

News and trends from the Spanish Biotech Sector

Executive Summary and Company guide



Edited by Spanish Bioindustry Association (ASEBIO)

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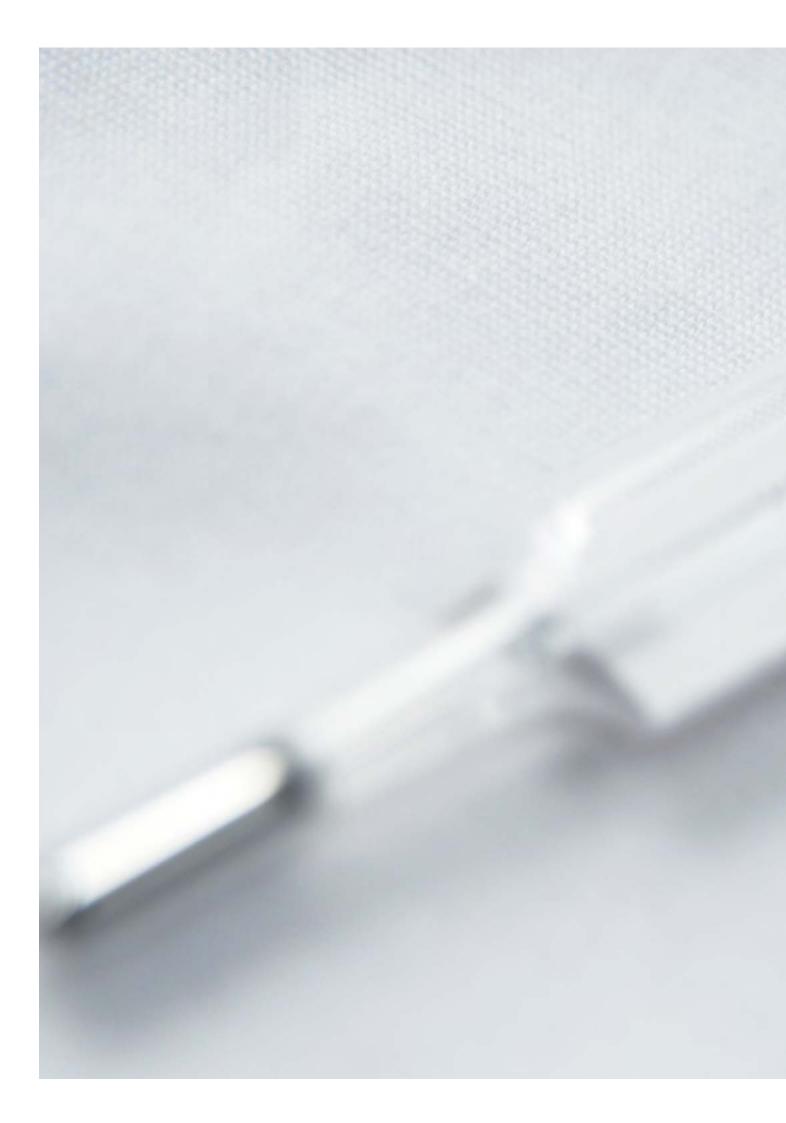
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Situation of the Spanish biotechnology sector



Situation of Spanish biotechnology sector

In view of the results of the study, for another year, the Spanish biotechnology sector continues to show some highly positive results.

- In 2011, the number of companies that perform biotechnology activities has risen to 3,025, an increase of 76.4% in 2010, underscoring the strengthening of sense of belonging to this sector.
- 660 companies stated that biotechnology is their main and/or sole activity (biotech companies), representing an increase of 7% from 2010.
- The sector employed 202,250 people in 2011, creating 38,724 new jobs in the last year (an increase of 23.7% in 2010).
- However, focusing solely on biotech companies, employment in this group of companies has dropped by 7.61%.
- Despite the adverse economic situation, the turnover for companies stating that they are biotechnology users has increased by 26.5% in 2011, to reach 76,069 million Euros.
- In 2011, the shared GDP of biotechnology user companies amounted to 7.15% compared to 5.72% for the previous year (or 2.98% in 2008).

Table 1 shows how practically all the cost drivers in the sector (except for R&D expenses and the number of patents) continue to grow strongly for yet another year. The soundness of this sector can be seen in Graph 1 (Evolution of Employment) and Graph 2 (Evolution of invoicing).

From a more micro-economic perspective, Table 2 shows how the cost drivers vary, depending on whether the biotechnology activities are principal and/or exclusive (biotech companies), and secondary activities or simply a necessary tool for production. This analysis specifically shows how biotech companies have indeed suffered a slight setback as a result of the economic crisis, given the fact that important variables as invoicing, employment and investment in biotech R&D decreased in relation to the previous year (-4.78%, -7.61% and -6.56% respectively).





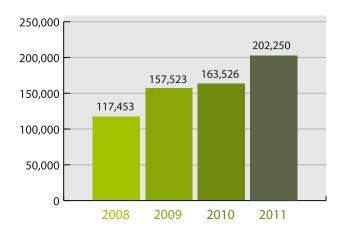
Table 1 Principal results of the biotechnology model from the survey on business innovation in 2011. Source: INE (National Institute of Statistics). Survey on Business Innovation 2011.

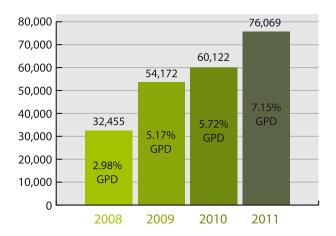
Main variables	Less than 250 employees	More than 250 emplo- yees	Total 2011	Total 2010	Difference	Growth rate
Companies performing biotech-related activities	2,923	102	3,025	1,715	1,310	76.4%
Companies in which biotechnology is the main and/or sole activity (biotechs)	639	21	660	617	43	7.0%
Companies in which biotechnology is a secondary business line	341	27	368	209	159	76.0%
Companies in which biotechnology is a necessary tool for production	1,943	54	1,997	889	1,108	124.6%
Companies performing R&D activities in biotechnology	972	69	1,041	969	72	7.4%
Total employment	73,725	128,525	202,250	163,526	38,724	23.7%
Turnover (millions of Euros)	13,046	63,023	76,069	60,122	15,948	26.5%
Personnel in biotechnology R&D (no. of persons)	6,761	2,039	8,800	8,258	542	6.6%
A) Total by job category						
Researchers	3,947	1,177	5,124	4,816	308	6.4%
Technicians and assistants	2,813	862	3,676	3,442	234	6.8%
B) Number of women	3,743	1,110	4,853	4,580	273	6%
Researchers	2,052	596	2,648	2,535	113	4.4%
Technicians and assistants	1,691	514	2,205	2,045	160	7.8%
Internal expenditure in biotechnology R&D (thousands of Euros)	383,487	154,397	537,884	568,280	-30,397	-5.3%
A) By type of expenditure						
Current expenditure	322,844	144,698	467,542	466,955	587	0.1%
- Salaries for researchers	128,525	53,161	181,686	169,680	12,006	7.1%
- Salaries for technicians and assistants	62,541	24,354	86,895	83,584	3,311	4.0%
- Other current expenditure	131,778	67,183	198,961	213,691	-14,730	-6.9%
Capital expenditure	60,643	9,699	70,342	101,324	-30,982	-30.6%
- Land and buildings	13,107	1,762	14,869	42,714	-27,845	-65.2%
- Equipment and devices	45,130	7,266	52,395	55,203	-2,808	-5.1%
- Acquisition of R&D specific software	2,406	671	3,077	3,407	-330	-9.7%
B) By source of funds						
Funding from Spain	338,058	127,492	465,550	479,894	-14,344	-3.0%
- Own funds	219,919	95,453	315,372	298,056	17,316	5.8%
- From companies	29,643	11,517	41,160	34,046	7,114	20.9%
- From Public Administrations	83,279	19,622	102,901	143,238	-40,337	-28.2%
- From universities	113	0	113	398	-286	-71.7%
- From private non-profit institutions	5,104	900	6,004	4,156	1,848	44.5%
Funding from abroad	45,429	26,905	72,333	88,386	-16,053	-18.2%
- From European Union programs	8,588	1,243	9,831	9,341	490	5.2%
- Other funds from abroad	36,840	25,662	62,502	79,044	-16,542	-20.9%
% Companies applying for biotechnology patents	5%	16%	5%	13%	NA	NA
Number of filed patents	371	59	430	643	-213	-33.2%



Table 2. Distribution of principal indicators for the sector by type of biotechnology activity in 2011. Source: INE (National Institute of Statistics). Survey on Business Innovation 2011.

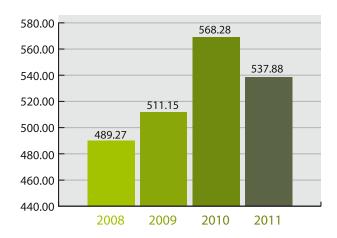
Principal variables		Principal			Secondary	1		Tool		Total in 2011	Total in 2010
	Value in 2010	Value in 2011	% over the total in 2011	Value in 2010	Value in 2011	% over the total in 2011	Value in 2010	Value in 2011	% over the total in 2011		
Units performing biotech-related activities	617	660	21.8%	209	368	12.2%	889	1,997	66.01%	3,025	1,715
Units performing biotechnology R&D	492	524	50.3%	144	198	19.0%	333	319	30.67%	1,041	969
Personnel in biotechnology (no. of persons)	5,963	6,266	39.8%	1,563	2,529	16.1%	5,071	6,945	44.12%	15,739	12,597
Expenditure in biotechnology (thousands of Euros)	585,482	544,997	65.1%	98,780	132,005	15.8%	195,150	160,409	19.16%	837,412	879,412
Internal expenditure in biotechnology R&D (thousands of Euros)	398,884	372,736	69.3%	60,657	83,022	15.4%	108,738	82,126	15.27%	537,884	568,280
% Companies filing for biotechnology patents	24	17.8	NA	9	4.1	NA	6	1.5	NA	5.4	13
Number of filed patents	454	320	NA	38	49	NA	151	61	NA	430	643
Turnover (thousands of Euros)	8,343,433	7,944,597	10.4%	35,124,682	45,360,438	59.6%	16,653,416	22,764,341	29.93%	76,069,376	60,121,530
Total employment	35,917	33,183	16.4%	45,938	56,056	27.7%	81,671	113,011	55.88%	202,250	163,526





Graph 1: Evolution of employment (number of workers). Source: INE. 2011 Business Innovation Survey

Graph 2: Evolution of invoicing (in millions of Euros). Source: INE. 2011 Business Innovation Survey



Graph 3: Evolution of expenditure in R&D (in millions of Euros). Source: INE. 2011 Business Innovation Survey

The most surprising increase in Table 1 is regarding to the large number of companies claiming to have conducted biotechnology activities over the last year (1,310 more than the previous year). This considerable increase can be interpreted as a sign that the sector is being consolidated, due to the increasing visibility of biotechnology as a source of innovation and competitive improvement in many different sectors considered to be traditionally mature. Furthermore, the number of biotech companies (one of the normal indicators to assess the size of the sector) shows a year-on-year growth of 7%.

Both the employment figure and the overall turnover figure for the sector show strong increases, with rates close to 25% (23.7% and 26.5% respectively). This considerable increase may be related to the inclusion of large industrial groups which, to date, had not stated that they were performing biotechnological activities. Specifically, the number of companies using biotechnology and with a staff of more than 250 employees has risen from 82 to 102 over the last year, although there is still a predominance of companies with less than 250 employees, accounting for 96.62% of the total.



As shown in Graph 3, the internal expenditure in biotechnology R&D dropped 5.1% over the last year, in line with a reduction of the public funds available in this area. Of particular importance is the 28.2% decrease in funds coming from the Public Administrations and the 71.7% decrease in funding from universities. In relation to the source of the funding, as for previous years, most funds (86.5%) are nationally sourced, whilst the distribution by source of funding is as follows: own funds (67.7%); Public Administrations (22.1%); other companies (8.8%); and private not-for-profit institutions and universities (1.3%).

Regarding the turnover for the Spanish biotechnology sector, 59.6% of the total can be seen to be attributed to companies that consider biotechnology to be a secondary business line, whilst 29.93% is generated by companies that consider biotechnology to be a necessary tool for production, and only the remaining 10.4% is actually related to biotechs. Likewise, taking employment as the baseline, the distribution is as follows: tool for production (55.88%); secondary activity (27.7%); and main activity (16.4%).

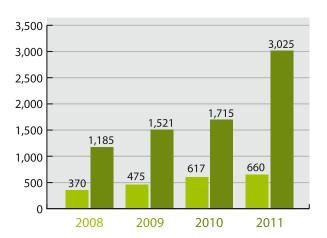
The filing of patents (a structural weakness of Spain) continues to hinder the competitiveness of the sector, undergoing a sharp drop of 33.2%, further aggravating the lack of patents suffered by the Spanish R&D&I system. It should be highlighted that almost 75% of the patents filed over the last year, came from biotech companies.

In relation to gender, and just as for previous reports, the percentage of women working in the biotechnology R&D area is slightly higher (55%) than for men.

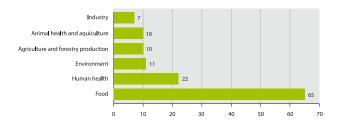
Finally, Graphs 5 and 6 show, respectively, the sectorial distribution of the biotechnology user companies and the biotech companies. As far as user companies are concerned, there is a remarkable predominance of food companies (65%) and human health (22%), whilst in the case of the biotech companies, the order is reversed: human health (55%) and food (34%).

Territorial analysis of the indicators

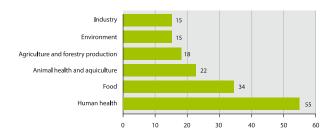
Graph 7 shows how Catalonia reasserted itself as the autonomous community with the highest concentration of biotechnology user companies (17.52%), followed by Andalusia (10.89%), overtaking the Community of Madrid which incurred a surprising drop from 11.85% down to just 6.99% of the total. This figure shall be closely studied in the next report by ASEBIO, in an attempt to determine whether this is due to the random data collection sampling or, on the contrary, to a change of trend in the concentration of companies of this type.



Graph 4: Evolution of the number of enterprises that are active in biotechnology. Source: INE. 2011 Business Innovation Survey.



 $\mbox{\it Graph 5: Percentage of biotechnology user companies based on the final application.}$



Graph 6: Percentage of biotech companies based on the final application -

In a second group, together with the aforementioned Community of Madrid, there is also Galicia (8.41%), Castile-Leon (7.76%), Canary Islands (6.81%), Castile La Mancha (6.71%), the Basque Country (6.29%) and, finally, the Community of Valencia (5.51%).



Graph 7: Geographical distribution of biotechnology user companies. Source: INE. 2011 Business Innovation Survey.



Graph 8: Geographical distribution of the biotech companies. Source: INE. 2011 Business Innovation Survey -

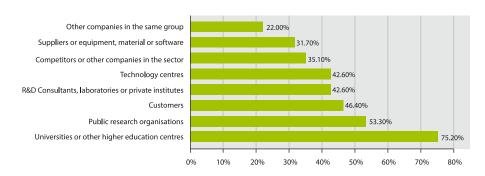
On the other hand, the geographical distribution of the biotech companies remains unchanged from previous years and, as can be seen in Graph 8, there are no real surprises, unlike the case of the user companies. In this respect, the largest number of companies of this type is concentrated in Catalonia (18.54%), followed by the Community of Madrid (15.49%) and Andalusia (13.05%).

Also, in line with last year's results, the following group includes Castile-Leon (7.31%), the Community of Valencia (7.63%), Galicia (5.74%) and the Basque Country (9.04%), as can be seen in Graph 8.

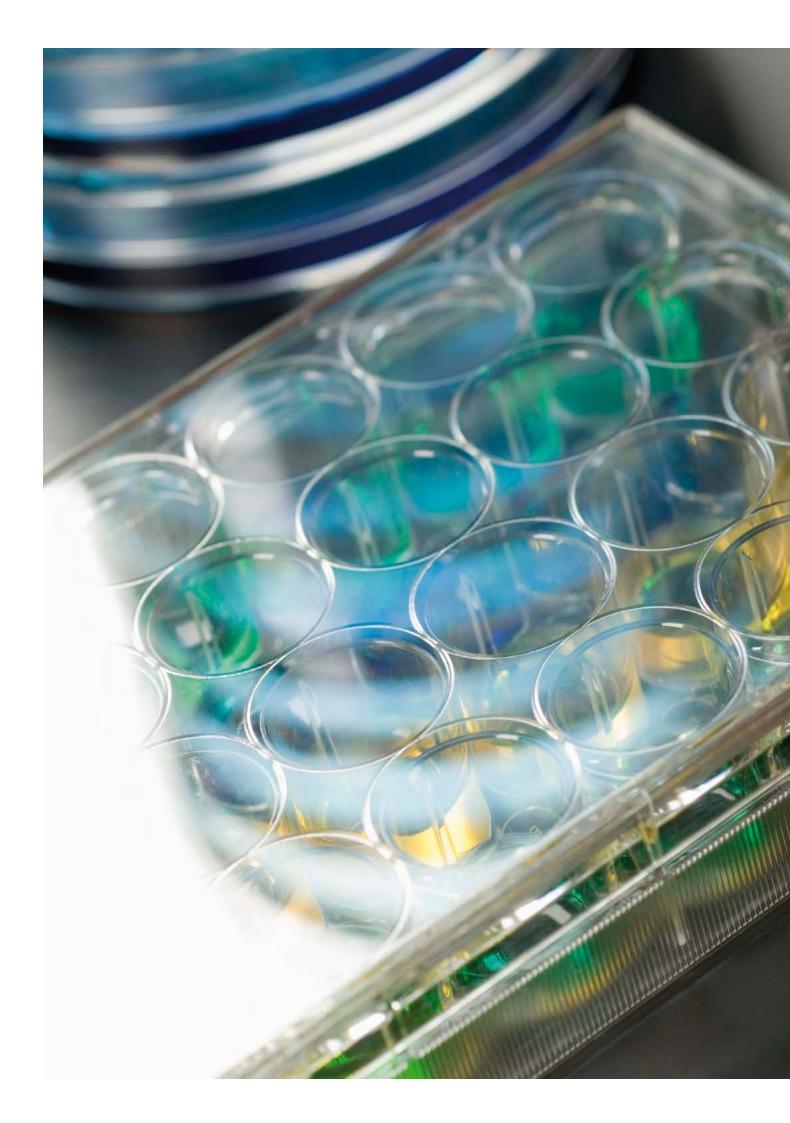
Competitive cooperation in the Spanish biotechnology sector

In line with the previous ASEBIO report, this section studies the type of collaboration between the so-called "innovative biotechnology companies", that are those companies making use of biotechnology and carrying out technological innovations during the period of 2010-2012, in other words those companies that have developed some type of innovative product or process during this period.

Of the 660 Spanish biotech companies identified as such in 2011, 51% stated that they had carried out technological innovations during the two previous years. And, of these, 222 maintained some type of collaboration with another organisation. In this context, Graph 9 shows the actors that have been most active in the collaboration between innovative biotechnological companies. As for last year, collaborations with public sector entities are predominant: Universities and other Centres of Higher Education (75.2%) (largely public institutions), and other Public Research Bodies (53.3%). In a second group, of particular note are collaborations with customers (46.4%), with technology centres (42.6%) and, finally, with consultants, laboratories and private R&D institutes (42.6%).



Graph 9: Biotech companies cooperating in innovation over the 2010-2012 period, according to their cooperation partners.





New companies created in 2012



New companies created in 2012

In 2012, 64 new companies in the biotech sector were recorded.

By autonomous community, Andalusia was the community with the highest number of companies created (19), followed by Catalonia (13) and then, present for the first time in this ranking, Galicia where seven new companies were set up.

Surprisingly this year, only three new companies were identified in Madrid and four in the Community of Valencia.

Table 3 includes the complete list of biotechnological companies started up in 2012, the Autonomous Community in which they are located and their corporate purpose.

COMPANY NAME	AUTONOMOUS COMMUNITY	CORPORATE PURPOSE
AC-GEN READING LIFE	Castile-Leon	AC-Gen Reading Life is a biotechnological company focused on the biomedical sector, offering specialist tailored healthcare solutions for the prevention, diagnosis and treatment of hereditary diseases. The company uses next-generation sequencing technology (NGS) based on semiconductor chips to detect mutations.
AD3-Energy	Andalusia	An effective system based on anaerobic digestion (AD) technology for the treatment of agri-food waste with high concentrations of dry suspended solids, obtaining three products with added value in the process: electricity and thermal energy; recycled water; and a high quality organic fertiliser.
Advanced Nanotechnologies	Catalonia	Innovative solutions based on nanotechnology tailored to the specific evolution of its customers.
AGLARIS CELL	Madrid	The development and distribution of automatic, contaminant-free cell culture bioreactors for use at the actual hospital complex.
ALCALIBER INVESTIGACION, DESARROLLO E INNOVACION	Andalusia	The optimisation and integration of a tool, based on the application of Near Infra-red spectroscopy (NIRS) technology to analyse the green opium poppy plant for the early selection of resistant genotypes to mildew and with a high alkaloid content.
AQUILON CYL	Castile-Leon	The research, development and marketing of processes, products, services and applications in the area of biotechnology, animal healthcare and biomedicine. Aquilon brings society closer to a number of research lines, primarily developed at the University of Leon.
ASCIL Biopharm	Catalonia	The discovery and development of biopharmaceuticals and biotechnological products directed to improve the condition and quality of human and/or animal life, and agroforestry and livestock in general.



BILBAO BIOMATERIALS INSTITUTE	Basque Country	Biomaterials for biomedical uses.
BIO NUTRICION VEGETAL	Andalusia	The manufacture and marketing of residue-free supplies for organic farming, for national and international markets.
BIOMEDYDOL	Aragon	A company dedicated to the development and sale of bio-computing solutions for the management and treatment of acute pain in hospitals.
Biostatech	Galicia	Consultancy services in bio-statistics and training products in statistical tools, techniques and methods.
BIRDI SOLUTIONS	Andalusia	Telemedicine applied to the rehabilitation of the pelvic floor.
BRAIN DYNAMICS	Andalusia	The creation, maintenance and operation of NeuroSeek, a system for the management of knowledge of the human brain, in normal and pathological circumstances.
Consultoría para la universidad y la empresa	Galicia	The creation of technology-based and entrepreneur enterprises.
CRYOBIOTECH	Andalusia	Cryopreservation. The storage of biological samples.
Deroceras	Galicia	Smart agricultural pest control.
DESTINA GENOMICA	Andalusia	A spin out of Destina Genomics of the University of Edinburgh, dedicated to molecular diagnosis through its patented chemical system for the rapid analysis of nucleic acids, including miRNAs, obtaining results with no false positives.
DNA DATA	Basque Country	The molecular diagnosis of genetic diseases.
Enemce Pharma	Catalonia	The scientific and commercial development of molecules, such as the nmcitalopram as a drug, and the sale or licensing to third parties of the assets developed at the right moment.
ENOC SOLUTIONS	Balearic Islands	R&D and the manufacture of liposome formulations.



ENTOMOTECH	Andalusia	A company providing entomological services.
EQUICORD	Madrid	A bank of horse and pet mesenchymal stem cells, for autologous use.
ForMune	Navarre	The development of therapeutic vaccines for the treatment of chronic infections and cancer. The company has an innovative platform based on recombinant proteins encompassing an endogenous ligand for TLR4 fused to disease specific antigens and aims to develop its first vaccine to the clinical trial phase.
Fralexa Bioresearch	Catalonia	The research, development and study of new ways of extracting and refining by-products from medicinal plants and seeds. The biomedical research for the use of medicinal plants and seeds, etc.
Future Companies Partners	Catalonia	A business consultancy specialising in business growth, corporate operations, management changes and the design of strategies, with particular focus on innovative companies and technology companies.
GENAGEN	Community of Valencia	The marketing of products and services in the genetics and healthcare areas.
GENEAQUA	Galicia	Genetics services to aquaculture companies.
GENERA BIOTECH	Community of Valencia	All types of R&D&I developments in order to valorise results of the biomedical and/or biotechnological research, leading to convert the mentioned results into products and/or diagnostic/prognostic services.
GENETRACER BIOTECH	Cantabria	R&D&I, production and marketing of biotechnological solutions in the area of pharmacogenomics and nutrigenomics.
GenoSalut	Balearic Islands	Genetics laboratory.
GMC 252	Catalonia	The development of an anti-diabetic drug.
GreenFuel Innovations	Castile-Leon	The development and marketing of biotechnological products applied to the energy sector. The management and execution of biotechnology projects.
Grupo BioRioja	La Rioja	A business association comprising companies located in the Autonomous Community of La Rioja and which regularly carry out direct or indirect activities relating to the application of biotechnology in industry and society.
HEALTHDUCATION	Andalusia	The design, development and marketing of mobile computing applications andapps, for use in the healthcare sector.



HISTAMAT SENSOR	Andalusia	The development of electrochemical sensors with a wide range of applications.
Humigal Sistemas Ecológicos de Depuración de aguas	Galicia	Water purification treatment through artificial wetlands for small settlements and industries.
IDOLIVE	Andalusia	The investigation, formulation, development, improvement and operation of methods for the identification of olive cultivars, table olives preserved in oil, or any other type of crop or food, in addition to the sanitary assessment for the molecular detection of pathogens.
Insights in Life Science	Catalonia	The provision of intermediary services and theassociation? of life science specialists with representatives of the industry (pharmaceutical and biotechnological companies, amongst others).
INTENANOMAT	Community of Valencia	The development and marketing of different types of nano particles of interest to cosmetics, biotechnology, biomedicine, environmental sciences, and photovoltaic technology.
INVES BIOFARM	Andalusia	The research, development and production of orphan drugs to improve the quality of life of the group of patients with rare diseases.
K2KNOW	Aragon	A platform for the exchange of medical, biotechnological and biocomputing knowledge for the transfer of developments to the markets through companies, and using the knowledge already generated by Universities.
Laboratoires Grand Fontaine	Catalonia	Nutritional solutions for senior citizens.
LENISAN BIOTECH	Andalusia	The development of natural dermo-cosmetic, nutraceutical products based on aromatic and officinalis plants.
Life Science Praxis	Catalonia	Directed at allowing life science companies to maximise their innovation value.
MICROHEALTH	Aragon	Telematic control of chronic disease.
NEOALGAE	Asturias	Scientific and technical consultancy services for the starting-up of a bioreactor with interesting commercial species of micro-algae. To provide any type of (commercial) micro-algae biomass to inoculate a bioreactor.
NEOL BIOSOLUTIONS	Andalusia	Partnership between Neuron Bio Industrial and Repsol, dedicated to the development of latest-generation technology for application in the energy and industrial chemical sector.
NEURONDIGITAL	Andalusia	A company dedicated to psychological research.



Omega Water	Galicia	R&D&I, the production and marketing of all types of products and equipment for water treatment and refining.
Outlining TTI	Balearic Islands	Consultancy for technology transfer and marketing.
PAIDEGRA	Andalusia	The provision of specialist paediatric healthcare services incorporating e-Health with Virtual patient, with particular attention to counselling, training, health education, sports medicine, child nutrition, and the development of clinical research projects in paediatrics and its specific areas.
Pepper Biology	Catalonia	The provision of bioinformatics services for laboratories, pharmaceutical companies and biotechnological companies, through project consultancy for private companies or for academic laboratories.
PHYTOPLANT RESEARCH	Andalusia	The development and recording of dioecious varieties of mono-cannabinoid hemp for the production of plant material, essential oils and extracts for application in the pharmaceutical nutraceutical and dermo-cosmetic sectors.
ProteoDesign	Catalonia	Research services for the biopharmaceutical industry for the development of safer and more effective drugs against cancer, as an alternative to aggressive treatments such as chemotherapy.
Protomex Life Science	Catalonia	The research, development, manufacture, marketing and sale of devices, components, sensors, biosensors, devices and/or equipment derived from the application of nanotechnology and/or photonics, and/or technologies.
SENDABIO	Basque Country	Manufacture and marketing of DHA product with the highest degree of purity on the market, and free from phytanic acid.
SISTIANA INVERSIONES	Madrid	The development of an advanced oxidation process for the treatment and degradation of a number of organic compounds.
SmartNano	Catalonia	R&D and marketing of innovative systems to deliver active ingredients through the skin. Principal focus on dermatology and cosmetics.
TECHNICAL PROTEINS NANOBIOTECHNOLOGY	Castile-Leon	The design, development and marketing of a therapeutical platform based on protein polymers for biomedical applications such as the area of regenerative medicine amongst others.
TERGUM	Andalusia	A new process to enrich oil in order to obtain compounds to be used as a basis for high range cosmetics.



THARSIS BIOMED	Andalusia	A biosensor based on a gold binding domain fusion protein which enables the orderly capture of antibodies.
Tresis Asesores Investigación, Ingeniería e Inversores	Galicia	The provision of technical engineering services and other activities related to technical consultancy in experimental research and development in biotechnology.
VALGENETICS	Community of Valencia	The provision of biotechnological services and R&D&I. The performance of phytopathological analyses, in vitro cultivation methodologies, molecular phytopathology, molecular biology and pathogen control. The marketing of biotechnological products.
VIVOPREK	Basque Country	In vivo pre-clinical analyses on animal models for cancer, neurodegenerative diseases, etc.

 ${\sf Table\ 3\ Companies\ dedicated\ to\ biotechnology,\ which\ started\ operating\ in\ 2012.\ Source:\ ASEBIO}$





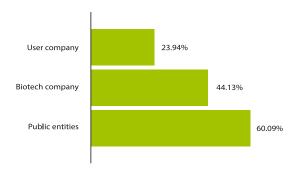
Business activity



Partnerships and business development

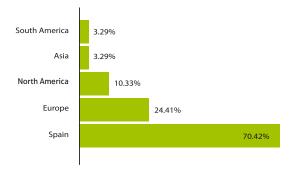
This section analyses the business development activities of the ASEBIO members. This includes those partnerships and/or collaborations in biotechnology (co-marketing, co-development, product and market exchange) initiated in 2012 with other entities.

In 2012, a total of 213 partnerships were recorded. Of these (Graph 10) more than 60% were with a public entity; 44% with another company in the bio sector; and 24% with a user company.



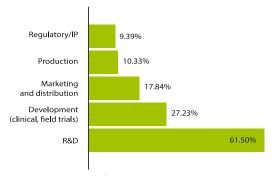
Graph 10 Distribution of the partnerships in the Spanish biotech sector in 2012, based on partner profile. Source: ASEBIO

Regarding to partner origin (Graph 11), 70% of agreements were with Spanish entities, more than 10% with North American entities, and more than 3% with Asian and South American countries.



Graph 11 Distribution of the partnerships in the Spanish biotech sector in 2012, based on partner origin. Source: ASEBIO

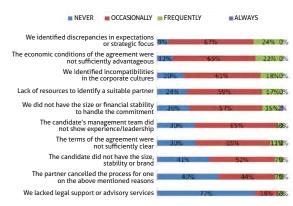
As far as the purpose of the partnership is concerned (Graph 12), 61% were agreements within the R&D area; 27% for some type of development (clinical, field trial, etc.); 18% corresponded to marketing and distribution agreements; 10% were production agreements; and 9% of the agreements came within the regulatory field and/ or industrial protection.



Graph 12 Distribution of partnerships in the Spanish biotech sector in 2012, based on the objective of the partnership. Source: ASEBIO

In the course of 2012, in addition to registration of initiated partnerships between members of ASEBIO, a new questionnaire was also prepared to determine the obstacles to be overcome by these companies in order to make such partnerships.

Graph 13 provides information on the obstacles encountered by the companies in order to formalise these partnerships in the course of 2012, at a national and international level.



Graph 13: Obstacles encountered by the companies to formalise partnerships. Source: ASEBIO

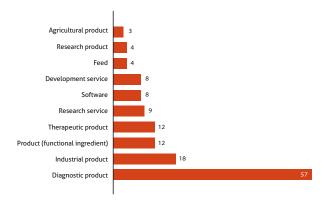
Product launches onto the market

Throughout 2012, ASEBIO member companies launched a total of 132 biotechnological products or services.

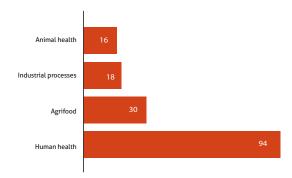
Table 4 provides details on all these launches, indicating the company, the name of the launched product and its purpose, in addition to the type of product or service and its area of application.

The majority of new launched products launched (94) are directed to the area of human health, followed by agrifood with 30 industrial processes (18) and animal health with 16.

The area with most launches corresponds to diagnosti products, followed by industrial products, therapeuti products and functional ingredients.



Graph 14: Distribution of launched products / services by typology



Graph 15: Distribution of launched products / services by field of application

Entity	Product name and purpose	Type and area
AB-Biotics	Neurofarmagen Depresión: saliva-based genetic test to identify the most effective treatment for each patient.	Diagnostic product - Human Health.
AB-Biotics	AB-Fortis: functional ingredient based on a patented microencapsulation system which prevents iron deficiency.	Product (functional ingredient) - Human health / Agri-food.
ALGAENERGY, S.A.	Culture technology and systems for the culture of microalgae in controlled conditions (automation and control system).	Industrial Product - Industrial and Agri- food Processes.
Algenex with the collaboration of Boehringer Ingelheim Svanova	Diagnosis kit based on IBES® technology for the detection of specific African swine fever anti-bodies in swine serum and plasma samples.	Diagnostic product - Animal Health.
Alphasip	COCACHIP: analysis of results obtained on the developed chips with a small sample of saliva and collected by mouth swab.	Diagnostic product - Human Health.
ASCIDEA	A portfolio of professional services for the intensive analysis of genome data (RNASeq, ChIPSeq, Exome, WGS, Metagenomic).	Research service - Human Health, Animal Health and Agri-food.
ASCIDEA	Professional whole genome sequencing: from the DNA/RNA sample to the comprehensive report.	Research service - Human Health, Animal Health and Agri-food.
Banco Español de Algas	The Algae Culture Management, a computing application which makes possible to knowthe characteristics of the cultivation, origin and possible application of 800 types of micro-algae, principally of the Macaronesia, which is divided into a number of categories.	Agri-food, software.



Banco Español de Algas	System for the organic culture of Spirulina microalgae.	Agricultural - Agri- food product.
Spanish Bank of Algae in partnership with Singular Factory	Web-based application and an iPAD APP for the management of stains, from the bioprospection phase right up to the complete flow.	Software - Agri-food/ Industrial processes.
Bayer CropScience	Movento Gold, a new product against the pear tree psylla and the peach tree aphid.	Agricultural - Agri- food product.
Bayer CropScience	Movento 150 O-Teq: control the cochineal pest in peppers.	Agricultural - Agri- food product.
Biobide	Neurotoxic test based on High throughput tracking using DanioVision®.	Diagnostic product - Human Health.
Biogune, in partnership with OWL Genomics, CIBERehd and 11 hospitals	Development of the first metabolome-based serum test for the non invasive diagnosis of non-alcoholic fatty liver disease or NAFLD.	Diagnostic product - Human Health.
Bioibérica Farma	Arthrosischip, a saliva-based DNA test to identify those patients with a high probability of rapid progress of a patient's knee osteoarthritis.	Diagnostic product - Human Health.
Bioibérica S.A.	Nucleoforce Fish: designed to minimise the intestinal inflammatory response to diets with a high percentage of feed materials of plant origin, helping to promote the digestibility of the diet and to therefore improve the intestinal health of the animals.	Product (functional ingredient) - Human health / Agri-food.
Bioibérica S.A.	Nucleoforce Cows: designed to accurately and specifically replace the needs of adult animals and calves. Thanks to its characteristics, it helps improve the reproductive and health parameters of animals.	Animal feed - Animal Health / Agri-food.
Bioibérica S.A.	SNACKS-Goodogs Caprice: a snack to pamper dogs with 60% fresh pork.	Animal feed - Animal Health / Agri-food.
Bioibérica S.A.	SNACKS-Goodogs Caprice: a snack for dogs with 35% fresh pork.	Animal feed - Animal Health / Agri-food.
Bioibérica S.A.	Dysgen: DNA chip to assess the genetic susceptibility to developing hip dysplasia in Labrador retrievers, through a simple blood sample.	Diagnostic product - Animal Health.
Bioibérica S.A.	Cartexan 400: chondroitin sulphate for the treatment of arthritis in Finland.	Therapeutic product - Human Health.
Bioibérica S.A.	Tendoactive: Food supplement made from collagen type I, Vitamin C and Mucopolysaccharides. Recommended for athletes with tendon pain. Launched in Hungary.	Product (functional ingredient) - Human health.
Biomar	LARVIVA Pro: with probiotics to reduce the occurrence of deformities in fish larvae and fry.	Product (functional ingredient) - Animal health / Agri-food.
Biomar	ORBIT: feed line targeted specifically at aquaculture in recirculation systems.	Product (functional ingredient) - Animal health / Agri-food.
Biomedal	A new method for detecting the presence of Anisakis in fish.	Agri-food development service.
Biomedal	GlutenTox ELISA Competitivo - kit for the quantification of gluten, suitable for hydrolysed samples (improvement).	Industrial - Agri-food product.
Biomedal	GlutenTox ELISA Sandwich - kit for the quantification of gluten (improvement).	Industrial - Agri-food product.
Biomedal	Protein A (miniA).	Industrial Product - Industrial Processes.



Protein A-Cys (miniA-C).	Industrial Product - Industrial Processes.
ProPure Agarosa-r Protein A.	Industrial Product - Industrial Processes.
Gluten Analysis Service - Extension of the scope of certification ISO 17025.	Agri-food research service.
Glutentox Reader.	Industrial - Agri-food product.
BIOMOL-EXOME: Human Exome sequencing and analysis service.	Human Health - research service.
BNT DERMOCOSMETICS: a new business line for the sale and distribution of dermocosmetic products (5 products are currently on the market).	Therapeutic product - Human Health.
F35 pilot bioreactor.	Industrial Product - Industrial Processes.
A new probiotic named Bifidobacterium longum ES1 specifically designed for celiac sufferers.	Product (functional ingredient) - Human health.
An active probiotic against Rotavirus infections.	Product (functional ingredient) - Agri-food.
Caronositol TM: D-chiroinositol obtained from carob for application in Polycystic Ovary Syndrome and insulin resistance.	Product (functional ingredient) - Human health.
Carositol®: Pinitol obtained from carob, for application in diabetes.	Product (functional ingredient) - Human health.
Hydroliv plusTM: Hydroxytyrosol (3 15%) obtained from the olive tree, with a strong antioxidant properties.	Product (functional ingredient) - Human health.
Camelina oil: oil for the production of biodiesel in addition to advanced biofuels.	Industrial Product - Industrial Processes / Biofuels.
Camelina flour: raw material with high protein content for the preparation of animal feed.	Industrial Product - Industrial and Agrifood Processes.
Camelina husk: raw material with high fibre content for animal feed.	Animal feed - Industrial and Agri- food Processes.
Camelina straw: raw material with high energy content and low ash content for the generation of electricity.	Industrial Product - Industrial Processes / Biomass.
Novel directional DNA cloning vectors based on pSpark® technology.	Industrial product / Research product - Industrial processes.
Technology for the expression of olfactory GPCRs on the surface of heterologous cells.	Industrial product / Research product - Industrial processes.
GEM (Genomics Multitool): a genomics data interpretation tool that is faster and more accurate than those currently used.	Software - Human Health.
	ProPure Agarosa-r Protein A. Gluten Analysis Service - Extension of the scope of certification ISO 17025. Glutentox Reader. BIOMOL-EXOME: Human Exome sequencing and analysis service. BNT DERMOCOSMETICS: a new business line for the sale and distribution of dermocosmetic products (5 products are currently on the market). F35 pilot bioreactor. A new probiotic named Bifidobacterium longum ES1 specifically designed for celiac sufferers. An active probiotic against Rotavirus infections. Caronositol TM: D-chiroinositol obtained from carob for application in Polycystic Ovary Syndrome and insulin resistance. Carositol®: Pinitol obtained from carob, for application in diabetes. Hydroliv plusTM: Hydroxytyrosol (3 15%) obtained from the olive tree, with a strong antioxidant properties. Camelina oil: oil for the production of biodiesel in addition to advanced biofuels. Camelina flour: raw material with high protein content for the preparation of animal feed. Camelina busk: raw material with high fibre content for animal feed. Camelina straw: raw material with high energy content and low ash content for the generation of electricity. Novel directional DNA cloning vectors based on pSpark® technology. Technology for the expression of olfactory GPCRs on the surface of heterologous cells.



CYTOGNOS, S.L	Screening EuroFlow™ LST-11. An 8 colour tube developed for evaluation of the major lymphocyte sub-populations in a number of clinical conditions, such as lymphocytosis, lymph node enlargement, etc. with a single test by flow cytometry.	Diagnostic product - Human Health.
CYTOGNOS, S.L	Screening EuroFlow TM SST. An 8 colour tube designed to evaluate mature lymphocyte populations (B, T and NK cells) and determine their clonality in a single test by flow cytometry.	Diagnostic product - Human Health.
CYTOGNOS, S.L	Screening EuroFlow™ ALOT-7. A 7 colour tube designed for the initial assessment of samples suspected of acute leukaemia, using flow cytometry.	Diagnostic product - Human Health.
CYTOGNOS, S.L	Infinicyt versión 1.7. A software programme for the multiparametric analysis of cytometry data.	Software - Human Health.
CYTOGNOS, S.L	APC-C750. Tandem fluorochrome for the red diode laser with maximum emission at 779 nm.	Industrial product - Human Health.
Farmasierra	Analine®: A new cream containing rosehip for the regenerative treatment recommended for the face care of all dehydrated skin types.	Therapeutic product - Human Health.
Fundación MEDINA	Platform for bioanalysis and preclinical evaluation.	Human Health - development service.
GEADIC, (Oryzon Genomics) / Reig Jofré	GynEC DX, "in vitro" RT-PCR based diagnostic system for endometrial cancer.	Diagnostic product - Human Health.
Genetadi Biotech	Genetic analysis service to improve the diagnosis of recurrent pregnancy loss or infertility.	Diagnostic product - Human Health.
Genetadi Biotech	Aminochip: Technology capable of the prenatal detection of 150 genetic amniocentesis syndromes.	Diagnostic product - Human Health.
GENÓMICA	CLART® CMA KRAS BRAF PI3K: A new diagnostic kit to help optimise the treatment of colorectal cancer.	Diagnostic product - Human Health.
GENÓMICA	CLART®HPV: A new improved kit for the detection of Human Papilloma Virus (HPV).	Diagnostic product - Human Health.
GENÓMICA	CLART® STIs A&B: Diagnostic kits for the detection of microorganisms causing infections in the human urogenital tract.	Diagnostic product - Human Health.
Gradocell	The launch of a new CRO business line (Gradocell Pharma) as a regulatory consultancy, and for the management and monitoring of clinical trials in Advanced therapies.	Human Health - research service.
Grifols Engineering	A new line of parenteral solution dispensing in flexible packages, by the Grifols plant.	Industrial product - Human Health.
Biofarma Group, of the Santiago de Compostela University	Innopharma: a pharmacogenomics platform to promote new drugs.	Human Health - development service.
Ingenasa	Immunoenzymatic test for the detection of hydrolysed Gluten in food.	Industrial Product - Industrial Processes.
INKEMIA IUCT group	Gestilab (technological capacities and know-how to serve any needs that may arise, offering a new cost optimization program).	Industrial processes - development service.
INKEMIA IUCT group	Preventox (Software tool focussed on predicting the risk level of specific chemicals on human health and the environment).	Diagnostic product - Human Health / Agri-food.
INKEMIA IUCT group	A High Throughput Biosynthesis - HTB platform (collections of bio-active molecules with a low molecular weight, chemically defined using biocatalysis as a tool).	Human and animal Health - research service.



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INKEMIA IUCT group	Authorisation for the manufacture of investigational medicinal products and the manufacture of medicinal products for veterinary use (Authorisation No. 4155E).	Human and animal Health - research service.
Innofood by Neuron and JR Suárez Monedero SL	Black Allium: Ajo Morado (purple garlic) processing process. The result is completely black garlic with some totally new organoleptic characteristics.	Product (functional ingredient) - Agrifood.
Instituto de Medicina Genómica (IMEGEN)	NextGenDx, a Genetic Diagnosis Service using NGS validated to Sanger, with 100x coverage.	Diagnostic product - Human Health.
Instituto de Medicina Genómica (IMEGEN)	RapidFinder™ Equine ID Kit: Real-time PCR based kit for the identification of horse DNA in meat.	Industrial - Agri-food product.
Instituto de Medicina Genómica (IMEGEN)	RapidFinder™ Quant Equine Set: Real-time PCR based kit for the quantification of horse DNA in meat.	Industrial - Agri-food product.
Instituto Internacional de Flebología	Hemosolve: treatment to eliminate haemorrhoids.	Therapeutic product - Human Health.
Integromics	OmicsOffice®: a platform for the analysis and integration of genomics data from NGS, qPCR and microarray technologies.	Software - Human Health.
Integromics	RealTime StatMiner® 4.3 in TIBCO® Spotfire®: qPCR analysis tool.	Software - Human Health.
Intelligent Pharma	Pegasus, 2-D virtual screening technology to identify active molecules that are structurally similar to a molecule with a specific function.	Software - Human Health.
Laboratorios Rubió S.A.	Dolquine® coated tablets.	Therapeutic product - Human Health.
Laboratorios Rubió S.A.	VWNG®: a new solution to access arteriovenous fistulas in dialysis treatment.	Therapeutic product - Human Health.
Master Diagnóstica	Innovative hybrid automated instrument (e-BRID).	Industrial Product - Industrial Processes.
Master Diagnóstica	Kits for the detection of HPV and Tick-Borne bacteria.	Diagnostic product - Human Health.
MSD (ES)	Infliximab - Paediatric ulcerative colitis.	Therapeutic product - Human Health.
MSD (ES)	Pegylated interferon - Triple Hepatitis C Therapy combined with boceprevir and ribavirina.	Therapeutic product - Human Health.
MSD (ES)	Ribavirina - Triple Hepatitis C Therapy combined with boceprevir and Pegylated interferon.	Therapeutic product - Human Health.
MSD (ES)	Etoricoxib - Treatment of moderate pain associated with dental surgery.	Therapeutic product - Human Health.
NATAC BIOTECH	Innovaoleo by NATAC: a line of ten new ingredients derived from the olive tree, with healthy properties.	Product (functional ingredient) - Human health.
Neiker-Tecnalia	New types of artificial soils for use as crop substrates in greenhouses.	Agri-food development service.
NIMGenetics	TrisoNIM®: a non-invasive prenatal screening test for the detection of foetal trisomies of chromosomes 21, 13 and 18 in material blood.	Diagnostic product - Human Health.
Operon	Lisakit chagas: Kit for the detection of Trypanosoma cruzi antibodies in human serum.	Diagnostic product - Human Health.
Operon	Hyperdiff: detection of hypervirulent Clostridium Difficile strains. 2a-bdiff, detection of Clostridium Difficile A and B toxins in separate bandages.	Diagnostic product - Human Health.
OWL	OWLIPIDS: Service for the identification of lipids for screening, search for markers, accompanying diagnostics and the optimization of the development of drugs.	Diagnostic product / Therapeutic product - Human Health.



OWL	Metabolomics service directed to the agri-food sector.	Agri-food development service.
Plebiotic	Molecular dynamics solutions for screening and molecular design (drug re-profiling) – PleMD.	Software - Human Health.
Promega Biotech Ibérica	Nanoluc: A new fluorescent reporter enzyme.	Human and animal Health - research service.
Promega Biotech Ibérica	Halotag: Protein purification system.	Investigational product - valid for a number of areas.
Promega Biotech Ibérica	ADCC: Antibody-dependent cell-mediated cytotoxicity biotest to quantify the FC effector function by measuring the activation of the NFAT signalling pathway.	Human Health - development service.
Promega Biotech Ibérica	CLA: Cell Line Authentication. STR testing, making it possible to identify the cell line, complying with the ANSI/ATCC requirements.	Human and animal Health - research service.
Promega Biotech Ibérica	ReliaPrep™ Large Volume HT gDNA Isolation System: System to isolate gDNA from 3-10 ml blood samples.	Diagnostic product / Therapeutic product - Human Health.
Promega Biotech Ibérica	PowerPlex® Y23 System: Multiplex 5 colour system including 23 loci for genotyping forensic samples.	Diagnostic product - Human Health.
PROTEOS BIOTECH	New product line for cosmetic body treatments.	Therapeutic product - Human Health.
Sistemas Genómicos	Genetic test for Osteodysplasia with 229 genes.	Diagnostic product - Human Health.
Sistemas Genómicos in partnership with IDIBELL and the Institut d'Investigació Trias i Pujal	Genetic test for neuropathies with 285 genes.	Diagnostic product - Human Health.
University of Valencia and the Politécnica University	Genetic test for the propensity to develop melanoma.	Diagnostic product - Human Health.
Venter Pharma SL	LacTEST 0.45g.	Diagnostic product - Human Health.
VIRCELL	RICKETTSIA TYPHI IFA IgG + IgM (Ref. PRITY) / IFA IgG (Ref. PRITYG) / IFA IgM (Ref. PRITYM) / IFA SLIDE (Ref. SRITY).	Diagnostic product - Human Health.
MBC092 -088 - 043 - 022 - 105 - 086 - 087 - 095 - 094 - 085 - 084 - 050 - 102 - 091 - 003 - 089 - 101 - 098 - 027 - 097 - 096 - 099 - 100 AmpliRun® Bordetella Holmesii / Campylobacter Jejuni DNA control / Clostridium Difficile DNA control / Escherichia Coli (vtec) DNA control / Human Parainfluenza 1 RNA control / Mycobacterium Avium DNA control / Mycobacterium Intracellulare DNA control / Mycobacterium Kansasii DNA control / Mycoplasma Genitalium DNA control / Mycobacterium Ulcerans DNA control / Mycoplasma Hominis DNA control / Parainfluenza 4 a RNA control / Parechovirus 1 DNA control / Rhinovirus RNA control / Salmonella Enteritidis DNA control / Shigella Flexneri DNA control / St Louis Encephalitis virus RNA control / Western equine encephalitis rna control / Versinia enterocolitica DNA control / Eastern equine encephalitis RNA control / Venezuelan equine encephalitis virus RNA control / Chikungunya virus RNA control / Yellow fever virus RNA control.		Diagnostic product - Human Health.
ZURKO Research	New test line for cosmetic and parapharmaceutical ingredients and products.	Human Health - research service.

Table 4 Products and services launched onto the market by ASEBIO members.



Strategic priorities

Each year, since 2005, ASEBIO has been conducting a short survey amongst its members to determine their priorities for the following year.

The results of the survey for 2013 are shown in table 5.

As for previous years, business internationalization continues to be the major priority.

Compared to 2012, the launchy of clinical phase trials, field trials and dose scaling, are the priorities that have varied most in comparison to 2012, dropping five places.

On the other hand, Licence-in technologies is the value which achievies the greatest increase in position, rising four points over the previous year.

PRIORITIES	Relevance 2013	Chang	ge in position regarding 2012
Internationalization	3.26	0	/=/
Acquiring knowledge and/or technologies	2.98	1	A
Forming partnerships with other user companies (drugs, food, etc.)	2.71	3	A
Licence-out technology	2.47	1	A
Launching products onto the market	2.37	-3	▼
Partnerships with other biotechs	2.29	2	A
Contracts or partnerships with public centres	2.27	0	/=/
Expand operations to other business areas	2.25	1	A
Start clinical phases/ Field trials/ dose scaling	2.24	-5	▼
Technologies licence-in	1.65	4	A
Form a joint venture	1.54	2	A
Refocus product development	1.54	-1	▼
Refocus R&D activities	1.35	-3	▼
Recruitment of professionals from abroad	1.11	-2	▼
Production outsourcing	0.94	0	/=1
Reduce operations	0.74	1	A
Merger with another company	0.53	-1	▼
Takeover of a company	0.33	0	/=/

Table 5 Analysis of the strategic priorities of the Spanish biotechnology enterprises for 2013. Source: ASEBIO





Industrial property and knowledge generation



Industrial property and knowledge generation

The information compiled in this Technological Watch Report was obtained in accordance with the methodology designed by the Scientific Park of Madrid, with the support of ASEBIO. This methodology is in line with continuous improvements derived from the experience of industrial property studies made in previous years.

The Thomson Reuters databases were used to prepare this report. The initial phase involved using the international patent classification (IPC) to locate all Spanish-owned biotechnology-related patents.

Finally, as a check, various public databases of the following organisations were consulted: Spanish Patent and Trademark Office (OEPM); European Patent Office (EPO); United States Patent and Trademark Office (USPTO), Japan Patent Office (JPO) and World Intellectual Property Organization (WIPO).

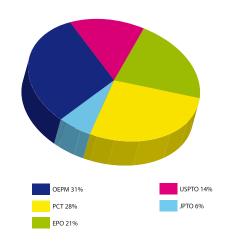
Analysis of the publications for Patent Applications and Awards

In Spain as a whole, 1,064 patents were published in the biotechnology sector in 2012, representing an increase of 15.4% over 2011. 72.37% of the patents published correspond to applications, whilst 27.6% correspond to patent awards. Table 6 shows, in absolute terms, the analysis according to the scope of protection (Spanish, European, North American, Japanese or international patents).

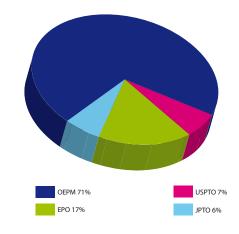
Patents Published in 2012*	ОЕРМ	EPO	USPTO	ЈРТО	РСТ	Total
Applications	240	162	104	47	217	770
Awards	206	49	22	17	0	294
Total	446	211	126	64	217	1,064

Table 6 Number of patent applications and awards from Spanish biotechnological enterprises Year 2012 Source: Clarke & Modet-PCM

Graph 16 shows that the highest percentage of patent applications was made through the Spanish patent and trademark office, OEPM, accounting for 31% of applications, followed by the PCT applications (28). Although the lowest percentage corresponds to Japanese applications, the positive trend should be emphasised, with an annual growth of 161% (a high growth rate due to the fact that there is an increase from just 18 applications in 2011 to 47 in 2012). An analysis of the patent awards shows that those patents awarded by the Spanish OEPM still represent the highest percentage, with a total of 71% (Graph 17).



Graph 16: Distribution of patent applications Source: Clarke&Modet-PCM



Graph 17: Distribution of patent awards. Source: Clarke&Modet-PCM

^{*} OEPM, Spanish patent applications and awards; EPO, European applications and awards; USPTO, North American applications and awards; JPTO Japanese patent applications and awards; and PCT, applications via the PCT.

Analysis of patent ownership, 2012

In 2012, the business sector, with 31% of the patents published, was the main agent in Spain, followed by the universities (18%) and Public Research Organisations (12%).

The distribution of patent ownership follows the same trend as for previous years, regarding the patent applications and awards published.

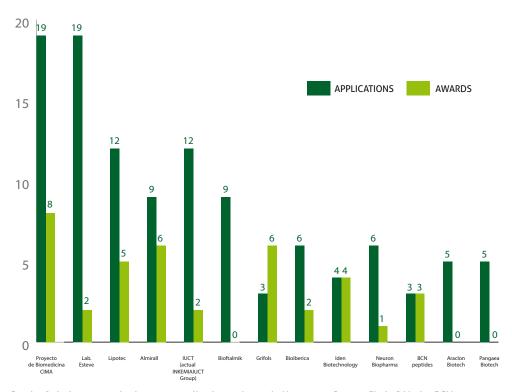
Patents published	Company	IPO	Various (joint ownership)	Public Adminis- trations (AAPP)	Universities	Founda- tions	Hospi- tals	Private
Applications	248	82	223	13	139	1	30	34
Awards	84	47	89	2	54	1	10	7
TOTAL	332	129	312	15	193	2	40	41

Table 7 Number of patent applications and awards published, according to ownership. Source: Clarke&Modet-PCM

Companies operating in 2012

In 2012, 332 Spanish biotechnological companies published patent applications or awards. CIMA was the most active enterprise in 2012, with 19 applications and 8 awards, followed this time by Laboratorios Esteve, moving up from third to second place, causing Lipotec

to move down to third place. Particular mention should be made of the Almirall company which has moved up to fourth place in the ranking with 9 applications and 6 awards, and IUCT in fifth place with 12 applications and 2 awards.



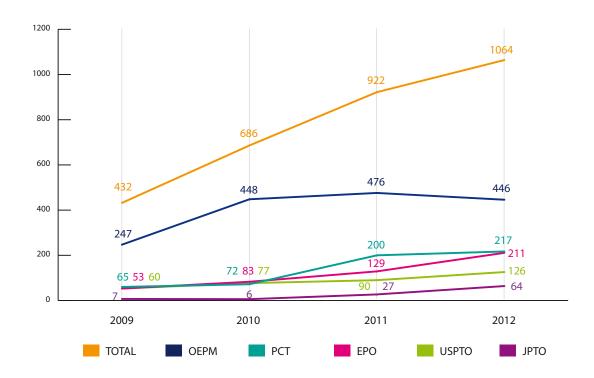
Graph 18: Active companies in patent application and awards. Year 2012. Source: Clarke&Modet-PCM



Evolution of the industrial property generated by the Spanish biotechnology sector 2009-2012

Based on the published data for the last four years, the application for patents in the biotechnology sector shows a clearly positive trend, with a growth of 146.3% over the last four years. This increase not only shows the biotechnology sector to be a growth sector, but also the importance given to industrial property by this sector, as a way to get a payback on investment. Considering the inter-annual variations, of particular importance is the slowdown in the growth of applications, with a growth of 51.21% between 2011-2010, whilst this fell to a growth of 23.6% in the period from 2012-2011. With regard to the published awards, particular mention should be made of the negative year-on-year variations occurring in 2012, with a decrease of 1.67%.

The trends analysis provides an accurate snapshot of the evolution experienced for each of the patent application pathways. The evolution of the published patents in Spain continued to rise until it reached its turning point in 2011. On the contrary, all the internationally processed patents in 2009 and 2010 were almost constant whilst, from then onwards, high growth rates can be observed. An analysis of the applications and awards reveals that the filed applications through the Spanish OEPM remained stable for the four years whilst, on the contrary, the awards show considerable growth up to 2011 and then drop by 15,23%.



Graph 19: Trends in published patents

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The strong growth experienced by the biotechnology sector over the last few years has been accompanied by an increase in the number of patent applications and awards in the sector. In order to measure the contribution of the biotechnology patents to the patent activity in Spain, we have included a ratio of the number of patent applications made by the biotechnology sector and the total number of patent applications in 2012. Based on the data shown in Table 8, the share of biotechnology patents in 2012 was 11.59%, representing an increase of 20.71% over the previous year.

	Year 2011	Year 2012	
	% Biotech/Totals	% Biotech/Totals	%Var. Annual
OEPM	8.45%	8.35%	-1.15%
PCT	11.99%	12.92%	7.73%
JPTO	19.78%	32.87%	66.16%
USPTO	10.37%	14.94%	44.03%
EPO	7.82%	12.95%	65.50%
Total	9.60%	11.59%	20.71%

Table 8 Ratio Biotechnology patent applications/ Total applications. Years 2011-2012. Source: Clarke&Modet-PCM

If an analysis is made of the different application processes, it can be seen that the highest percentage in the analysed ratio corresponds to the patent applications in Japan, with a share of 32.87%, followed way behind by the United Stated with 14.94% of the total share. This reveals again the growing marketing activity of biotechnological products in Japan. On the contrary, the share of biotechnological patents filed in Spain is experiencing an annual decline of -1.15%, which means a loss of share. In conclusion, biotech companies show a growing tendency to operate and patent in international markets.

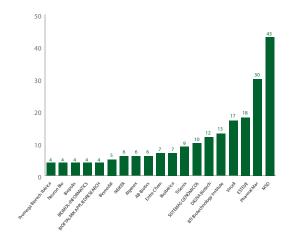
Scientific production in biotech companies

Each year, ASEBIO conducts a study on publications made in high impact scientific journals by Spanish biotech companies and multi-national research laboratories with headquarters in Spain, which are members of ASEBIO.

This study does not consider papers or posters presented at congresses or fairs. Neither does this study include those papers signed by research centres or by universities in which there is no mention of a relationship with business projects.

In the course of 2012, biotech companies made a total of 248 publications. This figure represents a year-on-year increase of almost 76%, with 141 publications recorded in 2011. The 248 publications were made by 41 biotech companies.

Regarding the companies with the highest number of publications (graph 24), this year the first position goes to MSD with 43 publications, followed by PharmaMar with 30. The company named Esteve has 18 publications, Vircell with 17, Biotechnology Institute has 13, Digna Biotech has 12, Sistemas Genómicos has 10 and TiGenix has 9.



Graph 20: Graph 20. Number of scientific publications by ASEBIO members. Source: ASEBIO





Healthcare or Red Biotechnology



Molecular diagnostics and personalised medicine

Spanish biotech companies are particularly active in the area of molecular diagnostics and personalised medicine and have the capacity to develop innovative products and services, capable of providing a cost-effective response to the needs of the National Health System. Precisely, the key challenge faced is the implementation of their innovations in Spanish hospitals and healthcare centres, so these local references could act as "demonstrators" for the international market.

A tool that could contribute to the promotion of R&D, for the improvement of services to citizens and promoting foster innovation in companies, which may have a special impact in the area of personalised medicine, is the Public Purchase of Innovative Technology, which can also be a recourse to funds (such as the FEDER funds) which have not been traditionally used by the NHS and which may contribute to the sustainability of this system.

At the beginning of 2012, Ferrer inCode started to market SymphonyTM, a new diagnostics tool which includes four genetic tests based on molecular biology techniques, helping doctors to predict the evolution of each breast cancer case, and, therefore, to select the personalised treatment based on the patient's genetic profile.

Genómica launched three new kits: Clart CMA KRAS-BRAF-PI3K, a diagnostic kit to help to optimise the treatment of colorectal cancer, Clart HPV for the detection of the Human Papilloma Virus (HPV) and Clart STIs A&B for the detection of micro-organisms causing infections in the human urogenital tract.

OPERON offers a complete genotyping panel of the Human Papilloma Virus (HPV). Based on the reverse blot technique using strips, a test is made for the presence of 19 high-risk sub-types, which are all potentially oncogenic, and 18 of low-risk. OPERON also launched two new HLA typing products, within the framework of personalised molecular diagnostics for patients: HLA B*5701 Strip and HLA B*27 Strip. The former is a genetic test for the genotyping of the HLA B*5701 alleles associated with hypersensitivity to Abacavir, a widely used drug in combination antiretroviral therapies for HIV treatment. The latter detects the HLA B*27 alleles directly associated with a number of pathologies such as ankylosing spondylitis.

GynEC®-DX is a good example of the diagnostic activity of the company Oryzon Genomics. This product is based on the differential and highly accurate expression of a five gene signature in order to determine the stage of cancer in uterine aspirates. The combination of this test with an AP biopsy on the same aspirate offers a negative predictive value of 99.6%

Gaiker-IK4 patented a new diagnostic kit for the detection of colorectal cancer through a blood analysis, based on the results of various genetic markers present in blood.

IMDEA Alimentación, in partnership with the La Paz Hospital in Madrid, patented a signature of four metabolic genes with a powerful prognostic value for patients in the early stages of colon cancer. This is a simple method to identify patients who may not require treatment after surgery, and those with a risk of relapse and therefore who require chemotherapy treatment.

Investigators at the Institut de Recerca Biomèdica (IRB) in Barcelona discovered the mechanism required to trigger the metastasis of colon cancer and its spread to the liver. This pioneering study opens the door to the creation of diagnostic tests within a period of at least five years, in order to predict the spread of the tumour to vital organs and, at a later time, to block this process.

INGENASA, in a joint venture with the FIMA of the Universidad de Navarra, is evaluating an expression profile for the diagnosis of lung cancer in plasma. Within this same joint venture, it has been obtained antibodies against the serine protease TMR-SS4, a marker of poor prognosis for patients with a histology of squamous cell cancer. These antibodies have already shown their usefulness in immunohistochemical tests and have been assessed for therapy.

INGENASA has also developed the DAS-ELISA kit to differentiate between human Coronavirus 229E and NL63, based on the use of specific monoclonal antibodies of the virus nucleoprotein, in collaboration with the Center for Infection and Immunity Amsterdam (CINIMA).

At the end of 2012, Amadix merged with Transbiomed, the first spin-off of the Instituto de Reserca del Hospital Universitario Vall d'Hebron, also increasing the company's capital. This merger made it possible to form a leading company in the development of innovative tools in the area of cancer diagnostics, with an extensive pipeline of programs for different types of cancer, such as lung, colon and prostate.

In partnership with INDRA, Althia is finalising the development of an expert system in Cloud for the diagnosis and personalised therapy for patients with either breast, colorectal or lung cancer, gene-

rating a database combining clinical and imaging parameters with experimental data (genomic, genetic and proteomic). Furthermore, Althia has generated new patents for the identification of markers for the stratification of responder patients to therapies for high grade gliomas and for diffuse large B cell lymphomas (DLBCL).

An investigation headed by CSIC has characterised the epithelial tissue formation process, thanks to the identification of 14 markers. The work, published in "Nature Cell Biology", could contribute to the detection of therapeutic targets against cancer types such as colon, breast and lung.

The Spanish company VenterPharma was issued with marketing authorisation by the Spanish and German regulatory agencies for Lactest, its new product for the diagnosis of hypolactasia based on a new molecular entity named gaxilose, which Ferrer is responsible for marketing in Spain and Germany.

NIMGenetics presented TrisoNIM, a non-invasive prenatal screening test for the detection of foetal trisomies of chromosomes 21, 13 and 18. It is based on a combination of latest generation sequencing technology with the most advanced bioinformatics in order to analyse the foetal DNA present in material blood.

The University of Granada, in partnership with Almirall, presented the results of the first study to permit the detection in pharmacies of possible type 2 diabetics with risk factors.

Araclon Biotech, in which Grifols has a majority shareholding, discovered a new blood protein with a diagnostic value for Alzheimer. The levels of this protein vary with the progress of this disease and can be observed in the blood using the "ABtest" kits patented by Araclon.

Neuron Bio has developed a program to seek differential biomarkers for Alzheimer's disease. The novelty of this project lies in the use of non-invasive fluids and the identification of biomarkers in the early stages of this disease.

At the beginning of 2012, AB-BIOTICS launched a new genetic test, Neurofarmagen Depresión, which made it possible to identify the most effective and safe treatment for a specific patient with depression, based on his/her DNA characteristics.

Sistemas Genómicos launched three new genetic tests, which consist in a neuropathy test with 285 genes, an osteodysplasty test with 229 genes and a test for propensity to develop melanoma.

The company OWL in partnership with Biogune, has developed the first metabolomics-based test for the non-invasive diagnosis of fatty liver disease. Furthermore, the Basque Health Service, through the BIOEF Foundation, commenced a project directed at assessing the diagnostic capacity and predic-

tive value of this test through its use in a number of Hospitals in the Osakidetza Basque Healthcare Network.

Biomedal contributed to the presentation of a non-invasive technique to make possible to determine whether a celiac has ingested gluten, with a simple stool sample.

Genetadi Biotech introduced a new microarray for the prenatal diagnosis of genetic syndromes. Amniochip is capable of detecting 150 different genetic syndromes.

Bioibérica Farma presented the results of its Arthrotest project, a saliva-based DNA test to predict the genetic propensity of patients to suffer osteoarthritis of knee with rapid progression. This analysis makes it possible to identify those patients with the worst prognosis and personalise their treatment in order to act on the disease, thereby making it possible to reduce or delay the implant or prosthesis and improve their quality of life.

BIOMOL-INFORMATICS introduced a new sequencing service to provide human genetics information: BIOMOL-EXOME directed at researchers and doctors, centred on the isolation, sequencing and analysis of the Human Exome with an estimated time for the complete process of no more than 10 weeks.

LEITAT, through Lykera Biomed (spin-off created from the technology centre), introduced two kits against \$100A4 and \$100P for use in the diagnosis, prognosis and monitoring of the response to anti-cancer treatments. These kits are currently being validated at a clinical level. In another investigation line, LEITAT developed a biosensor to quickly determine the immune response to vaccines.

The Unidad de Genética Clínica (clinical genetics unit) of the Clínica Universidad de Navarra is a technological unit providing diagnostics support to this Hospital, in close collaboration with the CIMA (Centre for Applied Medical Research) and its technological resources. This is a leading Centre in Spain for the determination of biomarkers, K-ras in CCRm and EGFR in NSCLC.

Through its X-Pol subsidiary, Genetrix signed a licensing agreement with the Germany company Qiagen for the marketing of Qualiphi, a new, more powerful version of the human DNA polymerase, improving the whole genome amplifications and the long DNA sequences.

Alphasip launched Cocachip, a saliva-based drug detection device.

Cytognos launched three new kits: LST-11 is a combination of anti-bodies developed to evaluate the principal lymphocyte subpopulations through a single flow cytometry test, the SST and finally, ALOT – 7, to conduct an initial evaluation of samples with suspected acute leukaemia.



Development of therapies for human health

Innovative medicines

As a result of the economic crisis, austerity and efficiency in the National Health System, which should be an ongoing obligation for the health authorities, has become a question of survival for the system. In this context, the innovative laboratories are committed to the cost-effectiveness of their therapies, and seek to make a contribution to improve the quality of life and life expectancy of the population.

Oncology

In just a few years, we have observed a fundamental change from conventional, unspecific therapies to the availability of medicinal products with highly defined objectives. Some challenges, still to be faced, are focussed on using Genetic advances for the development of new targeted therapies. Is the case of some biopharmaceuticals, which make it possible to apply chronic treatments in order to prevent relapses in lymphoma and leukaemia and thereby offer survival and quality of life benefits to patients.

Due to the designation by the FDA of PM1183 (Lurbinectedin) as an orphan drug for ovarian cancer, Zeltia's shares rocketed on the stock exchange in August 2012. Lurbinectedin is a compound made by PharmaMar (a Zeltia Group company) which is currently in Phase II trials for resistant ovarian cancer, lung cancer and breast cancer, and is also in phase I clinical trials in combination with other chemotherapeutic agents and for haematological tumours.

Furthermore, PharmaMar announced that the regulatory authorities granted 14 new marketing authorisations for Yondelis® in ten countries. Ten of these authorisation were for Yondelis® in combination with Caelyx® for the treatment of platinum-sensitive recurrent ovarian cancer in Bahrain, Costa Rica, Dominican Republic, Jamaica, Jordan, Nepal, Moan, Panama, Qatar and Vietnam. The other four marketing authorisations were obtained for Yondelis® for the treatment of soft tissue sarcoma (STS) in Bahrain, Dominican Republic, Jordan and Nepal. Yondelis® is currently approved in 73 countries.

Merck Serono and Threshold Pharmaceuticals announced a global agreement for the development and joint marketing of TH-302, a targeted drug against hypoxic tumour cells. Phase III clinical trials are being conducted for soft tissue sarcoma, phase II for advanced pancreatic tumours and additional clinical trials for other solid tumours and haematological problems.

Merck Serono reached an agreement with Symphegen A/S, in Copenhagen, for Sym004, an anti-body under research targeted to the epidermal growth factor (EGFR). It is now in phase I/II for the treatment of patients with metastatic colorectal cancer with no KRAS mutation.

Oryzon Genomics commenced preclinical trials of its second drug, a candidate for the treatment of chronic leukaemia. This is a powerful, selective, enantiopure LSD1 inhibitor, with a low molecular weight, excellent pharmacological characteristics and in vivo activity at very low doses. The candidate is orally bioavailable with good PK and a very good safety and selectivity profile.

Kinase inhibitor EC-70124, under development by EntreChem, was shown to be effective in mouse models for head and neck cancer, expressing a permanently active form of kinase Akt and loss of Trp53. In another study, with the same inhibitor, when administered orally, the molecule showed in vivo activity for prostate tumours characterised by the over-expression of ESE1/ELF3 and the co-activation of NI-kB.

Work published in the Journal of Molecular Cell Biology (JMCB) by investigators of the IMIBIC described how the DYRK2 enzyme regulates the proteins responsible for keeping the cancer cells alive.

Vivia Biotech and Ferrer are developing a new therapy for various haematological cancers, specifically for the treatment of non-Hodgkin lymphoma, chronic lymphocytic leukaemia and other haematological cancers.

As a result of the Eurostar Disc-Screen Project, finalized in 2011, the InKemia IUCT Group has filed three European patent applications for products IUCT-DS-0423 and IUCT-DS-0440 against metastatic breast and prostatecancer in addition to UCT-DS-0421 active against breast cancer. The applications, which were jointly presented with the project partner, Pharmatest Ltd of Finland, are in the transfer process to the company Plasmia Biotech, S.L, a spin-off of IUCT, in order to develop these products up to the clinical trial phase.

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• Respiratory diseases

Respiratory diseases form one of the areas in which a considerable number of companies are focussing their investigations. This is the case of Almirall which has a powerful project portfolio, such as Aclidinio, administered through the Genuair® inhaler, property of Almirall, an innovative, easy-touse, two-step device. Aclidinio was approved by the regulatory authorities (FDA and EMA) in 2012 for the treatment of chronic obstructive pulmonary disease (COPD). Almirall is currently focussing on the development of a range of respiratory products for the treatment of asthma and COPD, with a combination of aclidinium, to offer doctors a wide range of treatments with the same own technology inhaler. On the other hand, Almirall reached an agreement with the British biotech BioFocus to cooperate in the search for new targets in the respiratory and inflammatory disease areas.

Palau Pharma signed an agreement with the French company Sensorion, to develop a possible drug. Palau is to investigate applications for the treatment of asthma, whilst Sensorion is to investigate those related to vertigo.

• Neurological diseases

Merck Serono received the approval of the European Commission to extend the recommendation for the administration of Rebif 44 micrograms three times a week, for patients experiencing a single demyelinating event and who have a high risk of developing multiple sclerosis. The approval was based on the results of the Reflex study.

Oryzon Genomics announced its decision to go into pre-clinical development with its first candidate drug, a bi-specific inhibitor, the first of its kind, against LSD1 and MAO-B for the treatment of Huntington's disease.

Neuron Bio patented a new compound, NPS155, to offer an alternative way of combating Alzheimer's disease, other than statins, and which has been selected for its neuroprotective effect, its powerful antioxidant activity and its preventive effect against neuronal cell death.

Bionure, in partnership with the Clínic-Idibaps, presented a study which manages to prevent and improve Multiple Sclerosis in the pre-clinical phase and prepares the development of therapies with neuroprotective drugs. Likewise, Bionure announced its partnership with two North American foundations dedicated to the investigation of new treatment for Multiple Sclerosis (MS) and Optic neuritis.

The results of the phase III clinical trial of BG-12 oral, made by Biogen Idec, confirmed the efficacy and safety in the treatment of Multiple Sclerosis.

In the Journal of Neuroimmune Pharmacology, VivaCell Biotechnology España, published the results obtained with its candidate VCE-003, NCE a synthetic cannabinoid derivative which shows its powerful anti-inflammatory and neuro-protective effects and its therapeutic efficacy in mouse models for Multiple Sclerosis.

Neurotec Pharma, in partnership with Advancell, is continuing with the clinical development of NT-KO-003, an innovative neuro-protective, orally-administered drug to treat Multiple Sclerosis. The company is conducting a Phase IIa clinical trial on 103 patients with RR-MS in 16 Spanish and German hospitals (NeuroAdvan Study). The recruitment of the study patients is to end in March 2013 and the results are expected for the end of 2013.

• Inflammatory and Autoimmune Diseases

Almirall reached an agreement with Singapur Aslan Pharmaceuticals, to assign the rights of one of its drugs being developed for rheumatoid arthritis. Aslan undertakes to finance the clinical phase II trials through a product development program in the Asian-Pacific region.

Amgen and MedInmune announced a partnership agreement to develop and market medicinal products against inflammation, based on five monoclonal anti-bodies.

Diomune achieved the "Orphan Drug" designation for its immune modifying drug IV1303 and is currently in the funding round in order to start a phase I clinical trial for the treatment of human septicaemia, with some pre-clinical results that represent a 10-fold improvement on those obtained to date by any other drug for this disease.

TiGenix announced some positive interim safety results in its Phase IIa trial of Cx611 (a suspension of allogeneic adult stem cells derived from adipose tissue delivered through intravenous injection) for the treatment of rheumatoid arthritis. Specifically, this is a clinical trial on 53 patients in which23 centres are taking part. The trial has been designed to assess the safety, viability, tolerance and optimum dose of the medicine.

TiGenix also successfully concluded the Phase I clinical trial certifying the safety of the intralymphatic administration of its Cx621 product, based on stem cells obtained from the adipose tissue of healthy volunteers, for the intralymphatic administration in the treatment of autoimmune diseases, which opens up the possibility of achieving efficacy at much lower dosages of the medicine.



Likewise, TiGenix enrolled the first patient for the phase III trial of Cx601, a medicine comprising expanded adipose derived allogeneic stem cells for the treatment of perianal fistulas in patients with Crohn's disease.

Ophthalmology

Sylentis received authorisation in Spain and Estonia to start Phase II of its clinical trials with its SYL040012 compound for the treatment of ocular hypertension associated with Glaucoma. SYL040012 is a chemical entity under the interference RNA and it is to be tested in Spain, Estonia and Germany.

The Iniciativa Andaluza en Terapias Avanzadas (IATA) (Andalusian Initiative for Advanced Therapies) was authorised by the Spanish Medicinal and Healthcare Products Regulatory Agency to conduct a multi-centre clinical trial to assess the safety and feasibility of the treatment of patients with corneal ulcers with Nanostructured Artificial Human Corneas. Its production shall be made in the GMP laboratory network of the Public Health System of Andalusia, coordinated by the IATA.

Rare diseases

The clinical research into these diseases, affecting around 30 million people in Europe, shall be conducted differently from the process for common pathologies. Advances in new techniques make possible to obtain increasingly more comprehensive information, in less time and at a lower cost.

The International Consortium on Investigation into Rare Diseases (IRDiRC), supported by the Spanish Biotech Platform and ASEBIO, is a public-private partnership directed at looking abroad and strengthening relations with the USA, Canada, Japan and Australia. Its final objective is to have 200 new medicinal products by 2020, to generate 200 new diagnostic strategies and to constitute probable records. In short, the aim is to reactivate the investigation of those medicinal products declared to be "dormant" for which there is no ongoing research.

Digna Biotech set in motion a clinical trial to treat acute intermittent porphyria, a rare genetic disease which can cause considerable neurological damage, in partnership with CIMA, the Clínica Universidad de Navarra, the Hospital 12 de Octubre of Madrid and other international centres. The study, coming within the AIPGENE European Consortium, is directed at evaluating the safety and obtaining

preliminary data regarding the efficacy of a gene therapy product (vector rAAV2/5-PBGD).

Valentia BioPharma announced that it was investigating a drug against myotonic muscular dystrophy, affecting 6,000 people in Spain. Due to the promising results, clinical trials are expected to commence in one year. Likewise, this company from Valencia signed an agreement with the MD Anderson Cancer Centre to seek therapies against DM2.

The Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER) (Networking Centre for Biomedical Research into Rare Diseases) and the Centro Nacional de Análisis Genómico (CNAG) (National Centre for Genome Analysis) are collaborating in the sequencing and analysis of 116 exomes corresponding to cases of 24 rare diseases or pathological groups, in order to discover new genes responsible for different types of rare pathologies, such as mitochondrial, hereditary metabolic, neuromuscular and neurosensorial diseases. CIBERER in partnership with the CSIC and the University of Seville, patented a series of compounds which function as pharmacological chaperones for the neuronopathic forms for Gaucher's disease.

Sanifit is developing SNF472 for the treatment of Calciphilaxis. The designation of orphan drug was granted in 2012 by the EMA and the FDA.

Advanced therapies

The University of Malaga and the CIBER-BBN obtained an international patent for the regeneration of articular cartilage, a new treatment for osteoarthritis which enables the natural formation of cartilage. The cell therapy of the invention, applied to an osteochondral lesion is able to regenerate the damaged tissue, for the cartilage and the subchondral bone, with the new tissue "perfectly" integrated with the healthy tissue and showing a normal histological structure.

TiGenix reimbursed ChondroCelect in Holland, directed at repairing cartilage through cells. Formerly, ChondroCelect was available in that country under a shared risk model.

BTI Biotechnology Institute provided the Faculty of Dentistry of the Universidad Nacional Autónoma of México with a PRGF®-Endoret® unit, based on patented technology developed by BTI and its research team.

3P Biopharmaceuticals continues to work on a project for the development of treatment for Vitiligo (degenerative skin disorder) and is starting the GMP industrial production of stem cells for autologous treatment. 3P is also involved in the development of processes and production of other types of stem cells.



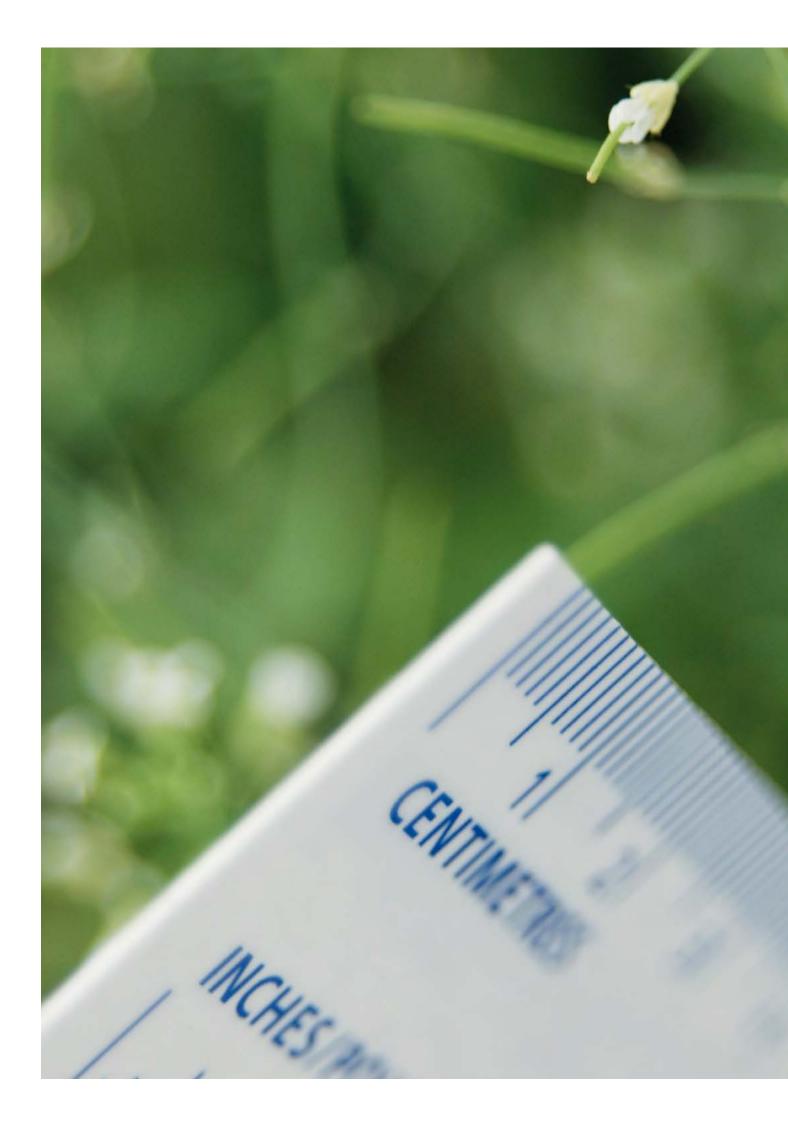
Bioibérica Farma and the Regional Health Ministry of Andalusia signed an agreement in 2012 for the development of new products for the prevention, diagnosis, and treatment of diseases through the use of cell therapies. Bioibérica has created the Cell Therapy and Regenerative Medicine Unit with headquarters in the GMP room (or clean room) located in the Healthcare Technology Park of Granada. The research work is managed from the Andalusian initiative in Advanced Therapies.

Histocell successfully completed the "in vivo" Preclinical Phase using sheep as an experimental model, for its cell therapy medicinal product HC-SVT-1001 for bone regeneration, at the AO Foundation in Davos, Switzerland. This project, which is being conducted in partnership with Salvat, is to start the Phase I Clinical trial on patients in 2013.

Bioinformatics

DREAMgenics launched its à la carte advisory and consultancy services on genomics and bioinformatic analysis (Whole Exomes and Genomes, Transcriptomes and Panels) for scientific and clinical investigators.

The Banco Español de Algas (Spanish Algae Bank) launched two new software programs. One is a computing application which makes possible to know the cultivation characteristics, source and possible applications of the 700 microalgae of Macaronesia while the other program is a web-based application and an APP for the management of strains, from the bioprospection phase right up to the complete flow.





Agri-food or Green Biotechnology



Functional food

In the area of functional food, in 2012, the CSIC, the company Biopolis and the Corporación Alimentaria Peñasanta (CAPSA) launched a probiotic milk powder on the market. This product, named Proceliac, reduces the intestinal inflammation of celiacs, rebalancing the intestinal microbiota whilst an anti-inflammatory response also occurs.

AB Biotics and the Damm Group used the yeast residue generated during beer making to develop a weight-loss product that could soon be on sale at pharmacys, after having demonstrated its ability to block the absorption of some fats by the body.

Likewise, AB Biotics launched a new food ingredient that prevents iron deficiency. A single dose of this product provides the recommended daily allowance of iron, avoiding the metallic taste and the typical side effects brought about by the fortification of food with iron. It can be marketed as either a dietary supplement or included in dairy products and any solid foods.

Innofood by Neuron developed a process for converting purple garlic - Ajo Morado de las Pedroñeras - into black garlic, named Black Allium. This new type of garlic is completely black with some totally new and different organoleptic (taste, texture, colour and smell) and nutritional characteristics in comparison to fresh garlic.

CSIC has paved the way for obtaining olives that are carriers of probiotic, live micro-organisms which can be beneficial to health when consumed in sufficient quantities. In this way, bacteria of the genus Lactobacillus and yeast, responsible for the fermentation of olives, join together to form a biofilm which bonds to the olive skin during this process.

BioMar is introducing the first feed range with probiotic bacteria approved for use in all aquaculture species in the European Union. The most important benefit of these new LARVIVA probiotic products is a reduction in the occurrence of deformities in fish larvae and fry.

The Centro de Investigación de Ordesa, in partnership with Biopolis SL, isolated a probiotic strain which is active against Rotavirus infections. The probiotic strain *Bifidobacterium longum subsp infantis* CECT7210 is able to reduce in vivo the incidence of Rotavirus infections. The bacteria is able to inhibit the virus replication in employed cell lines in 36.05% and protect them in 48.05%.

The Centro Tecnológico LEITAT co-ordinates the European NOSHAN project directed at investigating the technologies and processes required to convert food waste into functional feed, at a low cost and with low energy consumption, for maximum valuation of the source waste. Specifically, LEITAT investigates the achievement of protein hydrolysates enriched in active peptides with a number of functionali-

ties. These hydrolysates could be used in animal feed and also in nutraceutical, cosmetic and other sectors.

Neuron Bio is involved in the Al-AndSalud project funded by CDTI within the Technological Fund Program, together with the company De Oleo y COVAP, an investigation project for the research and development of new functional foods. In the course of 2012, amongst the projects executed by Neuron Bio, particular mention should be made of the functional ingredient effectiveness study and its validation in animal models prior to human pilot trials. These were conducted firstly in experimental cellular models and, in a second phase, in animal models, with particular prominence given to the zebra fish.

In 2012, Biosearch launched three new functional ingredients. Caronositol TM obtained from carob and which is recommended for the treatment of Polycystic ovary syndrome and insulin resistance, Carositol® for application in diabetes and, finally, Hydroliv plusTM obtained from the olive tree fruit, with a strong anti-oxidant nature.

Natac Biotech launched Innovaoleo by NATAC: a line of ten new ingredients derived from the olive tree, with healthy properties.

Technologies for food control and quality

The Centro Tecnológico LEITAT researches into the processes for the encapsulation of bactericides in order to control their release in food products and thereby to lengthen the shelf life of the same.

For more than 15 years and, as a result of a collaboration project with the National Biotechnology Centre for the development of a kit to detect Gluten in food, INGENASA has progressively entered into the Food Safety sector, primarily focussed on the Allergen analysis area. The company currently markets a number of in-house developed ELISA kits for the detection of traces of casein, b-lactoglobulin and egg, in addition to immunochromatographic strips for the rapid detection of milk proteins in food.

The Instituto de Medicina Genómica (IMEGEN) launched two new kits based on real-time PCR. One kit is to identify horse DNA in meat (RapidFinder Equine ID kit) and the other is to quantify DNA in horse meat (RapidFinder Equine Quant kit).

Biomedal launched a new method to detect the presence of Anisakin in fish.

Animal healthcare and feed

The biopharmaceutical company based in Andalusia, Bionaturis, which manufactures veterinary medicinal projects, is involved in the "Targetfish" project, directed to the pro-

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duction of vaccines for aquiculture. Additionally, it implemented the "Aquafly" in partnership with the University of Cadiz and CTAQUA (Fundación Centro Tecnológico de Acuicultura de Andalucía) in order to seek more effective alternatives for the vaccination of farmed fish species, without having to do this manually.

Algenex launched a new diagnostic product on the market, based on IBES® technology in collaboration with Boehringer Ingelheim Svanova. The product, named SVANOVIR ® VPPA-Ab, is a high performance test that offers accurate and reliable results for the detection of African swine fever anti-bodies in swine serum and plasma samples.

Bioibérica launched Nucleoforce Fish which minimises the intestinal inflammatory response in diets with a high inclusion of feed materials of plant origin, and Nucleoforce Cows to help improv ing the reproductive parameters and animal health. This company has also launched Dysgen, which is a DNA chip to assess the genetic propensity to develop hip dysplasia in Labrador dogs.

Agriculture

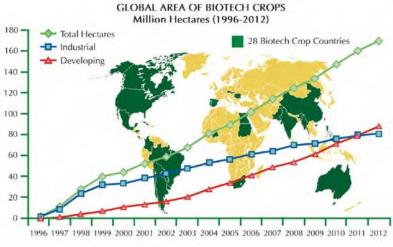
According to the "Annual Report on the global status of genetically modified crops in 2012" published by the International Service for the Acquisition of Agri-Biotech Applications (ISAAA), in 2012 the global area of biotech crops experienced a record of 100-fold increase, from 1.7 million ha in 1996 to 170.3 million ha in 2012, representing a 6% increase over 2011.

Spain occupies the seventeenth position, with a total of 116,306.6 hectares of GM maize, resistant to Lepidopteran pests, representing a 20% increase of 18,980.88 ha over the previous year. With regard to the total maize produc-

tion, MG crops represented 30% of the national total, 3.5% more than in 2011. This is clear from the latest data offered by the Ministry of Agriculture, Food and Environment (MA-GRAMA) on the surface areas planted with maize in Spain during 2012. Aragon is the autonomous community with the greatest planted surface area of BT maize, with 41,669.39 ha, that is 301.39% more than in 2011. Followed by Catalonia and Extremadura with 33,530.86 and 15,951.51 ha respectively. The provinces with the largest areas of biotech maize were Huesca (24,002.65), Lerida (27,076.75), Zaragoza (17,143.80) and Badajoz (10,690.06).

Relating to the developments by Spanish entities in 2012, the most salient ones are indicated below:

- Monsanto is developing research projects to improve the yield and productivity of vegetable species such as the tomato and is continuing to develop maize varieties with high yield levels.
- In 2012, Bayer CropScience launched its new insecticide (Movento Gold) intended for the treatment of plagues of sucking insects such as scale insects, psyllids, aphids, white-fly and thrips. The main characteristic of this insecticide is its two-way control, moving both upward and downward within plant sap and, therefore, offering greater effectiveness. The company also launched Movento 150 O-Teq for the control of the scale pest in peppers.
- Plant Response Biotech (PRB) is collaborating with the Centro de Biotecnología y Genómica de Plantas UPM-INIA (Centre for Plant Biotechnology and Genomics, CBGP) to facilitate the exploitation of the innovative technologies generated in the laboratories, such as crop vaccination through pre-immunization with molecules derived from plant pathogens (elicitors), which are detected by plant receptors.
- Glen Biotech designed the first natural product against the red weevil, developed from an autochthonous mushroom, the Beauveria bassiana.
 - The LEITAT Technology Centre is taking part in a national project within the Innpronta program, together with a Spanish company, in the production of biopesticides from urban waste.
 - The CSIC constructed a latest-generation greenhouse in Galicia. The first occupants were a group of non-transgenic, cisgenic (or intragenic) chestnuts, in other words, plants modified with their own genes, without adding those of another species. The work was focused on achieving high secretion of the protecting mechanism of the trees against two of the most important pests, namely ink disease and chestnut blight, to create highly resistant specimens.



A record 17.3 million farmers, in 28 countries, planted 170.3 million hectares (420 million acres) in 2012, a sustained increase of 6% or 10.3 million hectares (25 million acres) over 2011.

Graph 21: Global area of biotech crops Source: Clive James, 2012





Industrial or White Biotechnology



Biotechnology applications for energy production

According to the annual report on the use of biofuels corresponding to 2011, prepared by the National Energy Commission, sales of biofuels have increased by 17% over 2010, and 61% over 2009. Biodiesel accounted for 77% of the total of the biofuels marketed, 19% for bioethanol and 4% for hydrobiodiesel.

In 2011, diesel biofuels accounted for 7.19% of the total diesel sales in 2011, compared to 5.56% in 2010 and 4.15% in 2009. On the other hand, bioethanol reached 6.34% of petrol sales (6.22% in 2010, and 3.75% in 2009).

The key country for the production of biodiesel consumed in Spain was Argentina (45%), whilst production in Spain dropped (24.47%). The raw materials used for the production of biodiesel were primarily Argentine soy bean (48%) and palm from Indonesia (35%).

The consumed bioethanol is primarily produced in Spain (almost 60%). The raw materials used were maize (49.5%), sugar cane (24.8%), and wheat (18.0%), primarily sourced from Brazil (29.5%) and Spain (27%)

Abengoa Bioenergía, was selected by the Banco Nacional para el Desarrollo Brasileño (BNDES) and by the organism "Fomento e Inversión de Estudios y Proyectos" (FINEP) (Body for the Promotion and Investment in Studies and Projects) to adapt its second generation ethanol technology in order to develop it from sugar cane biomass. This project, which comes within the Scheme for the Industrial Innovation of the Sugar-energy sector (PAISS), makes possible for Abengoa to generate bioethanol and biobutanol from sugar cane bagasse and straw.

As well, Abengoa Bioenergía Nuevas Tecnologías heads the consortium Bio-AndaluS in which AZVI, Biomedal, Canagrosa, DMC Research Center, NEOL and Pevesa are also involved. The initiative, included in the Feder-Innterconecta scheme through the CDTI, comprises the experimental development of lignocellulosic biomass processing and other carbon sources in a number of bioproducts, within the framework of Sustainable Andalusia. For its part, Biomedal is developing bio-catalysts in this project, directed to the pre-treatment of the lignocellulosic biomass as a prior step to its use in the production of bioethanol, in addition to the development of fermentation processes for the valorisation of agricultural waste through its conversion into bioplastics.

Likewise, 2012 marked the completion of the Cenit BioSos or Sustainable Biorefinery, headed by Abengoa Bioenergía Nuevas Tecnologías. This project, which commenced in 2009, was aimed to develop new technologies to form part of the future biorefinery, involving 31 research centres, in addition to a consortium formed by 14 companies from sectors such as the chemical, energy, construction, biotechnology sectors, which in the near future, have to be integrated under the umbrella of the biorefinery.

Neol, the joint venture between Neuron Bio and Repsol continued with the development of its project for the industrial production of microbial oils (Microbioil®) for use as a raw material for biodiesel or hydrobiodiesel. The process was validated at the Neol pilot plant with good results and the first biomass culture and recovery tests were conducted at an external industrial plant.

In 2012 the Camelina Company España (CCE), a pioneering company and European leader in camelina, completed a commercial pilot project, involving 2,000 ha crop of camelina. CCE is promoting camelina as an alternative, sustainable crop, for rotation with traditional cereal crops, thereby minimising fallow land to become dry and arid regions. This company has started to expand the cultivation of camelina and is also involved in the ITAKA Project, co-financed by the European Commission, for the production of camelina-based sustainable biofuels for its use in aviation. ITAKA, formed by a consortium of companies such as NESTE OIL, Airbus, CLH and KLM amongst others, is seeking to accelerate the commercialisation of aviation biofuels in Europe.

The LEITAT Technology Centre is heading the European R&D project named URWASTECH, based on the combined treatment of wastewater and the organic fraction of the solid urban waste rest-fraction for the production of re-usable water and biogas for energy purposes. On the other hand, LEITAT is also involved in other 7th Framework Program R&D projects focussed on the treatment and energy recovery of waste and wastewater through the production and recovery of biogas and/or hydrogen, such as the Biogas2PEM-FC European project.

The InKemia IUCT Group, within the framework of European project Eureka 2G-BIOFUEL, developed a new Second Generation Biofuel (S-52) for industrial boilers, with the following principal characteristics: a product to replace Diesel or Fuel Oil; produced from biomass in a combination of natural raw materials and industrial waste of natural origin. The cost of the product is highly competitive, even compared to fossil fuel oil.

Furthermore, the InKemia IUCT group, Repsol and Abengoa became part of a European consortium bioeconomy-based enterprises (Biobased Industry Consortium) expected to prepare a Public-Private Partnership (PPP) in bioeconomics named BRIDGE (Biobased and Renewable Industries for Development and Growth in Europe). The aim for BRIDGE is to be ready for 2014 with the first calls for proposals for the Horizon2020 European program.

Within the framework of the Energreen program, researchers from Neiker Tecnalia are studying how to obtain more cost-efficient micro-algae based fuel which will reduce CO2 emissions. The researchers are improving the traditional micro-algae cultivation methods by modifying the algae metabolism in order to accumulate more oil in the form of lipids and to achieve a residual biomass which will finally be used to obtain biogas through a pioneering "anaerobic digestion" system.

Finally, the group Enzimología y Biorremediación de Suelos Orgánicos del Centro de Edafología y Biología Aplicada del Segura (Cebas-CSIC) (Enzymology and the Bioremediation of Organic Soils of the Centre for Soils Sciences and Applied Biology of the Segura) is involved, together with other participants, in a research project (Elesa) headed by the company Estrella Levante to convert brewers grains (a by-product derived from beer production) into fuel.

Biofuel plants and centres

In 2012, the CO2Algaefix project, headed by AlgaEnergy, commenced the construction work for what is going to be the first micro-algae plant dedicated to the capture and biofixation of CO2 at a pre-industrial scale. The plant is located in Arcos de la Frontera (Cádiz).

Abengoa Bioenergía successfully completed the construction and commissioning of the Ecoalga Plant, offering 5,000 m2 of flexible and experimental facilities for experimental tests primarily dedicated at validating the technical - economical viability of the industrial production of micro-algae integrated in bioethanol and animal feed plants.

Furthermore, Abengoa Bioenergía Nuevas Tecnologías, also developed the "waste to biofuels" (W2B) technology which is to be fine-tuned through the construction of a demonstration scale plant with capacity to process 25,000 Tons of solid urban waste (SUW) to obtain up to 1.5 ML of bioethanol suitable for use as fuel. During the second semester of 2013, there are plans to conduct tests with some 8,000 tons of SUW from Salamanca.

The InKemia IUCT group, in partnership with the Rumanian company ICPAO Medias, developed a new patented and economically viable biofuel for use in industrial boilers: theIUCT-S52, based on the first second-generation biofuel for diesel engines developed by Inkemia (el IUCT-S50). These results were achieved thanks to the European project EUREKA "2G-Biofuel" co-funded by CDTI and its Rumanian counterpart and which also includes the design of a pilot plant for the production of these biofuels.

Bio-processes

LEITAT is participating in the European project BioCon-Sept, headed by TNO, and related to the application of bioprocesses based on the use of ligno-cellulosic and oil-containing waste to obtain bio-products such as biosurfactants or chemical building blocks.

Plasmia Biotech, a company in which the InKemia IUCT group has a holding, entered the industrial scale-up phase for a generic nucleosidic pharmaceutical active ingredient, obtained through an innovative, patented biocatalysis process, based on enzymes that are property of Plasmia Biotech.

A team from the CSIC, together with the University of Oviedo and the University of the Balearic Islands, developed a bio-informatics platform to determine the self-cleaning capacity of soil affected by spillages (petrol or aromatic hydrocarbons) based on DNA micro-organism sequencing. The system also predicts in which bio-remediation soils is most effective, based on the use of natural elements of the actual eco-system to reverse the degradation of contaminated soil.

Biopolymers and Bioplastics

In its annual report for 2012, European Bioplastics states that the volume of bioplastics is 1.2 MM Ton, and that this is likely to increase five-fold up to 2016.

Heading the field is PET (Polyethylene Terephthalate) partially biologically based, which already accounts for approximately 40% of the global bioplastics production capacity. PET shall continue to increase to more than 4.6 MM Ton by 2016, equivalent to 80% of production. PET is followed by PE (Polyethylene), biologically based, with 250,000 tons, accounting for more than 4% of the total production capacity.

European Bioplastics warned of what it termed a "worrisome trend": the increase in production outside Europe, in South American and Asian countries, and urged European political leaders to convert their declared interest into specific measures. It pointed out that, if Europe wishes to benefit from the growth of the industrial value chain at all levels, it was time to take the appropriate decisions

Likewise, according to data provided by the APME (Association Plastics Manufacturers Europe), the use of plastics avoids generating 100 MM Ton of waste per year in the EU as a whole, and also avoids a 46% increase in energy consumption and CO2 emissions required for the use of alternative materials. We should therefore not lose sight of the fact that there is a sustainable facet in plastics.



In this respect, GAIKER-IK4 developed a new generation of renewably-sourced plastics, offering good fire resistance, through the European Fire Resist project, granted a budget of close to 8 MM €. GAIKER-IK4 is adding furanic resin composites in order to maximise the carbonization of the material in the event of fire, without altering the end properties of the plastic or interfering in the factory processing system.

The InKemia IUCT group reached an agreement with an important multi-national company to jointly develop four new microbial polysaccharide biopolymers, by providing its new proprietary polymers, for which the multinational company undertakes to study the technical and commercial viability of the biopolymer application in the field of pharmaceutical and cosmetic excipients.

LEITAT, through its ITACA project, is recovering waste derived from wastewater treatment. One of the recovery methodologies is based on the production of bioplastics through microbial cultures using biopolymer producing strains and selected waste as a substrate within the project framework.

Within its TriBioPlast® technological platform, Neol presented a new patented application requesting a microbial species isolated by Neol for the production of bioplastics and two variants generated by genetic modification, one with a greater bioplastic production capacity and the other with the capacity to produce aromatic monomers.

The University of Malaga (UMA) in partnership with the Instituto de Ciencias Materiales de Sevilla (CSIC) (Institute of Material Sciences of Seville) has managed to obtain a type of plastic from tomato skins (cutaneous). This is a biodegradable, viscoelastic biopolyester that protects against fluid loss and against infections, fungi, bacteria and parasites.

The company Domca, within the framework of the European project PLA4food, designed a garlic molecule based-plastic which makes it possible to keep vegetables fresh for a longer period of time. The end purpose is to develop an active, biodegradable container for freshly cut food products.

Other bioproducts

NanoMyP made a surprising development in the field of nanotechnology and was able to generate smart tissue capable of supplying drugs at the right place and time. It is also working on the development of smart tissue for dermatological treatments.

Inbiotec is involved in a European project intended to discover new bio-coatings to prevent rust on metal surfaces.

Within Abengoa Bioenergía, work is in progress to develop a number of technologies directed to obtaining high demand products for a number of applications in the chemical and energy sectors. These technologies use sugars or ethanol as raw materials, taking advantage of the synergies arising from the infrastructures and the extensive experience of Abengoa Bioenergía in the production of these materials.

In the course of 2012, Abengoa Bioenergía Nuevas Tecnologías, continued to invest in the growth and improvement of its R&D&I facilities. Thanks to this research work, the company has managed to halve the initial cost of second generation enzymes, though a further reduction of the same scale is also considered possible. Likewise, work is progressing on the enzyme production process through research schemes with leading companies in the sector, to achieve a production performance increase of 40% over last year. With these developments, enzyme demonstration batches have been produced on a scale of 100,000 litres. These have been evaluated at the second generation ethanol demonstration plant operated by Abengoa Bioenergía Nuevas Tecnologías at Babilafuente in Salamanca.







Financial environment



2012 is marked by capital increases of Genmedica Therapeutics, Inkemia IUCT Group, TiGenix, AB-Biotics, and nLife Therapeutics. The Genmedica capital increase reached 12 million € whilst the rest were above five million Euros.

In April 2012, CRB Inverbio, a venture capital company, completed the first closure of the Simplified Scheme CRB Bio II FCR fund, amounting 30 million euros. With this operation, it became one of the greatest specialist funds in life sciences.

In June 2012, the Government announced the creation of the public investment fund "Spain Start-up Co-investment fund", created with the collaboration of the Empresa Nacional de Innovación (ENISA) (National Innovation Company) and a group of specialist Spanish and international investors, each making a contribution of 20 million €.

Relating to mergers and takeovers, of particular importance is the takeover by Grifols of two Spanish biotech companies, VCN Bioscience and Araclon Biotech. Repsol acquired 50% of the company Neol Biosolutions while the merger of SYGNIS Pharma AG with X-Pol Biotech was successfully completed.

With regard to the Stock Market, Bionaturis and the Inkemia IUCT Group started trading on the Alternative Stock Market. In the case of Bionaturis, the company was first listed on the Alternative Stock Market (ASM) on the 26th January. The company managed to place 30 per cent of its capital for two million euros, equally divided between a public and private placement. For the launch on the ASM, KPMG Asesores acted as the registered consultant and the "Bankia Stock Market" as the Liquidity Provider and Placement Agency.

Inkemia IUCT Group started out in the ASM in December, through the "Listing" option. The floatation price was 0.80 € per share, reaching 0.84 € after the initial bidding, representing a 5% increase. For this stock exchange floatation, eSTRATELIS Advisors acted as Registered Adviser.









This section looks as the most noticeable figures in the Spanish biotech sector at the international level, analysing the data from the latest internationalization survey conducted amongst its members, such as the international alliances made, the establishment of member companies abroad and the evolution of all these companies and other variables over the last few years.

Internationalization survey

This section details the main conclusions of the 2012 biotech company internationalization survey conducted by ASEBIO, amongst its members, for the fifth year running.

Firstly, it should be highlighted that 80% of the respondents considered it to be essential to internationalise company activity whilst the remaining 20% considered this very important, showing a clear current or future commitment to this area. Those companies with no international activity, considered that they were not yet sufficiently consolidated concerning to their activity or products on the market, and preferred to invest in the consolidation of their business model and activity at a national level before competing in international markets.

According to the figures reported in the survey, 89% of the ASEBIO members conducted some type of international activity in 2012, a figure which is slightly higher than that of 2011. Amongst the principal international activities conducted, the export of products and/or services takes first place, with 66.7% (9 percentage points above the 2011 figure), followed by research alliances/partnerships, with 62.5% and participation in the 7th Framework Program with 48%. However, the activity recording the greatest growth is "licensing out", rising from 21% to 44%.

The principal international activities conducted by ASEBIO members in 2012(% over the total responses obtained):

Exporting products/services66.7%
Alliance / Partnership in research62.5%
7th Framework Program48%
Licensing Out
Representative office21%
Trade Agency 19%
EUREKA/CANADEKA/IBEROEKA Programs 19%
Licensing In
Production Plant12.5%

54.5% of the companies that are members of ASEBIO already have a specific department for the management of all their international initiatives, compared to 50% in 2011, accounting for approximately 14% of their total employees.

In 2012, the main export destination was once again the European Union, highlighting France, Germany, Italy, Portugal, the United Kingdom and Scandinavia as the principal EU markets relating to the number of operations. Likewise, Switzerland holds a key position outside the European Union countries.

North America (United States and Canada) follows the European Union as the second-most important area, although the South American and Asian countries are growing in importance, year after year, with particular mention of Brazil, Colombia, Japan and Mexico.

In their internationalization strategy, ASEBIO members continue to give priority to the United States and the European Union, which have traditionally boasted a leadership position. These are currently the markets in which our companies carry out the majority of their international operations. Asian companies such as Japan, India and China, and South American countries such as Brazil and Colombia, appear for the first time as a priority in the internationalization strategy of the sector.

The lack of financial resources continues to be the principal obstacle to an effective internationalization process for 91% of respondents, followed far behind by other reasons such as the lack of business culture (19%), language barriers (16%) and the lack of specific training in foreign trade / internationalization within the company (11%).

With regard to internationalization-related activities, 79% of respondents consider that fairs and partnering events are the most adequate tools, in addition to participation in fairs and the organisation of ASEBIO's own events with an international focus, such as BioSpain and the forthcoming BIOLATAM.

International presence

For yet another year, ASEBIO members continue with a strong international expansion, with already 136 subsidiaries (50% more than 2011), branches or representation offices in 41 countries in all five continents.

The geographical presence abroad of ASEBIO members is concentrated in Europe (49% of the total), South America (21%), North America, primarily the United States (18%) and Asia /Pacific (12%).

Listed below is the number of representation offices/ subsidiaries/commercial offices of the biotech member companies in each country.

USA	24
PORTUGAL	10
ALEMANIA	9
REINO UNIDO	9
MEXICO	9
FRANCIA	7
ITALIA	7
BRASIL	6
CHINA	
POLONIA	
SUECIA	5
SUIZA	3
BELGICA	3
ARGENTINA	3

TORQUIA
COLOMBIA
CHILE
DINAMARCA
AUSTRIA
HOLANDA
EMIRATOS
MALTA 1
AUSTRALIA
REP. CHECA
SINGAPUR
ESLOVAQUIA
MALASIA
TAILANDIA
JAPON
CANADA
GRECIA
IRLANDA
EL SALVADOR
GUATEMALA 1
NICARAGUA1
PERU
URUGUAY1
VENEZUELA1
HONG KONG 1
REP DOMINICANA
JORDANIA
TOTAL 136

Table 9 International presence of ASEBIO members, by number of subsidiaries/branches/representation offices Source: ASEBIO

Listed below are the biotech member companies and those countries in which they have some type of direct presence:

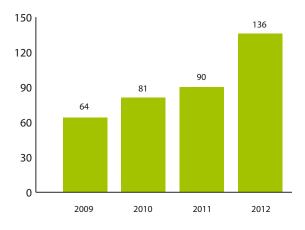
COMPANIES	COUNTRIES WITH DIRECT PRESENCE
ABENGOA BIOENERGÍA	USA, BRAZIL, FRANCE, HOLLAND
ABILITY PHARMACEUTICALS	USA
ALMIRALL	GERMANY, SWITZERLAND, UNITED KINGDOM, POLAND, DENMARK, BELGIUM, FRANCE, ITALY,
	PORTUGAL, AUSTRIA, HOLLAND, MEXICO
PROGENIKA R&D ASSOCIATION	USA, MEXICO, ARAB EMIRATES
BIOIBERICA	POLAND, BRAZIL, USA, BELGIUM, GERMANY, CHINA
BIOKIT RESEARCH & DEVELOPMENTS	USA
BIOMEDAL	USA
BIONCOTECH THERAPEUTICS	USA
BIOTOOLS	BRAZIL
BTI BIOTECHNOLOGY INSTITUTE	GERMANY, ITALY, PORTUGAL, UK, MEXICO, USA
DIGNA BIOTECH	USA
ERA7	USA
ESTEVE	GERMANY, CHINA, ITALY, MEXICO, PORTUGAL, SWEDEN, TURKEY, USA
EUROSEMILLAS, S.A.	ARGENTINA, CHINA, MEXICO, POLAND, TURKEY
FERRER INTERNACIONAL	GERMANY, FRANCE, PORTUGAL, GREECE, IRELAND, BELGIUM, ARGENTINA, BRAZIL, CHILE, EL
	SALVADOR, GUATEMALA, MEXICO, NICARAGUA, PERU, URUGUAY, VENEZUELA, HONG KONG
GADEA BIOPHARMA	MALTA, CHINA
GENETADI BIOTECH	MEXICO
GENETRIX	SWEDEN
GENOMICA S.A.U.	SWEDEN



Grifols Engineering S.A.	GERMANY, ARGENTINA, AUSTRALIA, MEXICO, COLOMBIA, SWITZERLAND, CZECH REPUBLIC, SWEDEN, SINGAPORE, BRAZIL, CHILE, SLOVAKIA, USA, FRANCE, MALAYSIA, THAILAND, ITALY, JAPAN, POLAND PORTUGAL, UK, CANADA, CHINA
GRUPO FARMASIERRA	PORTUGAL
INGENIATRICS, S.L.	USA
INTEGROMICS	USA
INTELLIGENT PHARMA	USA, UK, GERMANY
LABORATIOS SANIFIT	SWITZERLAND
Laboratorios Alpha San Ignacio Pharma S.L.(AlphaSIP)	USA
LABORATORIOS LETI , S.A.	PORTUGAL, GERMANY
LABORATORIOS RUBIÓ	PORTUGAL
LIFE SCIENCE PRAXIS	USA
LIPOPHARMA THERAPEUTICS	USA
NATAC BIOTECH	USA
NEURON BIO	USA
Neuroscience Technologies, S.L.	UK
Noray Bioinformatics, S.L.U. (NORAYBIO)	FRANCE, UK, ITALY
PHARMAMAR	USA, ITALY, GERMANY
PIVOTAL	ITALY, PORTUGAL, UK, FRANCE
PRAXIS PHARMACEUTICALS	PORTUGAL, FRANCE, COLOMBIA
Probelte Biotecnologia	MEXICO, DOMINICAN REP, BRAZIL, POLAND, JORDAN
RJ BIOTECH SERVICES	SWEDEN, UK, USA
SINOPTIA	USA, CHINA
THROMBOTARGETS	USA, UK,

Table 10 Listed below are the biotech member companies and those countries in which they have some type of direct presence: Source: ASEBIO

Mention should be made of the considerable increase in the establishment abroad of our companies, moving up from 64 entities in 26 countries in 2009, to 136 enterprises in 41 countries in all 5 continents in 2012.



Graph 22: International presence of ASEBIO member companies, by number of subsidiaries (2009-2012) Source: ASEBIO

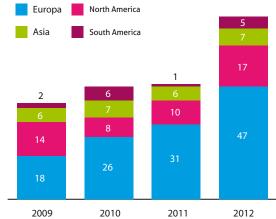
International Partnerships

In the course of 2012, a total number of 41 companies (+32% over 2011) signed 76 international partnerships (+58%). This increase is the highest since ASEBIO started to record these international agreements.

The geographical distribution of these partnerships remains similar to previous years, with the large majority corresponding to companies or institutions from other European countries (62%) and North America (22%). 9% of the remaining partnerships were made with Asian countries (principally Japan) and 7% with other South American countries.

It should be highlighted that the partnerships made by ASEBIO members have practically doubled over the last 4 years, increasing from 40 international partnerships in 2009 to 76 in 2012. Also the number of companies involved in these partnerships has increased considerably, from 22 in 2009 to 41 in 2012.

This figure includes any type of formal agreement between at least one Spanish biotech company or institution and any other international entity, and involving an explicit commitment for the achievement of different types of common goals (R&D, production, sales, etc.).



Graph 23: Geographical distribution of the international partnerships made by Spanish biotech companies/Institutions which are members of ASEBIO, in the period 2009-2012. Source: ASEBIO

ICEX Internationalization Plan for the Biotechnology Sector

For some years ASEBIO has been managing the internationalization plan for the Biotechnology sector. Over the last few years, principally since 2008, this aid scheme has allowed more than 130 companies to take part in more than 35 international activities in countries in a wide range as Canada, the United States, Israel, Colombia, the United Kingdom, Italy, Austria, Germany, Sweden and France.

In 2012, ASEBIO coordinated the organisation of the following international activities, receiving the financial and institutional support of the ICEX for the successful holding of the event.

BIOTECH SHOWCASE

This event was held in San Francisco (USA) from the 9th to 11th January 2012. This is one of the principal investment partnering activities in the life science sector, with the search for financing being one of the priorities of Spanish companies in the sector. The event is attended by almost 1,500 delegated from biotech companies, executives from pharmaceutical companies and investors from around the world specialised in this sector. Further-

more, it coincided with the JP Morgan Healthcare Conference 2012, the meeting point for the world's leading investors.

The Spanish delegation comprised 11 companies, which had the opportunity to take part in the partnering. In addition, eight of the eleven participating companies were selected to make a presentation of their business plan at the event, before an audience of specialist investors.

BIOPARTNERING NORTH AMERICA

This event was held from the 26th to 28th February 2012 in Vancouver (Canada). This was the first technology transfer and business development event to be held in Canada. In total, the event attracted delegates from more than 25 countries, with more than 800 participants from close to 500 companies.

Four ASEBIO business members took part in this event.

BIO EUROPE SPRING

The 6th edition of Bio Europe Spring was held in Amsterdam (Holland) from the 19th to 21st of March 2012. Bio Europe Spring is the second most important biotechnology event in Europe and attracts the most important companies from the biotechnology, pharmaceutical and investment sectors, maintaining thousands of bilateral meetings during the three days of the event.

The delegation comprised 25 Spanish companies who rated this event favourably. Furthermore, ASEBIO participated with a stand in the trade fair section of the event, and also in the partnering section, which made possible to promote the Spanish biotechnology sector and BioSpain 2012.

BIO EQUITY EUROPE

Bio Equity Europe 2012 was held in Frankfurt (Germany), from the 15th to the 16th May 2012. This technical workshop for the presentation of capacities was included in the ICEX internationalization scheme in order to help Spanish companies in the sector to seek financing.

Five Spanish companies took part, which rated the event very highly, as it allowed them to present their business project before an audience of specialist European investors, to make contact with these investors and with European analysts, and to arrange one-to-one meetings.

ILSI BIOMED

ILSI Biomed 2012 was held in Tel Aviv, from 21st to 23rd May 2012. This is the leading event in the biotechnology sector in Israel, one of the principal countries in innovation and private investment in the biotechnology sector. The event is organised by the Israel Life Science Industry Institution (ILSI).



Furthermore, the delegation of six Spanish companies attending this event benefited from the information pavilion that ICEX and the Spanish Trading Office in Tel Aviv organised at the fair. This stand allowed the companies to distribute catalogues, give information on their activity and organise further meetings.

BIO INTERNATIONAL CONVENTION 2012

As in previous years, ICEX organized the Official Pavilion of Spain at the BIO International Convention 2012 fair held in Boston (USA) from the 18th to 21st Jun2012.

BIO EUROPE

Bio Europe is the principal event for the technology sector in Europe and is held on an annual basis. Bio Europe 2012 was held from the 12th to 14th November in Hamburg (Germany). As in the past, ASEBIO took part in this partnering, with a delegation of 19 Spanish companies.

More than 3,000 delegates from 1,638 companies from 50 countries throughout the world took part in this event. Additionally, more than 15,276 bilateral one-to-one meetings were held and 174 company presentations were made. This event attracts biotechnology companies and also pharmaceutical companies, financial institutions, private investors in addition to service-related companies.

TECHNICAL SEMINAR IN COLOMBIA

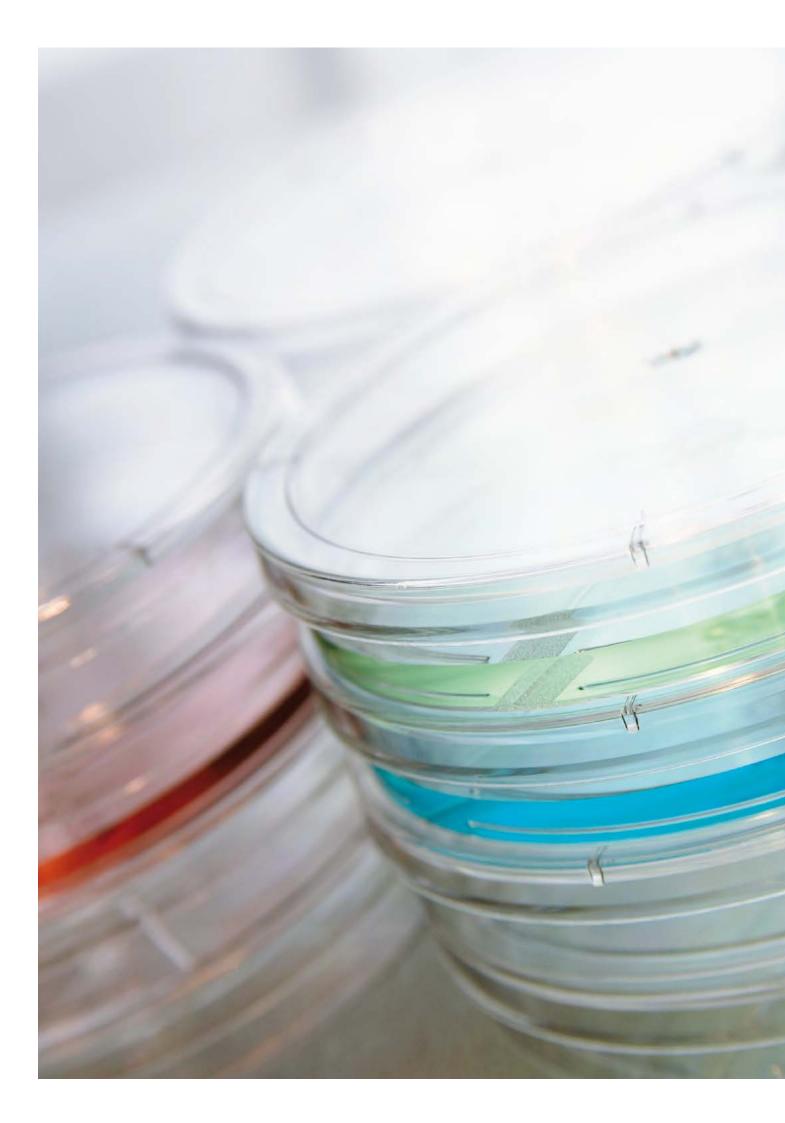
This technical seminar was held in Bogota (Colombia) from the 3rd to 5th December 2012. After looking into a number of Latin American markets such as Chile, Brazil and Mexico, it was finally decided to hold the event in Colombia. Colombia offers considerable potential to Spanish biotech companies, such as the market. It is also starting to develop its own biotechnology sector, offering a double opportunity to our companies, in sectors such as food, health and the environment.

GENESIS

GENESIS 2012 was held in London (UK) on the 13th December 2012. This sector event is organised on an annual basis by the British cluster ONE NUCLEUS.

ASEBIO took part with a delegation of six Spanish companies.







BioSpain 2012



BioSpain 2012 was held in Bilbao from the 19th to the 21st September 2012. This year the event was organised by SPRI and Biobasque, both coming under the Government of the Basque Country.

The 2012 figures show the great success achieved by BioSpain and the growing importance of biotechnology in our country. In fact, this year BioSpain has been positioned as the fifth world event in the biotechnology area regarding business development meetings and partnering, with a total of 2,775 meetings, representing a 29% increase over the former edition held in 2010. With these figures, BioSpain has risen from the seventh position achieved in 2010 to the fifth.This sixth edition was also characterised by a widespread increase in the number of participants, with a total of 1,850 sector-related professionals, from Spain and abroad, attending the event held from the 19th to 21st September at the Bilbao Exhibition Centre (BEC) in Barakaldo, 32% more than the previous event held in 2010 in Pamplona.

BioSpain was inaugurated by the H.R.H. Prince of Asturias, who visited the trade fair, taking a keen interest in the latest advances in the sector and subsequently meeting prominent people from the business and scientific areas. During these meetings he showed his full support for the biotechnology sector and his intention to attend further editions of this event, if schedule permits it.

Relating to other data, in the trade show area, occupying a surface area of 50% more than the previous edition, there were 29% more exhibitors than in 2010, with 217 stands. 78% corresponded to Spanish companies and the remaining 22% to international ones.

One of the new features of this edition was the creation of the 1st Forum for Employment and Training in Biotechnology, directed at bringing together labour supply and demand within the biotechnology sector. This was attended by a total of 400 persons. The most-in-demand profiles were for the scientific area and for the business development area, although other profiles were also demanded in other biotechnology areas. Job seekers were primarily, although not exclusively, graduates and doctors with experience in and related to red or healthcare biotechnology.

Likewise, the international scope of the biotechnology meeting was reflected in the presence of 40% more foreign companies than in 2010. In total, 762 companies attended, 210 of which were from abroad (28% of the total). Similar to the number of international companies taking part in the trade show increased by 65.5% (48 in total). Of the 210 international companies, of particular note are those from the United Kingdom (6%), France (4%), Germany (2%), the USA (2%), Belgium (2%), Holland (1%), Portugal (1%), Italy (1%) and Mexico (1%).

For the first time, BioSpain 2012 hosted an Investment Forum focussed on Industrial Biotechnology, organised by Feique and Madrid Biocluster. Furthermore, as in previous years, the BioSpain organisation created an investment forum focussed on all the areas of biotechnology, in which 32 projects were presented to a large group of national and international investors. As well, the Seventh Pharma-Biotech Workshop was held, organised by Farmaindustria and focussed on linking investigators with companies in the oncology field.

BioSpain also hosted the Biotec 2012 scientific congress, organised by the Spanish Society of Biotechnology (SE-BIOT), during which the General Meeting of this society was held, confirming Isabel de la Mata as new chairman of SEBIOT.

The subject-matters of the parallel sessions of BioSpain 2012 were focussed this year on relevant themes to the sector like the challenges of Horizon 2020: health and demographic change; food safety and sustainable agriculture; energy efficiency and clean transport, amongst others.

The official sponsors of BioSpain 2012 were the Fundación Genoma España, Zeltía, MSD and ICEX.

Based on the satisfaction survey conducted after the event, 77% of the BioSpain 2012 attendees declared that real business opportunities had been identified during the Fair.

Concerning the general rating of the event, 93% gave a positive rating and 88% indicated that it complying with expectations, due to the networking possibilities offered by BioSpain, the most highly rated section in this edition.

The respondents indicated that 97% of the meetings held during the BioSpain event led to a second, subsequent contact.

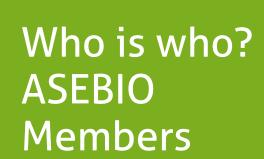
The key aim of most of the participants in BioSpain 2012 (48%) was to locate R&D partnerships. Other important aims were the attraction of potential customers (46%), to find out about the latest trends and technologies (32%) and to study the competition (26%).

With regard to future editions, 97% of attendees of the 2012 edition are considering taking part in the forthcoming edition of BioSpain, to be held from 1st to 3rd October 2013 in Santiago de Compostela.











3P Biopharmaceuticals, S.L.

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3P Biopharmaceuticals is a European-based Contract Development and Manufacturing Organization (CDMO) specialized in the development and GMP manufacturing of biopharmaceutical and advanced therapy products from early stages (POC,PC) up to clinical and commercial.

The Company offers an integral service for the development and manufacturing of biopharmaceutical products obtained from either microbial fermentation and mammalian cell culture.

Moreover, manufacturing related services such as analytical method development and validation, stability studies, working and master cell banks (MCB/WCB) manufacturing and characterization, formulation, cell bank storage and advanced therapy services are offered.

3P Biopharmaceuticals is equipped to handle:

New Biological Entities (NBEs):

- Recombinant proteins
- Vaccines
- Monoclonal antibodies
 Biosimilars and Biobetters
 Advanced Therapy products Manufacturing
- Cell Therapy producs
- Tissue Engineering products
- Culture media
- Biomaterials (scaffolds and membranes)

Areas of interest for future collaborations / partnerships: Development and Manufacturing of New Biological entities Development and Manufacturing of BiosimilarsCooperation in National and International grantsDevelopment of Industrial processes

Development of new Technologies and Manufacturing platforms

AB BIOTICS S.A.

Miquel Angel Bonachera / Sergi Audivert. CFO. info@ab-biotics.com Parc Cientific I Tecnologic. Universitat de Girona. Edifici Jaume Casademont B8 C/Pic de Peguera 15 17003. Girona - GIRONA Tel: 34 902 903 844 http://www.ab-biotics.com/



Research, development, protection and distribution of our own biotechnological solutions, making a contribution to improve people health and wellbeing.

AB-Biotics has three business divisions:

- -FUNCTIONAL INGREDIENTES develops probiotics and other nutraceuticals for the pharmaceutical and food sectors. Among them: AB-LIFE (probiotic for cardiovascular health), 13.1 (probiotic for IBD/IBS), AB-COLIC (probiotic for children colic) and AB-FORTIS (iron foritification).
- -AB-GENOTYPING develops genetic analyses for conducting pharmacogenetic studies. One of them is Neurofarmagen, already in the market. It is a DNA chip that enables the assessment of the patient's predisposition to respond to the drugs most widely used in treating depression, schizophrenia, bipolar disorders or epilepsy.

-R+D PARTNERING offers the pharmaceutical and food industries the comprehensive management of research projects, based on obtaining unique, patentable biotechnological solutions with high added value.

AB-BIOTICS is interested in developing biotechnological products for human health. Our main objectives are functional genomics and nutraceuticals. We are always open to set up synergic partnerships with other companies in order to jointly develop new solutions. We also look for partners interested in licensing our products to new markets.



AbbVie Farmacéutica S.L.U.

Avenida de Burgos, 91 - 28050 Madrid - Madrid Phone: 34 91 384 0910 http://www.abbvie.es



AbbVie (NYSE:ABBV) is a global, research-based biopharmaceutical company formed in 2013 following separation from Abbott. AbbVie combines the focus and passion of a leading-edge biotech with the expertise and structure of a long-established pharmaceutical leader. The company?s mission is to use its expertise, dedicated people and unique approach to innovation to develop and market advanced therapies that address some of the world?s most complex and serious diseases.

AbbVie is a patient-centric company; our starting point is a deep understanding of the disease.

Our products treat some of the world's most complex illnesses such as Rheumatoid Arthritis, Crohn's Disease, Psoriasis,

Ankylosing Spondylitis, Juvenile Idopatic Arthritis, Psoriatic Arthritis, Chronic Kidney Disease, Advanced Parkinson's Disease, Respiratory Syncytial Virus, HIV and Prostate Cancer.

Our pipeline is currently evaluating more than 20 compounds in Phase II and III and we have hundreds of patents for new discoveries in the areas of Immunology, Virology, Neuroscience, Renal Health, Oncology and Women's Health. We collaborate with university professors, researchers, health professionals, Health Authorities and patient advocates to offer new solutions that make a difference in patients lives.

For more information go to www.abbvie.es

Abengoa Bioenergy

abengoabioenergy@abengoa.com Paseo de la Castellana, 31 - 3 Planta 28046 Madrid – Madrid Phone: 34 91 319 70 70 http://www.abengoabioenergy.com

ABENGOA BIOENERGIA

Abengoa Bioenergy is a biotechnological company that contributes to sustainable development through the production of cheap sugars from starch and sugarcane. By means of fermentative processes that make possible a net reduction of contaminating emissions, Abengoa Bioenergy currently places on the market transportation fuels obtained from renewable resources

The mission of Abengoa Bioenergy consists in:

- Contributing to the sustainable development of the fuel and biochemical market by means of green technologies that reduce carbon emissions.
- Develop innovative technological solutions through continuous investment in R&D.
- Create value for our shareholders.
- Contribute to the personal and professional development of our employees through continuous training and the establishment and monitoring of individual development plans and goals.

The activities of the company are included in the following main areas:

- Procurement of raw material
- Bioethanol origination
- Production
- Trading
- Co-generation
- New technologies



Ability Pharmaceuticals, SL

Carles Domenech contact@abilitypharma.com Edifici Eureka - Campus de la UAB - 08193 Bellaterra - Barcelona Phone: 34 935868977 / 34 606433824 http://www.abilitypharma.com//index.php?id=12&idioma=EN



Ability Pharmaceuticals, SL is a biopharmaceutical company focused in oncology. It was founded on November 28, 2009 and is based in Bellaterra (Barcelona), on the Autonomous University of Barcelona campus.

The company is developing a patented new drugs class called Lipid Analogue Therapeutics, which is highly differentiated and has an innovative mechanism of action.

Ability Pharmaceuticals currently has two candidates in development: ABTL0812, which is finishing preclinical development and is expected to move into phase Ib, First in Man clinical trials for lung and pancreatic cancer in the second quarter of 2013, and ABTL1014, which is expected to start preclinical development in spring 2013.

The company develops new drug candidates through clinical proof-of-concept, to later license them to pharmaceutical companies for further development and marketing.

ABTLO812 is an antiproliferative and cytotoxic drug with a novel mechanism of action (MoA), intended for the treatment of lung and pancreatic cancers. Importantly, it shows synergistic properties with standard of care (SOC) drugs such as docetaxel (for lung cancer) and gemcitabine (for pancreatic cancer).

ABTL0812 was selected for preclinical development because, a) its activity over a wide panel of tumor cell lines (lung, pancreatic, lymphatic, liver, melanoma and glioma); b) its good efficacy in animal models of cancer; and c) its low in vivo toxicity.

ABTLO812 affects two major cell processes related with cellular division, and thereby with proliferation of tumor cells: a) inhibition of akt phosphorylation and mTORC1 and mTORC2 pathways, and b) DNA synthesis through the inhibition of dihydrofolate reductase (DHFR) gene expression. The modulation of these main cellular functions induces cell death by autophagy, a mechanism of self-digestion of the cell.

Both DHFR inhibition, and modulation of mTORC1 pathways are validated targets in cancer chemotherapy, therefore the development risk is markedly reduced. More precisely, AlimtaTM (pemetrexed, Lilly) and AffinitorTM (everolimus, Novartis) induce their anticancer effect by their action on the same targets that ABTL0812. Nonetheless, their mechanism is different and the potential appearance of cross-resistance between ABTL0812 and these marketed compounds is markedly reduced. Alimta is in the market since 2004 with sales over \$ 1.7 billion. While Alimta is a DHFR inhibitor (it inhibits the activity of the protein), ABTL0812 inhibits the expression of DHFR's gene, and therefore protein synthesis. Affinitor is in the market since 2009 with sales over \$ 500 million, with expected sales over \$ 1.5 billion in 2015. While Affinitor inhibits mTORC1 pathway only, ABTL0812 inhibits both mTORC1 (or Raptor) and mTORC2 (or Rictor).

AC-Gen Reading Life

Alberto Acedo info@acgen.es Edificio CTTA C/Paseo de Belén nº9 - 47011 Valladolid - Valladolid Phone: 34 983016257 / 34 675663193 http://www.ac-gen.com

AC-Gen Reading Life is a Spanish pioneer company in the application of Next-Generation Sequencing technology (NGS) for clinical use.

Mission: to improve the health and quality of life of people affected by genetic diseases.

Objectives: To provide high quality genetic analysis and cost-effective to help the implementation of personalized genomic medicine, as well as foster the development of partnerships in the field of research.

AC-Gen Reading Life in a Biotech company focus on the biomedical sector.



We offer Health specialists solutions for prevention, diagnosis and treatment of hereditary diseases. Our goal is to improve the health and quality of life of those individuals affected and their families.

AC-Gen Reading Life uses Next-generation sequencing technology (NGS) based on semiconductor chips for the detection of mutations associated to recurrent appearance of a disease in members of the same family.

The flexibility of the design of gene panels and specific protocols owns by AC-Gen Reading Life enable multiple gene sequencing for specific diseases.



Ad-Tech Ibérica, S.L.

Avda. Camino de lo Cortao, 6-8 nave 22 - 28700. Madrid Phone: 34 911 960 845 http://www.ad-techiberica.com

AD.TECH IBÉRICA

Ad-Tech Iberica specializes in the sale and representation of machinery and process solutions for Pharmaceutical sterile production and Biotechnology Production at all scales.

With a highly specialized sales staff, we collaborate with clients in the development of processes, selection and sizing of equipment, and optimizing return on investments.

Ad-Tech Iberica, offers with a specialized sales staff, customer support before, during, and after the sales of equipments and machinery. Consulting for equipment selection.

Products/ Services:

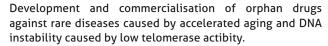
- Isolators and containment systems
- Fermenters from 5L.

- Industrial and Laboratory Freeze-Dryers
- Filling Machines for Vials / Ampoules / prefilled syringes
- Sterilization Tunnel.
- Autoclaves and low temperature sterilizaction.
- Washing of Vials / Ampoules
- Labeling Machine for Vials / Ampoules
- Water Distillers and Pure Steam Generators, Reverse osmosis, CIP, SIP, ...
- Supplies of vials, ampoules, stoppers, ...
- Laminar Flow custom made, portable, ATEX, etc ...
- Maintenance Services

Advanced Medical Projects

Antonio Molina. CEO amolina@advmedprojects.com Edificio TecnoAlcalá, Av. Punto Com 2, Campus Universitario -28805. Madrid - Madrid

Phone: 34 91-8305950 http://www.advmedprojects.com



Products:

A)Family of peptides able to increase telomerase activity in senescent cells or prone to become tumoral due to DNA instability.



B)GesTelMir peptide going into clinical trials against dyskeratpsis congenital.

C)Complete premium antiaging cosmetics line under GSE24-2 commercial name, based on telomerase activating peptides. 100% of the profit is reinvested on the biomedic R+D.



Advancell Advanced In Vitro Cell Technologies, S.A.

Clara Campàs-Moya. Managing Director advancell@advancell.net Via Augusta, 59, 3rd floor, 08006 Barcelona - BARCELONA Phone: 34 930130561 / 34 932380766 http://www.advancell.net



Advancell is an innovative biotechnology company that addresses patients unmet medical needs and well-being by developing value-added products need in oncology, dermatology and CNS.

Advancell mission is to build a portfolio of high value pharmaceutical products from in-licensing of promising pre-clinical candidates that we develop to clinical proof of concept.

ADVANCELL currently has four clinical-stage products in development:

ATH008 cream is in Phase 2b development for the treatment of hand-foot syndrome (HFS). HFS affects cancer patients receiving chemotherapy. There are no effective treatments available in the market and affected patients will either need to reduce dosing or stop chemotherapy. In addition to having positive efficacy data from two pilot studies, AD-VANCELL has successfully completed Phase I testing and has obtained EMA guidance concerning the clinical development needed for European approval. ADVANCELL is conducting a placebo controlled Phase 2b study to evaluate the safety and efficacy of ATH008 in HFS patients. Results of this study are expected by 3Q 2013.

ATHO01 (Acadra) is an IV solution in development to treat hematologic malignancies. ADVANCELL completed Phase 2a testing in patients with CLL showing Acadra has an acceptable safety and tolerability profile at doses that reduce the leukemic tumor burden. The Company demonstrated effica-

cy of Acadra in commonly used non-clinical models for myelodisplastic syndromes (MDS), mantle cell lymphoma (MCL) and acute lymphoblastic leukemia (ALL). Acadra showed synergistic effects when used in combination with standard treatments. ADVANCELL is conducting a Phase 2a study to evaluate the safety and efficacy of Acadra in high risk MDS patients, in collaboration with the French group of MDS.

ATH012 (NT-KO-003) is an oral product for treatment of multiple sclerosis (MS). ATH012 is a proprietary a low-do-se formulation that is being co-developed with Neurotech Pharma, s.l. The drug candidate has shown excellent efficacy in the widely used experimental autoimmune encephalom-yelitis (EAE) model used to study efficacy of potential drugs for treatment of MS. Based on these data, ADVANCELL and Neurotec Pharma started a double-blind, placebo controlled Phase 2a study in MS patients. Results are expected by 4Q 2013.

ADVANCELL's proprietary nanosystem technology enables the administration of difficult to formulate drugs and modulates their uptake in oral and topical applications. Based on this technology, ADVANCELL has two products in clinical development: ATH002 (Cyclosporin Dermosome Technology) for human skin indications such as psoriasis, and ATH004 (Cyclostopic-Vet), a topical cyclosporine in that successfully completed a field study (Phase 2 equivalent) in atopic dogs. ADVANCELL is looking for a strong partner to move this development forward.

Agroaxis

Paula Esteban del Río pesteban@agroaxis.com Parque Tecnológico Tecnobahía, Ctra. de Sanlúcar 11591 El Puerto de Santa María - Cádiz Phone: 34 956549169 / 34 638438509 http://www.agroaxis.com

The mission of the company is the research, development, production and distribution of pharmaceutic and biopharmaceutic products and services. It has specialized in the production of therapeutic proteins obtained through vegetable cells. To this aim, Agroaxis has developed highly competitive processes, through it's patented and exclusive technology platform, that are based on expression systems, industrial scale plant culture, extraction and purification of proteins,



all this using plant biofactories developed in vertical greenhouses.

- -Research, development, production and commercialization of biosimiars obtained through vegetable cells
- -Commercialization of nutraceutics
- -CMO services



ALGAENERGY, S.A.

Augusto Rodríguez-Villa. President info@algaenergy.es Avda. de Europa, 19 – Parque Empresarial "La Moraleja" 28108 Alcobendas - Madrid

Tel: 34 91 490 2020 / 34 91 490 4794 http://www.algaenergy.es

ALGAENERGY, founded in 2007, is an innovative technology based company working in the microalgae biotechnology sector. It has been promoted and is managed by a group of entrepreneurs and scientists with solid financial backing and extensive experience.

The company is backed by IBERDROLA, world leader in renewable energy, and Spain's largest oil company REPSOL, as shareholders and technology partners.

With substantial R&D programmes, ALGAENERGY is linked to some of the most recognised international microalgae research centres and universities. ALGAENERGY's mission also includes the exploitation of the enormous talent and ability available in Spain within this area of science and expertise.



ALGAENERGY is already selling products from microalgae for aquaculture, under its trademark ALGAEPISCIS, and is also investigating the application of microalgae in pharmaceuticals, nutraceuticals, cosmetics, animal feed, agriculture and novel materials. It also offers technology services and the construction of turnkey plants for the production of microalgae.

The company's ultimate goal is the production of 2nd generation biofuels from certain microalgae and cyanobacteria in a commercially viable way, promising alternative as its production may use waste water, brackish or marine, does not compete with agricultural land, production is high and sustainable and its main nutrient is CO2 thus contributing to improving the environment.

ALGENEX (Alternative Gene Expression S.L.)

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Algenex develops and commercializes remarkably productive baculovirus-based technologies for the production of high quality recombinant proteins. It also manufactures difficult-to-produce, recombinant proteins for diagnostic products and vaccines, some of them immunologically potentiated by a novel, proprietary molecule.

Two technology platforms are the foundation of ALGENEX:

Top-Bac® - A proprietary expression cassette composed by several virus-derived regulatory elements that, when incorporated into the genome of a baculovirus vector, improves to unprecedented levels the productivity and quality of recombinant proteins produced by insect cells.

IBES® - Based on the use of insect larvae as disposable, living biofactories that in combination with Top-Bac® lead

to record productivities for a baculovirus-based expression system. This technology, pioneered by Algenex in Europe, allows for a rapid and linear scaling-up process; increases success with proteins difficult to express; and dramatically reduces the capital investment with respect to conventional bioreactor-based technologies.

Algenex's key business lines are: 1) licensing its proprietary technology platforms to produce recombinant proteins, whether for investigational or commercial purposes; 2) contract manufacturing to supply diagnostic reagents and/or assisting in their development; 3) co-development of vaccines with suitable partners; 4) licensing its immunopotentiating molecule for its use in veterinary and human vaccines.



Áliad Conocimiento y Servicio

comunicacion@aliad.es C/ Arándiga 18C - 28023 Madrid - Madrid Phone: 34 91 357 15 50 http://www.aliad.es



Áliad is a training and consulting company specialized in private healthcare. Our main business services are: training, professional development for companies; management consulting for improving the efficiency and profitability of these companies; accreditation studies and innovation and research projects and legal services."

Aliad (www.aliad.es) is a training and consulting company specialized in private healthcare. We are leaders in services to private healthcare in Spain with 11 years of history. Our mission is to contribute to the improvement of health services by supporting organizations and professionals. We have international experience, because we are partner of the EFQM for Private Healthcare and work closely with EFQM in health areas since 2003.

We have 456 references and work actually with more than 300 clinics and hospitals in Spain.

We are very focused on business excellence and quality improvement systems, and we have developed three Programmes for our clients: SEP-Sanidad Excelente Privada (Excellent Private Health Care), Confianza (Patient Safety) and Mercurio (Data Protection). Also we conduct research studies on Private Healthcare and many innovation projects, both in management and training; We have partnerships with leading Universities, Professional Associations and Scientific Societies and we elaborate with them training and R+D projects.

With respect to training experience, we have more than 275 courses and we have trained over 70,000 health professionals. Our belief in active training has supported professional development and business projects, patient care, competence, equality, and many others. Our training design and strategy are monitored by a Commitee of Customers, all of them Human Resources managers, Care managers and doctors coming from hospitals, clinics and Scientific Societies.

Alma Consulting Group España

Jorge Mendez Marketing and Communication Director jmendez@almacg.com Address: Edificio Sollube Plaza Carlos Trías Bertrán nº7 - 28020 Madrid - Madrid Phone: 34 91 575 03 01 / 34 625876609 http://www.almacg.es



Mission and Objectives

Our mission is to identify and obtain financing and savings for our customers.

We contribute to our clients competitiveness through measurable actions.

Professionals of ALMA CG work day by day to boost your growth through Innovation, providing the resources you need to finance your Research and Development potential, with a constant commitment for optimisation and security.

Almirall, S.A.

Corporate External Communications General Mitre, 151 - 08022 Barcelona - Barcelona Phone: 34 93 291 30 00 http://www.almirall.com



Provide valuable medicines to you and futures generations.

Vision

Be recognised as an innovative pharmaceutical company situated among the top players in our strategic therapeutic areas with a strong European presence and global reach.

Almirall is a pharmaceutical company committed to health that bases its strategy on innovation and international growth. Headquartered in Barcelona (Spain), Almirall resear-



ches, develops, manufactures and markets proprietary R&D and third party drugs for the purpose of improving people's health and well-being.



ALTHIA

Pedro Salord psalord@althia.es c/ Velázquez 16, 3° D - 28001 Madrid – Madrid Phone: 34 91 781 94 65 / 34 600 41 66 33 http://www.althia.es



Althia is a biomedical company engaged in the development of new tools for the study of predictive and personalized oncology and inflammatory diseases. It has a multidisciplinary team of physicians and scientists with a solid career in the field of diagnosis, therapy and biomedical research, including the study of stem cells. It has three areas of activity constantly innovating: Care in Diagnosis / Prognosis, Translational Research covering the gap between basic and clinical research and advanced radiotherapy treatments based on single-dose (SD-IGRT). Althia has laboratories endowed with the most advanced equipment and technology in Barcelona and in Granada (Genyo center).

Althia's main business areas are:

- Routine diagnosis and prognosis provides an integrated analysis of tissue and molecular phenotypes for cancer and allied diseases, using novel technologies to predict outcome and customize treatment for each patient.
- Translational research develops algorithms based on molecular and morphometric signatures that define the specific individual tumor phenotype. This will allow to identify those patients most likely to benefit from different treatment modalities
- Treatment implements novel image-guided, intensity modulated single dose radiotherapy protocols targeting the tumor while completely excluding surrounding normal tissues. The aim is improving treatment-planning as well as delivery accuracy and speed, thus enhancing patient throughput, therapeutic benefit and safety.

The main advantage of integrating these three activities is

the ability to evolve rapidly by re-distributing know-how and resources between areas. The integration allows for commercial synergies that offer competitive advantages by having a diagnostic-therapeutic development pipeline.

Translational R&D strategy:

- Apply Molecular and Systems Pathology to study cancer through object-oriented image analysis, pattern recognition, and quantitative biomarker multiplexing.
- Validate pre-clinical models by pathway analysis and Molecular and Systems Pathology.
- Define therapeutic end-points, resistance mechanisms, and markers of tumor progression in order to optimize clinical trials.
- Apply artificial intelligence and mathematical modeling to develop decision-making algorithms to improve clinical management.

In Clinical trials, through the application of Molecular and Systems Pathology:

- Facilitate patient selection according to drug-response.
- Optimize clinical trials: positive impact in cost and time savings.
- Provide reproducibility, and consistency of clinical trial results / measurements.
- Maximize the likelihood of success for drug regulatory approval.

AMADIX

Rocio Arroyo rarroyo@amadix.com 4 Jose Antonio Primo de Rivera St, 2º - 47001 Valladolid - Valladolid Phone: 34 983102060 / 34 606505338 http://www.amadix.com



Amadix is a biotechnology company, focused on the development of innovative diagnostic tools in cancer diagnostics, that address unmet medical needs in the field of Oncology. Amadix identifies, evaluates and in-licenses breakthrough discoveries in cancer diagnosis and develops them into marketable products.

Amadix is actively looking for innovative projects in cancer diagnosis with a clear commercial rationale, coming from Spanish Universities, hospitals and research institutions, to build a pipeline through in-licensing of cutting edge technology. The Company will than seek strategic alliances with international companies to assist it in reaching the market. Amadix would sign a licensing deal with regards to each of its products.



Amgen, S.A

Juan Carlos Esteban. Corporate Communication jesteban@amgen.com World Trade Center Barcelona.Muelle Barcelona Edificio Sur, 8ª planta -08039 Barcelona - Barcelona

Phone: 34 936 001 900 http://www.amgen.es



PRODUCTS:

To serve patients by transforming the promise of science and biotechnology into therapies that have the power to restore health or even save lives.

Oncology and hematology treatments. Amgen is developing research programs in nephrology, hematology, oncology, inflammatory diseases, metabolism and neuroscience.

Araclon Biotech, S.L.

Ian Sherriff. International Affairs isherriff@araclon.com Paseo de Sagasta n 17, 2º Izda. - 50008 Zaragoza - Zaragoza Phone: 34 976 796 562 / 34 675 820 980 http://www.araclon.com/



Araclon Biotech is a company dedicated to the research and development of therapies and diagnostic methods to be applied to degenerative diseases, currently focusing on Alzheimer's disease.

Araclon Biotech is a company dedicated to the research and development of therapies and diagnostic methods to be applied to degenerative diseases, currently focusing on Alzheimer's disease. At present, Araclon is working on four different projects:

The first of these focuses on the diagnosis of Alzheimer?s disease (with detection kits for beta-amyloid 40 and 42 pro-

teins in blood already patented and a kit for AB17 patent pending).

The second is centred on Alzheimer's therapy (immunotherapy based).

The third is an emerging project, which attempts to respond to the challenge of predicting Alzheimer's disease in totally asymptomatic individuals.

And finally, a project related to the development of a therapy for the Parkinson's disease.

Archivel Farma, S.L.

Olga Rue. Chief Executive Officer archivel@archivelfarma.com C/ Fogars de Tordera, 61 - 08916 Badalona - Barcelona Phone: 34 934 972 456 http://www.archivelfarma.com



Discovery and initial clinical development of novel pharmaceutical agents of biological nature.

PRODUCTS:

RUTI®, poly-antigenic vaccine made of fragments from My-cobacterium tuberculosis, detoxified, and formulated with liposomes.

RUTI® is in phase II of clinical development for the prevention of active tuberculosis in individuals with latent tuberculosis infection (therapeutic use).

RUTI® is as well under evaluation for its use in the treatment of active tuberculosis and in other therapeutic areas.

AREAS OF INTEREST TO FUTURE COLLABORATIONS:

Prevention and treatment of tuberculosis with biological agents.

Diseases or pathological conditions that could benefit from immunomodulatory treatments.

ASCIDEA COMPUTATIONAL BIOLOGY SOLUTIONS, S.L.

Albert Mascarell Creus. CEO amascarell@ascidea.com C/ Almogavers 165- 08018 Barcelona – Barcelona Phone: 34 935868731 http://www.ascidea.com



aScidea is a technology-based company that provides scientific services based on bioinformatics tools and advanced computing.

We offer complete solutions in the field of the omics (genomics, proteomics, transcriptomics), with access to the best experimental platforms (microarrays, deep sequencing NGS) in order to obtain high quality genetic data, and a wide variety of bioinformatic data analyses to obtain comprehensive results.

aScidea is committed to quality and cost efficiency, so we offer consulting services to optimize the design, management and implementation of projects in the area of genomics research and pharmaceutical and biotechnology companies.

In aScidea we believe that the democratization of the genetic information will lead to a healthier and more prosperous society.

1. Obtaining genetic profiles with different complexity, using the most innovative and proven platforms:

Massive sequencing.

- Roche 454 GS FLX
- Roche 454 GS Junior
- Illumina HiSeq2000
- Illumina MiSeq
- Ion Torrent PGM

Microarrays

- Affymetrix platforms
- Agilent platforms
- Illumina Arrays

We also obtain genetic profiles with reduced performance technologies such as qRT-PCR, SNPlex or DigitalPCR.

2. Bioinformatics Data Analyses:

We offer several pre-configured packages for the most common studies in the market. We also customize any bioinformatic and/or biostatistician analysis to fullfil the specific needs of our customers.

3. Custom Software Design:

In aScidea we know that the Software-as-a-Service is not always the ultimate solution for computerized solutions. Therefore, we provide our IT department to design and implement innovative solutions, packaged on a software format with optional services of maintenance, warranty and after-sales.

4. Scientific and technical consulting:

We are aware that time is money, and therefore innovative projects must be cost-effective for companies or research institutions.

For this reason, aScidea is responsible for designing, managing and executing projects with different genetic base end applications, always providing access to the best solutions.

aScidea is the ideal team for the design/creation of new genetic tests with applications in all sectors of biotechnology.

ASPHALION

Montse Pérez. Marketing Assistant mperez@asphalion.com Vía Augusta 59, of. 113 - 08006 Barcelona - Barcelona Phone: 34 93 238 59 45 http://www.asphalion.com



ASPHALION is an International Drug Development and Regulatory Affairs Consultancy based in Barcelona.

Founded in 2000, its consultants combine a long experience in R&D management, acquired in many years in the Pharmaceutical Industry, together with a deep knowledge of Regulatory Affairs issues and International Drug Registration Procedures.

Our services include:

- Drug Development Project Start-Up & Planning
- Pharmaceutical Business Development
- Clinical and Non-clinical Medical Writing and Support
- R&D and Regulatory Project Management
- Regulatory Procedures and Submissions
- Product Maintenance
- Pharmacovigilance
- eSubmission: eCTD and NeeS

- Medical Devices
- Tailored Pharmaceutical Training

Why choose Asphalion:

- Rely on decades of industry experience of our consultants
- Receive fast and independent expert opinions
- Speed-up your work and save time/money
- Add value to your projects
- Validate your development and regulatory strategy
- Take advantage of our international team and its extensive partner network
- Rely on fixed working teams and constant contact persons
- Count on ad-hoc support
- Trust in our maximum flexibility
- Optimise workflows and minimise efforts for maintenance of registered products
- Succeed with complex registration procedures
- Discover professional and reliable service at its best



Azierta Contract Scientific Support Consulting, S.L.

info@azierta.eu

c/Valle del Roncal 12, Edificio Ros y Falcón, Oficina 18 - 28232 Las Rozas - Madrid Phone: 34 912 771 076 http://www.azierta.eu azierta

Azierta complements the scientific structure of the client providing the services that they need at every moment and with every project, or providing a full scientific department either in the short-medium term (interim management) or as a permanent service.

Our team ensure a quality service tailored to the needs of each client in differents areas: Medical-regulatory strategy, Regulatory affairs, Medical affairs (medical support, marketing and medical research); Pharmacovigilance and risk management (case processing, preparation and/or update safety reports, training, audits and procedures, database...); Quality assurance (procedures, quality control and scientific audits); Market Access and Marketing and communication.

Our motto 'Science to business' reflects our firm objective to provide an extra value to the corporate business, entrepreneurially sharing the project with our clients.

Bayer CropScience NV

David Andrés. EU Registration Manager david.andres@bayer.com J.E. Mommaertslaan 14 - 1831 Diegem – Machelen Phone: 32 9 243 04 68 http://www.bayercropscience.com

Bayer CropScience is the sub-group of Bayer AG that develops innovative agricultural solutions in three business segments: Seeds, crop protection and environmental science. Bayer CropScience develops seeds with enhanced yield and quality properties for the benefit of agriculture, food and fiber manufacturers, consumers and the environment employing modern breeding methods including plant biotechnology. The individual seed varieties are adapted to the requirements of the relevant markets, and guarantee high quality.

Our work is focused on improving the plant properties, for example their optimized performance under the most varied



of environmental conditions.

We therefore create sustainable, plant-based solutions for agriculture.

Vegetable seeds.

Seeds for agricultural crops (e.g. cotton, canola, rice, soybean).

Trait development and commercialization.

BIOCHEMIZE SL

Jaume Mir. CEO jmir@biochemize.com Av. de la Innovació 2 - 08225 Terrassa - Barcelona Phone: 34 686441120 http://www.biochemize.com

Biochemize uses the platform of the microbial fermentation and biocatalysis for the design of bioprocesses at industrial level, and for the enzymatic screening upon active principles and high value molecules.

Biochemize designs, optimizes and scales-up bioprocesses at industrial level, based in the use opf enzymes and/or microorganisms (wild or recombinantly obtained) for the pro-



duction of high value molecules, with competitive advantages related with standard chemical synthesis methods.

Biochemize also develops enzymatic screening procedures upon an specific molecule, for the evaluation for the obtention of derivated structures which can suppose higher or different activity, with competitive advantages related with combinatory chemistry methods.



Biocross

Carlo Zanotti czanotti@biocross.es Avda. Francisco Vallés, 8 - 47151 Boecillo - Valladolid Phone: 34 983 549 896 / 34 606177664 http://www.biocrossdiagnostics.com



Biocross is a spin-off of the Spanish National Research Council focused on the diagnosis of neurodegenerative diseases.

For many diseases of the central nervous system, a simple and accurate blood test remains unavailable. Such a test is clearly essential for people with Alzheimer's, the most common type of dementia.

Alzheimer's is diagnosed by means of a clinical assessment based on scales to evaluate the patient?s cognitive status. The accuracy of these scales is limited, especially in the earlier stages of the disease.

Biocross is developing a multiparametric blood test that combines different biomarkers. This test will make it possible to diagnose Alzheimer's more accurately than current techniques.

Biocross is exploring similar strategies based on the combination of a series of biomarkers used in the early diagnosis of amyotrophic lateral sclerosis and Parkinson's disease."

The system currently being developed by Biocross, aims to respond to the needs of all those working in the diagnosis of Alzheimer's. This multiparametric assay combines different types of biomarkers, such as metabolites, peptides associated with the disease, and genetic markers.

We aim to reach a level of accuracy higher than that of clinical diagnosis.

As the assay is performed on a simple blood sample, it is easily standardized and adapted to hospital laboratories.

During the development phase, samples from patients with other types of dementia have been used, thus ensuring the highly specific nature of the test. This is a key factor, since the symptoms of Alzheimer's disease can be confused with other types of dementia (eg, frontotemporal dementia and Lewy body dementia).

The system is currently being validated in a multicentre study—7 hospitals and Queen Sofía Foundation – Fundación CIEN—analyzing more than 500 samples from patients with Alzheimer's and volunteers with no mild cognitive impairment.

Bioftalmik

Jon Careaga. Executive Director jon.careaga@bioftalmik.com Parque Tecnológico de Bizkaia, ED. 800 - 2ª planta - 48160 Derio – Bizkaia Phone: 34 944.069.659 http://www.bioftalmik.com



Our main objective is to design and develop diagnostic, prognostic and therapeutic systems for eye diseases and Biodevices for ophthalmic surgery.

SERVICES:

- Integral R&D platform
- Diagnostic tests
- Clinical trials

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our strategy clearly promotes scientific, technical and clinical collaboration and all its manifestations as the most effective ways to innovate.

Our main areas of interest are:

Ophthalmology, therapy, diagnostic, prognostic, cell culture, molecular biology, proteins, drug development and drug delivery.



Biogen Idec Ibérica, S.L.

Guido Decap Carrasco. VP & Managing Director guido.decap@biogenidec.com Paseo de la Castellana, 41 - 2°. - 28046 Madrid – Madrid 34 91 310 7110 http://www.biogenidec.es



VISION: With passion, purpose and partnerships, we transform scientific discoveries into advances in human healthcare.

MISSION: We create new standards of care in neurology, oncology and immunology through our pioneering research, our global development, manufacturing and commercial capabilities.

CORE VALUES: Courageous Innovation. Quality, Integrity, Honesty. Team as a Source of Strength. Commitment to Those We Serve Growth, Transformation and Renewal. Consistent with our core values, we as individuals and as a corporation are dedicated to creative and constructive growth, transformation and renewal as a source of inspiration and vitality. Stating your corporate principles is one thing; At Biogen Idec, we live these principles every day. They are the soul of the company.

PRODUCTS:

With our stated mission to create new standards of care for unmet medical needs, Biogen Idec is focused on five therapeutic areas: Neurology, Immunology, Oncology, Cardiopulmonary and Hemophilia. These are areas in which we have both proven expertise and products in our pipeline that we believe can lead to first-in-class or best-in-class molecules. Within each area, we have selected targets based on both biology and the pathophysiology of disease.

TYSABRI® (natalizumab) is a treatment approved for relapsing forms of MS in the United States and relapsing-remitting MS in the European Union.

AVONEX® (Interferon beta-1a) has the most treatment experience for relapsing forms of MS worldwide, with more than 135,000 patients on therapy. It is used worldwide as a treatment for relapsing forms of MS to slow the progression of disability and reduce relapses.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

At Biogen Idec, we believe strongly in the value of successful partnerships, and we do everything we can to make them work. If your company is in the later stages of development, Biogen Idec can provide a wealth of resources to help successfully commercialize your product.

Our approach to partnerships is driven by two core principles that promote success: respect and flexibility.

We are interested in partnerships in our core therapeutic areas, which include neurology, oncology and immunology. In addition, we welcome products in acute care, including cardiovascular, hemophilia, infectious disease, and other products used in a hospital environment. We also have active programs in hemophilia research and development. In fact, we are open to partnerships in additional therapeutic areas that lend themselves to a specialty biopharma business model.

Bioibérica S.A.

Roger Sabata. Business Development Manager rsabata@bioiberica.com Plaza Francesc Macià, 7 – 8ª planta - 08029 Barcelona - Barcelona Phone: 34 93 490 49 08 http://www.bioiberica.com



Bioibérica is a biotechnology company specialized in the research, development, manufacture and marketing of biomolecules for the pharmaceutical, veterinary and agricultural industries. Since its creation in 1975, Bioibérica undertook a firm commitment: supporting good health in humans, animals and plants.

Products/Services:

- HEPARIN: Bioibérica started its activity with heparin. Nowadays, one out of five administered doses worldwide is developed and manufactured by Bioibérica. Heparin is one of the oldest drugs still in generalized clinical use that is employed to prevent arterial diseases, thromboembolisms or coronary accidents, among others.
- JOINT HEALTH: Prevention, diagnostic and treatment of osteoarthritis, articular lesions and other musculoskeletal problems are the main pillars of Bioibérica both in the human and veterinary joint health area. Producing and marketing chondroprotectors (chondroitin sulfate, glucosamine and hyaluronic acid). Diagnostic and prognostic DNA chips, Biomarkers or Cell Therapy are some of the research lines in process.

Bioibérica produces and markets ingredients for feed intended for consumption, by young animals or animals with digestive problems contributing to boost appetite, improve digestibility, and enhance the intestinal health of animals.

- PLANT STRESS: Currently, agricultural production is subject to several factors that can lead to stress and this negatively affects the quantity and the quality of the crops.



Biokit Research & Developments, S.L.U.

Pau Planas. Quality Assurance Manager pau.planas@biokit.com Can Malé, Lliçà d´Amunt - 08186 Barcelona – Barcelona Phone: 34 93 860 90 00 http://www.biokit.com



Development, production and commercialization of immunoassays for the clinical diagnostics (IVD) market.

PRODUCTS:

- Serology reagents for the diagnosis of infectious diseases and for the detection of plasma proteins. Manual assays (latex agglutination, hemoagglutination, immunochromatography), ELISA assays and assays for automatic platforms (immunoturbidimetry and chemiluminiscence)

OEM services: Contract development and manufacturing of immunoassays for clinical chemistry, immunochemistry and coagulation applications.

Raw materials: Polyclonal and monoclonal antibodies. High-quality natural and recombinant antigens.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

New clinical biomarkers with high diagnostics potential, apt to be detected through the use of high sensitivity immunoassays.

OEM immunoassay opportunities.

BIOMAR Microbial Technologies, S.A.

Dr. Arturo Ayats Pérez. Vicepresident. Dr. Antonio Fernández Medarde. CEO info@ibiomar.co

Parque Tecnológico de León. Calle D, Parcela M-10, 4 - 24009 Armunia - León Phone: 34 987 84 92 00 http://www.biomar.co



Biomar is a Biotechnological company specializing in Marine Microbiology and the Chemistry of Natural Products.

Biomar develops its own drug candidates in a variety of therapeutic areas. In parallel with the pharmaceutical sector, projects are under way since 2006 in a variety of industrial sectors such as Bio-energy and Agro-food areas.

The quest for medicinal products in the area of human health has been our main aim since the very origin of the company. The collection of compounds and their great chemical diversity, as well as our network of collaborators specializing in different pathologies, allow us to embark on projects ranging from cancer to neurodegenerative, infectious or autoimmune diseases. Other hand, we are working on natural extracts with anti-fungal activities against pathogenic fungi of the skin and on natural extracts as whiteners, antioxidants, anti-acne and anti-wrinkle products.

The food production area comprises several Biomar compounds in a very advanced stage of development, compounds that will help to increase the productivity of agriculture and the food processing industry: Natural preservatives, sweeteners, etc., in food processing, and high-performing biopesticides and fertilizers, including some that are about to be marketed world-wide.

Biomar has now selected several candidates from microalgae in order to obtain fatty acids that are transformed into biodiesel; and sugars/proteins that can be used for feeding humans and animals. It is a key project for Biomar in terms to reduce the impact of current energy processes.

PRODUCTS:

OUR LIBRARIES are the beginning of all our research projects due to Biomar has the world's largest collection of marine micro-organism. We are making extraordinary advances in a wide variety of fields due to its bio diversity and presence of novel compounds.

SERVICES:

BIOMAR is an expert in the development of production methods to obtain compounds with high purity is at the heart of this line of work. Fermentating and downstream processing have been developed in our plant for more than 50 compounds. Besides, our fermentating capacity of 30, 300, 3000 liters.



BioMarin Europe Ltd. Sucursal en España

Tiago Osório de Barros. Country Manager IBERIA tbarros@bmrn.com Complejo inmobiliario empresarial Miniparc I, Edificio B-Planta 1ª Oficina 4, C/ Azalea s/n, de la Urbanización "El Soto" - 28109 Alcobendas – Madrid Phone: 34 800 808 508 http://www.biomarin.com



BioMarin seeks to develop product candidates that:

Address currently unmet medical needs

Suggest a clear-cut development profile

Provide an opportunity to be first-to-market

PRODUCTS:

- Naglazyme
- Aldurazyme
- Kuvan

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Metabolic Diseases

Enzyme Replacement Therapies

Biomedal, S.L.

Ángel Cebolla Ramírez. General Manager acebolla@biomedal.com Avda. Américo Vespucio, 5-4. Planta 1, módulo 12 - 41092 Sevilla - Sevilla Phone: 34 954 081 276 http://www.biomedal.com



To develop new, innovating technologies for the progress of post- genomic research and the efficient industrial production of new biomolecules that are useful for society.

Biomedal S.L is a biotechnology company whose mission is to develop and commercialize new technologies, services and products for research, bioindustry and diagnostics.

The company develops its activities in two areas:

Biomedal Life Science: is devoted to the development and commercialization of products and services for life sciences

research, and technology for industrial bioprocesses. Its own technology allowed the improvement of recombinant protein production.

Biomedal Diagnostics: Health related bioanalitic systems, detection of immunological diseases markers, food safety products such as Glutentox, and Oleotest, food analysis etc.

BIOMOL-INFORMATICS SL

Paulino Gómez-Puertas. Scientific Advisor bioinfo@biomol-informatics.com C/ Faraday, 7. Campus Universidad Autónoma de Madrid - Cantoblanco. -28049 Madrid – Madrid

Phone: 34 918 279 767 / 34 627004637 http://www.biomol-informatics.com



BIOMOL-INFORMATICS is a company specialized in Computational Biology founded in 2007 by scientists from the Centro de Biología Molecular Severo Ochoa as a spin-off company of Parque Científico de Madrid.

BIOMOL-INFORMATICS offers consulting services on Bioinformatics in areas of research, diagnostics and pharmaceutical industry. Located in the campus of the Autonomous University of Madrid, the company is specialist in Rational Drug Design using 3D computational simulation, Molecular Dynamics of macromolecules and Data Analysis of Next-Generation DNA Sequencing.

I+D:

- FP7 Divinocell: FP7 collaborative project HEAL-TH-F3-2009-223431 Exploiting Gram-negative cell division targets in the test tube to obtain antimicrobial compounds. 2009 - 2013.

- IMI programme Combating Antibiotic Resistance. HIPERAC-TIV. 2014 - 2018. (Negotiation stage 2 EFPIA/GSK).
- FP7 DORIAN: FP7 collaborative project FP7-HEAL-TH-2011-278603 Developmental Origins of Healthy and Unhealthy Ageing: The Role of Maternal Obesity. 2011 2014
- FP7 Epi-TRAITS: FP7 Marie Curie project FP7-PEOPLE-2012-ITN-316965 Epigenetic regulation of economically important plant traits. 2012 2016.
- MINECO DIGEN-1K: Coordination of the INNPACTO project DIGEN-1K (participants: Madrid Science Park, IdiPaz, CBM-SO:CSIC-UAM). Plan Nacional I+D+I. 2011-2014.

Bionanoplus, S.L.

Hesham Salman - Founder hsalamn@bionanoplus.om Pol. Ind. Mocholi – Plaza CEIN, 5 nave B14 - 31110 Noain – Navarra Phone: 34 948103926 http://www.bionanoplus.com



Bionanoplus is a bio-nano-pharmaceutical company aimed to the development of nano-formulation and nano and micro delivery technologies. We provide solutions to overcome formulation and delivery problems for Pharma, Cosmetic, Agrofood and plant healthcare industries based on our proprietary technology. Our technology is based on GRAS or food-grade substances with no organic solvents and easy to scale.

Bionanoplus applies nanotechnology to solve formulation and processing problems in the pharmaceutical industry, cosmetics, agro-food and plant healthcare. We developed our own technology and patents. We are a specialist in polymeric nanoparticles. We develop R&D for third parties, pro-

duct co-development and our own pharmaceutical products portfolio based on well known out of patent molecules increasing their safety and benefits.

Our technology platform allows us to develop tailored solutions to specific problems using or adapting our self assembling nanoparticles (Nano G201, Cap G201, SNAP,...). We developed bio-adhesive nanoparticles and delivery systems based on in-situ self assembling nanoparticles for controlled release of the substance of interest.



BIONATURIS

Victor Infante. CEO info@bionaturis.com Av. Desarrollo Tecnológico 11.- 11591 Jerez de la Frontera – Cádiz Phone: 34 856 818 424 http://www.bionaturis.com



Bionaturis is a public-owned biopharmaceutical company, listing in the Spanish MAB stock exchange, developing and producing biological products for the pharmaceutical and veterinarian sectors. Bionaturis specializes in the prevention and treatment of niche diseases.

Bionaturis preserves its core vision of a global access to health, stimulating the progress by constant innovation as making complex biologicals drugs more feasible to people and producers all around the world.

Products

Recombinant vaccines for human and animal health (manufacturing and efficacy proof of concept performed).

Services:

Lab, clinical and market delivery of biological drugs for human and animal applications (recombinant vaccines, antibodies, enzymes, fusion proteins).

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

In-licensing of patented (or suitable for patent protection) recombinant antigens (in-vitro and in-vivo -rodents- efficacy tested).

BIONCOTECH THERAPEUTICS, S.L.

Elena Caballero Castellote. Project department ecaballero@bioncotech.com C/ Catedrático Agustín Escardino, 9 – Parc Científic UV - 46980 Paterna - Valencia

Phone: 34 961109955 http://www.bioncotech.com



Bioncotech Therapeutics is a biopharmaceutical company focused on the development of new anticancer therapies.

Bioncotech Therapeutics is a biopharmaceutical company based in the Scientific Parc of University of Valencia that counts with the support of the Spanish National Cancer Institute (CNIO) and Instituto Empresa. We are currently finalizing the pre-clinical phase of our first compound, BO-110, a selective activator of autophagy and apoptosis, designed for the treatment of cancers which, due to their aggressiveness and lack of effective treatments, are included in the concept of orphan oncological diseases.

Bionet Ingeniería

Pedro Ramos pedro.ramos@bionet.com Av. Azul 2.11.2 - Parque Tecnológico Fuente Alamo - 30320 Fuente Alamo - Murcia

Phone: 34 902 170 704 / 34 616970677 http://www.bionet.com



BIONET designs and builds fermentors/bioreactors, membrane filtration plants, and provides process development and engineering services for biotechnology-based industries.

We work for food, biotechnology, energy, pharmaceuticals and chemicals companies, serving with our technologies both their production and environmental needs.

PRODUCTS:

- Lab to Market Engineering[L2M].
- From process development at lab-scale we offer: Feasibility studies. Industrialization and scale-up studies. Turnkey construction of pilot plants. Pilot plant testing.

- Project management of biotech investments: Basic and detailed engineering. Project management or turnkey construction of industrial facilities. Commissioning and start up according to GMPs.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Technology centres and R&D departments with new processes that want to add value to the Process Technology Packagethrough a viability study, from an engineering point of view, considering existing / potential investors. New industrial investment projects and facilities that want to introduce a new process / product or that simply want to revamp an existing one. Technology centres that can collaborate in process optimization and troubleshooting.



BIONURE

and Glaucoma (GL).

Albert G. Zamora. CEO info@bionure.com C/ Dalmases 27, Local 1 - 08017 Barcelona – Barcelona Phone: 34 931258607 http://www.bionure.com

Bionure is an early-stage drug development company founded in 2009 (spin-off from Hospital Clínic de Barcelona - IDI-BAPS and CSIC) based in Barcelona and San Jose, California. We are aimed at developing neuroprotective therapies for the treatment of neurodegenerative diseases, with special focus in Multiple Sclerosis (MS), Acute Optic Neuritis (AON)

Neurodegenerative diseases are sanitary priority in advanced countries because of its high frequency, social and sanitary costs and the lack of curative therapies.

Available treatments for MS are immunomodulatory drugs, only partially effective and have many side effects.

In particular, current treatments for MS are immunomodulatory drugs (modulate the body immune system) that decrease the frequency of relapses and hold up its progression, but they are only partially effective and have many side effects. In the case of AON, the treatment with corticosteroids is barely effective.

In the case of GL, current marketed drugs are IOP-lowering drugs (only reduce intraocular pressure).



In these diseases, there are many patients who don't benefit from current therapies.

Bionure develops BN201, a small molecule, First-in-Class, neuroprotective drug. It represents a new approach for the treatment of MS, AON and GL, since there is not any neuroprotective drug in the market.

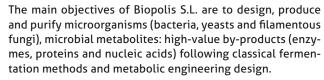
The aim of Bionure is to complete the clinical development of BN201 until Phase IIa (PoC of neuroprotection in humans) asap and close co-development/licensing agreements with other pharmaceutical companies.

The short-term strategy is to develop an i.v BN201 for the treatment of AON. This will allow to complete PhIIa in humans sooner (PoC of neuroprotection). There's also the possibility to obtain Orphan Drug Designation. Finally, BN201 will be extended to bigger indications such as MS and GL.

BN201 is in preclinical development (IND<1 year, to be completed during 2013). Clinical trials are expected to be started at the end of 2013 - earlier 2014 and PhIIa to be completed by 2016.

Biopolis, S.L.

Daniel Ramón Vidal. Director General biopolis@biopolis.es C/ Catedrático Agustín Ecardino, 9. Parque Científico Universidad de Valencia - Edificio 2. - 46980 Paterna - Valencia Phone: 34 963 160 299 http://www.biopolis.es



PRODUCTS AND SERVICES

- Probiotics and functional ingredients.
- Functional and technological validation trials.
- Use of animal model C. elegans for Alzheimer candidate screening, obesity, diabetes, aging, microbial infection testing.
- Revaluation of waste and subproducts.
- Purification of proteins.
- Custom design and selection of microbial strains/valuable biochemical compounds.
- Process design, development and production of microorganisms and derivatives.



- Production of new generation biofuels and biopolymers.
- Metagenomic and metabolomic analysis.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Biopolis S.L. offers its services both to industries, such as the food and feed sector, agrochemical, chemistry, pharmaceutical and environment, as well as to public and private research centers.

Finding customers and collaborators:

- License for probiotics commercialization
- For contract manufacturing of microbial strains or specific industrial-microbiology-derived compounds
- For contract R&D using proprietary biological model (C. elegans), sequencing (454 Roche, Ion Torrent), metagenomics, metabolomics and nutrigenetics tools.



Biosearch S.A.

Mónica Olivares Martín. Research Manager molivares@biosearchlife.com Camino de Purchil, 66. - 18004 Granada - Granada Phone: 34 91 380 29 73 http://www.biosearchlife.com



Company dedicated to research, development and commercialization of new products based on natural ingredients with health benefits.

PRODUCTS:

- Vegetable, lipid and probiotic extracts
- Exclusive product development
- Technical and legal consultants

- Regulatory affairs
- Stability studies

AREAS OF INTEREST FOR FUTURE COLLABORATIONS: Development of new bio active ingredients based on vegetable, lipid and probiotics extracts and their application in the pharmaceutical, food and cosmetic industries.

Biosurgical

Silvia Martinez sma@biosurgical.es Ctra. Torrejón Ajalvir km 5,2 Ajalvir - 28864 Ajalvir – Madrid Phone: 34 918874220 / 34 606441146 http://www.biosurgical.es



MISION: to provide health care professionals with an innovative solution which incorporates an advantage in terms of efficacy, safety and cost effectiveness for the treatment of some diseases that require surgical intervention consisting on complete cytoreduction followed by HIPEC (Hyperthermic Intraperitoneal chemotherapy).

Biosurgical is a company dedicated to marketing worldwide the patented PRS system for intraperitoneal hyperthemric chemotherapy recirculation. The introduction of the PRS system constitutes a milestone in the management of some diseases by cytoreductive surgery followed by HIPEC because it allows for the first time, to effectively recirculate the medication using the closed technique monitoring the pressure inside the cavity and optimizing drug distribution and temperature control.

Areas of interest: healthcare professional training on HIPEC closed technique with BRS, clinical trials in cooperation with the clinicians and medical institutions and investigation groups. Potential collaboration with pharma companies to develop new products as a result of the combination of drugs with medical devices.



Biotech Deveopments, S.L.

contacto@biotechdevelopment.es Juan R. García Soria. Director Ejecutivo Avda. D'Olof Palme, 10, bajos - 08840 Viladecans – Barcelona Phone: 34 930107676 / 34 657417269 http://www.biotechdevelopment.es

Providing tools for promoting R+D and Innovation, decision making, and thus provide the research necessary components to attract investment

Investing in the value chain for the development of new treatments and drugs derived from biotechnology through biotech management and transfer

Empower competent profiles in business areas within the field of biosciences able to apply their knowledge in health in the biopharmaceutical industry.

Biotech Business School: Biotech Business School gives professionals in health sciences business concepts oriented to creation and management of biotechnology-based companies and their application within the biopharmaceutical industry framed, giving a start to his managerial training and enhancing their mixed profile as a professional.

R&D and Innovation Consulting: Biotech R&D and Innovation Consulting provides our customers the tools capable



of unifying the language of research, science, into investors language, capital, to facilitate the promotion and implementation of research projects and decision making to promote the development of biotechnology-based companies.

Biotech Investment: Why invest in a particular research project in biotechnology?

The answer lies in the choice of questions. What is the economic value of my project? What is the potential for future exploitation? How much investment do I need to develop my business model?

For this reason Biotech Investment becomes the partner of choice for the creation and management of biotechnology-based companies, transfer and financing biotechnology research lines, thus contributing to the development of new treatments and drugs derived from biotechnology.

Biotherapix Molecular Medicines S.L.U.

Juan Sebastián Ruiz. Institutional Relations Director jsruiz@genetrix.es Pza de la Encina, 10-11. Núcleo 1, 3ª Planta. - 28760 Tres Cantos - Madrid 34 91 806 30 89 http://www.biotherapix.com



Biotherapix Molecular Medicines S.L.U. is a company belonging to Genetrix Group, which specializes in generating high affinity biological molecules to treat inflammatory diseases.

Programmes under way:

- New generation of anti-inflammatory drugs specifically chemokine receptor antagonists (Diakinas®).
- Platform for generating and selecting (screening) human monoclonal antibodies for therapeutic and diagnostic purposes.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Molecular therapy. Protein biology. Protein production and purification systems. Development of therapeutic antibodies. Inflammation. Infectious diseases



Biotools B&M Labs, S.A.

Isabel Jiménez González - Marketing & Sales Manager isabel@biotools.eu Valle de Tobalina 52, nave 43 - 28021 Madrid - Madrid Phone: 34 917100074 http://www.biotools.eu



Research, development and manufacture of recombinant enzymes and other tools for molecular biology. Development of new technologies for molecular diagnostics and biomedical research.

Comprehensive, fast, simple, robust, automatable and competitive diagnostic solutions, based on internationally patented proprietary technologies and reagents from the company.

PRODUCTS:

- Recombinant enzymes, nucleic acid purification systems and other reagents for molecular biology.
- Ready-to-useMolecular diagnostic Kits based on Gelification Technology (one tube-one reaction).

SERVICES:

- Services for design, stabilization and automation of nucleic acid amplification reactions.
- Services for the development of comprehensive automatable solutions for molecular diagnostics.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Technology transfer: Transfer of Biotools Gelification Technology for the stabilization in a single tube all necessary reagents to perform an amplification reaction.

This technology has been licensed to the Brazilian Public Health System, and it has been implemented in Brazilian blood banks for the detection of HIV and HCV among blood donors

Bosques Naturales, S.A.

Ricardo Licea. Biotechnology Coordinator ricardolicea@bosquesnaturales.com Avda de la Vega, 1. Edificio 3 - 28108 Alcobendas - Madrid Phone: 34 91 360 42 00 http://www.bosquesnaturales.com



Promotion and maintenance of fine wood forestry plantations.

This activity has a triple function: Sustainability, Productivity and Innovation.

Bosques Naturales is a company leading research and development which applies vegetal biotechnology and intensive agronomic techniques to its production processes. Its lines of research in forestry biotechnology are oriented to genetic characterization of vegetal material in order to improve the volume and quality of wood.

PRODUCTS:

- Plantations of high economic value trees using selected vegetal material which is reproduced "in vitro".
- The company has a Vegetal Tissue Growth Unit which provides its own germplasm bank.

SERVICES:

Bosques Naturales covers all the growth and maintenance costs of the trees during the twenty or twenty-five years which their productive cycle lasts.



BTI Biotechnology Institute

Dr. Eduardo Anitua Aldecoa. Scientific Affairs Manage r eduardoanitua@eduardoanitua.com C/ Jacinto Quincoces, 39 - 01007 Vitoria - Álava Phone: 34 945 160 652

www.bti-implant.es / www.prgf.es / www.institutoeduardoanitua.com

Research and development of new product, new materials and new processes for biological material obtaining through several technologies some of them related to Regenerative Therapies.

PRODUCTS:

- Design and manufacture of dental implants, prosthetic components and surgical instruments, Bioactivatable surface for implantology.
- Technology development for tissue regeneration using Plasma Rich in Growth Factors (PRGF).



- Educational material and courses development, and its diffusion.
- Diagnostic software

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Tissue engineering, bone regeneration, regenerative therapies

CAMBRIX GENOMIC INSTITUTE, S.A.

Manuel Rey Barrera mrey@cambrix.es C/Pino Central, 16, 1N - 41016 Sevilla - Sevilla http://www.cambrix.es





Camelina Company España, S.L.

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The company's goal is to produce sustainable feedstock for the second generationadvanced biofuels industry, with special focus on biojetfuel for the aviation industry.

The company deploys camelina plantations, an energy oilseed crop very resistant to drought and frost. It has introduced camelina in Spain as a rotation crop with traditional cereal in arid dryland regions with low productivity.

A. Biofuels: camelina oil.

Camelina oil is used for biofuel production, both for the automotive (biodiesel) and aviation industry (biojetfuel).

B. Animal feed: camelina meal.

Camelina meal, high in protein and Omega-3, is used in animal feed in different diets: cattle, pigs, poultry meat, egg production, and fish.

Finally, the main waste generated in camelina plantations, camelina straw, is an excellent feedstock for electricity production in biomass power plants due to its high energy and low ash content.

The main areas of interest for future collaborations / partnerships are focused on developing new varieties of camelina, specially adapted to the soil and climate of arid drylands in Spain.

Canvax Biotech S.L.

Elier Paz Rojas. Managing Director e.paz@dominion.es CL Alcalde Velasco Navarro 10, 5-Izq - 14004 Córdoba - Córdoba Phone: 34 957 420870 http://www.dominion.es/index.html



The search for antigens for vaccines

PRODUCTS:

Own technology for the identification of antigens inducing T CD4+ and CD8+ response.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Vaccine sector, model animals for protection against infections.

Celgene

Marta Moreno. Market Access and Regulatory Affairs mmoreno@celgene.com Paseo de Recoletos 37 -39 Planta 4ª - 28004 Madrid - Madrid Phone: 34 914229168 http://celgene.com

Celgene is a global biopharmaceutical company committed to improving the health of people with certain types of cancer and other rare diseases incurable.

Research has placed as the stregnth of its activity and is characterized by the development and commercialization of innovative therapies designed to respond to the medical needs not yet covered.



PRODUCTS:

- MULTIPLE MYELOMA: REVLIMID (lenalidomide)
- MYELODYSPLASTIC SYNDROMES: VIDAZA (azacitidine)
- METASTASIC BREAST CANCER: ABRAXANE (nab paclitaxel)



Celgene Institute of Translational Research Europe (CITRE)

David Villalba. Senior Manager Operations dvillalba@celgene.com Parque Científico y Tecnológico Cartuja 93 C/Isaac Newton 4 - 41092 Sevilla - Sevilla

Phone: 34 955 001 705

http://www.celgene.com/research/citre_overview.aspx

CITRE®, the Celgene Institute of Translational Research Europe, is a focal point for advanced biomedical research including regenerative medicine, personalized medicine and cellular therapies.

CITRE® consists of five departments - tumor biobanking, bioinformatics, placental stem cells, epigenetics and cell signaling. They will be supported by five services - cell culture, cytometry, electronic microscopy, genomics and proteomics, organized around a Central Unit for Translational Medical Research.



Located in Seville, Spain, CITRE® grows out of a shared vision between Celgene and the government of Andalusia to provide a bridge between the discoveries of basic research and their application in addressing the needs of modern medicine.

Clean Biotec S.L.L.

Nathalie Beaucourt. nathalie@clean-biotec.com San José De Calasanz 11 Bajo - 26004 La Rioja - Logroño Phone: 34 941238261 http://www.clean-biotec.com



Mission and Objectives:

Find solutions to resolve environmental pollution problems using clean, sustainable and economical technologies.

Improve the natural regulation capacity of ecosystems to reduce environmental impacts.

New ways of natural and controlled systems for waste elimination and recycling.

PRODUCTS/SERVICES:

- Ecodiagnostics
- Environmental audit reports
- Waste assesment projects
- Paleobotanic studies
- Implantation and control of biomonitoring networks
- Phytoremediation and Bioremediation

- R & D biorremediation projects
- Restoration of degraded lands
- Reseach and improvement of new phyto and bioremediators
- Microorganism research from extreme environments to use in bioremediation and other biotechnological applications

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Environmental microbiology

Bioremediation

Biomonitoring

Metagenomics



CRB Inverbío, S.G.E.C.R

Annie Roda comunicacion@crossroadbiotech.com Almagro 1, 1º derecha - 28010 Madrid - Madrid Phone: 34 91 4467897 http://www.crbinverbio.com



Cross Road Biotech Inversiones Biotecnológicas (CRB Inverbío SGECR SA) is a venture capital management firm registered with number 87 in the CNMV. CRB Inverbío manages Venture Capital Firms that invest in the development of seed stage companies in life sciences that address unmet medical needs and have the potential to grow into successful businesses. To that end, the company selects innovative projects led by prestigious scientists and entrepreneurs, providing financing, management support and strategic advice.

CRB Inverbio is based upon the expertise and successful track record in continuous value creation of Cross Road Biotech, a Spanish venture capital firm that has invested and managed eleven biotech companies since 2005. CRB Inverbio has a unique competitive advantage: the expertise,

analytical capabilities and commitment to succeed of the management team: a key element to build highly successful businesses and maximize the returns to the investors.

CRB Inverbío manages Funds and Venture Capital Firms specialized in life sciences. At present the company is launching CRB Bio II, a 60M? venture capital fund to invest in emerging companies for life sciences, an attractive opportunity to participate in one of the most powerful investment sector of the new economy.

Life Sciences

Medical devices

Biotechnology, diagnostics, agriculture

Curaxys

Paula Esteban del Río pesteban@curaxys.com Ctra. de Sanlúcar - 11500 El Puerto de Santa María – Cádiz Phone: 34 956549169 / 34 638438509 http://www.curaxys.com



Curaxys mission is to become a reference in national and international markets through a back integrated process from R&D to production and commercialization of biosimilars treating different pathologies as Cancer offering more competitive prices.

To achieve this target Curaxys owns its own technological platform CuraMab® with state of the art technologies allowing us to produce any monoclonal antibody allowing

us to offer high price reductions.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

- -Research, development, production and commercialization of biosimiars obtained through mammalian cells.
- -Commercialization of generics.
- -CRO and CMO services.

CYTOGNOS, S.L

Fernando Martín de Lara. Director Financiero fmartin@cytognos.com Polígono "La Serna", Nave 9. 37900 - Santa Marta de Tormes - Salamanca Phone: 34 923125067 http://www.cytognos.com



Cytognos S.L. is a biotechnology company based in Salamanca (Spain) dedicated to the design and development of new reagents, software and techniques that provide innovative solutions in the flow cytometry field.

Our aim is to offer complete solutions in the diagnosis of haematological diseases by flow cytometry.

Products:

Cytognos markets a large number of single, double and triple antibodies against human antigens and isotype controls, reagents to study cell cycle and DNA content (multiple myeloma, acute lymphoblastic Cell B Leukemia, Non-Hodgkin's Lymphoma Cell B, Bladder Cancer screening), multicolor Kits for the study of lymphocyte subpopulations, monitoring of multiple myeloma and screening of Paroxysmal Nocturnal Hemoglobinuria.

We have also developed systems for absolute cell counting and the erythrocyte lysing solution Quicklysis.

Another Cytognos´ product is the flow cytometry Analysis Data Software INFINICYT, one of the most powerful and complete software worldwide, supported by the EC within the VI Frammework Programme.

Areas of interest for future collaborations:

Cytognos is always open to possible collaborations, both in the development of new joint projects, and in the commercial exploitation of new methods.

The main areas of interest are those related to Oncology, Immunology and Hematology.



Digna Biotech, S.L.

Núria Safont. Communications officer nsafont@dignabiotech.com Avda. Pio XII, 22. Oficina 2. - 31008 Pamplona - Navarra Phone: 34 91 185 25 10 http://www.dignabiotech.com



The mission is to harness the multi-disciplinary expertise of the world-class Translational Research Consortium to generate robust clinical therapeutic and diagnostic candidates available for development and commercialization partnerships with pharmaceutical companies.

The objective is to contribute to improving Public Health and well-being by addressing unmet or medical needs in critically important medical areas such as cancer, liver, cardiovascular, neurodegenerative and autoimmune.

Digna Biotech has a pipeline focused on Hepatology, Gene Therapy, Oncology and Cardiovascular diseases.

Four products (Cardiotrophin-1; Inferferon alpha 5; Disitertide (P144) and AAV vector to treat acute intermittent por-

phyria -licensed to uniQure, are being developed.

Studied indications among others are:

- Scleroderma (systemic sclerosis and morphea) Disitertide (P144)
- Ischemia / Reperfusion in solid organ transplantation: cardiotrifina-1
- Acute-intermittent porphyria: AAV viral vector for the deficiency of porphobilinogen deaminase (PBGD)
- Hepatitis C: Interferon alfa-5
- Hepatic resection: cardiotrophin-1

Diomune S.L.

Miguel Ángel Llamas Director Técnico mallamas@diomune.com C/ Félix Boix Nº9 4º C - 28036 Madrid - Madrid Phone: 34 91 806 46 56 http://www.diomune.com



Diomune is a biotech company specialized in research and development of new immunology treatments oriented to human and animal health areas in infectious, inflammatory and autoimmune diseases.

The three main lines of business of the company are to develop a veterinary drug to cure canine leishmaniasis, research and develop a drug to treat sepsis in humans and seek licensing agreements for the use of an innovative immunomodulatory compound as an adjuvant for vaccines.

Thanks to our experience, Diomune SL offers other research groups and companies a range of products and services of high complexity.

PRODUCTS/SERVICES:

Murine models of sepsis (LPS, E. coli, CLP), Leishmaniasis, models with and without adjuvant vaccine or with and without subsequent treatment, inflammatory models (rheumatoid arthritis, psoriasis, asthma, acute inflammation by carrageenan peritonitis by thioglycolate), Cancer colon associated with ulcerative models, metabolic syndrome and obesity, hepatic cirrhosis, and so on.

Validations: Microbiological tests, determination of glucose, lactic acid, cell proliferation, apoptosis, cytokines in culture supernatant and serum, monitoring of cell populations by flow cytometry, antibody titers, study of the Th1/Th2 balance, and so on. Variety of cell types available.

Diomune uses the latest advances in Molecular Biology, Immunology and Research to meet the technological demands of enterprises: servicios@diomune.com

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our main interest for future collaboration focuses on the implementation of licensing agreements or joint ventures, with other companies with greater capacity than ours, to develop clinical trials for sepsis and septic shock in human phases with our drug (which has been shown excellent results in animal models). Also, we would like to contact other companies who develop and/or market vaccines that seek new adjuvants to enhance their action.

Our major interest in collaboration is Vaccine Development. Diomune has a potential immunomodulator able to direct immune responses to be used as vaccine adjuvant. We are looking forward to find partners interested in using them as adjuvant in their vaccines or as immunomodulator in Immune-based diseases.



Draconis Pharma, S.L.

Jordi Vilar. Sales & Business Development Manager jvilar@draconispharma.com

Av. Cami Reial, 51-57 / Pol. Ind Riera de Caldes - 08184 Palau-solità i Plegamans - Barcelona

Phone: 34 902 565 092 http://www.draconispharma.com

Draconis Pharma is a biotechnology company focused on providing scientific and technological services to pharmaceutical and biotechnology companies, aimed at supporting drug discovery at different stages of research, such as target validation, hit-finding, hit-to-lead and lead optimization towards the release of a robust and well-characterized preclinical candidate.

Draconis offers services and has expertise in the following areas:

- Medicinal chemistry
- Analytical chemistry
- Cell-based assays
- In-vivo efficacy



- ADME & PK
- Toxicity & Safety
- Quality assurance
- Integrated service

Draconis Pharma also dedicates part of its resources to the discovery and development of innovative drugs for the treatment of inflammatory, autoimmune, allergy or pain disorders. Currently, Draconis is collaborating in two independent drug discovery programs, Neogenius Pharma and Dendria, focused on the identification of innovative molecules to treat inflammatory pain and neuroinflammatory diseases respectively.

DREAMgenics, S.L.

Gonzalo R. Ordoñez gro@dreamgenics.com Parque Tecnológico de Asturias - P 30 (Edificio Treelogic) - 33428 Llanera - Asturias

Phone: 34 902423023 http://www.dreamgenics.com

In a more concrete level, DREAMgenics is aimed at building and marketing innovative software products that will assist the medical diagnosis from the human genome data.

Our target market is the specialist physician (at medium-term even the primary care physician) through national health systems or private health institutions.



PRODUCTS/SERVICES:

- Bioinformatic Analysis of Whole Genomes and Exomes
- Bioinformatic Analysis of Transcriptomes
- Advisory and Consulting Service. Other approaches
- Design and analysis of gene panels and multiplex approaches

EntreChem, S.L.

Francisco Morís. Co-founder & CEO info@entrechem.com Edificio Científico Tecnológico, Campus "El Cristo" - 33006 Oviedo - Asturias Phone: 34 985 259021 http://www.entrechem.com



Our objective is the discovery and development of bioactive new chemical entities (NCEs) from m icrobial natural products. We generate novel analogs by combinatorial biosynthesis of the corresponding metabolic pathways, identify the most promising candidates and advanced the preclinical development until demostration of efficacy in vivo.

PRODUCTS:

EntreChem offers genetic engineering for identification and manipulation of metabolic pathways from bacterial natural products of interest in the pharmaceutical (antibiotics, antitumorals, antifungals) and agro (insecticides, herbicides) sectors. EntreChem offers enantiopure products for medici-

nal chemistry and services of applied biocatalysis, as well as custom synthesis of optically pure compounds.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Discovery and developmente of new drugs from natural products by genetic engineering and biocatalysis.

Antibiotic and antitumoral activity assays (cellular and biochemical), target identification.

Early preclinical in vivostudies (efficacy, PK).

Bioprocess scale-up.



Era7 Information Technologies

Eduardo Pareja-Tallo. Director General epareja@era7.com BIC Granada Avenida de la Innovación 1 Parque tecnológico Ciencias de la Salud - 18100 Armilla - Granada

Phone: 34 958 256 771 / 34 655 660 448 http://www.era7.com



To help biotech companies and organizations in the biomedical field to take advantage of Information Technologies for a better information and knowledge management. With this objective in mind we design and provide advanced software solutions specially based on Internet technologies.

PRODUCTS:

- Palinsight Pro: software for DNA palindromicity analysis and representation.
- Livera7: Software specially designed to manage and held real time virtual Congresses and workshops.

SERVICES:

- Services of Knowledge Expression.

- Services of custom software development of Web applications, intranets, Web platforms and bioinformatics workflows automation.
- Bioinformatics and biosciences consultancy services.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Bioinformatics software development.

Participation in R&D and innovation projects including participation in the EU VII Framework Program.

Agreements for marketing and distribution of our services and products.

Esteve

Dr. Eduard Valentí. Regulatory Affairs Director & Pharmaceutical Quality Head evalenti@esteve.es

Av. Mare de Déu de Montserrat, 221 - 08041 Barcelona - Barcelona Phone: 34 93 446 60 00 http://www.esteve.com ESTEVE

ESTEVE is a private, fully integrated International Group that pursues innovation and excellence in the pharmaceutical-chemical industry, while maintaining its dedication to the promotion of health for the benefit of society.

R&D: ESTEVE invests significantly in R&D, focused in analgesia. Its lead program is a Sigma-1 receptor antagonist for neuropathic pain.

ESTEVE is a diversified company marketing a wide range of ethical and OTC pharmaceutical products, vaccines, generics, products for veterinary use and it manufactures APIs.

ESTEVE has also established strategic alliances, ISDIN for dermatological products and ESTEVE-TEIJIN-HEALTHCARE in home respiratory therapy.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

ESTEVE is open to evaluating new opportunities for collaboration, especially in the area of analgesia.



Eurosemillas, S.A.

José Pellicer. Development Manager eurosemillas@eurosemillas.com Paseo de la Victoria, 31 1º A - 14004 Córdoba - Córdoba Phone: 34 957-421732 http://www.eurosemillas.com



To be a company of reference in the farming world, committed to agricultural development in the geographical areas where it is present.

PRODUCTS:

- Select seeds
- CottonGrain: cotton grain animal feed
- Cotton fibre
- Oleaginous oils
- Development of licences for various plants: Fruit trees. Strawberry. Citrus fruits. Raspberry
- Others: avocado pears, asparagus, etc.

SERVICES:

- Farming news portal http://terraagraria.es
- Development of an electronic commerce platform

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Select seeds

Genetic improvement

Biotechnology

Development of plant varieties

Farming portal

Extraction of vegetable oils and cotton fibre

Ferrer inCode, S.L.

Jordi Puig. General Manager jordi.puig@ferrerincode.com Diagonal, 549 - 08029. Barcelona - Barcelona Phone: 34 93 600 37 00 http://www.ferrerincode.com



Ferrer inCode's goal is to offer personalized medicine services that make it easier for health professionals to make decisions on disease prevention. In so doing, it contributes to the improvement of the therapeutic targets of treatment and consequently on the quality of life of patients whose pathologies, such as cardiovascular and oncological diseases, have a major impact on the health system.

Ferrer inCode's services are based mainly on the latest genomic, proteomic technologies.

- CardioinCode®, DNA-Chip analyzes more than 111 genes to determine the risk to suffer a cardiovascular event in patients with moderate risk and will identify the altered signaling pathways with cardiovascular significance for the patient.
- Sudd inCode ® DNA-Chip determines the risk to suffer sudden death identifying more than 50 genes associated to arrhythmic congenital syndrome and cardiomyopathys.

- Nutrichip®, DNA-chip for apply nutrigenetics and nutrigenomics to personalize the diet and to identify the genetic causes of the obesity.
- MammaPrint® measures the expression of a ser of 70 genes which means that patients can classified as having low or high risk of relapse so that adjuvant chemotherapy is delivered only to those patients who really need it.
- CancerType® uses a gene expression analysis comprising 92 genes and can locates the primary tumor among 54 different types of tumors.
- ADTect® evaluation of the genetic profile of 96 genes which help diagnose an illness of he central nervous system. This provides the doctor with a practical, less invasive and quick methodology.

Ferrer Internacional S.A.

Dr. Andrés G. Fernández. Innovation in Biotechnology, Head agfernandez@ferrergrupo.com

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FERRER is a private pharmaceutical group that works for the wellbeing of society through the promotion of health.

FERRER Grupo, formed by more than 50 companies, has a direct presence in 26 countries and its products are present in more than 90 territories.

FERRER is characterized by the diversification of its business covering drug prescription, vaccines, molecular diagnostics, OTC and food additives.

FERRER maintains a high investment in R&D of new therapies, having a specific area dedicated to the collaborative research and focused on biotechnology projects originated in the Academy or biotech companies.

FERRER has research centres in Spain, Germany and India. FERRER internal R&D investigates new drugs in the field of antimicrobials and sleep disorders. It also develops projects under the "polypill" concept to facilitate treatment compliance and the rationalization of costs for the health systems.

The area of Innovation in Biotechnology identifies, promotes and develops therapeutic and diagnostic projects in collaboration with external groups. Projects, based on cutting-edge technology platforms, provide high added value therapeutic solutions in fields such as CNS, cardiovascular, oncology, infectious diseases, dermatology, ophthalmology and gastroenterology.

Fibrostatin, S.L.

Luis Antonio Castillo Sanz. General Manager luis.castillo@fibrostatin.com University of Valencia Science Park. Catedrático Agustín Escardino 9 -46980 Paterna - Valencia

Phone: 34 960000802 / 34 655510713 http://www.fibrostatin.com



Fibrostatin SL corporate objectives are the research and development of novel diagnostic and therapeutic products for human disorders where GPBP proteins are useful as diagnostic biomarkers or therapeutic targets (autoimmunity, inflammation and cancer).

FibroStatin's vision is to commercialize its scientific advances into much needed medical products.

Fibrostatin SL has exclusive commercial rights to virtually all patented GPBP technology.

The managers of FibroStatin SL would be glad to consider proposals of collaboration and alliance with pharmaceutical and biotechnology companies interested in co-developing therapeutic or diagnostic projects focused on GPBP technology.

FibroStatin SL is open to establish licensing-out agreements of its patent portfolio and proprietary technology with companies willing to develop projects individually.

Formune S.L.

Thomas Zürcher. CEO thomas.zurcher@formune.es Vivero de innovación, Polígono Mocholí, Plaza Cein 5, oficina T5 - 31110. Noain - Navarra

Phone: 34 653837986 http://www.formune.es



Formune is dedicated to the development of therapeutic vaccines for the treatment of chronic infections and cancer. The company owns a proprietary, novel platform based on recombinant proteins encompassing an endogenous ligand for TLR4 fused to disease specific antigens and aims to progress its first vaccine candidate to clinical studies.

The development of new therapeutic vaccines is essential for the treatment of chronic infections and tumours. Adjuvant EDA (Fibronectin Extra Domain A) activates dentritic cells (DC) through TLR-4 and the EDA-antigen fusion technology ensures the simultaneous antigen targeting to DCs, expression of co-stimulatory signals and DC maturation. EDA-antigens have shown improved anti-viral or anti-tumoural T cell

responses and excellent vaccine efficacy in animal models.

Formune has recently licensed the EDA vaccine technology and has selected EDA-HPV as a development candidate for the cure of cervical cancer, the second most prevalent cancer in women. The company will focus in the next 2 years on the preclinical development of EDA-HPV and discovery efforts to progress a second vaccine to candidate selection.

R&D activities can count the strategic support of DIGNA biotech and the close alliance with the group of Dr. Juan Jose Lasarte at the CIMA who invented the EDA technology.



Gadea Biopharma, S.L.U.

José Luis Barredo. Biotechnology Director joseluis.barredo@gadea.com Parque Tecnológico de León, C/ Nicostrato Vela s/n - 24009 León - León Phone: 34 983 54 82 72 / 34 697423983 http://www.gadea.com



Gadea Grupo Farmacéutico, S.L. is an independent Spanish group of affiliated companies dedicated to the development, production and commercialization of active pharmaceutical ingredients (APIs) and finished forms, as well as chemical and galenic process development. It is formed by the following companies: (I) Crystal Pharma, S.A.U., dedicated to the development, production and commercialization of APIs, and specialized in steroids, sterile steroids, and high potency products. (II) Gadea Biopharma, S.L.U., dedicated to lyophilization and aseptic filling of APIs under the highest quality requirements, and to the development of biotechnological processes for the bioconversion of vegetal raw materials to precursors of steroids. (III) Cyndea Pharma, S.L., company shared at 50% by Cinfa and Gadea. (IV) Hunan Norchem, Ltd. Chinese company 67% owned by Gadea.

Gadea Biopharma, S.L.U. works in the biotechnological field on the selection of microorganisms, and development and scale-up of different processes of fermentation for the production of APIs, mainly precursors of steroids. These precursors are used by Crystal Pharma, S.A.U. for the chemical synthesis of different kinds of commercial steroids. Additionally, it offers services to other companies for strain improvement and development of fermentation processes.

Moreover, Gadea Biopharma, S.L.U. is very active in the pharmaceutical field, focusing its activities on aseptic filling of Vials, Prefilled Syringes and Eyedrops. Expertise in suspensions and freeze drying, APIs and Vials.. It works on the development of new APIs and offer services to other companies.

Galileo Equipments, SL

Fernando Martín comunicacion@galileoequipos.com Faraday 7, 28049 Madrid - Madrid Phone: 34 91 116 99 41 / 34 635 733 692 http://www.galileoequipos.com

At Galileo we specialize in the sale of fully restored, 100% warranted, pre-owned quality equipment for medical, chemistry and life science laboratories. Save up to 80% on your equipment purchases!

GALILEO La ciencia a fu alcance

Gendiag

Margarita Garrido. Associate CEO margarita.garrido@gendiag.com Juan de Sada, 32 - 08028 Barcelona - Barcelona Phone: 34 93 509 32 33 http://www.gendiag.com



GENDIAGs objective is to facilitate the application of personalized medicine by providing diagnostic services for disease predisposition, early diagnosis, prognosis and drug-response prediction. These area based mainly in genomics, proteomics, metabolomics and bioinformatics technology.

GENDIAG creates alliances with investigators, research institutes, biotech and or pharmaceutical companies for the development of their project on a faster and efficient manner. GENDIAG wants to involucrate to the investigator in the development of the project and to share with him the benefits of the marketing when the idea turns into product.

The products developed by Gendiag and marketed by Ferrer inCode are: CardioinCode®), DNA-Chip analyzes more than 111 genes to determine the risk to suffer a cardiovascular event in patients with moderate risk and will identify the altered signaling pathways with cardiovascular significance for the patient.

Sudd inCode ®) DNA-Chip determines the risk to suffer sudden death identifying more than 50 genes associated to arrhythmic congenital syndrome and cardiomyopathys.

Nutrichip®, DNA-chip for apply nutrigenetics and nutrigenomics to personalize the diet and to identify the genetic causes of the obesity.

Trombo inCode® DNA-Chip for genotyping polymorphisms in genes involved in hereditary thrombophilia. This tool will incorporate the genetic tests that are currently performed individually and sequentially in order to find a genetic alteration.

Gendiag is currently leading new developments in Oncology, Neurology and Hepathology areas.



Genera Biotech

María Lloret comunicacion@generabiotech.com Parque Científico de Valencia C/ Catedrático Agustín Escardino, 9 - 46980 Paterna - Valencia

Phone: 34 963543028 / 34 680343460 http://www.generabiotech.com



- The design of research/technological strategies.
- Undertaking documental research and data analysis.
- Evaluation of proposed project.
- Evaluation of selected call for proposals and other calls seeking more appropriate
- Production of research reports, and evaluation summarie.
- Facilitating the dissemination and commercialization of research results.
- Consultancy and project management.

ADDED VALUE: We have specialized in the application for funding to the National Institutes of Health (NIH) for non U.S. residents. We give full support to researchers who wish to apply for grants for research and development project to this entity. We provide support for the NIH complex registrations, full support for the administrative processing of applications and offer ourselves to write entire scientific-technical documentation of the project. The researcher provides the necessary information under Confidentiality Agreement and we then perform all scientific and administrative work, under the supervision and support of the researcher.

Our mission:

Given our great scientific and business expertise, Genera Biotech mission aims to catalyze the transfer of biotechnology and knowledge from technology providers (universities, research centres and hospital foundations) to its receptors (biotechnology companies, pharmaceutical industry and other companies).

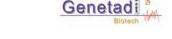
The company has a dynamic strategy for developing novel biotechnological products that solve human health needs. This business model allows them to adapt their physical and human resources to the specific needs of each of the developments that they undertake. So, we seek the best experts in each of the areas and better infrastructure for key experiments. In addition, we work very close to the academic scientists, allowing us to acquire innovative ideas to incorporate into our technology portfolio.

The company also works as consulting firm specialized in biomedical research, helping to assess a project or proposal to a particular call grant, providing an expert assessment and a critical evaluation report to get a different research view and better chance of success.

We offer our services to researchers in the field of biosciences, also bioentrepreneurs, research entities and companies, with a personalized service to redirect their research to market demands and help find partners for co-development when necessary.

GENETADI Biotech

José Luis Castrillo. CEO info@genetadi.com Parque Tecnológico de Bizkaia. Edificio 502 -48160 Derio - Vizcaya Phone: 34 944044343 http://www.genetadi.com



Genetadi Biotech is a company that develops new human genetic diagnosis kits specialized in the gynecology, pediatric and oncology biomedical sectors. Our company is integrating its projects of research and development in Systems Biology applying the most modern techniques developed after human genome sequencing.

PRODUCTS:

- AMNIOCHIP & NEONATAL-ONE

SERVICES:

- Prenatal and neonatal testing by aCGH microarrays
- Cytogenetic and molecular genetics services
- Analytical metabolic services by mass spectrometry (MS/MS).

Human genomic NGS services

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Nanodiagnostics

Single-molecule DNA sequencing

Human genomic analysis (Bioinformatics)



Genetrix, S.L.

Juan Sebastián Ruiz. Institutional Relations Director jsruiz@genetrix.es Pza de la Encina, 10-11. Núcleo 1, 3ª Planta. - 28760 Tres Cantos - Madrid Phone: 34 91 806 30 89 http://www.genetrix.es



Genetrix, created to promote entrepreneurial leaders in the biotechnology sector, is a group of companies aimed at generating value from using the results of academic and clinical research for the benefit of society.

SERVICES:

Genetrix is constantly working to bring together the outcomes arising from different scientific disciplines, by setting up and maintaining collaborations of a varied nature with public research centres, technological centres, public and private hospitals and pharmaceutical and biotech enterprises. This collaborative spirit is one of the features that most identifies the Genetrix Groups and its has proven to be of great value in making this ambitious business project a reality. The Group is working on the creation of biotech initiatives assessing, designing and executing business plans in the life sciences field. The rapid evolution of the Genetrix Group is the direct result of the excellent quality of the work

carried out by its professionals and the special concept held by its development team of the biotech business. The groups speed of development is also underpinned by the selection of staff from a scientific and business background, in the keeping up of the links and collaboration with a variety of groups and the appointment of professionals of the highest level onto its management team.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Biotechnology. Life Sciences. Scientific applications for medical purposes. Investment in biotechnology.

Gennova Scientific, S.L.

Carmen Pérez. CEO carmen@gennovalab.com C/ Vides, 24 - 41940 Tomares - Sevilla Phone: 34 95 4150767 http://www.gennova-europe.com



Gennova Scientific is an international Biotechnology company in the life sciences and clinical diagnosis field. It is integrated in a business corporation committed to the development of new products and advanced technologies.

Our goal is to provide the highest quality in the production of innovative antibodies for in vitro diagnostic as well as the development of new products combining Nanotechnology and antibodies as an implement for the clinical diagnosis. Gennova is certified ISO9001:2008 e ISO13485:2004.

Gennova is mainly focused in the production of antibodies and ancillary reagents for Immunohistochemistry (IHC) and Histopathology Special Stains Kits.

We are interested in the improvement of multiple staining antibodies tests, optimization of antibodies production from Hybridomas, Histology, research&development and quality control.

New lines of development are Flow Cytometry along with Nanotechnology particles to improve the detection through antibodies. Also the design of DNA and RNA diagnosis probes for in situ hybridization applied to diagnosis and diseases monitoring.



GENOMICA S.A.U

Rosario Cospedal. General Manager rcospedal@genomica.com C/ ALCARRIA 7, Pol. Ind. Coslada - 28823 Madrid - Madrid Phone: 34 916748990 http://www.genomica.com



GENOMICA S.A.U. is the first Spanish company focused on molecular diagnostics that also have an extensive experience in the analysis of Genetic Identification. Founded in 1990, it is located in the Community of Madrid and it is 100% owned by Zeltia. Our mission is to improve current methods of molecular diagnosis and genetic identification using reliable and automatic tools, according to the highest quality standards.

GENOMICA designs, manufactures and markets, nationally and internationally, molecular diagnostics applications (IVD) based on the amplification and subsequent detection of genetic material on its innovative CLART ® platform, which is a combination of low-density arrays and a colorimetric reader, that includes a specific software for its analysis, developed for this purpose (SAICLART ®).

To date market lines addressed are two: diagnosis of infectious diseases and pharmacogenomics related to cancer. This last one is based in the detection of human gene mutations associated with factors determining tumor response to therapy.

In the area of Genetic Identification, GENOMICA performs forensic genetic identification, parentage testing, turnkey projects for laboratories for analysis of genetic fingerprinting and population-based databases.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Marketing of diagnostics products mainly in Middle East, Eastern Europe and Asia. Inlicensing: Diagnostic systems in oncology and molecular microbiology. OEM opportunity in both markets. Outlicensing: Technology transfer and staff training on DNA genetic fingerprinting.

Genzyme

Fernando Royo genzymespain@genzyme.com Martinez Villergas, 52 - 28027 Madrid - Madrid Phone: 34 917245700 http://www.genzyme.com



The discovery and development of innovating products and services for serious pathologies, with special attention to rare diseases.

Genzyme, a Sanofi company, is a subsidiary of Genzyme Corporation through Genzyme Europe BV, dedicated to the development and introduction of therapeutic solutions for unresolved medical problems.

PRODUCTS:

Lisosomal Storage Diseases: Gaucher, Fabry, MPS 1, Pompe. Family Hypercholesterolemia. Products in development for Mulitple Esclerosis.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Rare diseases/Orphan drugs

Mulitple Esclerosis

Gestión Sanitaria Siglo XXI

raulmunoz@gestion21.es Phone: 65 654529063 / 65 654529063



GS&ILOXXIIs a company that provides services consisting of bussines advising and consulting in pharmaceutical industry and training managing and optimitation of commercial and institutional relationships in the same field, all abovementioned within the public and private system.

PRODUCTS/ SERVICES:

- Institutional Relationship
- Experts in institutional relationship in health system and pharmaceutical industry.
- Connoceurs of the scene of key opinion leaders and decision makers in several administrations in different regional governments with Knowlegde of pharmaceutical industry regulatory framework in several administration.

- Hospitals.
- Advisory Board with head managers of pharmacy.
- Internal meetings with head manager economical manager, experts and leaders in de healht sector direct towards to managers of pharmaceutical Industry.
- Pharmaco economical evaluation.
- Analysis and interpretation of results about economical studies.(spanish markert adapted).
- Strategys and design of negotiation skills.
- Coaching in field, direct towards to members of Market Acces departments.
- Relationship with oficial pharmaceutical college.



GILEAD

Gilead Sciences, S.L.

Maria Rio. General Manager ma.recepcion@gilead.com C/ Via de los Poblados, 3.Cristalia Edificio 7/8 , Planta 6ª 28033 Madrid - Madrid

Phone: 34 91 378 98 30 http://www.gilead.com

comprimido). ATRIPLA(Tenofovir disoproxil, emtricitabina & efavirenz ,one pill, once a day).

- HEPATITIS B :HEPSERA (Adefovir dipivoxil), VIREAD (Tenofovir disoproxil).
- ANTIFUNGAL: AMBISOME(Anfotericina B liposomica).

Investigate, Develop and commercialize innovative drugs in therapeutics areas with uncover needs, with the objective to improve curation and surveillance rates in patients with severe infectious diseases.

PRODUCTS:

- HIV: VIREAD(Tenofovir disoproxil). EMTRIVA(Emtricitabina).
- TRUVADA(Tenofovir disoproxil y emtricitabina en un solo

Glen Biotech S.L.

Berenice Güerri Agulló. Manager b.guerri@glenbiotech.es Colegio Mayor. Ctra. San Vicente – Alicante s/n. 03690 San Vicente del Raspeig. Alicante Phone: 34 633034536 http://www.glenbiotech.es

Glen Biotech is a spin-off from the University of Alicante (UA). Our mission is to develop innovative and sustainable solutions for problems linked to agricultural and landscape sector.

The main business line is the development and commercialization of biological control agents against pests, specifically



against palm tree pests. In the future, we will expand our activities to other fields such as plant sample analysis for the detection of crop pathogens, search for secondary metabolites with biological activity, etc.

GP-PHARM, S.A.

Isabel Bazán. Assistant CEO ibazan@gp-pharm.com P.I. Camí Ral. Isaac Peral, 17 - 08850 Gavà - Barcelona Phone: 34 93 638 80 00 http://www.gp-pharm.com

Research, development, manufacture and commercialization of Injectable products for the areas of Oncology, Nervous Central System, Cardiology and Urology.

Based on two Drug Delivery Technological Platforms (Micronanspheres and Liposomes)

PRODUCTS:

- Development and Contract Manufacturing services based on the two Drug Delivery Platforms of injectable drugs (Micro- Nanspheres and Liposomes).
- Products in phase of commercialization or register (Octeo-tride-Irinotecan-Leuprolide-Oxaliplatino-Gemcitabina).
- RD Projects in different phases of development (Oncology-CNS-Cardiovascular).



AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Utilization of our Delivery Systems for development new molecules or for improvement of current molecules that already have lost patent.

Alliances with pharmaceutical companies to take our products to the Market (USA, Japan, China, India).

Alliances with pharmaceutical companies to do joint development of GP-Pharm's projects.

Manufacture and Development for pharmaceutical companies in our Laboratories and Manufacturing Plant.



GRADOCELL,SL

Rossana García rgarcia@gradocell.com Santiago Grisolía, 2 Parque Científico de Madrid - 28760 Tres Cantos -Madrid

Phone: 34 664429569 http://www.gradocell.com

GRADOCELL

Gradocell is a consulting and CRO (Contract Research Organization) Spanish, founded in 2010, offering advisory services (technical and documentary) and training standards (GMP, GLP and GCP) in the field of advanced therapies (cell therapy, gene and tissue engineering) and Innovative Medicines and the preparation of necessary documents and monitoring of clinical trials in this area of biotechnology.

Our objective is to become the reference consulting company and CRO in Spain, and we are directed to companies and laboratories interested in implanting quality in both research and products belonging to advanced therapies.

Gradocell services are focused on consulting and helping our clients in their process to obtain and implement autorization regarding Cell Therapy regulations. We also give advice in documentation and procedures for addressing these guidelines. At Gradocell we can offer:

- Gmp for advanced therapy laboratories.
- Preparation of audits and inspections by regulatory agencies.
- Specialized technical consulting in cell therapy processes.
- Consulting and elllaboration of documents for clinical trials in advanced therapies (impd, researcher manual, etc.) and monitoring of clinical trials in advanced therapies.

We advise and train your staff in all levels of the process: documentation, facilities, validations, etc. Our training offer in specialized in the preparation of: Quality managers, Manufacturing managers, Production technicians, Quality control managers, Quality control manager, Qualified person.

Gri-Cel SA

esperanza.guisado@grifols.com Av de la Generalitat 152 - 08174 Sant Cugat de Valles - Barcelona Phone: 34 935712700 http://www.grifols.com

Gri-Cel manages and coordinates the investigation and product development in the field of gene and cell therapy, conducted by different companies that Grifols has invested in.

GRIFOLS

Grifols Engineering S.A.

Esperanza Guisado Moya. VP Government and Public Affairs esperanza. guisado@grifols.com

Pol. Levante Calle Can Guasc, nº 2 - 08150 Parets del Valles - Barcelona Phone: 34 935710042 http://www.grifolsengineering.com

Grifols Engineering is a company specialized in biotech and sterile manufacturing processes. Grifols Engineering offers consultancy and engineering services and also machinery development for the biotech industry. Also offers the design and construction of tailor made solution: the precise application or specific machine which cannot be found on the market.

Grifols Engineering offers:

ENGINEERING:

- Project management: two Project Management models:
- Integral turnkey project for the Biotech industry or sterile liquid manufacturing
- Project Management in stages:
- Conceptual design Basic engineering
- Detailed engineering Implementation and start up
- Biotech processes: Upstream, Downstream, Chromatography columns, Viral inactivation.
- General processes: IV Solutions plants, CIP/SIP, Modular cleanrooms MISTERIUM®, Pharmaceutical Quality Water.



MACHINERY:

- Specific Machinery for biotechnological + hemoderivative sector:
- ABO: Automatic bag openner
- PBO: Plasma bag openner
- Sterile filling line
- Tailor made machinery design and construction of tailor made solution for Biotech and pharmaceutical industry.
- Machinery integration: Whether manufactured by Grifols Engineering or market standard equipment.
- Automation / process improvement. Optimization and process improvement within the parameters of efficiency, quality and productivity.

BIOPHARMACEUTICAL CONSULTING: Technical Studies, technical training

Permalink



GRIFOLS, S.A.

Dra. Esperanza Guisado. VP Government and Public Affairs esperanza.guisado@grifols.com
Poligono Industrial Levante. C/ Can Guasc, 2 - 08150 Parets del Vallès - Barcelona
Phone: 34 935710100 / 91748120 http://www.grifols.com

GRIFOLS

Grifols is a Spanish group of companies, specialized in the hospital pharmacy sector, with a presence in more than 100 different countries. Grifols is now the third plasma therapy producer in the world in terms of production capacity and the leading European company in this sector, due to a well-balanced diversified range of products.

Bioscience Division

It encompasses all activity relating to plasma derived therapies; this includes human plasma handling from its collection through the production process and the final marketing and distribution of these therapies as products.

Hospital Division

It covers non-biological pharmaceutical products, equipment, devices and healthcare supplies for hospital pharma-

cies such as parenteral solutions (fluid therapy), and enteral and parenteral clinical nutrition products.

Diagnostic Division

This division is specialized in in vitro diagnostics. It develops and manufactures equipment, instrumentation and reagents for transfusion medicine such as blood typing tests or donor-patient pre-transfusion compatibility tests. Its products are used by hospital blood banks, transfusion centers and clinical immunohematology laboratories. This division also markets instrumentation and reagents for immunology and hemostasis.

Grupo BioSerentia

Jorge Arenas-Vidal. Director jarenas@bioserentia.com C / Príncipe de Vergara, 57, Esc A, 1B - 28006 Madrid - Madrid Phone: 34 915 632 199 http://www.bioserentia.com



Provide Strategic Advise to, and Partner with, companies, entrepreneurs, investors, governments to create and accelerate Ventures in Life Sciences.

SERVICES:

- Corporate Strategy, Strategic Investments in Life Sciences
- R&D Strategy and Management
- Fund Raising
- BioEntrepreneurship Platform
- BioBusiness Incubation & Acceleration
- Interim Management
- Commercial, Sales & Operational Support

AREAS OF INTEREST FOR FUTURE COLLABORATIONS WITH AFFILIATE COMPANIES REACTOMIX AND BIOMASS BOOSTER:

HEALTH: Personalized Medicine and Disruptive Technologies

ENERGY: biomass optimization, biorefineries strategy and implementation.



Grupo Farmasierra

Tomás Olleros. President tomas@farmasierra.com Carretera de Irún, Km, 26,200 - 28709 San Sebastian de los Reyes - Madrid Phone: 34 916 570 659 http://www.farmasierra.com



Pharmaceutical group of companies specialised in Research & Development, Manufacturing, Distribution and Marketing of Medicines, Food Supplements and Cosmetics operating at national and international level.

PRODUCTS:

- Gynaecology: Remifemin, Carbocal 600 mg, Carbocal D, Carbocal D Masticable, Carbocal orange flavor, Tricolam, Flucosil gel.
- Paediatrics: Calcio 20 emulsión, Aminoveinte, Trofalgón, Trilombrin.
- Urology: Prosturol, Inurec.
- Generics: Acetilcisteina.
- Pain & Inflamation: Ibuprofeno Farmasierra 5% gel, Ibuprofeno Fermasierra 50 mg/g gel mentolado, Astefor, Ibustick (Ibuprofeno Gel roll-on).
- Central Nervous System: Sinequan.

- Antiinfectives: Terramicina, Terra-Cortril,
- Línea 20: Multivitamínico Farmasierra, Derma 20, Sol 20.
- Food Supplements: Bifibran, Lactospore, Omega 3, Visdon, Cosmetics.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

In terms of services GRUPO FARMASIERRA offers:

Technological Development and High Tech Contract Manufacturing Services

Research & Development

Manufacturing of medicinal products for Third Parties

Licences out

Licences in

Warehousing and Distribution Contract Services

HAMAMATSU PHOTONICS

David Castrillo. Manager Director infospain@hamamatsu.es C. Argenters, 4 edif 2. - 08290 Cerdanyola del Vallés - Barcelona Phone: 34 935824430 http://www.hamamatsu.es



Hamamatsu Photonics; a global company with over 50 years expertise in the manufacture of optoelectronic components. The company's corporate philosophy stresses the advancement of Photonics through extensive research and yields innovative, high quality products for a wide variety of applications. Hamamatsu Covers the whole spectrum and reaches up to single photon detection. Hamamatsu manufactures from components like photodiodes or CCDs to big systems such as cameras and HTS, for enduser application or specially custom designs to cover our customer's needs.

PRODUCTS:

- a) Components: Photodiodes, Photomultipliers, CCD, CMOS, Cameras for fluorescence and luminescence imaging.
- b) Systems: HTS, slide scanner, microscopy imaging, spectroscopy, lifetime analysis.
- c) Customized products. Detectors that can include optics, filters, electronics and mechanics to fullfill customer's applications.

Our interest area is to become a partner when photons has to be detected.



Histocell, S.L.

Julio Font. CEO info@histocell.com Parque Tecnológico de Bizkaia, Edificio 800, 2ª planta - 48160 Derio -Bizkaia

Phone: 34 94 656 79 00 http://www.histocell.com



Histocell Works in Tissue Engineering and Cell Therapy to develop innovative products for regenerative medicine. Histocell facilities include a 65m2 certified clean room for GMP production of Cell Therapy medicaments, and several laboratories for quality control and R&D. Histocell works with differentiated adult stem cells obtained from adipose tissue.

SERVICES:

- Cell Therapy medicaments.

Divided in three main lines:

-GMP production of adult mesenchymal stem cells from adipose tissue and chondrocytes.

- -Development of new Cell Therapy medicaments.
- -Development of biomaterials for regenerative medicine.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Open new research lines to provide solutions to lacks in regenerative medicine and cell therapy, in addition to providing products that facilitate testing tasks in the pharmaceutical and cosmetic sectors. Its interest is directed to research groups with expertise in the field of new biomaterials.

Igen Biotech, S.L.

David Segarra de la Peña. Managing Director igen@igenbiotech.com Gustavo Fernández Balbuena, 11 - 28002 Madrid - Madrid Phone: 34 91 510 29 99 http://www.igenbiotech.com



IGEN Biotech is a privately owned company focused on R&D in the biomedical field. Its aim is to put into practice biomedical research and development and bring it to the market as products and services. Its main field is development of new diagnostic methods, drugs and other therapeutic methods, focusing on the use of genomic, proteomic and cell therapy.

Genomic DNA extraction technology for different applica-

iGENatal (on sale): high throughput DNA extraction kit for prenatal samples (amniotic fluid and corionic villus).

Interest areas for futures colaborations/alliances: R&D Centres, Foundations, Universities and research groups interested in transferring technologies to be applied in innovative diagnostic systems.

ImmunNovative Developments

Josep Lluís Falcó. CEO jlfalco@immunnovative.com Parc Científic de Barcelona. Biooincubadora PCB-Santander Baldiri Reixac 4-8. -08028 Barcelona - Barcelona

Phone: 34 934031945 http://www.immunnovative.com



Technological platform based in the development of new biological for the treatment, diagnosis and prevention of immune-based inflammatory disorders.

PRODUCTS/SERVICES:

- ImmunNovative-01: treatment of bacterial sepsis
- ImmunNovative-02: treatment of fungal sepsis

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Biotechnology Sepsis Proteins GMP Development Regulatory



Immunostep, S. L

D. Ricardo Jara Acevedo. CEO rjara@immunostep.com Cancer Research Center of Salamanca Campus Miguel de Unamuno Avda. Universidad de Coimbra s/n - 37007 Salamanca - Salamanca Phone: 34 923 29 48 27 http://www.immunostep.com



IMMUNOSTEP is a Biotech company focused in the proteomic area that research, develop, produce and market reagents and technologies both for research and diagnostics based on techniques such as Flow Cytometry, Proteomic Arrays or Multiplex Technology.

Our product areas include human and mouse cell immunophenotyping, human recombinant proteins, apoptosis, cytokines and growth factors, cell-cycle analysis, detection and quantification proteins.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

IMMUNOSTEP has its own research and diagnostics product development, production and quality control capabilities

both for research nd diagnosis products (EN ISO 13485:2003/AC:2007, Health License to Manufacture IVD).

We have a multidisciplinary program, which includes the production of antibodies, recombinant proteins and different protein array formats for the development of technologies, solutions and diagnostic kits in vitro.

At present we have in our pipeline, developments related to hematological malignancies, respiratory and other illnesses.

Inbiomotion SL

Cristina Aguilar Carretero/Cecilia Ducco info@inbiomotion.com C. Baldiri Reixac 10, 08028 – Barcelona - Barcelona Phone: 34 934033780 http://www.inbiomotion.com



Inbiomotion is a Barcelona-based personalized medicine company incorporated in 2010 with the goal of developing biomarkers that predict bone metastasis to improve the quality of life of cancer patients.

Inbiomotion's proprietary single biomarker codes for a nuclear protein and is able to predict which patients will relap-

se to the bone. It has been validated with over 900 patient samples in two independent cohorts with three independent techniques (gene expression, IHC and ISH), resulting in negative predictive value of over 95%.

Ingeclima, S.L.

Natalia Goya ingeclima@ingeclima.com Dr. Díaz Emparanza, 39 A - 48002. Bilbao - Bilbao Phone: 34 944 424 800 http://www.ingeclima.com

Our aim is to provide the best technological solutions complying with our customers needs in order to achieve a profitable exchange. We want to strengthen and improve by means of the excellence of our actions, exceed our customers expectations and adapt skillfully to changes in our environment.

INGECLIMA, ALBIAN GROUP member and 25 years experience company, is made up of a team of professionals specialized in turnkey projects for pharmaceutical, biotechnological, veterinary, and other related industries.

Ingeclima

We provide solutions for all those who need to developed their production activities in controlled contamination atmospheres. (Reproduction and cellular handling, advanced therapies, biosafety, ..).

We stay close to our customers since the initial idea of a new plant or production area to the validation, qualification and approval by regulating agencies.

Our aim is to provide suitable sensible and skilfull solution to optimize our clients investments.



Ingeniatrics

Agustín Mariscal agustin.mariscal@ingeniatrics.com Camino Mozárabe 41 - 41900 Camas - Sevilla Phone: 34 954 081 214 http://www.ingeniatrics.com



Ingeniatrics, Microencapsulation for you: Drug Delivery, Functional Nutrition and Chemicals microencapsulation products and services specialists.

INGENIATRICS

Development, Scaled-up Process Validation, Transference & In-plant Manufacturing of particles at micro and nano scale for applications in Pharma, Biotech, Chemistry and Nutrition.

3 Pilot-plants, Whiteroom, Flow Spray-Dryer.

Wide range of sizes and materials.

FLOW FOCUSING®

One step microencapsulation by gentle proprietary technology producing small & homogeneous droplets.

Size and morphology control.

FLOW BLURRING®

Production of sprays of extremely fine droplets with the lowest energy consumption.

NE-4

High throughput nebulizer for microparticles generation: nanoclays, lixiviates treatment.

INKEMIA IUCT GROUP

Angeles Molina. Manager of the Business Projects Dept. Iuct.sales@iuct.com C/ Alvarez de Castro, 63 - 08100 Mollet - Barcelona Phone: 34 93 579 34 32 http://www.inkemia.com



InKemia IUCT group has the mission the generation, management and exploitation of knowledge of high technological value. The principle for the business of InKemia is the generation of that KNOWLEDGE and its exploitation through the promotion and sales of high value services for the Chemical, Pharmaceutical, Biopharmaceutical, Biotechnological and other Life Sciences and similar areas.

This knowledge or know-how generated at InKemia is transformed in a pipeline of products, process, services and highly specialized technology platforms highly integrated and patent protected.

In this manner, Inkemia present the following business strategies:

Generation of a pipeline of final products and technology processes due to the development of the R&D developed in house to be patented (with 24 international patents currently published), licensed out and transferred to the industry

Co-development of high technological value R&D with companies of synergic to joint develop new products and pro-

cesses, sharing cost and benefits

Exploitation of the technology developed though technical services, contract research, and other services, including consultancy for the chemical, pharmaceutical and food industry, among others.

Exploitation, manufacturing and commercialization of high value products through the creation of Spin-off companies based in our own technology with a clear and viable business model. These spin-off companies will be open to the participator of specialized capital investors and independent management.

Participation in new companies though the Knowledge Capital Fund (http://www.knowledgecapitalfund.com/index.php/en/) after the agreement with third parties or by cooperation with technological entrepreneurs in synergic sectors.

Development of complementary for the industry and the general market such as technological analysis services, consulting, specialized technical training, among others.

Inmunología y Genética Aplicada, S.A. INGENASA

Belen Barreiro Moran bbarreiro@ingenasa.com Hermanos García Noblejas, 39. 8° - 28037 Madrid - Madrid Phone: 34 913 680 501 http://www.ingenasa.es



Research, development, production and commercialisation of biotech products for animal health care.

PRODUCTS:

- Serologic diagnosis assays
- Molecular diagnosis assays
- Second generation vaccines

SERVICES:

- Protein expression, monoclonal antibodies



Innovaxis

Paula Esteban del Río pesteban@innovaxis.es Parque Tecnológico Tecnobahía, Ctra. de Sanlúcar 11500 El Puerto de Santa María - Cádiz Phone: 34 956549169 / 34 638438509 http://www.innovaxis.es



INNOVAXIS is a biopharmaceutical company engaged in the research, development and commercialization of advanced cellular therapies. The Innovaxis core technology is the stem cell culture and the use of these cells as a pharmaceutical

product.It is specialized in human stem cell research and its clinical applications for the treatment of peripheral vascular diseases (PVD), especially the ischemic diabetic limb (also called diabetic foot).

Instituto de Medicina Genómica (IMEGEN)

Ana Martínez Hortigüela anam.hortiguela@imegen.es C/ Catedrático Agustín Escardino, 9 - 46980 Paterna - Valencia Phone: 34 963 212 340 http://www.imegen.es



Development of diagnostic tests based on genetic and genomic analysis, focused on the detection of hereditary disorders. Design and production of sets of analysis based on molecular biology techniques, for the diagnosis of human diseases. Promotion of alliances and collaborations public private.

SERVICES:

- Services of molecular diagnostic
- Sets of molecular analysis of human pathologies
- Research Projects in genomic

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Diseases of hereditary transmission

Oncology

Farmacogenomics

Next generation sequencing

Instituto Internacional de Flebología IIDF

Juan Cabrera. Chairman juancabrera@iidf.es C/ Recogidas, 24 Portal B Bajo - 18002. Granada - Granada Phone: 34 958253581 / 34 630951225 http://www.iidf.es



The Institute specializes in providing scientific and medical services related to sclerosing microfoam, the best and most advanced means for the removal of a large vein area.

The mission of the International Institute of Phlebology IIDF is to offer the highest possible level of excellence in its research and in the transmission and innovative marketing of its achievements on behalf of the scientific community, healthcare and society in general.

The International Institute of Phlebology has set itself the following strategic objectives:

Becoming in a reference center in Europe in promoting and conducting research, development and innovation in its field.

Being a pioneer in translational research of new pharmaceutical vectors in biotechnology and gene therapy.

Having a separate building that serves as headquarters in Granada's Health-Siciences Technology Park.

Focus research effort in immediately applicable lines as nonsurgical treatment of hemorrhoids and varicocele.



Integromics, S.L.

Jose Maria Carazo, PhD. Principal Founder carazo@integromics.com Avenida de la Innovación, 1, - 18100 Armilla - Granada Tel.: 34 958 750 627 - www.integromics.com



INTELLIGENT

Integromics provides state-of-the-art Bioinformatics software solutions for data management and data analysis in Genomics, Proteomics and Drug Discovery. Our advanced software technology enhances your ability to effectively organize your data, perform validated analyses, discover new biomedical knowledge and gain unique well-founded insights.

SERVICES:

- The development and marketing of software for genomic and proteomic data management, analysis and mining.
- Professional services relating to these products.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

The development and commercialisation of software for genomics, proteomics and related sectors.

Intelligent Pharma S.L.

Anna Serra. Business Development aserra@intelligentpharma.com Torre I, Planta 6. Parc Científic de Barcelona, c/Baldiri Reixac, 4-8 08028, Barcelona - Barcelona

Tel.: 34 934034551 - www.intelligentpharma.com



Intelligent Pharma is a company specialized in computational chemistry applied to drug discovery and development. Using our in-house developed technologies, we offer computer-assisted drug design to discover, enhance and study drugs and drug candidates. Customized projects are carried out for pharmaceutical and biotech companies working in the field of life sciences. Our mission is to be the preferred partner of the pharmaceutical and biotech industry in the computational side of the drug discovery research and our final goal is to help our clients in reducing the time-to-market, the costs and the risks of the biomedical research.

Intelligent Pharma offers a wide range of services in the field of computer-aided drug discovery, molecular modeling and ICT for Life Science.

SERVICES:

- Identification of new active compounds
- Identification of inhibitors
- Determination of mechanisms of action
- Determination of non-structural, mimetic compounds
- ADME/Tox predictions
- Computer-aided Hit to Lead optimization Computer-aided Lead optimization

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

At Intelligent Pharma we are very opened to collaborations with private companies and academic research institutions. Our main areas of interest are drug discovery, molecular modeling and ICT for Life Science.

Inveready: INVEREADY ASSET MANAGEMENT, SGECR, SA

Sara Secall ssecall@inveready.com Cavallers 50 - 08034 Barcelona - Barcelona Tel.: 34 931807260 www.inveready.com

Inveready is a leading early stage Venture Capital group in Spain. Inveready has raised four VC founds. We invest in high growth companies and innovative business models.

Established in 2008 and with more tan 40 portfolio companies, Inveready has acquired extensive experience in both IT and Biotechnology and has raised a specific Biotechnology-only fund in 2012.



Inveready Biotech II is Inveready's first fund solely focused on biotechnology companies.

We are looking for opportunities in drug discovery, molecular diagnostics, nutraceuticals as well as medical devices and other opportunities. We are an early stage fund.



IPROTEOS

Jesús Seco jesus.seco@iproteos.com Baldiri I Reixac, 10 - 08028 Barcelona - Barcelona Tel.: 34 934020906 - www.iproteos.com



Iproteos S.L has the commitment and the goal to develop new therapeutical strategies based on the deployment of peptidic inhibitors towards those proteases involved in Central Nervous System diseases. To do so, different areas of drug development (discovery, pre-clinical validation and patenting) are carried out to finally third-party license the peptidic drug.

As a biotechnological company we are constantly seeking future partners, either from academia or another company, to establish scientific collaborations regarding the development and validation of new drugs towards the inhibition of either proteases or protein-protein complexes.

Janus Developments

Natàlia Ferrer. Head of administration nferrer@janusdevelopments.com PCB, Baldiri Reixac, 10 - 08028 Barcelona - Barcelona Tel.: 34 934031351 - www.janusdevelopments.com



JANUS DEVELOPMENT SL is a company specializing in the management of transitional stages of biomedical projects with a mission to transform knowledge into economic value and biomedical social.

JANUS has acquired licensing patent rights over 11 technologies for their early stage development and has worked with various hospitals, public research centers, foundations and private companies to define development plans for their technologies.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

JANUS, as areas of interest are all those companies, universities, hospitals ... with the need of our services, either to develop some technology to provide a counseling service.

KYMOS PHARMA SERVICES, S.L.

Lara Ferrer. Marketing Manager lferrer@kymos.es Baldiri Reixac, 10 – 08028 – Barcelona – Barcelona Tel.: 34 934020280 www.kymos.com/



Kymos is a Contract Research Organization specialised in analysis for the pharmaceutical, fine chemicals, biotechnology and veterinary sectors. Our facilities, are located, at the Parc Científic de Barcelona Ever since its establishment Kymos have created a wide network of contacts of a large variety; the main objectives of such network are to enlarge the list of our services, to establish synergies, to update and widen our knowledge and make our company known, with the aid of the best allies in each case.. We have also privileged access to the Parc Científic's equipments.

Our services support our customers as far as research, development, registration and marketing of their products is concerned, which enables them to speed up their projects,

optimise internal resources and facilitate their approach to an advanced analytical technology. Our technical team's analytical specialisation is high, and are widely acquainted with regulatory aspects required for designing and carrying out the studies. We ensure the quality of the studies carried out which are performed in accordance with internationally accepted quality standards (GLP/GMP). We offer a complete range of services. We are ready to act on all aspects of drug development requiring analysis: synthesis, pharmacokinetics, toxicology, metabolism, galenic pharmacy, clinics, quality control and manufacturing.



Labgenetics, S.L.

Jorge Puente Prieto. General Manager jorge.puente@labgenetics.com.es C/ Poeta Rafael Morales, 2. 2ª Planta 28702 - San Sebastián de los Reyes - Madrid Tel.: 34 91 659 22 98 - www.labgenetics.com.es



Mission and Objectives:

To carry out highly accurate and decisive genetic tests within a minimum response period.

To apply the most advanced techniques to identify alterations in the DNA sequence related to the onset of the most prevalent hereditary diseases in Europe.

To consolidate as the Reference Centre in Forensic Genetics and Human Genetic Identification Tests.

PRODUCTS:

- Forensic Genetics: Paternity testing, parentage (kinship) analysis and genetic identification (DNA fingerprinting) from any biological traces. Reference Centre in complex kinship testing and complex Forensic sample analysis. Detection of biological fluids (semen, blood and saliva)
- Clinical Genetics: Molecular Diagnostics of more than 250 hereditary diseases. Personalized Genetic Diagnostic Service (A la carteDiagnostic) to comprise rare diseases. Prenatal Genetic Diagnostic, including the fast aneuploidy screening by QF-PCR, and Preimplantational Genetic Diagnostic (PGD)

to select genetically healthy embryos.

- Technology Transfer: Set up and start up of Molecular Biology turn-keylaboratories, focused on human genetic analysis. The designed projects are highly flexible and are adjusted to the petitioner requirements.
- Scientific Advisory Services: Interpretation of expert reports based on DNA evidences in civil legal and penal procedures. Assistance to legal procedures as judicial experts to ratify specialist's reports based on DNA evidences. Theoretical and practical training in Forensic Genetics and Genetic Diagnostic techniques to professionals, private individuals, companies, laboratories and research teams.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Development of new Molecular Diagnostic techniques.

Projects of Forensic Genetics and Genetic Diagnostic training.

Development and distribution of new Molecular Diagnostic Kits

Laboratorios Alpha San Ignacio Pharma S.L.(AlphaSIP)

Miguel Roncales. DIRECTOR mroncales@alphasip Calle María de Luna 11, Nave 13 - 50018 Zaragoza - Zaragoza Phone: 34 976 512 887 http://www..alphasip.es/

AlphaSIP's main goal is to develop benchmark medical diagnostic devices to contribute to the improvement of the international healthcare system and foster advances towards personalized medicine.



AlphaSIP is mainly focused in the Haematology sector to provide a medical diagnosis tools capable of detecting thrombosis risk.



Laboratorios Farmaraba, SL

Jose Andres Fernandez info@farmaraba.com Avda. Bruselas, 8--oficinas 7,8 y 9 - 01003 Vitoria-Gasteiz - Alava Phone: 34 945770003 http://www.farmaraba.com



Farmaraba is created in Vitoria in 2011 as an independent company within the Elgorriaga Group. Its main dedication is the production and marketing of ingredients for the food industry and its activity falls within the biotechnological industry. Comsuption of Omega-3 polyunsaturated fatty acids provides many benefits for human health, improving the functioning of the body and preventing the emergence of diseases relevant in today's society.

Hence Farmaraba is proposed to develop a R&D Project to direct the development of the technology of production of docosahexaenoic acids (DHA) by marine microalgae heterotrophic cultivation in order to produce oils rich in Omega-3, which can be incorporated into this niche market recently appeared in the food industry. Therefore, one of the remarkable goals in this Project is the collection of novel strains that can be exploited without infringing existing patents today.

Laboratorios LETI, S.L. Unipersonal

Ellen Caldwell. BU Director, Immunology and Vaccines for Global Health ecaldwell@leti.com

Gran Via de les Corts Catalanes, 184. 7º 1ª -08038 - Barcelona – Barcelona

Phone: 34 933 945 350 - www.leti.com



The company's objective is to contribute to sustainable improvements in heath and well-being, paying special attention to prevention, early diagnosis and treatment of personal healthcare. Having innovative, patented products is a key objective of LETI. The company dedicates to research and development between 8 and 10% of its turnover.

The company is focused in four areas' allergy, dermatolgy, diagnostics, and vaccines.

The Allergy Unit specialises in the production of allergenic extracts for in vivo diagnosis and etiological treatment of allergies. The Dermatology and Personal Healthcare Unit (DPH) is focused on the manufacturing of skincare and other, personal healthcare products. The Diagnostics Unit speciali-

ses in in vitro diagnosis and culture media for assisted reproduction. The Vaccine Unit is focused on the development of vaccines for the prevention of leishmaniasis.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Laboratorios LETI isinterested in inresearch and development collaboration in theareas of diagnostics, vaccines, and therapies related to allergy, dermatology, immunology and leishmanisis. In addition to research and development, the company is interested in expanding access of our products to international markets.

Laboratorios Rubió

labrubio@laboratoriosrubio.com C/ Industria 29 – Pol.Ind. Comte de Sert - 08755 Castellbisbal - Barcelona Phone: 34 93 772 25 09 http://www.laboratoriosrubio.com



Laboratorios Rubió S.A. is a Specialty Pharmaceutical Company manufacturer of finished and bulk pharmaceutical products, 100% privately owned. Its main focus is in manufacturing and / or commercializing medical products for diseases of low incidence / prevalence in the therapeutical areas of CNS, Rheumatology, Nephrology, Urology, Gynecology and Oncology-Radiotherapy. Rubió is a leading company in ADHD in Spain and has a significant presence in rheumatoid arthritis, lupus and chronic kidney disease.

Its main focus is the manufacture and / or marketing of specialty/products for diseases of low incidence/prevalence in the therapeutic areas of CNS, Rheumatology, Nephrology, Urology, Gynecology and Oncology-Radiotherapy.

It has a well established export business and licenses-out, export agreements for its main strategic products: Rubifen, Rubifen-SR, Dolquine, Resincalcio, Resinsodio and Resincolestiramina, Reutenox.

Rubio is present in over 40 countries and actively seeking new customers and markets as a strategic business and export.



Laimat Soluciones Científico Técnicas, S.L.

Josefina Pedrajas. Director fpedrajas@laimat.com Parque Tecnológico Ciencias de la Salud de Granada, Avda. Innovación 1 – 18100 – Armilla - Granada

Phone: 34 958 750 951 / 34 858 100 141 - www.laimat.com



Reach: Applied investigation for the development of new products for the biotechnological, agro food, pharmaceutical and chemical industries.

Mission: Contribute to improve society's health and welfare, participating in the development of new products for pharmaceutical and agro food industries, by applied investigation using physic-chemical particles properties Knowledge.

R&D:

- Microencapsulation of active ingredients for new materials, intelligent textiles and food.
- Development of electrochemical sensors with applications in food security, toxicology and diseases diagnosis.

Services as external R&D department for companies from the agro food, pharmaceutical and chemical sectors. Provides solutions to physicochemical problems: Solubility, Stability, Formulation, Microencapsulation.

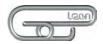
AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

R&D Projects, in Health, Nanotechnology and Biotechnology areas:

- Microencapsulation and controlled delivery of drugs
- Adaptation of a new analytical technology for determination of toxics and early diagnosis. Provides: portability, quickness, sensitiveness, selectivity and easy use.
- By-products revaluation
- Polymorphs determination
- Physicochemical characterization of biopolymers
- Solubility
- Stability control

Lean GxP Support S.L

Carolina Egea Millet info@leangxp.com C/Faraday 7 – 28049 – Madrid – Madrid Phone: 34 914686309 / 34 674058929 - www.leangxp.com



Our mission is to guide our clients toward meeting the Quality, process improvement and cost reduction as part of their culture, adopting a proactive attitude towards that change. Our challenge is to generate a change of mind regarding the compliance of quality.

The goal of LEAN GxP is the QUALITY and give access to the demands and requirements of the new market.

Our staff has a dual scientific and technical profile and has extensive experience in the Chemical, Biotechnology, Cosmetic and Pharmaceutical industry. Always focused in production environments, clinical trials and R & D.

SERVICES:

- Implementation / improvement of quality systems based on ISO standards.
- Implementation / improvement based GLP Quality Systems.

- Implementation / improvement based GMP Quality Systems.
- Continuous Process Improvement based on Lean methodology.
- Validation of Systems and Processes in ISO environments, GLPs and GMPs.
- Qualification of Equipment under existing ISO or environments GLP / GMP.
- Process Design Automation, under 21 CFR part 11/GAMP 5.
- Document Management and Storage (GDP, GMP).
- Total or partial outsourcing of staff / functions of Quality department.
- Use Management and Cleanroom conditioning.



Life Length

Stephen J. Matlin. CEO info@lifelength.com C/ Agustín de Betancourt, 21 8° - 28003 Madrid - Madrid Phone: 34 91 3956368 - www.lifelength.com



Life Length, a spin-off of the Spanish National Cancer Research Center, is the world's only company able to measure critically short telomeres, a crucial biomarker test for measuring biological age for the public and providing telomere measurements services for drug development and clinical trials to the pharma / biotech industry.

Life Length, a life sciences company founded in 2010 to commercially exploit Telomere Analysis Technology (TAT) deve-

loped by Dr. Maria Blasco, Chief Scientific Advisor of Life Length and Director of Spanish National Cancer Research Centre, provides testing services to pharmaceutical and biotech industries for drug R&D and clinical trials, as well as to the general public through physicians and clinics interested in telomere indicators of biological age and overall health. Life Length is the first company offering such precise testing. The founding partners are the Botin Foundation, Dr. Blasco and Matlin Associates.

Life Science Praxis, S.L.

 $\label{lambda} \textbf{Laurence Mickalonis. President and Senior partner laurence.} \\ \textbf{mickalonis@ lifesciencepraxis.com}$

Av. Diagonal 468, 6ta - 08006. Barcelona – Barcelona Phone: 34 610545732 - www.lifesciencepraxis.com



Our mission, at Life Science Praxis, is to enable life sciences companies to maximize the value of their innovation by empowering bioscience with market insight.

We aim to help innovators:

- Maximizing the innovation Core Market Value, at the intersection of science, market and product.
- Differentiating a Technology Platform and/or Product throughout the development continuum up to launch.

In order to enhance their success chances in fundraising and/or exit strategy.

SERVICES:

- Develop the Innovation DNA for a scientific platform.

- Define and assess Core Target Markets and Core Market Value
- Develop and adapt optimal Target Product Profiles at the intersection of Science, Product and Market, Define and adapt Positioning, Value Proposition, Story board and Key messages that maximizes the innovation potential.
- Develop and support development or launch roadmaps and exit strategies.
- Collect Market Insight with diversified market research techniques to drive business decisions.

We have experience in many therapeutic classes, particularly in oncology, immunology and rare diseases.

Lipopharma Therapeutics

Vicenç Tur. CEO v.tur@lipopharma.com Ctra. de Valldemossa, Km. 7,4. Parc BIT. Incubadora de Empresas de Base Tecnológica. Edificio 17- 2º piso. Módulo C-8 – 07121- Palma de Mallorca- Palma de Mallorca Phone: 34 971439 886 - www.lipopharma.com



Lipopharma is a pioneering biopharmaceutical company that focuses on the discovery, rational design and initial clinical development of a new generation of medicines associated with a novel therapeutic approach: Membrane Lipid Therapy (MLT).

PRODUCTS:

Minerval®, a Ras/MAP Kinase pathway inhibitor, is showing very high efficacy with no toxicity in several types of cancer, clearly outperforming approved drugs. A promising MLT based pipeline is also being consolidated, with potential appli-

cations in CNS (Alzheimer's Disease), cancer, inflammation or Spinal Cord Injury.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Lipopharma is seeking new partnerships and collaborations with pharmaceutical companies in order to complete the clinical development for Minerval® in cancer. We are also interested in R&D collaboration agreements to further advance our new MLT based products in attractive areas such as AD, inflammation, cardiovascular diseases or Spinal Cord Injury.



Lonza Biologics Porriño, S.L.

Luis Sánchez Ureña, Site Manager lonzaporrino@lonza.com La Relba s/n – 36410 - O Porriño - Pontevedra Phone: 34 986 344 060 - www.lonza.com

Lonza

Lonza Biologics Porriño is a CMO which offers offers comprehensive multi-product recombinant protein manufacturing services to the biotechnology and pharmaceutical sectors.

It also provides advanced analytical services for the characterization of proteins and manufacturing process support for the biotechnology industry.

Our customers are mainly companies or research centers which need to manufacture proteins in amounts and/or purities that exceed those they can produce themselves, as well as to leading biopharmaceutical multinationals that require additional and flexible production capacity for both products undergoing clinical trials and those already authorized.

PRODUCTS/SERVICES:

- Working Cell Bank and cryopreservation of the cells capabilities.
- Ampoule thaw and expansion suites.
- Inoculum Train Bioreactors Capacity from 20L to 8000 L.

- Production bioreactors 4 x 10,000 L.
- Initial recovery by centrifugation and depth filtration.
- Purification suites separate initial purification and virus negative areas.
- Bulk drug substance freezing facility.
- QC laboratory testing.
- Warehousing GMP Warehouse and dispensing.
- Manufacturing Science & Technology laboratory.

To enjoy a virtual tour to the Porriño site: http://www.lonza-virtualtours.com/porrino

Master Diagnostica, S.L.

Juan Jiménez Manager. Gerente juan.jimenez@vitroweb.com Avda. del Conocimiento 100, P.T. Ciencias de la Salud 18016 Granada - Granada Phone: 34 958 271 449 - www.masterdiagnostica.com



Design, development and commercialization of systems for molecular and immunohistochemical diagnostic in oncology and infectious diseases.

PRODUCTS:

- Antibodies and detection systems for immunohistochemistry.
- Kits for molecular analysis of gene rearrangements in lymphomas.
- Kits for screening and genotyping of human papillomavirus by PCR.
- Kits for molecular diagnostic of zoonotic bacteria
- Kits for mutational analysis of tumoral genes.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Molecular diagnostic in infectious pathology.

Mutational analysis of genes involved in pharmacogenetic and inherited cancer.



MERCK, S.L.

Marta Gállego. Dpto. Comunicación comunicacion@merck.es C / María de Molina, 40 - 28006 Madrid - Madrid Phone: 34 917454400 http://www.merck.es



Merck is the pharmaceutical and chemical company with more tradition in the world, with origins in 1668. Merck seeks business success with a formula based on values and generate economic value. Our strategy is supported on three concepts that define Merck's strategy: Sustain, Change and Grow.

Merck is concentrated in two business segments: pharmaceuticals and chemicals. All activity of the company is organized into four Divisions: Merck Serono and Merck Consumer Health Care (pharmaceutical) and Performance Materials and Merck Millipore (chemical).

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

The Merck Serono division aims to provide innovative solutions to patients. We are specialized in the treatment of cancer, neurological diseases, infertility, hormonal and metabo-

lic disorders, cardiovascular disease and other diseases with significant unmet medical needs, such as phenylketonuria. And we continue investigating to provide patients with therapeutic advances in our actual business.

Merck, Sharp & Dohme de España, S.A. (MSD)

Carmen López-Lavid. Communication Director carmen_lopez_lavid@merck.com Josefa Valcárcel, 38 - 28027 Madrid - Madrid Phone: 34 91 321 06 00 http://www.msd.es



Today's Merck is working to help the world be well. Through our medicines, vaccines, biologic therapies, and consumer and animal products, we work with customers and operate in more than 140 countries to deliver innovative health solutions. We also demonstrate our commitment to increasing access to health care through far-reaching programs that donate and deliver our products to the people who need them.

PRODUCTS:

MSD pipeline has over 20 promising late-stage candidates spanning the stages of life, and we have a presence in more than 100 countries around the world, including emerging markets. MSD also publishes unbiased health information as a non-profit service.

To visit MSD pipeline:

http://www.merck.com/research/pipeline/home.html?WT.svl=content

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Scientific discovery and development have always been the cornerstones of our company. Today, we conduct research in a broad range of therapeutic categories including cardio-vascular disease, infectious diseases, vaccines, cancer, neurology and womens health. And, to help achieve our goal of saving and improving lives around the world, we are expanding our capabilities in new areas, such as biologics.

CORPORATE RESPONSIBILITY:

Corporate responsibility is our daily commitment to save and improve lives by discovering better ways to make a difference in everything we do.

http://www.merckresponsibility.com/



Metas Biotech S.L.

Stuart Medina Miltimore Profesor Waksman 3, 8°A - 28036 Madrid - Madrid Phone: 34 647649749 www.metasbio.com



MetasBio is a firm that provides professional services to companies and investors in the fields of life sciences (biotechnology and medical technology), food and healthcare.

Our vision is that in Spain there are opportunities in innovative business models based on the exploitation of the results of research and technological innovation. MetasBio intends to be a leader in investment and development in innovative business projects through a comprehensive range of professional services.

Our activity includes five business units:

-Strategic consulting to companies in the fields of life sciences, food and health.

- -Advice to investors through a comprehensive technical evaluation.
- -The creation and enterprise promotion.
- -Business development through patent licensing, technology transfer or identification of new growth opportunities.

Support Services to business management under interim management and administrative and financial management.

Miltenyi Biotec

Iván Alvarez-Sierra. Country Manager macs@miltenyibiotec.es Ciudad de la Imagen. C / Luis Buñuel, nº 2 - 28223 Pozuelo de Alarcón - Madrid Phone: 34 91 512 12 90 http://www.miltenyibiotec.com



Miltenyi Biotec develops, produces, and markets state-ofthe-art products and services for cell separation, cell analysis, cell culture, molecular biology, and clinical research applications.

PRODUCTS:

- MACS® Technology for Cell Separation.

- AutoMACS
- CliniMACS®.
- Microarrays & Bioinformatics.
- Adsorbers for Therapeutic Apheresis.

Minoryx Therapeutics

Marc Martinell. CEO mmartinell@minoryx.com TecnoCampus Mataró-Maresme, Av. Ernest Lluch 32, TCM2 - 08302. Mataró -Barcelona

Phone: 34 937021975 http://www.minoryx.com



At Minoryx, we are committed to finding novel treatments for life threatening rare diseases.

We prioritize pediatric diseases and we are currently focused on neurometabolic diseases of genetic origin. Minoryx develops a new generation of non-competitive pharmacological chaperones through a proprietary technological platform.

As a complementary approach, Minoryx also progress repositioning-based projects.



Monsanto Agricultura España, S.L.

Jaime Costa . Regulatory Sciences Manager jaime.costa@monsanto.com Avenida de Burgos, 17, 10^a - 28036 Madrid - Madrid Phone: 34 913 432 701 http://www.monsanto.es



Monsanto offers technological tools and technical solutions to increase the efficiency and sustainability of agricultural production and to improve food quality.

PRODUCTS:

Monsanto is a global supplier of agronomic tools for farmers, including:

- seeds (vegetables and row crops)
- biotech traits
- crop protection products (such as herbicides)
- integrated production systems
- biological products.

For further information on our products go to:

http://www.monsanto.com/products/Pages/default.aspx

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Crop breeding

Plant Biotechnology

Conservation agriculture

Precision farming.

Myriad Genetics España, S.L.U

Felis Iglesias. Country Manager Iberia figlesias@myriad.com Calle Calendula N°93, Miniparc III, ED.K, PB - 28109. El Soto de la Moraleja. Alcobendas - Madrid

Phone: 34 910916946 http://www.myriad.com



The promotion, development and commercialization of solutions, services, products and treatments for disease prevention and analysis, identification and evaluation of risks associated with any disease or prognosis of the disease in patients.

Predictive Medicine:

- BRACAnalysis: Testing for Hereditary Breast and Ovarian Cancer (HBOC) Syndrome.
- COLARIS: Testing for Lynch Syndrome (HNPCC).
- COLARIS AP: Testing for Adenomatous Polyposis Syndrome (FAP, AFAP, MAP).
- MELARIS: Testing for Hereditary Melanoma.
- PANEXIA: Testing for Hereditary Pancreatic Cancer.

Personalized Medicine:

OnDose (US): Testing for 5-FU Dose Optimization.

PREZEON: Testing for PTEN Status.

TheraGuide(US): Testing to guide 5-FU related chemotherapy.

Prognostic Medicine:

Prolaris: Testing for Prostate Cancer Aggressiveness.



NANOIMMUNOTECH

Rubén Santos Martínez de Laguna. Control Manager rubensantos@nanoimmnunotech.es
Plaza Fernando Conde Montero Ríos, 9. - 36201 Vigo - Pontevedra Phone: 886302070 http://www.nanoimmunotech.eu



Nanoimmunotech is a spanish company in the Nanobiotechnology sector.

The core business is the Functionalization and Characterization of nanoparticles, along with the appropriate advice, prior to their use in different applications.

Vision: To become a world reference in the Functionalization and Characterization of nanoscale systems.

Mission: nanoimmunotech commitment is to offer products and services that comprehensively cover market characterization and functionalization of nanoparticles, in the Biotechnology and Health sectors.

The company is based on the following business areas:

1. The core business of nanoimmunotech is the product portfolio based on the nitzipper® technology. This technology consists in two strategies for the multifunctionalization of nanomaterials. nanoimmunotech also offer personalized de-

velopment projects, for the conjugation of different nanoparticles, biomolecules or drugs, depending on the needs of the customer.

2. Biological (in vivo and in vitro) and physico-chemical characterization of nanoparticles and products using nanote-chnology. Giving support to very different customers (pharmaceutics, cosmetics, diagnostics, agrofood market, etc.) so they can design better and safer products.

nanoMyP (Nanomateriales y Polímeros SL)

Angel Valero Navarro. Product and Marketing Managing Director avalero@nanomyp.com

Edificio BIC-Granada, lab 121 Parque Tecnológico de la Salud. Avda. Innovación, 1 - 18016 Armilla - Granada

Phone: 34 958637114 http://www.nanomyp.com



Our mission is to provide high-tech products that satisfy the most demanding needs of our customers, through the generation and supply of smart materials on demand with physico-chemical properties fully customizable.

We base our competitiveness in the constant innovation of our products. That is why our main pillars are the training and empowerment in the creativity of our research team.

NanoMyP® vision is to be the national and international reference in the design and supply of smart materials based on nanotechnology and functional materials on demand.

For each problem, a solution ... and nanoMyP® products are this solution.

NanoMyP® is a Spin Off company of the UGR which is specialized on the design and synthesis of polymeric and hybrid nano and microparticles, polymers and copolymers, and smart materials with tailored physicochemical properties to customer needs.

NanoMyP ® supplies: molecularly imprinted polymers (MIPs); Polymers of cyclodextrins; Polymeric nano and mi-

croparticles functionalized with OH, COOH, NH2, tertiary amines, pyridine, epoxide, Cl ...; Silica microparticles for biomolecules immobilization; and inert or functionalized (OH or NH2) magnetic particles.

NanoMyP® offers the manufacture of polymeric and hybrid nano and micro-materials by using electrohydrodynamic techniques (EHD; electrospinning and electrospray), microencapsulation of chemicals in polymeric materials by using spray-drying, dripping, micro-emulsion, coacervation or interfacial polymerization, as well as the development of projects for industry-wide scalability.

For these purposes, NanoMyP® has specialized staff and a fully equipped laboratory for the synthesis and EHD processing.

In addition we offer our R&D Department to develop those materials you need for your business (materials on demand).

Nanotherapix S.L.

esperanza.guisado@grifols.com Parque Empresarial Can Sant Joan. Avenida de la Generalitat 152-158. -08174 Sant Cugat del Vallès. - Barcelona Phone: 34 935710500

GRIFOLS

The goal of Nanotherapix is the development of advanced therapy medicinal products (ATMP) based on the use of the patient's autologous cells. These cells are obtained from blood and re-infused to the patient after an ex-vivo genetic modification.

Nanotherapix is developing a non-GMP gene therapy platform and currently it is able to produce and purify first generation adenoviral vectors.

Areas of interest of Nanotherapix are the culture and characterization of blood cells, pre-clinical models of disease, de-

velopment of technology for gutless adenovirus production, in vivo cell tacking of human cells, etc.

NATAC BIOTECH S.L.

José Carlos Quintela. Chief Scientific Officer natac@natac.es Parque Científico de Madrid. C/ Faraday 7. 28049 Madrid - Madrid Phone: 34 91 827 64 70 http://www.natac.es



Natac is a biotechnology company dedicated to the investigation, development, manufacturing and commercialisation of healthy ingredients for their application in functional foods and food supplements as well as active pharmaceutical ingredients of natural origin, namely plant extracts and functional lipids. Also, Natac makes available to its clients a range of services aimed at placing the final product in the different sale channels.

Vision: To become a world reference company which through scientific knowledge, applies the benefits of nature to improving life quality.

Mission: To transfer, through strategic alliances, the scientific knowledge to industrial projects which generate value and contribute to improving health and quality of life.

OUR COMPETITIVE ADVANTAGE

Knowledge of the key markets for functional ingredients.

We are specialists in combining basic research, applied research, innovation and transferring knowledge to the market (SCIENCE TO MARKET).

Ability and strength of a large company with the flexibility, agility and personal service of a small company.

Research and development team of highly qualified professionals with wide experience in the development of new functional ingredients and scientific documentation to support health claims in functional foods.

Potential to develop technological and commercial barriers with our proprietary products.

Markets: APIs, nutraceuticals, functional food, animal feed and cosmetic.

We have a wide range of proprietary products developed in different health areas. Please, visit our website.



NEOL BIOSOLUTIONS SA

Javier Velasco. CEO jvelasco@neolbio.com Avda de la Innovación 1 - 18100 Armilla - Granada Phone: 34 958750598 http://www.neolbio.com



Neol is focused on the discovery and development of industrial bioprocesses in the biofuels and chemical markets. Neol's main goal is to provide efficient and environmentally-friendly solutions to the industry.

Neol owns a wide microbial collection and a highly qualified team that created Microbiotools by Neol, a technological platform that enables the development of bioprocesses up to industrial scale.

MicroBiOil®is a technology platform to produce second-generation biofuels from microbial oils. Via the use of specific micro-organisms, renewable feedstocks or industrial by-pro-

ducts are metabolized as the sole carbon source to obtain an oily biomass. Due to its fatty-acid composition these oils are suitable to be used as raw materials to produce biodiesel, renewable diesel or biokerosene. All processes and micro-organisms used have been fully developed by Neol and are protected by world-wide patents.

Neol is also at the development stage of a procedure for producing bioplastics from industrial by-products and renewable feedstocks (Tribioplast®). Such process is based on the cultivation of PHA over-producing strains isolated and developed by Neol.

Neuron Bio

Malena Valdivieso. Business Development info@neuronbio.com Avda de la Innovación nº 1 Business Innovation Centre Parque Tecnológico de la Salud - 18016 Granada - Granada

Phone: 34 958 750 598 http://www.neuronbio.com



Neuron Bio specializes in the development of biosolutions for the pharmaceutical and agro-food industries via its divisions: Neuron BioPharma and Neuron Bioservices.

Neuron BioPharma Division is working on the discovery and development of compounds which help to prevent or treat various neurodegenerative diseases. Research on Alzheimer's disease is the main aim of this division, which concentrates on understanding the implications of the regulation of cholesterol in the brain. Thanks to the development of these studies Neuron Bio has become a pioneer at worldwide level in this sector and has a unique knowledge of the mechanisms that regulate cholesterol levels in the brain as well as the effects they have on the development of neurodegenerative diseases.

Neuron Bioservices division offers in vitro and in vivo assays for the discovery and evaluation of drug candidates.

On the other hand, Neuron Bio owns 50% of the company NEOL Biosolutions, S.A., (Neol) dedicated to the discovery and development of industrial bioprocess for the biofuel and chemical sector. Neol was formed from the segregation as an independent company of the former bioindustrial division of Neuron Bio. In July 2012, Repsol bought 50% of this company giving rise to an alliance that will allow accelerating the scale-up of the processes for advanced biofuels and bioplastics production previously developed by Neuron Bio.

Neuroscience Technologies, S.L.P.

Dra. Cristina Quiles. Director cquiles@nsc-tec.com Science park of Barcelona, Edifici Hèlix. C/ Baldiri Reixac, 15-21 - 08028 Barcelona - Barcelona

Phone: 34 93 402 0164 http://www.nsc-tec.com



Neuroscience Technologies is a biomedical company with expertise in human and animal pain neurophysiology.

We help the pharmaceutical and biotech industries in assessing the activity of new compounds acting on the peripheral nervous system.

Our services provide a direct translation of results from basic research to the clinical setting.

SERVICES:

- Clinica studies on neuropathic pain patients.
- Preclinical studies on experimental models of axonal hyperexcitability.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Development of new drugs targeting axonal hyperexcitability in the pain field.

Development of diagnostic devices for neuropathic pain.



NEUROTEC PHARMA SL

Marco Pugliese. CEO marcopugliese@neurotec-pharma.com c/Baldiri Reixac 15, Edifici Hèlix, Bioincubadora PCB-Santander - 08028 Barcelona

Phone: 34 935189908 / 34 672357159 http://www.neurotec-pharma.com



Neurotec Pharma SL is a spin-off from the University of Barcelona founded in 2006 and based in the Bioincubator PCB-Santander, Science Park of Barcelona, Spain. Our mission is the preclinical and clinical development of drugs to treat central nervous system (CNS) diseases that occur with inflammation and neurodegeneration such as Stroke, Alzheimer's disease (AD), Multiple Sclerosis (MS) and Amyotrophic Lateral Sclerosis (ALS).

The team of Neurotec has an extensive experience in CNS research and we are developing our therapeutic proposals

by using in vitro tools and accepted animal models of CNS diseases. Currently, in collaboration with the company Advancell, Neurotec is performing a Clinical Phase IIa trial in 18 Spanish and German hospitals to test the efficacy and safety of the compound NT-KO-003 in 105 patients with relapsing-remitting MS (Study NEUROADVAN). With the same molecule, Neurotec is completing preclinical studies for ALS.

Newbiotechnic, S.A.

Evangelina Naranjo enaranjo@nbt.es Paseo de Bollullos de la Mitación, 6 - PIBO - 41110 Bollullos de la Mitación -Sevilla

Phone: 34 955 776 710 / 34 615 612 828 http://www.nbt.es



To identify, protect and commercialise microbiological and molecular tools with an immediate, practical application in the farming and agrifoodstuffs sector, which are safer for the consumer and more respectful with the environment.

Founded in 1999, NBT is an R&D company in farming and agrifoodstuff biotechnology, with three business areas: 1) Biological control agents 2) Gene technology for improving crops and 3)Molecular diagnostics services. It has genomics and phytopathology laboratories and a pre-industrial production plant and a HR team, including six people with PhDs. With a technological portfolio of over 20 patents and a research network of 45 groups at world level, NBT is a pioneer in the development and registration of biofungicides and leader in molecular phytopathology.

PRODUCTS:

- Biological Control Agents (biofungicides, bioinsecticides).
- Tools for plant improvement by genetic transformation SERVICES:
- Genomic and Bio-IT services

- Phytopathological diagnostics
- Agrifoodstuff diagnostics
- Veterinary diagnostics
- Human genetic diagnostics

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

The development of microbiological products for crop protection. Submerged fermentation technology and product recuperation.

Co-development/ distribution of natural products for agriculture (microbiological products, plant extracts, organic extracts, etc.).

Development of diagnostic genetic tests for farming, aquaculture, veterinary and food product applications.

The development of concept tests in plant genetic transformation.



NIMGENETIS, GENÓMICA Y MEDICINA, SL

Beatriz Maroto. R+D Manager bmaroto@nimgenetics.com C/ Faraday, 7. Parque Científico de Madrid - 28049 Cantoblanco - Madrid Phone: 34 91 8047760 http://www.nimgenetics.com



NIMGENETICS is a biomedical technology company dedicated to the research, development and innovation of last generation products (DNA biochips) to be used in genetic diagnosis of clinical and research samples.

Our main goals are:

To ease, in an efficient way, medical professionals access to the latest scientific advances in genomic tools such as Array-CGH for the improvement of health care at all stages, prevention, prognostic characterization and diagnostic reliability.

To offer researchers and research services, in addition to an extensive range of genomic tools, a personalized customer service that goes from the design and selection of the most appropriate platform, up to a complete biocomputer analysis.

The company is right now focused on three main areas:

1. Own design of Diagnostic Biochips to be used for prenatal diagnosis (KaryoNIM® Prenatal 15K, KaryoNIM® Prenatal

60K), postnatal diagnosis (KaryoNIM® Constitutional 60K, KaryoNIM® Constituctonal 180K), oncologic diagnosis (OncoNIM-CD Cancer Diagnostics, OncoNIM-CF Cáncer Familiar) and stem cells (KaryoNIM® Stem Cells)

- 2. Services of Genetic Diagnosis based on our bichips, we provide our clients with a genetic report for the medical specialist to help in the diagnostic and management of their patients. This is possible because NIMGenetics is the only Spanish company authorized by the Community of Madrid's Health Department as an Analitical Diagnostics Centre with Genetic Unit, specialized in biochips.
- 3. Services of consulting and development of genomic research, with an specialized service for the biomedical community in R&D institutes.

n-life Therapeutics

Francisco Santos Zaino fszaino@n-life.es Av Innovación 1, Nave 5 PT Cs de la Salud - 8100 Armilla - Granada Phone: 34 958750599 / 34 600347517 http://www.n-life.es/en/



nLife Therapeutics is a biotechnology company leading the discovery and development of oligonucleotides as therapeutic agents for those CNS disorders where unmet medical needs are not covered by traditional treatments.

nLife believes that antisense and RNAi-based therapy has the potential to effectively treat a broad array of pathologies by silencing the expression of targeted disease-associated genes, covering specific and clear unmet medical needs.

The general project strategy is to develop the candidate up to early human Proof-of-Concept, and then reach an agreement for its licensing-out or co-development.

nLife believes that the key to success is obtaining quality results under a project management policy, and is actively pursuing the establishment of fruitful partnerships that are driven by strong commitment, close collaboration and transparent communication.



Noray Bioinformatics, S.L.U. (NORAYBIO)

Marta Acilu. Business Development Manager info@noraybio.com Address: Parque Tecnológico de Bizkaia, 801 A - 2º - 48160 Derio - Bizkaia Phone: 34 944 036 998 http://www.noraybio.com



Supports the life science sector. Aims to meet the needs of work in all aspects of the biosciences.

- -Animal research centres
- -Biobanks
- -Centres for assisted reproduction
- -Laboratories and research units Pharmaceutical industry

PRODUCTS:

- AniBio

- NorayBanks
- Fivisoft
- NorayLIMS
- NorayLab

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

NorayBio looks for strategic alliances and partnerships to continue the internationalization of its products and the company by opening branch offices abroad.



Noray Biosciences Group (Noray BG)

Julio Font. President info@noraybg.com Parque Tecnológico de Bizkaia . Edificio 801-A. 2ª planta 48160 Derio - Bizkaia

Phone: 34 94 403 69 98 http://www.noraybg.com

Noray BG is a holding group focussed on Biosciences, whose mission is to manage and integrate the companies in the Biosciences sector to enhance their access to the market and their internationalization.

Noray BG is currently composed by two companies: Histocell and NorayBio.

SERVICES:

Noray BG is a holding dedicated to the management of its companies (NorayBio and Histocell, at the moment), in different fields like strategic management, business development, internationalization, financial management and human resources.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Noray BGs strategy for the near future is based on the continuous growth by means of collaboration agreements with other companies and institutions, development of new innovative products and acquisition or merger with new firms, everything done with the firm idea of motivating the expansion throughout the European and international market

One Way Liver Genomics, SL. (OWL)

Julián Sánchez. CEO jsanchez@owlmetabolomics.com Address: Parque Tecnológico de Bizkaia, Edif 502, pl 0 - 48160 Derio - Vizcaya Phone: 34 94 431 85 40 http://www.owlmetabolomics.com



OWL is a biotechnology company with the mission to identify biomarkers and therapeutic targets in the field of high prevalence diseases. Its technological platform offers metabolomics and lipidomics services to Pharma, Biotech companies ,Research Centers and Food and Cosmetic companies.

OWL is focused in the area of health, with pioneering scientific applications, and its goal is to identify, validate, patent and commercialize diagnosis and/or prognosis systems, as well as therapeutic targets.

PRODUCTS AND SERVICES:

To consolidate the developments of OWL as a technology-based company, an innovative line of development has been developed, Metabolomics, which allows opening diagnostics to the massive identification of specific biomarkers for a given pathology. Currently there are two business lines:

 In vitro serum based Non Alcoholic Fatty Liver Disease (NAFLD) diagnosis test.. 2.-Metabolomics and lipidomics services to pharmaceutical, biotechnology companies, research centers, food and cosmetic companies in key areas such as biomarkers discovery, clinical studies, diagnostics, toxicology, sample authentication or adulteration determinations.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS

OWL is applying its know-how in metabolomics to be used in other pathologies for both the diagnosis and prognosis within the framework of the personalized medicine.

Currently OWL is developing new research in hepatic diseases and other high prevalence diseases such as Multiple Sclerosis and CNS Diseases (Parkinson).

OWL is interested in Pharma, Biotech companies, Research Centers, Food and Cosmetic companies, that demand metabolomics services for their own R+D, and is also seeking for appropriate partners to establish commercial alliances for new products and markets.



Operon, S.A.

Tomás Toribio. General Manager Info@operon.es Camino del Plano, 19 - 50410 Cuarte de Huerva - Zaragoza Phone: 34 976 503 597 http://www.operon.es



To be international leader in 6 technologies relating to In Vitro Diagnosis: Monoclonal antibodies, recombinant antigens, agglutination latex, immunochromotography, ELISA and Molecular Biology tests.

SERVICES:

- Research, development and manufacturing of Monoclonal Antibodies.
- Research, development and manufacturing of Recombinant Antigens.
- RD&I and manufacturing of In Vitro Diagnostic kits based on immunological reactions.
- RD&I and manufacturing of In Vitro Diagnostic kits based on molecular biology.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Industrial production and purification of monoclonal antibodies and recombinant antigens.

Design and large scale production or with own brand of new In Vitro Diagnostic tests.

Oryzon Genomics S.A.

Carlos Buesa. CEO cbuesa@oryzon.com C / Sant Ferran 74 - 08940 Cornellà de Llobregat - Barcelona Phone: 34 93 515 13 13 http://www.oryzon.com



Oryzon is a biomarker discovery company with a Diagnostic and Therapeutic pipeline focused in Oncology and Neurological disorders. Oryzon's mission is the identification of gene functions and proteins so as to design and develop biotechnological products that improve people's health.

SERVICES:

The company has an integrated bio-marker discovery and validation platform and develops its own core research program, with an increasing number of projects in selected niches of the biomedicine arena always in partnership with the Academia and Pharmaceutical companies.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Oryzon has several important strategic alliances with food, biotech and pharmaceutical companies and is looking for industrial pharma and food partners to launch new global projects.

Palau Pharma S.A.

Heidi Sisniega. Chief Business Officer hsisniega@palaupharma.com Pol. Ind. Riera de Caldes. Avinguda Camí Reial, 51-57 - 08184 Palau-solità i Plegamans - Barcelona

Phone: 34 93 863 04 83 http://www.palaupharma.com



Palau is a product-driven biopharmaceutical company focused on the discovery and development of revolutionary and differentiated new medicines that are designed to address the unmet medical needs of patients suffering from inflammatory and autoimmune diseases. Its business strategy consists of developing compounds up to the point of obtaining their proof-of-concept in humans, and then establishing strategic alliances with multinational pharmaceutical companies for their subsequent development and commercialization.

Palau Pharma has a broad portfolio of projects at different stages of development from early discovery to the late clinical stages, including two in the market: a drug-coated coronary stent, ACTIVE®-IRIST®, being commercialized

worldwide by Iberhopitex; and CIMALGEX®, a product for the treatment of inflammatory pain in companion animals, being currently marketed in Europe and in the near future in US by Vetoquinol Veterinary Pharmaceuticals. For more information about Palau Pharma's and its projects, visit our website www.palaupharma.com.

At Palau, partnering plays a strong role in both our business model and our development philosophy. We are actively seeking to establish partnerships with leading biotechnology and pharmaceutical companies for the late stage development and commercialization of our projects beyond Phase II clinical trials.



PALOBIOFARMA

Lyhen González Lio Igonzalez@palobiofarma.com calle Enric Granados 29, 4º piso - 08330 Premiá de Mar - Barcelona http://www.palobiofarma.com



Palobiofarma focuses on the discovery and development of new drugs based on the modulation of adenosine receptors, from the discovery to the clinical POC. The goal of the company thereafter is to license the development, results and project-related patents to Pharmaceutical Companies.

Palobiofarma has developed an extensive intellectual property around the adenosine receptors with 8 national and 4 international patents, making the company one of the leading Drug Discovery Biotech in Adenosine.

PBF-509: is a potent adenosine A2a antagonist receptor for the treatment of Parkinson's disease (PD). Currently is in Phase I clinical trials.

- PBF-680: is an adenosine A1 antagonist for the oral treatment of asma. Currently is in Phase I clinical trials.
- PBF-695:is an adenosine A3 antagonist for the oral treatment of glaucoma. This compound has begun the regulatory preclinical development.
- PBF-999: is a dual antagonist of the adenosine A1 receptor and phosphodiesterase 10 for the treatment of schizophrenia. This compound has begun the regulatory preclinical development.

PANGAEA BIOTECH, S.L.

Elizabeth Breedlove. Corporate Development ebreedlove@pangaeabiotech.com C/ Sabino Arana 5-19 USP Dexeus Instituto Universitario. - 08028 Barcelona -Barcelona

Phone: 34 93 546 01 19 http://www.pangaeabiotech.com



To become a top EU centre for cancer treatment, a worldwide reference for in-vitro diagnostics (IVD) of treatment response, and to develop innovative anti-cancer drugs with major clinical and commercial potential based on targeted approaches (i.e., early identification of the putative target population).

Discovery and development of gene signatures predictive of sensitivity to anticancer agents. Biomarker discovery agreements applicable to drugs under development. Service agreements to third parties. Technology transfer agreements.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Business development and out-license of our predictive models to diagnostic companies.

Strategic alliances with pharma and biotech companies in the field of cancer pharmacogenomics.

Service agreements on pharmacogenomics.

Development of new technologies applicable to cancer pharmacogenomics.

Parexel International

Georgina Singleton. Director, Marketing georgina.singleton@parexel.com Genova, 17-3 Planta - 28004 Madrid - Madrid

Phone: 34 +44 1895 614530 http://www.parexel.com



SERVICES:

- PAREXEL is a leading global bio/pharmaceutical services organization that helps clients expedite time-to-market through our development and launch services. These include a broad range of clinical development capabilities, integrated advanced technologies, regulatory affairs consulting, and commercialization services.



Pevesa, S.L.

Iñaki Mielgo. General Manager and CEO imielgo@pevesa.es Polígono Industrial Poliviso. Avda. de la Industria, s/n - 41520 El Viso del Alcor - Sevilla

Phone: 34 955 946 024 http://www.pevesa.es



To be a reference in the design, production and R&D in the area of proteins, peptics and amino-acids and biochemical compounds employing biotechnology as a work tool.

PRODUCTS:

- Proteins, peptics, biochemical products.

SERVICES:

- Industrial Biotechnology and Biochemical Engineering.
- Enzyme and Fermentation Technology.
- RD&I Laboratories and Pilot plant.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS: Contract manufacturing, custom made manufacturing.

Product development.

Collaboration, research and development agreements for new products.

Joint Ventures.

Investment in biotech projects.

Pharmamar, S.A.U.

pharmamar@pharmamar.com Avda. De los Reyes, 1 Pol. Ind. La Mina-Norte - 28770 Colmenar Viejo - Madrid Phone: 34 91 846 60 00 http://www.pharmamar.com



PharmaMar, founded in 1986 and part of Grupo Zeltia, is a biopharmaceutical company which explores the seas to find innovative treatments. PharmaMar is conducting a pioneering marine biotechnology programme in search of new marine-based drugs. The company's research taps the sea, whose enormous biodiversity makes it a model for discovering new anti-tumour drugs.

PRODUCTS:

PharmaMar currently has six compounds under clinical development for different indications. The sea´s potential as a source of medicines was confirmed with the 2007 approval of the first marine-based drug; PharmaMar obtained marketing authorisation for the treatment of advanced soft tissue

sarcoma in adults throughout the EU and Switzerland, and also in countries where our partners undertake development and commercialisation. In 2009, the drug was approved by the European Comission for platinum-sensitive relapsed ovarian cancer.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our business strategy is to find co-development partners who are able to successfully contribute to a joint development. To this end, we seek partners who can contribute to successfully develop our product portfolio of marine origin in Europe, USA and Japan. PharmaMar retains commercialization rights for Europe while granting licenses for all territories outside of Europe.

Phyture Biotech

Albert Jané Font - CEO a.jane@phyturebiotech.com Sant gaietà 121, 2nd floor. - 08221Terrassa - Barcelona Phone: 34 931278109 http://www.phyturebiotech.com/en/



Phyture Biotech is a spin off from Faculty of Farmacy, University of Barcelona. We are specialized in plant cell cultures technology. With this property technology, high value active ingredients are developed and produced for cosmetic and pharmaceutical sectors.

Additionally, Phyture Biotech intend to use this technological platform for recombinant proteins production.

Phyture Biotech has developed, during the last two years, an active ingredient based on plant cell cultures of Centella asiatica. This have been done in association with the pharmaceutical company Casen Fleet to incorporate this ingredient in their new medical device product, launched in January 2013. With this launch, Phyture Biotech becomes a pioneer in the development of active ingredients for medical devices based on plant cell cultures technology.

Nowadays, the company is strongly investing in the development of active ingredients for the treatment of several dermatological pathologies. With company property technology, the beneficial activity of several plant species are being significantly increased compared with traditional extracts commonly used.

At the same time, Phyture Biotech is offering developing SERVICES of exclusive active ingredients and customized to satisfy each customer needs. This services are offered in both COSMETIC and PHARMACEUTICAL sectors.

In addition, the company is investing in the improvement on plant cell cultures as a technological platform for RECOMBINANT PROTEINS production. The plant cells have unique and not exploited characteristics that makes them a high potential technology in this field.



Pioneer Hi-Bred Spain, S.L.

Alberto Ojembarrena. Operations Manager piospa@pioneer.com Avda. Reino Unido n°7. Edificio ADYTEC - Euroficinas, 2ª Planta - 41012 Sevilla

Phone: 34 954 298 300 http://www.pioneer.com



The development, production and commercialisation of agricultural seeds and inoculants for the conservation of animal fodder.

PRODUCTS:

- Maize, Sorghum, sunflower, cotton, soybean, corn, lucerne, rape seeds.
- Lactic bacteria inoculants for animal fodder conservation. SERVICES:
- Comprehensive agronomic services of complete advisory service to agricultural users of the plant species marketed.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

The development of varieties of plant species and inoculants for agriculture and stock farming.

Development of methods and knowledge concerning stock feeding.

Development of varieties of plant species for human nutritional use

Development of varieties and processes for the bio-energy industry

Development of processes for improving and knowing the agricultural crop environment better (soils, waters, efficiency and irrigation methods, abiotic factors, pest control, etc.).

The DuPont Oval Logo is a registered trademark of DuPont. Pioneer® is a registered trademark of Pioneer Hi-Bred International Inc. Des Moines, Iowa, U.S.A.

Pivotal

natalia farr natalia.farr@pivotal.es Gobelas 19 - 28023 Madrid - Madrid Mobile Phone: +34 679488022 http://www.pivotal.es

Leading, 120-strong, regional South/Western-European CRO and Pharma Consulting Group with >11 years of experience.

More focused geographyically in Spain, Portugal, Italy and France.

Diversified portfolio of national and international projects.

Differentiated added value comes from therapeutic focus across all functions and a strong multi-specialty Medical Division.

Consolidated oncology division and hub.

Biotechs focused division.

Clinical Operations (CO): Clinical trials start-up, Regulatory support, Monitoring, Project management.

Data Management and Biostatistics (DMBS): Data base setup, entry & coding, Remote data capture and Paper CRFs, Validated clinical trial management tools, Statistical analysis & reports.

Resourcing (RES): Selection of specialised Pharma personnel, Functional resourcing, Educational and Sales Support Teams

Medical (MD): Medical writing activities (protocols, abstracts, papers), Medical monitoring, Liaison with authorities and Thought Leaders, Strategic support to clients Technical support to other divisions within Pivotal.

Pharmacovigilance (PVG): Global SAEs management, PVG databases (ARGUS), SAEs hotline, reconciliations and periodic safety review.



Plant Response Biotech S.L.

Marisé Borja. Head of R+D marise.borja@plantresponse.com Centro de Empresas Parque Científico-Tecnológico UPM Montegancedoe Científico-Tecnológico UPM Montegancedo - 28223 Pozuelo de Alarcón -Madrid

Phone: 34 91 452 4839 http://www.plantresponse.com



Plant Response Biotech S.L. develops new products, methods and bioassays for plant protection to promote sustainable agriculture based in science. PlantResponse strategy is based in a strong Intellectual Property portfolio from an international network with excellence public and private research groups. Our vision is to bring these products and traits form the lab to the greenhouse, from the scientist to the grower. Our products are routinely trialed under real production conditions.

PlantResponse has launched its first-in-class elicitor after completion of the field/greenhouse tests for proving wide pathogen resistance and yield increase in garlic and pepper both in ecological and integrated management. A platform for systematic High Throughput Screening (HTS) to identify Elicitors has been developed by our scientists. Validation in target crops is carried out in real production conditions both in field and greenhouse trials to guarantee the success and yield performance PlantResponse has wide experience in building bridges between academic researchers and industry. One of our mail goals is to bring exciting discoveries from the lab to the market.

PLASMIA BIOTECH

Esteve Guardia info@plasmiabiotech.com C/Temple, 15-19 1r 1a - 08038 Badalona - Barcelona Phone: 34 931593133 http://www.plasmiabiotech.com

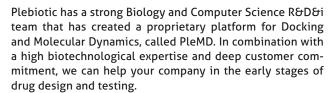


PLASMIA is dedicated to research and develop new more efficient ways of synthesis of pharmaceuticals, especially nucleoside analogues. These new synthetic routes are based on the use of enzymes. Chemoenzymatic synthesis processes allow obtaining the product in a more accurate way with clear advantages in terms of costs, time and safety.

Chemoenzymatic pharmaceuticals syntehsis projects.

Plebiotic

Álvaro López Medrano. CEO alvaro.lopez-medrano@plebiotic.com C/ Gobelas 17, Planta baja - 28023. Madrid - Madrid Phone: 34 917081076 http://www.plebiotic.com



Plebiotic focuses on the design of new drugs and their simulation by means of Docking and Molecular Dynamics.

Plebiotic owns a proprietary hardware and software system, based on GPUs (Graphics Processing Units), called PleMD, that achieves high simulation rates at a very reduced cost.



With PleMD, long and efficient protein-ligand, protein-protein simulations are feasible.

Plebiotic offers complete pre and post sales services, spanning from drug design or standard screening of chemicals libraries to end to end projects comprising structural design and analysis of new molecules (enzymes, ligand mutations).

Plebiotic product has been used, with positive results, in pre-clinical simulations for drug design (neurodegenerative diseases, cancer).



POC Microsolutions

Marcin Pacek mpacek@pocmicrosolutions.com Address: Goiru Kalea nº 9 - 20500 Arrasate-Mondragón - Gipuzkoa Phone: 34 943 71 24 00 / 34 660717982 http://www.pocmicrosolutions.com/



Our main goal is to deliver to the market POC Diagnostic Solutions based on scientific and technological developments in the field of "Lab On a Chip" (LOC) that has been generated over the years through various national and international re-

search collaborative programs as well as internal research projects of IK4-IKERLAN's Microsystems group.

Praxis Pharmaceutical, S.A.

Javier Julián (jjulian@praxisph.com) / Javier Gil (jgil@praxisph.com) C/Hermanos Lumière 5. Parque Tecnológico de Álava. - 01510 Miñano - Alava Phone: 34 945298198 http://www.praxisph.com



Praxis Pharmaceutical is a company that works in the Health Sciences, based in the Parque Tecnológico de Miñano, Álava, and which operates in Europe and Latin America. Our corporate purpose is development and manufacturing for third parties and the Praxis Group, as well as the marketing of biopharmaceutical products specialised in the treatment of orphan and low-incidence indications.

Praxis Pharmaceutical is a company that works in the Health Sciences, based in the Parque Tecnológico de Miñano, Álava, and which operates in Europe and Latin America. Our corporate purpose is development and manufacturing for third parties and the Praxis Group, as well as the marketing of pharmaceutical products specialised in the treatment of orphan and low-incidence indications.

Praxis Pharmaceutical is structured in three divisions:

1- Research and Development Division: engaged in research into new drugs; including a biotech line for regenerative the-

rapies as well as peptide synthesis and nano-microencapsulation of drugs.

- 2- Manufacturing Division: contract development and manufacturing of sterile drugs, specially biologics. This division also supplies the Praxis Group.
- 3- Sales Division, whose objective is the marketing of drugs and health products.

Praxis Pharmaceutical's mission consists of providing health professionals with innovative drugs and health products that extend the therapeutic arsenal they have to improve the treatment of their patients.

Praxis Pharmaceutical currently has more than 60 specialised workers with broad experience in the sector of research, the manufacturing of pharmaceutical products and the marketing of drugs.

Probelte Biotecnologia

Luis Orts Llopis Managing Director vicentemarti@probeltebiotecnologia.es Ctra. Madrid, km. 384.6. Polígono industrial El Tiro, c/ Antonio Belmonte Abellán s/n. Espinardo - 30100 Murcia - Murcia Phone: 34 968 307 250 http://www.probeltebiotecnologia.com/



Since its beginnings, PROBELTE BIOTECNOLOGIA has been defined as a competitive and innovative company with the corporate purpose of researching, developing, innovating and commercialising natural bio-active principles, either functional or technological, obtained through green technologies and addressed to the food, cosmetic, pharmaceutical and veterinarian sectors.

PRODUCTS:

Natural bio-active principles like POMANOX and MEDITEA-NOX obtained through physical procedures. Development of bio-active principles for use as functional or technological ingredients in the food, cosmetic, pharmaceutical and veterinarian industries.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Development of new applications and uses of the bio-actives principles in the food and pharmaceutical sectors.

Development of new natural bio-actives principles through green technologies.

Development of new fish vaccines.



Progenika Biopharma, S.A.

Sergio Escorza. Director, International Strategic Alliances sescorza@progenika.com

Parque Tecnológico de Bizkaia - 48160 Derio - Bizkaia Phone: 34 94 406 4525 http://www.progenika.com



Progenika's mission is to improve healthcare through the development, validation and commercialization of products that allow personalization of treatment for complex diseases: in vitro tests for their prevention, diagnosis and prognosis; prediction of response to drugs; and monitoring of the effectiveness of biologic therapies

Areas of expertise and interest for Progenika Group companies include:

Genotyping: Testing based on SNPs is applicable to a broad spectrum of studies, such as the identification of diseases and etiological research, gene association, mutational analyses, or associations between disease and gain/loss of chromosomal regions.

Massive sequencing: de novo and re-sequencing technologies allow gathering significant gene functional information, offering a high capacity and data quality unattainable by traditional sequencing.

Analyses of gene expression: our platforms make it possible to analyze simultaneously, in a quantitative and reproduci-

ble way, the expression levels of thousands of genes involved in a particular physiological process. Projects aimed at a restricted number of candidate genes and/or validation of expression markers is also possible.

Non-coding RNA: the large number of genes regulated by microRNAs makes the analysis of this kind of molecules particularly interesting to identify those that are associated with different pathologies.

Gene regulation: there are several technological options for the analysis of regulatory mechanisms, from massive sequencing studies applied to analysis of methylation to specific studies using microarrays.

Production of solid and liquid microarrays and immunoassays: tests for the detection of proteomic and genomic biomarkers can be implemented in different formats, such as ELISAs, chips, or liquid arrays based on suspended microspheres or microparticles.tion sequencing; or solid array, liquid array and immunoassay development.

Promega Biotech Ibérica S.L.

Joan Garrell. Sales and Marketing Manager joan.garrell@promega.com Avenida Bruselas, $5-3^a$ planta - 28108. Alcobendas - Madrid Phone: 34 902.538.200 http://www.promega.com/es



Our mission consists of providing reliable and competitive solutions to promote the progress of life science research, biotechnology and genetic identification, while offering a personalized service of high quality through sustainable practices.

Promega is a company that provides reagents and instrumentation to the scientific community to promote progress in life sciences, offering at the same time a personalized customer service and scientific advice.

The over 2,000 products in our catalogue allow scientists all around the world to enhance their knowledge through life

science research, in particular in the areas of genomics, proteomics, cellular analysis and drug discovery. Our products are also used for specific applications in molecular diagnostics and human identity.

The mother company, Promega Corporation, was founded back in 1978 in Madison (Wisconsin, USA), and designed to provide an environment for innovation and creativity. Promega has proprietary branch offices in 15 countries and over 50 distribution agreements worldwide. One of these subsidiaries is PROMEGA BIOTECH IBÉRICA S.L. that started its activities in Spain in the year 2005.

ProRetina Therapeutics, S.L.

PRODUCTS:

Stuart Medina. General Manager stuart.medina@proretina.com Pza. CEIN, 5 - 31110 Noáin - Navarra Phone: 34 948 317 345 http://www.proretina.es

Development of drugs for treatment of retinal diseases.

- PRO-001. Neuroprotective agent for treatment of retinitis pigmentosa.

- PRO-015. Gene therapy for treatment of retinitis pigmentosa



AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Novel molecules with potential ophthalmological indications.

Sustained release technologies for intraocular delivery of therapeutic agents.



PROTEOS BIOTECH, S.L.

Alina Girigan. Life SciencesMarketing Responsable info@proteosbiotech.com 14 Almansa Str. - Bioincubator - 02008 Albacete - Albacete Phone: 34 915417000 http://www.proteosbiotech.com



Production and commercialization of recombinant enzymes for their application in research, cosmetics and biomedicine.

PRODUCTS:

Recombinant enzymes and proteins Collagenase, Keratinase, Pz-Peptidase, Subtilisine, Lipase, INF alpha 2b, INF beta 1b, G-CSF

SERVICES:

Bioprocesses and biocatalisys using recombinant enzymes.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Cosmetics, Biopharmaceutical, Recombinant Enzymes and Proteins Production and Commercialization.

Proyecto de Biomedicina CIMA, S.L. (BITA)

Antonio Martin. General Manager amartin@proyectobiocima.com Avenida Pío XII, 22. Oficina 1 - 31008 Pamplona -Navarra Phone: 34 948 287 561 http://www.proyectobiocima.com



Managing, patenting and exploiting all the results coming out from the research activity carried out in the CIMA project, a joint venture between a group of several first class spanish companies and the CIMA(Research center for applied medicine owned by the University of Navarra.

PRODUCTS:

See the web www.proyectobiocima.com

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Licensing for the development of the results owned by the company, through licensing agreements with biotech companies or by setting up new companies to develop these results

Recombina

Cristina Latasa info@recombina.com Polígono Mocholí, Plaza CEIN 5. Viveros de Innovación, Nave T-1-31110 Noáin – Navarra

Phone: 34 629723302 / 34 646126744 http://www.recombina.com/Home/Home.html



- Custom Cloning
- RNA services
- Genetic Engineering of Microorganisms
- Small scale recombinant protein production
- Recombina's R&D



- Research and Development (R&D) services

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Biomedical sciences and Pharmaceutical Industry. Biotechnology companies. Waste Industry and Energy Sector. Agroalimentary Industry. Cosmetic companies.



Rekom Biotech S.L.

Ana Camacho. General Director agcamacho@rekombiotech.com Edificio BIC-Granada, 203. Avda. De la Innovación, 1. Parque Tecnológico de la Salud. -18100 Armilla - Granada

Phone: 34 958591887 http://www.rekombiotech.com



In Rekom Biotech our mission is to offer a high quality proteinic and genomic products related with infectious diseases, and also to offer advanced biotechnology services regarding design and development of new proteins and enzymes. Rekom Biotech expects to be a reference company for obtaining antigens coming from human and animal infectious agents.

For this reason our main aim is to obtain a wide antigen spectrum from all over the world, including both the most known diseases and less known locally important diseases, thus covering different potential markets.

Rekom Biotech is a biotechnology company focuses in the production of recombinant antigens as biomarkers of microorganisms responsible of human and animal infectious diseases. We also offer support of genomic design and process development for purification of native and recombinant

proteins. We design and produce recombinant antigens as infectious diseases biomarkers with and without tags in order to make them versatile enough to perform their application in the different platforms of the IVD market. Also, we produce positive DNA controls focused in infectious diseases, which contains genes or gene fragments which can be used as positive controls in PCR and q-PCR assays. We are a biotechnology-based company, which consist of a multidisciplinary group of scientists coming from private industry and the University of Granada. This symbiosis makes us highly competitive in several areas.

The products of Rekom Biotech are designed, developed, produced and distributed according to our Quality Management System that is certified for compliance with ISO 9001 standards.

Repsol

Enrique Espí. Bioenergy Consultant eespig@repsol.com Centro de Tecnología Repsol Ctra. De Extremadura,A5 - km 18 - 28935 Móstoles - Madrid

Phone: 34 917536457 http://www.repsol.com



Repsol is an integrated energy company that strives to guarantee the well-being of society whilst complying with sustainability criteria. We are constantly searching for energy solutions based on eco-efficiency and new energy. We are committed to technological innovation as the key to building a more efficient, secure, competitive and sustainable energy model. This commitment is embodied in the Repsol Technology Centre: a leading European centre where we promote R&D+i.

Repsol is interested in the bioenergy sector across the whole value chain, from raw material production through land or water crops (algae) and the transformation of biomass into biofuels, mainly liquids (gasoline-kerosene-diesel range), but also gas (biogas biopropano ...) or solid (pellets,...) and through thermochemical and biological processes.

RJ Biotech Services

Isabel Amat. Business Development Manager isabel.amat@reigjofre.com Gran Capita 6 - 08972. Sant Joan Despí - Barcelona Phone: 34 93 480 67 10 http://www.reigjofre.com



RJ Biotech Services, is part of Reig Jofre Group, a leading European Development, Manufacturing and Marketing group of finished pharmaceutical forms with own presence in Spain, Nordics, UK and currently more than 180 clients and distributors in more than 52 countries. The main therapeutical areas of interest for internal developments as well as third-party development collaborations are dermatology, gynaecology, respiratory and anti-infectives.

RJ Biotech Services provides solid expertise in designing formulations and lyophilisation process for chemical and

biological products with a Centre of Excellence in Freeze-Drying, development and optimization of upstream and downstream processes, development of analytical methods for API and finished formulations, fill and finish for clinical batches with a GMP manufacturing site for investigational products, designing of advanced drug delivery systems for injectables and regulatory support for every stage of the clinical phases.



SANIFIT

Joan Perelló Bestard. CSO info@sanifit.com Address: PARC BIT. Ctra. Valldemossa, km 7.4. Edificio Naorte. Planta Baja. Oficina 4 - 07121 Palma de Mallorca - Illes Balears Phone: 34 971 439 925 http://www.sanifit.com



Sanifit offers a new approach to calcification disorders. The Rx pipeline focus is on severe renal diseases and soft tissue calcification.

The experienced management team has proven track record and large pharma/biotech experience.

The business model is to develop the products up to clinical prove of concept and out-license/partner final development and commercialization.

SNF472 (lead product): Phase I clinical trials are scheduled 2013, PhII 2014-16. It targets renal disease, dialysis patients reducing calcification and cardiovascular events, indications with high medical need and blockbuster potential.

In addition an orphan drug development with SNF472 is in progress. Orphan drug designation was granted by EMA and FDA in August and December 2012 respectively.

The preclinical pipeline aims at major renal/CV areas, CKD and kidney stones.

The IP protected technology covers also the use in medical nutrition and medical devices, where Sanifit develops applications jointly with partners.

OTC dental care products with outstanding clinical efficacy were successfully developed and are in the commercial partnering phase.

SARTORIUS STEDIM SPAIN, S.A.U.

Carlos Císcar Escolà. Bioprocess Sales Manager carlos.ciscar@sartorius-stedim.com C/ Isabel Colbrand, 10-12 local 70, Polígono industrial de Fuencarral - 28050. Madrid - Madrid



Phone: 34 91.358.6091 http://www.sartorius.com

Sartorius is one of the world's leading providers of laboratory and process technologies and equipment. Our innovative products and high-quality services help customers around the globe implement complex and quality-critical processes in biopharmaceutical production and laboratory environments in a time- and cost-efficient way.

Our key customers are from the biotech, pharma and food industries, as well as from public research institutes and laboratories. Sartorius operates its own production facilities in Europe, Asia and America, and also has sales offices and local representatives in more than 110 countries. Strongly rooted in the scientific and research communities and closely allied

with customers and technology partners, the company is dedicated to its philosophy of Turning science into solutions every single day.

Main business areas:

- Filtration Technologies
- Fluid Management
- Fermentation Technologies
- Purification Technologies
- Integrated Solutions
- Process Analytical Technology
- Validation and technical service



Secugen, S.L.

Begoña López Gimaré. Sole Officer b.lopez@secugen.es C/ Santiago Grisolía, nº 2 (Parque Científico de Madrid) - 28760 Tres Cantos -Madrid

Phone: 34 918063105 http://www.secugen.es



The company's main objective is the development of methodologies for DNA analysis applied to research and genetic diagnostics tests. We market analytical applications for the diagnosis a la carteof any genetic disease using the most advanced DNA sequencing technologies, also providing a genetic counseling service. We provide molecular genetic testing services, among others, to hospitals, the pharmaceutical sector, the food sector and, in general, to all public and private research centers.

SERVICES:

- Clinical Services: Human Genetic Diagnoctics Tests. Genetic Counseling. Rare Diseases. Molecular Genetic Analysis a la carte.
- Molecular Biology Services: DNA Sequencing. Genetic analysis on demand (Animals, plants, microorganisms). Massive sequencing of genomes. Transcriptomics. Metagenomics.
- Research Services: Development of R & D projects in the field of genomics.

Sensia, S.L.

Iban LARROULET, General Manager sensia@sensia.es Industrialdea, A-Gunea, Pab.1 - 20159 Asteasu - Gipuzkoa Mobile Phone: 34 680982921 http://www.sensia.es

Sensia is the first Basque Initiative to set up a leading company in the instrumentation sector for life science research laboratories and for environmental measurement.

Sensia develops, manufactures and commercialises laboratory systems based on SPR technology.

SENSIA is a company of the Mondragon Group.

PRODUCTS:

The INDICATOR is an instrument based on Surface Plasmon Resonance(SPR) which enables comparative measurements to be made by incorporating channels. The Surface Plasmon Resonance is a powerful technology for measuring biomolecular interactions, allowing real-time measurements without

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our company is actively working with various companies and public and private research institutions for the development research projects in any scientific area where our expertise in Genomics, Genetics, Biochemistry and Molecular Biology can be helpful.

The company has been a pioneer in DNA sequencing and in particular in the introduction of new massive sequencing technologies and in 2007 founded the company Lifesequencing SL who settled in Spain the first massive sequencing platform's most advanced in the market, the GS-FLX (454) Sequencer, with the aim of making available to the companies and the scientific community one of the most powerful tools that currently exist for better understanding of the genomes of living organisms from man to microorganisms.



having to brand the analytes. The INDICATOR system has a large number of applications; in general all those studies based on biomolecular interactions: biochemical and chemical detection, discovery of medicines, diagnostics, proteomics, genomics, forensic medicine, food analysis, environmental monitoring, etc.

It is an automated bi-channel device that delivers three main advantages to the market: a unique robustness and reliability, allowing its easy transportation, an extreme sensitivity in detection, and a user friendly interface for an intuitive and immediate learning, for the democratization of the technique.

Please visit our website.



Seprox Biotech

Yago Romero. Commercial Director yromero@seprox.es Conde de Aranda 16 1º Dcha - 28001 Madrid - Madrid Phone: 34 914362036 http://www.seprox.es



SEPROX BIOTECH is a Spanish company created in December 2008. Between its main business areas is the production at industrial level of Hydroxytyrosol, Hydroxytyrosol Acetate and 2-3,4 Dihydroxyphenilacetic Acid.

SEPROX BIOTECH has developed its own production process using chemical synthesis and enzymatic biocatalysts.

The great power of these compounds is its high antioxidant capacity together with its powerful free radical scavenging activity. Historically, these compounds were extracted from olive leafs, reaching lower purity levels than SEPROX BIOTECH products. They can be applied in cosmetics, nutrition, and pharmaceutical and food industries.

Its brand new production method gives SEPROX BIOTECH a competitive advantage over its competitors dedicated to extract polyphenolic compounds from natural sources, due to the quality levels (in terms of purity over 99.7%- and deep control of impurities) that our products reach, and the reproducibility, which is extremely important when applied to nutrition, cosmetics or pharmaceuticals.

SEPROX BIOTECH offers its products to interested companies, looping for long term and strategic relationships for the development of new products.

Sermes CRO

Antonio Berlanga. General Director aberlanga@sermes.org C/Rufino González 14 Esc 1 2ºDcha - 28037 Madrid - Madrid Phone: 34 91 3756930 http://www.sermes.org

Sermes CRO seeks to develop the biotechnology sector offering Start-up, monitoring, data recording and statistical analysis, providing comprehensive coordination in all the organization and technology-based self-development.

Sermes CRO offers in Spain and International the following products and services:

- Full and complete Start-up Service.
- Design and development of clinical research protocols.
- Design and development of paper and electronic CRFs.



- Monitoring Phase II trials, III and IV and post-approval studies.
- Management of clinical trial data.
- Using of Oracle Clinical as database, including Electronic-CRF service with WhoDrug and MedDRA Dictionaries.
- Statistics and Publications.

Also, Sermes CRO is a founding member of the organization PSN-Pharmaceutical Service Network, which provides global coverage for any clinical trial.

Sigma Aldrich Química, S.A.

Javier Márquez. General Manager Javier.marquez@sial.com Ronda de Poniente, 3 - 28760 Tres Cantos - Madrid Phone: 34 91 661 9977 http://www.sigmaaldrich.com



Sigma-Aldrich is a leading Life Science and High Technology company. Our chemical and biochemical products and kits are used in scientific research and pharmaceutical development and our mission is to facilitate the science that makes the life better.

PRODUCTS:

Our chemical and biochemical products and kits are used in scientific research, including genomic, functional genomics and proteomic research, animal models, biotechnology, pharmaceutical development and the diagnosis of diseases: Antibodies. shRNA & siRNA. Oligonucleotides. Media, reactives and sera for cell culture. Zinc Finger Nucleases for Gene Editing. Animal Models. Reactives for iPS cells, etc

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Sigma-Aldrich has developed an aggressive initiative for the evaluation of novel technologies that can enable the scientific community. This initiative provides Sigma-Aldrich with the opportunity to continue to offer new and novel technology-based products to researchers in academic, medical and industrial institutions, throughout the world. Technologies of Interest: Functional Genomics, RNAi, Gene Editing, Cell Biology, Live Cell Biosensors, Gene Expression, Proteomics, Stem Cells, Analytical and Material Science.



SINOPTIA, S.L.

Eulalia Clos Cañellas. Director for Europe and Latin America eulalia.clos@sinoptia.com

Balmes, 150 2º 1ª - 08008 Barcelona - Barcelona Phone: 34 678 694 285 http://www.sinoptia.com



SINOPTIA is an international company, focused in assessing clinical analysis laboratories, genetic diagnostic businesses and biotechnology businesses in general.

SINOPTIA is focused in advising and connecting the right parties in the IVD businesses.

We work with people and for people to get the better results

The most important differentiation of SINOPTIA is our involvement in the implementation of the solutions.

We do not sell reports, we sell solutions.

Three phases METHODOLOGY:

- SINOPTIA Strategy: Studying the client in depth and defining a strategic plan.
- SINOPTIA Management: Studying the client in depth and defining a strategic plan.
- SINOPTIA Connect: Studying the client in depth and defining a strategic plan.

We are managers with hands on experience who get involved with our clients with formulas like Interim Management, specialized headhunting, process improvement or mediator of business connections.

Sistemas Genómicos, S.L.

Mayte Gil. Project Manager mayte.gil@sistemasgenomicos.com Parque Tecnológico de Valencia. Ronda G. Marconi, 6 - 46980 Paterna -Valencia Phone: 34 902 364 669 http://www.sistemasgenomicos.com



Sistemas Genómicos is a firm dedicated to research in DNA and RNA genetic codes. Its mission is to provide society with a genetic research service.

We collaborate in various customised R&D projects. Our aim is to offer this new research to industry and to society.

Our Mission is to contribute to improve the quality of life of those people with hereditary diseases, and to care for people's health in food quality matters.

WORKING AREAS:

- -Biomedicine:specialised in the diagnosis of genetic diseases, the study of their physiopathological processes and the development of new treatment outlines that address personalised medicine (genetic diagnosis, the genetic board, preventive genetic medicine). It consists of two units:
- 1)Medical Genetics Unit:in charge of diagnoses, prognostics and new treatment models for genetic diseases by applying various technologies to study different medical specialities (cardiology, neurology, oncology, paediatrics,oncohematology, prenatal genetic diagnosis).
- 2)Reproductive Genetics Unit:offers diagnosis tests relating to reproduction and genetics. Among its most outstanding achievements, we find thousands of embryos transferred with no trace of genetic diseases, as well as tests that we offer in the service of all those who present genetic and reproductive difficulties (Preimplantational Genetics Diagnosis Services (PGD), Genetically Caused Infertility Diagnosis Services, Genetic Diagnosis Services for Donors of Gametes and Embryos and Reproductive Genetics Counselling Service)

- -Sequencing Services:Our offers range from automatic DNA sequencing to massive sequencing using Next Generation Sequencing platforms (NGS).
- -Bioinformatics:we offer the following services: massive sequencing data analysis, microarrays expression data analysis, hosting services and consultancy services.
- -R&D+i Projects: We have the acknowledged capacity to collaborate with international teams to match any development in the genome and transcriptome research field. We can include all the research stages in the process, from constructing libraries to bioinformatics and identifying individual genes.
- -Clinical Units: conceived to directly advise patients. We are here to help you if you need genetic advice or counselling.
- -Agrofood and nutrigenomics: The aim here is to provide industry with the tools it needs in food safety matters: Transgenics, Authentication of species, Allergens, Microbiology and Self-analysis.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our company actively seeks the stablishment of strategic allilances to promote R¬D projects in Genomics.

We want to be your technology partner. We differentiate ourselves by being not only a supplier, but a long-term partner.



SmartLigs

Rubén Gil Redondo (CEO) rgilredondo@smartligs.com c/ Faraday 7 (Parque Científico de Madrid) - 28049 Madrid - Madrid Phone: 34 910 075 722 / 34 682 395 707 http://www.smartligs.com



Smartligs is a biotechnological company focused on the discovery and development of new drugs. We collaborate with the pharmaceutical and biotechnological industry in the search of pre-clinical candidates, with the aim of reducing costs, risks and time to market as well. We use innovative computational chemistry technologies, integrated with other disciplines in the research process (molecular biology, organic chemistry, medicinal chemistry and pharmacology), which accelerate development processes while making them more cost efficient.

We base our competitive advantage on our proprietary bioinformatics platform for high throughput virtual screening. From a chemical library with millions of compounds, we identify those molecules with the maximum activity for a given therapeutic target. Furthermore, we can optimize the candidate drugs by increasing their potency and specificity,

enhancing their scalability, improving their pharmacological properties and reducing their toxicity. This strategy allows us achieving high success rates in the clinical development.

Our technology is suitable for drug discovery projects in all therapeutic classes.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

We are looking for partners with expertise in the following fields:

Therapeutic targets identification and validation.

In vivo and in vitro assays.

Evaluation of pharmacological properties.

Toxicity studies.

SOM Biotech SL

Raúl Insa. CEO insa@sombiotech.com Barcelona Science Park. Baldiri Reixac, 4 - 08028 Barcelona - Barcelona Phone: 34 934020150 / 34 690623263 http://www.sombiotech.com



SOM Biotech is a private global company focused in drug repurposing. It was established in 2010 at the Barcelona Science Park based in a property chemical field scaffold hopping technology with unlimited scalability. Our goals achieved up to day are:

- Repurposed compound, SOM0226, ready for Phase II proof of concept in humans in any form of TTR Amyloidosis.
- First license of SOM0777, a compound for a medicinal chemistry program in Glioma.
- Orphan Drug Status pre-submission for SOM0226.
- Up to 7 compounds in preclinical development for unmet needs.
- Up to 4 patents submitted in Europe and US.
- SOM has obtained private and public funding for more than \$1,600,000.
- SOM Biotech has achieved worldwide presence in repurposing Congresses, Books and Specialized Reports (Insight Pharma, Scrip).

We have discovered, developed and patented SOM0226; a compound ready for Phase II in TTR Amyloidosis, an orphan disease, in all its forms (neuropathic, cardiac, senile and CNS form). SOM0226 is more potent than the gold standard (Vyndagel®, Pfizer), not yet in the US market.

Seven compounds are in preclinical development for other indications:

- Huntington disease
- Benign Prostatic Hyperplasia
- Phenylketonuria
- Amnesia/ Alzheimer

SOM has submitted four patents up to now and has the ability and structure to repurpose 25 projects per year, with the aim of submitting at least 6 more patents and license compounds mainly after Phase II proof of concept.



STAT-Diagnótica & Innovation

Jordi Carrera info@stat-diagnostica.com Baldiri Reixac, 4 - 08028 Barcelona - Barcelona Phone: 34 934485124 http://www.stat-diagnostica.com



STAT-Diagnostica develops Near Patient Testing systems that simplify and reduce time to results for the diagnosis of certain medical conditions.

Founded in 2010 and based in Barcelona, STAT-Diagnostica is developing a novel in vitro diagnostic system which is a

versatile, easy-to-use platform that consolidates molecular and immunoassay techniques in a single device, the first clinical applications will be directed at infectious disease detection, antibiotic resistance determination and detection in critically ill patients.

Stem Center, S.L.

Asunción Sánchez Ochoa manager@stem-center.com Camí dels Reis, 308 - 07010 Palma de Mallorca - Palma de Mallorca Phone: 34 971 910074 http://www.stem-center.com



Research and use of adipose derived stem cells in different clinical conditions.

PRODUCTS AND SERVICES:

Extraction of adipose derived stem cells from lipoaspirates and autologous re-implantation into the patient for aesthetic or regenerative purposes.

Suanfarma Biotech S.G.E.C.R. S.A.

Gonzalo Marin. Managing Director gonzalomarin@suanfarma.com Calle Einstein 8- 3^a Pl - 28108 Alcobendas - Madrid Phone: 34 91 567 15 56 http://www.suanfarmabiotech.com



Suanfarma Biotech SGECR is a venture capital asset management company specialized in biotechnology authorized by the Spanish CNMV (equivalent to US SEC) in July 2007 and registered with number 66. Our mission is the management of biotechnology specialized funds and consultancy to biotechnology companies in several areas, such as business and commercial activities, industrial and R&D support, as well as regulatory guidance and financial advice.

Suan Biotech I FCR authorized by CNMV in September 2007. The current portfolio of investments already managed by Suanfarma Biotech SGECR SA includes the companies: Vivia

Biotech, 3P Biopharmaceuticals, Pevesa, Halotech, Salupharma, Biomedal, Clave Suan, Agrenvec & Noscira.

Suan Biotech II FCR in process.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

SUANFARMA BIOTECH SGECR, S.A. evaluates investment opportunities with a strong and solid science, IP and growth potential. We look for projects and opportunities within universities, tech transfer units, R&D centers and within our national biotech and pharmaceutical market.



Sylentis, S.A.U.

sylentis@sylentis.com Parque Tecnológico PCM C/Santiago Grisolía, 2 - 28760 Tres Cantos -Madrid Phone: 34 91 804 76 67 http://www.sylentis.com



Sylentis focuses on researching new therapeutic approaches based on gene silencing. Sylentis is specialised in developing therapies via interference RNA, a powerful tool for rational drug design.

We are developing treatments for glaucoma and dry eye syndrome. Sylentis is also focusing on inflammatory bowel disease. Furthermore, Sylentis is focusing on post-traumatic neuron lesions and ischaemia, neurodegenerative diseases and dementia.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Because the release of RNAi in the body is an important part of these technologies, the company has a number of research projects under way regarding the controlled release of drugs, in cooperation with various public and private institutions

TCD PHARMA

Ran Vigdor info@tcdpharma.com Jose A. Primo de Rivera 4, 2° - 47001 Valladolid - Valladolid Phone: 34 983102050 http://www.tcdpharma.com



Our mission is to create value for the shareholders who believe in us and the communities we live in by developing innovative drugs that address unmet medical needs in the field of Oncology and provide clinical benefits to millions of patients worldwide.

TCD-717 is the Company's leading product. This first-inclass, precisely-targeted ChoK alpha inhibitor is a small molecule that has demonstrated its effectiveness in treating various cancer types in pre-clinical studies. TCD-717 is currently in a Phase I clinical trial as a treatment for solid tumors. The study has been approved by the FDA as part of an Investigational New Drug (IND) application, and is currently being conducted in two medical centers in the U.S.

We are seeking partners for the TCD-717 Clinical Stage Oncology Program.

TERACLON IDF, S.L.

Crescencio López de Silanes. Vicepresident c.silanes@teraclon.com C/ Capitán Haya, 38 - 28020. Madrid - Madrid Phone: 34 915700055



Investigation, development and production of pharmacy and biotechnological products.

Basic investigation and development of pharm products to develop, patent, experiment, carry out clinic test, sanitary registers, manufacture and commercialize pharms, biotechnological products and other products or medicinal mixes which have positive effects for health and human being wellness, as well as similar investigation activities, manufacturing and commercializing any medicinal product or mixed.



Thrombotargets Europe, S.L.

Ignasi Miquel ignasimiquel@thrombotargets.com TTE-BARCELONA: Parc Mediterrani de la Tecnologia, Av Canal olímpic s/n, Edif B6, 2ªPlanta - 08860-Castelldefels - Barcelona Phone: 34 93 664 20 40 http://www.thrombotargets.com



Thrombotargets Europe is a clinical stage Biotech company focused on the development of new therapeutic treatments in the field of haemostasis. To achieve this goal Thrombotargets has developed proprietary High Throughput Screening Technologies that allow the speed-up of the Drug Discovery process for the identification of innovative drugs that may improve the quality of life of the human being.

PRODUCTS:

- 1) TT-173 (Topical Hemostat for treatment of surgical bleeding, Phase II)
- 2) Several programs focused on haemostasis and coagulation (anticoagulants, antifibrinolytics).

3) Technological Platforms: BIOPLATFORMSCREEN (High Throughput Screening in haemostasis for the detection of anticoagulants, procoagulants, fibrinolytics, antifibrinolytics)

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

- 1) Collaborations in HTS projects; identification and development of new drugs in haemostasis
- 2) Development of tt-173 containing sealants/patche.
- 3) Biomarkers to be integrated in biosensor-based diagnosis platform (POC in Alzheimer)

TIGENIX NV

María Pascual. VP of Regulatory Affairs and Corporate QA jacqueline.curros@tigenix.com Marconi, 1. Parque Tecnológico de Madrid - 28760 Tres Cantos - Madrid Phone: 34 91 804 92 64 http://www.tigenix.com



TiGenix NV (NYSE Euronext: TIG) is a leading European cell therapy company with one marketed product, ChondroCelect, and a strong clinical stage pipeline of adult stem cell programs. TiGenix is based out of Leuven (Belgium) and has operations in Madrid (Spain) and Sittard-Geleen (the Netherlands).

The company's lead product, ChondroCelect, for cartilage repair in the knee, is the only approved cell-based product in Europe, and is currently being launched across Europe. TiGenix's adipose derived allogeneic stem cell platform has been

extensively validated: Cx601, Phase III clinical trial to treat complex perianal fistula in patients with Crohn's, a Phase IIa trial in rheumatoid arthritis ongoing, and a Phase I trial to investigate intra-lymphatic administration in autoimmune disorders.

Valentia Biopharma S.L.

M. Carmen Álvarez. Technical Director mc.alvarez@valentiabiopharma.com Parc Cientific Universitat de Valencia. C/Catedrático José Beltrán 2. - 46980 Paterna - Valencia

Phone: 34 96 354 38 42 http://www.valentiabiopharma.com



Biotechnology company focused on developing models of human genetic diseases in Drosophila and obtaining drugs by automated screening of compounds in in vivo models of Drosophila melanogaster.

PRODUCTS:

We have a unique technology for drug discovery generated by the integration of a in vivo High Throughput Screening platform (in vivo HTS platform) with different Drosophila biomedical models.

SERVICES:

- Generation of Drosophila biomedical models.
- Screening of compounds in our HTS platform.
- Hit validation in in vivo models.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Rare diseases, genetic base diseases.



VALIDATEC SL

Maika Chillón. Technical Director mchillon@validatec.es Dr Diaz Emparantza, 39 - 48002. Bilbao - Vizcaya Phone: 34 944702693 http://www.validatec.es/ VALIDATEC®

AIM: Contribute to keep our customers quality standards, providing current rules compliance and this way increasing their competing skills.

VALIDATEC, ALBIAN GROUP member company offers an overall consulting solution from the beginning of the project to the validation final stage aimed to all health sectors, biotechnological, pharmaceutical an microelectronics industry which are ruled by strict quality parameters.

We provide solutions in the GMP Compliance field. Our services include validations, qualifications, calibrations, documentation, consulting and training.

Our customized in place training courses are attended by professionals with a wide experience in the field of industries that require controlled atmospheres and processes.

VALIDATEC, with central office in Bilbao has also local offices in Madrid and Barcelona.

Valoralia I+D

Youness Ouahid Benkaddour youahid@valoraliaimasd.com c/ Ronda de Poniente, 4 - 28760 Tres Cantos - Madrid Phone: 34 918036590 http://valoraliaimasd.com

research and development Objective: get several drugs for various diseases. Screening



VCN BIOSCIENCES

Manel Cascalló Ph.D. CEO info@vcnbiosciences.com Av. de la Generalitat 152. -08174 Sant Cugat del Vallès. - Barcelona Phone: 34 93 571 2359 http://www.vcnbiosciences.com

VCN Biosciences mission is the development of new agents for the treatment of cancer based on oncolytic adenoviruses with high potency and selectivity. The company develops new candidate viruses from its design, preclinical studies, and early efficacy studies in humans (Phase I and II clinical trials).

VCN Biosciences SL is a company focused in the development of new therapeutic approaches for tumors that lack effective treatment. The company uses an oncolytic adenovirus technology platform to design highly selective and efficient agents that replicate and self-amplify exclusively in tumor cells. The selectivity of VCN oncolytic adenoviruses allows their systemic administration, which is especially re-



levant for the treatment of disseminated cancer. Contrary to chemotherapy, the ability of oncolytic virus to self-amplify in tumor cells results in an effective dose increase with time. These properties highlight VCN candidates as promising alternatives for the treatment of refractory tumors such as pancreatic adenocarcinomas or melanoma, which are some of the current tumor targets of VCN Biosciences.



VENTER PHARMA SL

José Luis Martín. CEO jlmartin@venterpharma.com Azalea, 1. Edif.B, Ofic.3 - 28109 El Soto de la Moraleja, Alcobendas. - Madrid Phone: 34 916 252 189 http://www.venterpharma.com



Venter Pharma SL is a biotech Company created in 2003 with the aim of developing products in the field of gastroenterology to help patients and professionals.

Venter Pharma SL was founded in 2003 under the name of Lactest SL, upon the development work carried out in the Universidad Autónoma de Madrid and Consejo Superior de Investigaciones Científicas (CSIC).

During these years, in deep collaboration with UAM and CSIC, the company has developed the method for the evaluation of lactose intolerance, completed the preclinical and

clinical studies to determine the toxicity and efficacy of the product and finished the scaling up of the product.

Venter Pharma has developed LacTEST 0.45 podwer for oral solution, a diagnostic drug for the diagnosis of lactose intolerance that overcomes the deficiencies of current methods. LacTEST is based on a new molecule which INN is gaxilose

LacTEST finished the development process in 2009 and the European authorization process in 2011. Now the company is waiting for the approval of the Spanish and German health Agencies.

VETGENOMICS, S.L.

Armand Sánchez. CEO armand.sanchez@uab.cat Edifici Eureka – Parc de recerca UAB. Campus de la UAB - 08193 Bellaterra -Barcelona

Phone: 34 935868978 / 99 http://www.vetgenomics.com



Animal Genomics and Veterinary Molecular Diagnostic

VETGENOMICS aims in the field of veterinary genetic diagnosis are: (i) to develop innovative analytical services in companion animals and (ii) collaborate with technology partners that enable us to develop genetic diagnostic products with higher added value for end users.

VETGENOMICS is a company with experience in animal genomics, with capacity for innovation and flexibility to adapt technology to customer needs, increasing the added value of its products and becoming a partner of choice in R + D+ i.

Vetgenomics is a SME spin-off of the UAB. With a team of 8 people including technicians and PhD dedicated exclusively to R&D, Vetgenomics is devoted to molecular diagnostic in companion animals. One of the company skills is the in-house design of real time quantitative PCR assays for diagnostic of several pathogens. Vetgenomics skills and competences are:- Expertise in genetic veterinary diagnostic; - In-house design of real time PCR assays for pathogen detection; - Network of veterinarians; - Research group focused on canine genomics (LUPA, 7FP).

VidaCord, S.L.

Angel G. Alvarez Ramos. Presidente y Fundador agar@vidacord.es Oficinas: C / Puntonet, 4-bajo dcha. Laboratorio: Edificio Zye bajo dcha. Tec-

noalcalá - 28805 Alcalá de Henares - Madrid Phone: 34 91 830 57 85 http://www.vidacord.es



To process and criopreserve the cord blood that parents entrust VidaCord. To offer their children in the future the possibility to use these cells or their derivatives to treat certain diseases.

SERVICES:

Obtaining, processing and criopreserving stem cells from blood cord.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Cell Therapy

Regenerative Medicine



Vircell, S.L.

Almudena Rojas. Technical Manager arojas@vircell.com Plaza Domínguez Ortiz, 1.Pol. Ind. 2 de Octubre - 18320 Santa Fé - Granada Phone: 34 958 441 264 http://www.vircell.com



Vircell is a biotechnology company specialized in the development and production of ready-to-use reagents for the diagnosis of infectious diseases in humans by different techniques ranging from the traditional cell culture to the most innovating developments in the field of molecular biology. Vircell has been a successful market player worldwide distributing its products in 75 countries.

"Since its foundation in 1991, the three main objectives of the company are: to produce reagents of the highest quality, to provide highly-specialized technical support and to develop innovative diagnostic solutions that bring significant advances to the market.

The in-house production of all the antigens needed for the development of its kits enables Vircell to work with independence from external suppliers. This peculiarity makes it a flexible company able to guarantee the quality of its products. The reliability of its kits is the result of a strict quality control according to international standards. All tests distributed are validated and CE-marked complying with the

European directive 98/79/CE. Vircell is ISO 13485:2003 and ISO 9001:2000 certified and is involved in the process of implementation of GMP standards.

Vircell offers nearly 300 references grouped into several product lines (ELISA, Brucellacapt®, IFA, monoclonal antibodies, cell lines, transport medium, rapid tests, PCR controls and oligochromatography tests). All products are intended for the clinical diagnosis of infectious diseases. Vircell also has a raw material catalogue that includes native and recombinant antigens.

Among the strategic objectives, it is worth highlighting Vircell's efforts to increase its penetration in the BRIC countries (Brazil, Russia, India and China), entry into new diagnostic technology platforms and improve its business alliances in countries such as Germany, Japan and the United States.

Vitagenia HealthCare

Julio César García Martín. Consejero y Director Científico jcgarcia@vitagenia.com Parque Científico de Madrid. Santiago Grisolía, 2 - 28760 Tres Cantos - Madrid Phone: 34 91 828 72 32 / 34 662 658 727 http://www.vitagenia.com



Vitagenia Healthcare develops, produces and commercialises health solutions whose goals are pathology risks identification related to our genetic pattern and disease prevention through specific products, based on scientific research, technology and innovation and focused in the health industry: practitioners, pharmacists, pharmaceutical companies, health systems and final consumer.

MARKET FOR A DISRUPTIVE STRATEGY IN HEALTHCARE UNI-VERSE Contribute to health industry transformation promoting prevention as a way of life based on customized diagnostics and innovation to delay or avoid disease, improving human life and helping in the sustainability of health systems, having a clear preventive definition, nutraceuticals sometimes have very specific indications for health disorders and are in fact prescribed by practitioners and sold in pharmacies.

VITAGENIA HEALTHCARE

- We design, develop, produce and commercialise nutraceuticals with high degree of innovation, solid scientific base and proven effect, whose distribution channel is basically depharmacy and promoted through medical prescription
- We make available a range of tools to practitioners and pharmacists to carry out their jobs in the health prevention domain:
- DNA tests for pathology risks identification in connexion with products commercialised in pharmacies
- Nutraceuticals effect monitoring through specific analysis



Vivacell Biotechnology España, S.L.

Dra. M.Luz Bellido Cabello de Alba. Managing Director m.bellido@vivacellspain.com

Parque Científico Tecnológico de Córdoba, Rabanales 21 C/ Astrónoma Cecilia Payne, ID8.1, Edificio Centauro, Primera Planta - 14014 Córdoba - Córdoba Phone: 34 957290666 http://www.vivacellspain.com



Founded in 2003, VivaCell has been positioned as a leader biotechnological spanish company for preclinical development of non-psychotropic cannabinoid compounds with therapeutic use in chronic pathologies such as obesity, neurodegeneration and cancer. The activities of the company are concentrated in the preclinical phase of drug discovery.

From a large collection of plant-derived extracts and a library of natural compounds biologically tested, VivaCell has developed a strong pipeline. Nowadays, it is composed by VCE-

003, which is being developed against multiple sclerosis and it is expected to reach clinical phase in 2015. VCE-004 is being developed as neuroprotector. And finally CDE-001 is a standardized cannabis phytoextract with application in atopic dermatitis. In addition, the company provides specialized in vitro and in vivo models for testing and developing pharmaceutical, nutraceutical and phytopharmaceutical compounds.

Vivia Biotech, S.L.

Andrés Ballesteros. Directot General admin@viviabiotech.com C/ Severo Ochoa 35 Edif Bioanand - 29590 Campanillas - Malaga Phone: 34 952 367 628 http://www.viviabiotech.com

Vivia Biotech pioneers the screening of thousands of drugs directly in patient's blood samples, an innovative Systems Biology research model, really translational, which has allowed implementing for the first time in the world the Exvitech Tecnological Platform, property of Vivia Biotech.

Vivia Biotech is a worldwide pioneer in screening thousands of drugs or combinations in a patient sample through its proprietary ExviTech© technology platform. Vivia has developed and clinically validated a Personalized Medicine Test for Hematological Cancers that identifies the best available



drug combination treatment for each individual patient. The test discriminates between sensible and resistant protocol treatments for each patient, and uses gold standard diagnostic equipment (flow cytometry), adding automation and data mining capabilities.

Smart Reprofiling: by analyzing thousands of drugs on a patient's sample, we identify potentially effective drugs for a disease in the most direct way which, until now, was not possible.

Vivotecnia Research, S.L.

Antonio Vila Coro. Head of Business Development vilacoro@vivotecnia.com
Phone: 34 91 728 07 15 http://www.vivotecnia.com

Vivotecnia performs pre-clinical research on a contract basis. We offer reliable high quality investigation for the cosmetic, pharma and biotech industry.

SERVICES:

We offer solutions to research and development projects. We can perform a wide range of efficacy and toxicity studies. We are certified to work under GLP standards and can work with rodents, non rodents and dogs as required by FDA, EMEA and the rest of agencies around the world.



AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Activity, efficacy and toxicity studies in in vitro and in vivo models.

Managing services for animal facilities and animal models.

Animal facility services and rooms to rent.



VLP Bio

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The strategic goal of VLP BIO is developing innovative vaccines, for the major pharmaceutical markets, based in our propietary platform named Q-VLP (virus like particles).

VLP BIO activity: Design and production of chimerical particles pseudo-viral ""Virus Like Particles"" (VLP) using in the development of new vaccines for animal and human health.

PRODUCTS:

- Vaccines platform Q-VLP ®.
- CIN-Cervical Cancer ®: Therapeutic and prophylactic vaccine against cervical cancer.
- New therapeutics and/or prophylactics vaccines candidates (in development).

Voyer Iberoamérica Executive Search

Luis Truchado. Partner-Director voyer_madrid@eurogalenus.com Avda. Alberto Alcocer, 7 -28036 Madrid - Madrid Phone: 34 91350 55 56 http://www.voyeriberoamerica.es



Voyer Iberoamérica / EuroGalenus is an executive search firm specializing in the Biotechnology field.

Since the founding of EuroGalenus in 1992, we are focused on the Executive Search profession. We expanded horizons

last year on our 20th anniversary by partnering with the Voyer International group, merging our activities as Voyer Iberoamérica and covering both sides of the Atlantic with the same level of service and professionalism.

Ysios Capital Partners SGECR

Julia Salaverria jsalaverria@ysioscapital.com Avda. Diagonal, 600 Entlo 2 - 08021 Barcelona - Barcelona Phone: 34 935173545 http://www.ysioscapital.com

We aim to create value by providing talented entrepreneurs with the resources and tools to achieve success in transforming intellectual capital and scientific knowledge into successful companies.

Ysios Capital is a leading Spanish independent venture capital firm that provides private equity financing to early- and mid-stage human healthcare and life science companies.



We target the entire healthcare and biotechnology industry, with a special focus on pharmaceuticals, diagnostics and medical devices.

Ysios Capital manages Ysios BioFund I, founded in 2008 with 69 €million in size and a portfolio target of 10-12 companies.



Zeltia

Carmen Eibe. Projects Coordination Director ceibe@zeltia.com Plaza Descubridor Diego de Ordás, 3, 5ª planta, - 28003 Madrid - Madrid

Phone: 34 91 4444 500 http://www.zeltia.com

Founded more than 70 years since its origin Zeltia group has been involved in the biopharmaceutical and chemical. Investigated to improve the quality of life for patients, so each year we invest more resources in R + D + i in order to provide innovative treatments.

In the biopharmaceutical sector differ several lines of research: Oncology, molecular diagnostics and genetic identification and RNAi (RNA interference).

In the field of consumer chemical there are several business lines: manufacture and sale of products for home care, manufacturing and sale of paints and protective coatings timber for professional and DIY.



AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Zeltia since its beginnings has collaborated and continues collaborating actively with academics and public centers, with same and large businesses of the sector biopharmaceutical and of the chemical, so much national as international sector

ZURKO RESEARCH SL

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Zurko Research launched a new line of clinical evaluation of cosmetic and pharmaceutical products and ingredients. In this area it is offering personalized services according to current regulations and customer needs.

Our goal is to become the best valued company within our sector. Zurko Research is also a biotech consultant specialized in the design and development of research projects in areas of Biotechnology, Health, Cosmetics, Pharma, Environment, Agriculture, Food and Renewable Energy.

As cosmetic products' Evaluators, our services are addressed at producers of cosmetics and raw materials, to enable them to prove the safety and efficacy of their products. We realize:

- Stability Studies
- Toxicity Studies
- Security Studies
- Efficacy studies
- skin Care
- body Care
- Hair Care



And of course advise and elaborate reports for Safe Cosmetics (European Regulation 1223/2009).

In the area of biotech consulting, Zurko Research offers to its clients a comprehensive and professional advice service in identifying appropriate funding lines for needs directly or indirectly related to the biotechnology solutions required.

Zurko Research offers a range of high value-added services to the biotech industry and related sectors including:

- R & D + i Proposals Review
- Indirect aid to R & D + i
- Training in laboratory techniques and equipment management.

Partners

ase**bio**





















for leadership excellence

















ase**bio**



Agencia de Innovación y Desarrollo de Andalucía IDEA

Elena Gallego Cañabate.Investment Promotion Deputy Director egallego@agenciaidea.es

Torneo 26 - 41002 Sevilla - Sevilla

Phone: 34 955 030 775 http://www.agenciaidea.es

The Agency of Innovation and Development of Andalucia, IDEA, entity under the Regional Ministry of Economy, Innovation, Science and Employment is the Development Agency of the Regional Government of Andalucía. Its mission is to contribute to the economic and social development offering the best services to the companies and Andalusian entrepreneurs as well as foreign investors already operating in the region or planning to set up in Andalucía. The objective of Agency IDEA is to foster business spirit, innovation, cooperation, to reinforce the competitiveness and to attract new investment projects to the region.

The Agency IDEA offers support services to the Andalusian companies and foreign companies already operating in the region:

Main support services:



- Support in accessing finance, funding and incentives to the companies.
- Promotion of technology infrastructure and business sites.
- Advanced support services related to innovation.
- Customized and confidential services to foreign companies already set up in the region and attraction of new investment projects, offering aftercare services to multinational operating in the region as well as softlanding services aiming to speed up the integration of multinational workers in Andalucía

Agencia Estatal. Consejo Superior de Investigaciones Científicas, CSIC

Ángel Caballero Cuesta. Vicepresidente Adjunto de Transferencia del Conocimiento angelc@orgc.csic.es C/ Serrano, 142 - 28006 Madrid - Madrid Phone: 34 91568 15 31 http://www.csic.es

CSIC is the largest public research organisation in Spain and the third largest in Europe. Our 6000 researchers, located in 130 centres and institutes across Spain give us the capacity to cover all knowledge fields and generate annually close to 20% of the national scientific production and 180 patents. Moreover, we are the first Spanish applicant in the ranking of PCT (international) patent applications.



Over and above, our research capacity is the basis for our contribution to the society via dissemination, training and knowledge and technology transfer to both Spanish and foreign companies through individually-tailored collaboration approaches, including more than 60 patent licenses in a yearly basis.

BANCO ESPAÑOL DE ALGAS



Banco Español de Algas

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The Spanish Bank of Algae, is a national R & D + i of the University of Las Palmas de Gran Canaria (ULPGC) linked to its Scientific and Technology Park (FPCT) whose basic objectives isolation , identification, characterization, conservation and supply of microalgae and cyanobacteria.

Besides these features, the BEA is intended as a service to facilitate the development of a new sector based bioindustrial cultivation and application of microalgae and cyanobacteria.

OBJECTIVES: To offer to companies and R & D institutions a vast biodiversity of microalgae and cyanobacteria. Stablish the bases for the development of a new ecosystem-based agro-industrial production of microalgae biomass and bioactive.

MISSION: Isolation, identification, characterization, conservation and supply (to companies and institutions) of microalgae and cyanobacteria. Conservation of microalgae for business purposes and for bio-industrial patents. Training, dissemination and assessment in microalgae biotechnology

SERVICES:

- $\hbox{-} Strain\ identification\ by\ microsco.}$
- Strain identification by DNA analys.
- gDNA "à la carte".
- Strain isolation and purification.
- Patent depository.

- Deposit for maintenance.
- Flow Cytomey.
- International Courss.
- Acceptance of strain donation.

PRODUCTS:

- Strais.
- Main catalo.
- Axenic strain.
- gDNA Strain.
- Sequenced DNA strain.
- g trains easy-to-grow.
- Genomic DN.
- Culture media and seawater

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Anti-neurodegenerative diseases. Anticarcinogenic. Antioxidant / free radical. Arteriosclerosis. Antiallergic. Anticoagulant. Antihepatotoxic Anti-inflammatory. Cardiovascular. Hypoglycemic. Hypolipidemic. Bactericide. Immunostimulant. Anti-viral /-retroviral (herpes, HIV). Anti-osteoporotic. Anti-mycoplasma (veterinary). Cosmetic Dermatology. Natural anti-UV Protectors. Production of recombinant proteins and monoclonal antibodies glycosylated.



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Phone: 34 946 555 155 http://www.biobasque.org



To develop a new business sector related to life sciences, contributing to diversify the current industrial tissue and to maintain competitiveness in an international context.

PRODUCTS:

BioBasque is represented by the BioBasque Agency, a onestop location for biosciences in the Basque Country, and the instrument created to implement the strategy and to co-ordinate the relevant stakeholders.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

BioBasque is interested in establishing contacts with equivalent organisations, and other type of entities, that contribute to support the growth of the biocluster. It is equally interested in contacting companies wishing to establish operations in southern Europe.



Biocat

Adela Farré. Director of Communications and Institutional Relations afarre@biocat.cat

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Biocat is the organization that coordinates and promotes the biotechnology, biomedicine and medical technology sector in the BioRegion of Catalonia. Its mission is to dynamize all the stakeholders in this area public and private organizations represented in its governance bodies to boost the research system, an active transfer of knowledge and business development.



Biocat's main goals are:

- To consolidate the cluster by promoting the mutual knowledge and interactions among the BioRegion's stakeholders.
- To foster companies competitiveness and to stimulate entrepreneurial talent.
- To facilitate and promote the sector's internationalization.
- To inform and contribute to a better understanding and social awareness of biotechnology.

BIOIB (Cluster biotecnológico de las Islas Baleares)

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Phone: 34 871230022 http://www.bioib.org

State translage 1

BIOIB's mission is to promote biotech sector in Balearic Islands and help to create a suitable environment for adding value in Balearic research.

Activity: Identify projects to increase biotech companies competitiveness and generation of public-private initiatives.

Competences and fields intervention: Fostering relationships and synergies between all the stakeholders located in the area and encourage networking with other clusters and agencies. Internationalizations, promotion the participation of Balearic island companies in International fairs and congresses in the sector.

SERVICES:

Research and Knowledge consulting for its members: Organize government subsidies, research grants and other sour-

ces of financing. Organize biotechnological events. Provide an employment and internship database to assist both employers and possible candidates. Offer consulting services on technical, legislative and market aspects. Promote internationalization and the establishment of alliances an R&D collaborations.

Assistance on the creation of SME s biotechnology companies.

Represent the sector s interest in front of Governmental agencies.

Facilitate the transfer and implementation of biotechnology into sectors where it is traditionally used as well as untraditional sectors.

BioMadrid

Juan Sebastián Ruiz. Vicepresident. Paula Andrea Certuche. Project Manager info@biomadrid.org

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Phone: 34 673 574 752 http://www.biomadrid.org



BioMadrid is an association of biotech companies in Madrid.

Our main goal is to encourage the growing and consolidation of biotechnology in Madrid promoting dialogue between different social and economic agents, involved in the development of the sector.

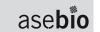
Biomadrid has focused its activities on representing their members off the public administration and communicating specific information relevant for them.

Currently, 50 companies are part of BioMadrid, most of them are SME's. These companies spend much of their resources to carry out R&D in different areas such as biomedicine,

bioinformatics, clinical genetics, biotechnology, food processing, production of recombinant proteins, cancer etc.

BioMadrid has partnerships with public and private entities such as Parque Científico de Madrid, Fundación Madri+d, CDTI and PromoMadrid.

These partnerships allow us to support company internationalization, applications for subsidies and grants acting as a representative between the companies and the public administration as well as supporting the bio-entrepreneur in their first steps, mentoring their start-up in Madrid.



BIOVAL

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BIOVAL was formed at the end of 2006 to increase the opportunities and further develop the biotechnology sector and become a means of growth, both socially and economically, for the Valencian Region.

BIOVAL is composed of more than 50 biotechnology companies located in the Valencian Region, as well as research and technology centers, universities, and hospitals whose R&D are oriented towards biotechnology.

Is the Valencian Community BioRegion. Bioval was created as a private initiative in 2006, since then it has dynamized the Valencian Biotech Sector through its more than 70 companies, universities, research centers and hospitals In 2010 an arrangement was signed with the Generalitat Valenciana to convert Bioval in the interlocutor with the Administration in any matter related with Biotechnology.

In addition to promote collaboration inside and outside the Valencian Community, Bioval makes effort to train Bioentre-

preneurs and professionals with the annual Biotech Superior Course. And it is also powering BioBreakfast aimed to create synergies with international groups, promoting not only research projects but business deals too.

In 2011 Bioval stablished alliances between traditional sectors and Biotech sector in order to bring on innovative proccesses in mature sectors, opening new business opportunities. In other hand, Bioval is working closely with the M.I.T. and Boston area companies to let Valencian companies show into their Biotech network.

Bioval supports Biotech companies in R&D project management, networking, divulgation, international visibility, etc

Everything free standingly done and with a complete business mind, acting as catalyst of the sector.

Centro Nacional de Análisis Genómico (CNAG)

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The Centro Nacional de Análisis Genómico (CNAG) was created in September 2009 with support from the Spanish and the Catalan governments. It is situated within the Parc Cientific de Barcelona (PCB), occupying approximately 1200 square meters and with a headcount of 40 staff. It is directed by Dr Ivo Gut.

CNAG vocation is to carry out large-scale projects in DNA and RNA sequence analysis in collaboration with the Spanish, European and International Research Community. The integrated CNAG infrastructure has one of the largest DNA sequencing capacities in Europe.

CNAG covers a range of capabilities including whole-genome de novo sequencing, whole genome re-sequencing, targeted re-sequencing, profiling of mRNAs or small RNAs, localization of DNA or RNA binding sites (ChIP-Seq) and DNA methylation profiling.

We have currently a park of twelve 2nd generation DNA sequencers that produce more than 500 Gbases of sequencing data per day. The sequencing operation is supported by an extensive informatics infrastructure and multiple connections to the Barcelona Supercomputing Center (BSC).

CNAG participates in large national and international collaborative research projects in genome research and particularly in disease-related genetic studies, such as FP7-projects READNA, ESGI, EVA, GEUVADIS, BLUEPRINT, SYBARIS, AirPROM, RDCONNECT and IBDCHARACTER, and in the International Cancer Genome Consortium (ICGC). Other projects include de novo sequencing of endangered species, diagnostics using exome and target resequencing in several medical conditions, and sequencing plant cultivars for the agriculture community. A significant amount of these projects has been successfully completed in cooperation with industrial partners.



Centro Nacional de Investigaciones Oncológicas, CNIO

José Ignacio Fernández Vera. Director of Support to the Investigation vera@cnio.es

Melchor Fernández Almagro, 3 - 28029 Madrid - Madrid

Phone: 34 91 224 69 00 http://www.cnio.es

Basic and applied research under an integrated approach, fostering the interaction of basic research with of molecular diagnostics programmes and of the discovery of new drugs, all supported by a solid equipment and technical services infrastructure.

SERVICES:

Undertaking research to enable the new, more efficient diagnosis and treatment methods to be obtained for oncological diseases.



The transfer of scientific knowledge into clinical practice, so that scientific progress has an effect on our healthcare system as early as possible, and thus on patient welfare.

The transfer of technology developed in the CNIO to innovating companies.

To set up a new and more effective management system in the European scientific environment.

Centro Tecnológico LEITAT

Joan Parra. General Manager info@leitat.org Passeig 22 de Juliol 218 - 08225 Terrassa - Barcelona Phone: 34 937882300 http://www.leitat.org



LEITAT Technology Centre aims to collaborate with companies through research initiatives, developments and innovation pathways to add value to products, processes and tasks in different economic sectors, including the pharmaceutical, cosmetic, biomedical, cancer, biotechnology, nanotechnology and biomaterials and others.

In addition to the promotion of R+D+i, LEITAT's objectives are the technology transfer and scientific development under sustainability, responsibility, integrity and independence criteria.

- Generation of monoclonal antibodies.
- Drug repositioning
- In vitro and in vivo pharmacological characterization of therapeutical agents.
- Identification and validation of new biomarkers.
- Design and characterization of tools, instruments and devices for diagnosis, prognosis and monitoring.
- Characterization of antimicrobial properties, antifungal and anti dust mite.
- Determination of drug levels in biological fluids.
- Determination of the effectiveness of cosmetic active principles.
- Implementation of ADME studies and biocompatibility
- Design and development of enzymatic and microbial bioprocesses.
- Industrial microbiology: screening and isolation of microbial strains of interest.
- Biofunctionality study with characterization of antimicrobial properties, anti-fungal, anti dust mite and prebiotic characteristics.
- Microencapsulation of different active ingredients with wide applications in many sectors.
- Determination of inorganic nanoparticles and their toxicity profile.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Identification and validation of therapeutical targets. Generation and characterization of new drugs.

Targeting and drug delivery.

Micro and nanoencapsulation of active ingredients.

New biosensors.

Studies of toxicology, ecotoxicology and efficacy of nanoparticles.

Development of in vitro cellular models to predict efficacy, safety and mechanism of action of compounds in development for biotech, pharmaceutical, cosmetic and chemical industries.

Extraction of the active ingredients from microalgae and renewable sources for food, cosmetic and pharmaceutical industries.

Design and application of bioprocesses in industrial environments:

- -Substitution of conventional organic reactions.
- -Biocatalysts.
- -Biotechnological production of food ingredients.
- -Valorisation of by-products.
- -Environmental Biotechnology.
- -Obtention of materials (fibres, biopolymers).
- -Obtaining products or chemicals (antibiotics, vitamins ...).
- -Obtaining energy (Biofuels).

Industrial microbiology:

- -Isolation, selection and characterization of microorganisms with different industrial applications.
- -Microbiological studies.

Biofunctionality studies:

-Screening of new molecules or extracts with different biofunctionality.

Microencapsulation - Development of micro and nanocapsules for applications in different industries: cosmetic, food, textile, detergents...

Synthesis and processing of biopolymers.



CIBER BBN

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Phone: 34 976 51 23 68 http://www.ciber-bbn.es



Mission and Objectives:

To increase research capabilities of the component groups (sharing resources, coordination and promotion of synergies). To enhance greater and better use of advanced technologies in the National Health System.

To improve the technological le

To improve the technological level of national industry in this field.

To favour the emergence of specialists with a high level of training in health technologies.

To increase the presence of Spain in decision-making forums and international research networks in this field

PRODUCTS:

CIBER-BBN Research Infrastructure on Biomedicine: Production of Biomolecules Platform; Production of Biomaterials and Nanoparticles Platform; Tissues, Biomaterials and Surfaces Characterization Platform; Bioimaging Platform; High-performance computing Platform.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

BIOENGINEERING AND BIOMEDICAL IMAGING -Multimodal diagnosis -Intelligent devices BIOMATERIALS AND TISSUE ENGINEERING -Regenerative medicine (Scaffold-based Tissue Engineering; Cell therapy; Cell biophysics) -Endoprostheses and implants NANOMEDICINE -Molecular diagnosis and biosensors. -Therapeutic nanoconjugates and drug delivery systems.

CIBERER

Ingrid Mendes. Scientific Manager imendes@ciberer.es C/ Álvaro de Bazán, 10 - Bajo - 46010 Valencia - Valencia Phone: 34 96 339 47 89 http://www.ciberer.es/

Mission and Objectives

CIBERER's main objective is to become an international reference centre for research on rare diseases, with emphasis on translational research. The scientific knowledge generated by the groups in CIBERER is intended to be applied in clinical practice in the patient's benefit.

SERVICES:

The CIBERER main services are related to:



- Collaborative research projects on rare diseases.
- Research platforms infrastructures.
- Knowledge/Technology transfer.
- Genetic and molecular diagnosis.
- Development of advanced therapies.
- Gene therapy and cell therapy.
- Clinical trials and orphan drugs.
- Training Programmes.
- Research collaborative projects.

FUNDACION ESPAÑOLA PARA LA CIENCIA Y LA TECNOLOGIA

Diego Velasco Escribano diego.velasco@fecyt.es Pedro Teixeira 8, 2ª Planta Edificio Iberia Mart I - 28020 Madrid - Madrid

Phone: 34 91 425 09 09 http://www.fecyt.es

The Spanish Foundation for Science and Technology (FECYT) is a public foundation supported by the Ministry of Economy and Competitiveness. Based on the principles of rationalization, transparency and efficiency, the aims of FECYT are to develop tools for social participation for science, to foster science dissemination and to contribute to improve scientific culture, to function as a communication channel for Spanish scientists abroad and to be a reference for Spanish research and innovation indicators. FECYT also supports scientific information and resource management, especially in the field of licenses to access to international databases of scientific references.

FECYT has a portfolio of biotech patents from public research institutions in order to facilitate technology transfer.

These patents are included in a development program that covers proof of concept, scale-up, preclinical development, and marketing plans of different inventions.



Specifically, FECYT has seven projects to out-license:

- Human Health
- Cysteine protease inhibitors for the treatment of tropical diseases
- Calcineurin Inhibitor Peptides (main indications atherosclerosis & RA)
- Antibiotics against Helicobacter pylori
- New vaccine against malaria
- p38 inhibitors useful against neuropathic pain.
- p300. New target for cancer treatment
- Animal health
- FMD Vaccine

FECYT also has a portfolio of 9 spin-off. These companies have been funded by the Foundation to carry out development plans. FECYT has a call option of 15 to 20 percent of equity, and is looking for investors interested in them.



Fundación GAIKER

Maitane Ipiñazar. Biotechnology Area Market Coordinator mark@gaiker.es

Parque Tecnológico de Bizkaia, Edif.. 202 - 48170 Zamudio - Vizcaya Phone: 34 946 002 323 http://www.gaiker.es

GAİKER

GAIKER is a Technology Centre whose objectives are to carry out research and supply reliable, innovative technological solutions which give value to the company, contributing to its technological development and its competitiveness through the generation, gathering, adaptation and transfer of innovative technologies in a sustainable manner. It also assumes the development of opportunities in emerging economic activities, all within a framework of collaboration with other agents.

- Cell culture
- Proteomics/ Genomics
- Microbiology
- Fluorescence Microscopy
- Surface Plasmon Resonance (SPR)
- Applied Molecular Biology (PCR, RT-PCR, etc.)

In order to carry out In Vitro Toxicology studies in pharmaceutical products, we have the Good Laboratory Practice Certificate (GLP). We are mainly focused on Health, Pharmaceutical, Food, Fine Chemistry and Agriculture, Industrial Chemistry and Services sectors.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Our main fields of work are the following:

- 1.Biodetection systems: BioRecognition molecules immobilization processes on surfaces. BioDetection systems development. Identification and development of target molecules
- 2.Omics: Genomics. Proteomics
- 3.In Vitro Test: Efficacy evaluation. ADME. Toxicity of drugs and nanoparticles

FUNDACIÓN IMDEA ALIMENTACIÓN

contacto.alimentacion@imdea.org Parque Científico de Madrid, Calle Faraday 7 - 28049 Madrid -Madrid

Phone: 34 91 279 69 60 http://www.alimentacion.imdea.org



The objective of IMDEA Food Foundation is to carry out research, technological development and innovation in the field of Nutrition, Food and Health. Its aim is the study of the relationship between genes and nutrients with special emphasis on the study of metabolism and prevention of chronic diseases (mainly cardiovascular disease, obesity and cancer) through food.

Currently the R & D activities of the Institute are organized around three groups of R & D and a horizontal platform that provide service to companies and research groups: The Cantoblanco Platform of Nutritional Genomics and Food (GENYAL).

R&D GROUPS:

- Nutritional genomics of cardiovascular disease and obesity. IP: Prof. Jose Maria Ordovas. The group works on detecting microRNAs modulated by dietary components and the identification of target genes of these microRNAs associated with cardiovascular disease and obesity. It is essential to characterize the molecular mechanism of action of microRNAs and their targets in order to meet its modulation from a preventive and therapeutic point of view. The line also includes the study of the effects of food intake on plasma profile of microRNAs and the effect of these microRNAs on disease risk factors.

- Molecular Oncology and Nutritional Genomics of Cancer. IP: Dr. Ana Ramírez de Molina. The group works on the following research areas: Identification of tumor markers with prognostic or predictive value of response to treatment of patients with food-related tumors. Study of the activity of bioactive compounds as potential nutritional supplements with beneficial effect in the prevention, development, progression and / or treatment of gastric tumors.
- Foodstuffs for specific health use. IP: Prof. Guillermo Reglero Rada. This line studies the effect of the minor components of food on the expression of genes related to chronic diseases. Applied genomics, epigenomics and other omics technologies to study the molecular mechanisms of action and the validation the natural nutrients and bioactive ingredients effects as a reliable way to develop and market products and strategies for the prevention of chronic disease through a more personalized and functional diet.

SERVICES: Genyal platform integrates various activities and advanced scientific support units to the study of food-heal-th relationship offering service to companies and research groups: design and conduct of clinical and nutritional trials, genomic analysis, bioinformatics and biostatistics, design and validation functional foods; nutrigenetic advice; advanced specific training in nutrition, food and health, communication and dissemination.



Fundación Inbiomed

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Phone: 34 943 309 064 http://www.inbiomed.org

Inbiomed

Our research is focused on the biology of ADULT, EMBRYONIC AND INDUCED PLURIPOTENT (iPSCs) STEM CELLS with a strong interest in their application in the fields of CANCER, HEMATOLOGICAL DISEASES and NEURODEGENERATIVE DISEASES, such as PARKINSON's Disease.

We carry on translational research in order to bring our results to the patient's bed as soon as possible.

The Inbiomed Foundation has 4 Core Facilities to aid research, providing vital support to the work done by researchers:

- 1- Cell Reprogramming and Differentiation Platform.
- 2- Cytometry and Advanced Optical Microscopy Platform.
- 3- Viral Vector Platform.
- 4- Animal Model Platform.

These Core Facilities also offer external services to the local and national scientific community, placing the best trained staff at their disposal as well as cutting-edge equipment and technology in regenerative medicine.

Inbiomed's Core Facilities are technical units supported by a centre specialized in Regenerative Medicine and conducted by researchers with rigorous and specific scientific criteria and experience.

Each of these research lines is made up by two independent research groups.

Another important pillar of Inbiomed is Inbiobank, the adult stem cells bank. The main goal of Inbiobank is the isolation and banking of adult stem cells and primary cells with high quality standards obtained from several tissue origins for their use in qualified nacional and international research projects. Traceability of cell production processes is guaranteed through ISO:9001 certification.

Inbiomed Pharma Ltd is the new subsidiary of Inbiomed and the result of the absorption of the preceding Inbiopharma, a pharmaceutical laboratory built up under GMP compliance and focused on the development of biotechnological products; in 2006 Inbiopharma was the second facility approved in Spain for cell therapy manufacturing, and the first laboratory where a cell based chimeric advanced therapy investigational product was produced.

At present Inbiomed Pharma Ltd is a pharmaceutical company for the development of advanced therapies specializing in: Advanced viral vector platform for their clinical use. Ubiquitin-proteasome system: used in the identification of new drugs for cancer-related diseases, neurodegeneration. Cell reprogramming and differentiation: from skin fibroblasts, peripheral blood and umbilical cord blood cells into cardiomyocytes, neurons. Cellular models for drug screening for neurodegenerative diseases and cancer.



Fundación MEDINA (Centro de Excelencia en Investigación de Medicamentos Innovadores en Andalucia)

Olga Genilloud. Scientific Director olga.genilloud@medinaandalucia.es Edificio Desarrollo Farmacéutico. Avda. Conocimiento 3, Health Sciences Technology Park - 18100 Armilla - Granada Phone: 34 958 993 965 http://www.medinaandalucia.es



Fundación MEDINA is a non-profit public-private partnership between Merck Sharp and Dohme de España S.A., the Junta de Andalucía and the University of Granada, to discover innovative compounds and therapies for unmet medical needs.

Research activities at MEDINA are focused on:

I.Discovery of new compounds and therapies as new leads for drug development.

II. Contract Research Services: High throughput screening services for lead discovery, ADME/TOX, bioanalysis and metabolomics.

PRODUCTS:

New leads from microbial natural products in therapeutic areas with unmet medical needs.

- -License of natural product libraries.
- -Drug discovery sreening platform.
- -Highly automated screening services, including High Content Imaging.
- -Safety, adverse drug metabolism (ADME/TOX) and toxicity platform of drug candidates in development:

- -Cardiotoxicity: ion channels assays (hERG, Cav1.2, Nav1.5)
- -Drug metabolism assays(CYP inhibition and induction, drug stability and metabolite profiling)
- -Cytotoxicity
- -Genotoxicity (AMES Test)
- -Turbidimetry and solubility

Off-target interactions(neurotransmisor receptors, PPARs)

- Bioanalysis and metabolomics (High resolution MS)

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Discovery of novel therapeutics from microbial natural products collections in: infectious diseases (including tuberculosis and parasitic diseases), oncology, immunoregulation and rare diseases.

Study of potential cardiovascular and neuronal safety risks, and drug-drug interactions of new leads in early stages of the drug-discovery process.

Metabolomic analysis and identification of metabolism biomarkers.

FUNDACIÓN PARA LA INVESTIGACIÓN BIOMÉDICA DE ANDALUCIA ORIENTAL (FIBAO)

Jose Ramón Fernández jfernandez@fibao.es Doctor Azpitarte 4 4ª Planta - 18012 Granada - Granada Phone: 34 958020245 http://www.fibaosalud.com



Fundación para la Investigación Biosanitaria de Andalucía Oriental (FIBAO) is a non-profit foundation specialized in Bio-Health Research management, its member of the Research Management Foundations Network of the Andalusian Public Health System.

FIBAO offers a platform of services covering the entire value chain of biomedical research, from discovery to application in improving health, with the aspiration of being a facilitator and supporting biomedical research groups as a valorization and transfer vehicle of research results to industry and society.

PRODUCTS/SERVICES:

- Collaborate with our research groups
- Donation and sponsorship
- Industrial property
- Clinical trials and cro
- Economic official advice
- Statistical advice
- Funding opportunities
- Validation products
- National and international projects management
- Creating companies spin off
- Scientific dissemination
- R&D and innovation training



Fundación Parque Científico de Madrid (PCM)

Ana Caro direccion.general@fpcm.es Campus de Cantoblanco . C / Faraday, 7 - 28049 Madrid - Madrid Phone: 34 91 4116 99 40 http://www.fpcm.es



Mission and Objectives: To foster scientific research

SERVICES:

- -Business Development: Support for entrepreneurs, Business Creation, Business Incubator, Bioincubator, Access to financing, scientific and university environment.
- -Scientific Services: Genomics, Proteomics, Micro-analysis of materials, Bio-IT, Industrial Biotransformation.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

The creation of companies with a technological base.

Science services to biotech companies.

Large scientific facilities.

Technical assistance for the creation and management of science and technology parks.

Fundación Parque Científico Tecnológico Agroalimentario Aula Dei (Fundación PCTAD)

Susana Martínez Hernández. Fundación Aula Dei Director smartinez@pctad.com Avenida Montaña, 930 - 50059 Zaragoza - Zaragoza Phone: 34 976 716 976 http://www.pctad.com



Mission and Objectives:

To connect de research centres and the companies.

To support and encourage the companies within the agricultural and environmental sector to look for scientific and technological solutions.

To transfer the results of the research centres linked to the Park to the production fabric.

To spread the researcher's work to enhance its visibility.

To arrange and promote the existing technology offer.

To detect and give solution to the new technologies needs

To encourage the creation and consolidation of innovative companies within the sector."

PRODUCTS:

- Management of R + D + i contracts between companies and research centres.
- Advice regarding R & D projects.
- Business incubator.
- Innovation and Creation of new technology based firms Programme. Spin off Programme.
- Cooperation networks for knowledge and technology transference.

- Transferring and putting the technology on the market.
- Regional, National and International Financing of R + D + i projects.
- Training: specialised postgraduate and advanced courses for professionals.

MOLECULAR BIOLOGY SERVICES:

- Genetic Plant Improvement
- Genetic fingerprinting of individuals, varieties and species.
- Varietal Identification and filogenetic relationships
- Analysis of genetic diversity in natural and improved populations
- Identification of genes associated with agronomic traits of interest (disease resistance, increased production, improved organoleptic and nutritional properties ...))

FOOD SAFETY SERVICE:

- Analysis and detection of food residues

SERVICE OF QUALITY AND TECHNOLOGY OF VEGETABLE FOOD:

Solutions for the industry to improve product quality and optimize production processes

Control, measurement and analysis of quality parameters of fruits and vegetables"



Fundación Parque Tecnológico de Ciencias de la Salud de Granada (PTS)

Jesús Quero Molina. Manager jquero@ptsgranada.com C / Recogidas, nº 24. Portal B, Esc. A - 1ºB - 18002 Granada - Granada Phone: 34 958 53 50 50 http://www.ptsgranada.com



Mission and Objectives:

The promotion of interdisciplinary research in biomedicine at an international level.

The protection and transfer of knowledge.

The consolidation of health sciences business framework based on technology and aimed at clinical practice.

Being a centre of excellence for healthcare.

SERVICES:

RESEARCH SERVICES

- Library
- Cell Culture
- DNA Sequencing
- Genomics and Proteomics

- Oligonucleotide Synthesis

SERVICES OF TECHNOLOGICAL INNOVATION

- -Funding of the I+D+i
- -Transfer of Technology
- -Industrial Property
- -Technological Alertness
- -Strategic R&D Management

MANAGERIAL SERVICES

- -Services of EIBTs's creation
- -Services of incubation
- -Services of managerial development

AREAS OF INTEREST FOR FUTURE COLLABORATIONS: Biotechnology and Human Health

FUNDACIÓN PÚBLICA ANDALUZA PARA LA INVESTIGACIÓN DE MÁLAGA EN BIOMEDICINA Y SALUD

Itziar Ochotorena Zubizarreta fimabis@fimabis.org Avda. Jorge Luis Borges nº15 Blq.2 Pl.3 - 29010 Málaga - Málaga Phone: 34 951440260 http://www.fimabis.org

FIMABIS, (Andalusian Public Foundation for Health and Biomedicine Research in Malaga) is a non-profit foundation devoted to the integral management and promotion of Research & Development and Innovation (R&D&I) for institutions, organizations and professional members of the Andalusian Public Health System (SSPA as per its Spanish acronyms) in Malaga, by means of an agreement entered by and between SSPA and FIMABIS.

FIMABIS as a whole, and in coordination with the Network of Research Management Foundations belonging to the SSPA (RFGI-SSPA), offers a service and information network providing support and legal entity to the research community developing scientific projects in Andalusia.



The Service Portfolio supporting the R&D&I offered by the RFGI-SSPA to the researches includes the following services: Advice on fundraising, management of the funds granted, management of clinical trials and observational studies, management and advice on international projects, methodological support and statistical analysis, management and advice on the results protection and transfer, research promotion and events coordination and well as legal advice.

FUNDACIÓN PÚBLICA ANDALUZA PROGRESO Y SALUD

Javier Montero Plata. Director of the Technology Transfer Office fundacion.progreso.salud@juntadeandalucia.es
Avda. Américo Vespucio, 5, bloque 2, 2ª planta - 41092 Sevilla - Sevilla
Phone: 34 955040450 http://fundacionprogresoysalud.junta-andalucia.es/



The Andalusian Public Foundation Progress (FPS) and Health is an organization which belongs to the Andalusian Regional Ministry of Health and Social Wellness. It is the central entity which provides services to the Andalusian Public Health System (SSPA) through three areas of activity: support and manage of research; ICT development; and training and professional competence evaluation.

FPS is in duty of technology transfer of the SSPA that is managed by Technology Transfer Office (OTT-SSPA) that is organized as a network structure that collaborates with the Network of Research Management Foundations (RFGI) which operates at a local level.

The OTT-SSPA offers specific services to:

- -SSPA research community: R&D results protection, intellectual property rights management, technology transfer, establishment of business alliances and spin-offs creation.
- -Healthcare, pharmaceutical and biotechnology industries: research groups identification, technology offers, reverse technology transfer, public-private financing and business attraction.

FUNDACIÓN VASCA DE INNOVACIÓN E INVESTIGACIÓN SANITARIAS

Lorea Mendoza Arteche. Chief of the Demostration Unit of Innovative Technologies in Health Care Imendoza@bioef.org
Plaza Asua, 1 - 48150 Sondika - Bizkaia
Phone: 34 94 4538500 http://www.bioef.org



The Basque Foundation for Health Innovation and Research (BIOEF, from the Basque Berrikuntza + Ikerketa + Osasuna Eusko Fundazioa), set up by the Department of Health of the Government of the Basque Country, is an instrument to support the health authorities of the Basque Country. Its mission is to promote innovation and research in the Basque Health Service, Osakidetza, to achieve continuous development and improvement in the capacity of the service to care for the health of the people in the region. In particular, to enable it to fulfil its mission, the Foundation seeks to provide a framework for collaboration, cooperation and communication between the sectors involved in health research, development and innovation at regional, national and international levels.

The work of the Foundation is carried out through two institutes:

The Institute of Health Research (O+Iker) is responsible for the activities of the Foundation that are most directly related to biomedical research and The Institute of Health Innovation (O+Berri) focused on the continuous innovation in the health service, both of organisational systems and of management instruments.

Within BIOEF, there are different specialized management units that actively collaborate with industry:

- Basque Research BioBank (O+Ehun): responsible for collecting, storing and distributing biological samples for biomedical research.
- Demonstration Unit of Innovative Technologies in Health Care (DEMOTEK): that provides research services focused on the design and execution of evaluation trials, to assess the effectiveness and economic impact of healthcare related-products.
- Office of Clinical Trials Management (O + SAIK).
- Integrated Services Unit of Technology Transfer (USITEC): that manages intellectual and industrial property rights and coordinates the collaboration with other entities for the co-development of new products.

GENMIC: Grupo de Investigación de Genética y Microbiología



GENMIC: Grupo de Investigación de Genética y Microbiología

Lucía Ramírez. Professor of Genetics and Plant Breeding lramirez@unavarra.es

Grupo de Investigación de Genética y Microbiología Departamento de Producción Agraria Edificio "Los Olivos" Universidad Pública de Navarra -31006 Pamplona -Navarra

Phone: 34 948169107 http://www.unavarra.es/genmic

The primary goal of GENMIC is to train Master and PhD students in the fields of Biotechnology and Public Health through the development of research projects in genetics and microbiology based on the application of genomic and transcriptomic technologies applied to the fields of agriculture, industry and health. This training is carried out in the frame of large research projects funded by the National Research Plan and by international genome and transcriptome sequencing projects. This training objective is expanded to other interested people through ad hoc courses and the development of joint research projects.

Products / Services:

- Training courses in genetics, microbiology, omics techniques and genetic breeding for professionals in agriculture, industry or health.



- Development of projects using genetic and genomic techniques for companies with an agricultural, industrial or healthcare biotechnology base.
- Production of new agricultural varieties.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Genetics and genomics applied to the improvement of industrial processes and plant breeding.

Genomics and transcriptomics applied to the identification of genetic conditions in human health.

Sequencing of genomes, metagenomes, and transcriptomes in the fields of agriculture, industry or health.

Gobierno de La Rioja. Dirección General para la Innovación

Julio Antonio Herreros Martín. Director General para la Innovación dg.innovacion@larioja.org

Centro Tecnológico de La Rioja. Avda. de Zaragoza, nº 21 - 26071 Logroño - La Rioja

Phone: 34 941 291 684 http://www.larioja.org

R+D and Innovation Policies Design Communication of the relevance of the R+D and Innovation issues Regional coordination of those activities Push up of the technology transfer Facilitate the growing up of new innovative companies Enlarge the research activity in La Rioja Be in the European R+D and Innovation Network Focus the local companies to the new technologies to improve their competitiveness

SERVICES:

- New Third R+D and Innovation Regional Plan 2.008-2.011
- New Regional Law for R+D and Innovation
- Technology Surveillance and Prospective
- Support our companies to participate in R+D and Innovation projects



- Develop activities to transfer the biotechnological solutions to traditional companies
- Helping companies to reach funds for biotechnological projects
- Coordination of the Technologies Centres in La Rioja
- Communicate to a public of all ages the relevance of the biotechnology

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

All related to the above mentioned objectives.



Grupo de Investigación BioFarma de la Universidad de Santiago de Compostela

Mabel Loza mabel.loza@usc.es

CIMUS Research Center. Av. de Barcelona s/n - 15782 Santiago de Compostela - A Coruña

Phone: 34 881815460 http://www.usc.es/biofarma



BioFarma /USEF is a USC research group dedicated to drug discovery via a drug screening platform and chemical and biological tools.

The group collaborates with important pharmaceutical and biotechnology companies and with international research groups, providing experience and support at the initial stages of drug discovery research.

BioFarma /USEF provides services to the following:

1) Public groups, by tailor-made design of experiments and automatization/ miniatuarization of techniques in order to benefit from new hits proceeding from structurally diverse chemical groups.

2) Private biotechnology and pharmaceutical companies, by the fine-tuning and execution of connected programmes or connectable links for selecting drug candidates.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Early drug discovery via the following:

- 1) Discovery of biomarkers and drugs, by combining scientific knowledge and translational expertise.
- 2) Creation of strategic alliances with pharmaceutical and biotechnology companies for the combined development of products for the diagnosis and treatment of diseases.

Institut de Recerca Biomèdica de Lleida (IRBLleida)

Elias Daura Oller. Managing Director edaura@irblleida.cat BIOMEDICINA I, Av. Alcalde Rovira Roure - 25198 Lleida - Lleida Phone: 34 973 70 22 23 http://www.irblleida.cat



IRBLleida aims to promote, develop, transfer, manage and disseminate biomedical research and research training in the field of life sciences and health

IRBLleida is a research institute devoted to create advances in biomedical research as to improve the health of the population by translating these results into health care system new practices.

Investigators from two independent institutions, the University of Lleida and the Health Catalan Institute of Lleida, develop synergy projects in a uniquely collaborative environment that fosters innovative multidisciplinary research, from basics to clinics.

The institute offers its scientific stock of knowledge, technological facilities and management expertise to those pharmaceutical companies, biotechnology companies, agrifood companies and other research centers aiming to perform research in common areas of interest. Specifically, we design and develop:

- 1. Coordinated projects in basic, clinical and translational areas.
- 2. Preclinical trials in cellular models and/or animal models of various diseases, for the validation of effects, toxicity testing or detection of new applications.
- 3. Clinical and epidemiological trials (oncology, renal disease, endocrinology, neurodegenerative diseases, nutrition)

We also have highly specialized technical services as the Biobank facility, Cytometry and Microscopy, Immunohistochemistry and Molecular Pathology, Metabolomics and Biostatistics.

Specifically, the areas of interest to develop cooperative research projects include Oncology, Renal Disease, Pharmacology, Sleep Apnea, Respiratory Infections, Pleural Diseases, Neuroscience and Rare Diseases, Endocrinology, Aging, Mental Disorders, Nutrition and Surgery experimental, among others.



Instituto de Investigación Biomédica (IRB Barcelona)

Dr. Cristina Horcajada, Head of Innovation innovation@irbbarcelona.org
C/Baldiri Reixac 10 - Barcelona 08028 - Barcelona http://www.irbbarcelona.org

IRB Barcelona is an independent, non-profit research institution engaged in basic and applied biomedical science that aims to improve quality of life by applying advances in this field.

We have 5 different research programmes:

Cell and Developmental Biology. Includes gene expression, developmental molecular biology, cell biology, functional genomics and proteomics of cell and embryo development and tissue regeneration.

Structural and Computational Biology. Includes the structural analysis of macromolecules and their interactions usign a variety of techniques: X-ray, NMR, electron microscopy, macromolecular biophysics, bioinformatics and molecular modelling.



Molecular Medicine. Includes the molecular bases of metabolic and genetic diseases, the study of diagnostic or therapeutic targets and the functional genomics and proteomics of pathologies and translational research.

Chemistry and Molecular Pharmacology. Includes the design and synthesis of small molecules and macromolecules, with special emphasis on two aspects of combinatorial chemistry: the building of libraries and optimisation of the production of synthetic compounds, and biotechnologies for molecular selection directed at therapeutic targets and the establishment of the relationship between drugs and their targets.

Oncology. Includes the study of diverse aspects of tumour initiation and progression, the relationship between stem cells and cancer, and the identification of the programmes that drive tissue-specific metastasis.

INSTITUTO DE INVESTIGACIÓN SANI-TARIA FUNDACIÓN JIMÉNEZ DÍAZ

Verónica García Martínez veronica.garcia@fjd.es Avda. Reyes Católicos, 2, Entreplanta - 8040 Madrid - Madrid Phone: 34 915504904 / 34 670772332 /http://www.iis-fjd.es

The Fundación Jiménez Díaz Institute for Medical Research (IIS-FJD) is an institution with a well-established record of commitment to research and teaching in addition to its clinical, care-related activity.

These three pillars guide the work carried out in the IIS-FJD, whose goal it is to foster excellence in research, scientific and technological understanding, teaching, and training in the hospital. Such a purpose is behind the strategy that seeks to bring advancement and research to clinical practice in the most efficient way possible.

Generation and fostering a culture of innovation and support for the development of innovation projects in the health sector.



Promoting partnerships on projects in R+D+i, with agents of the scientific-technological environment, universities at a national and international level.

Transfer of products or services to market for the benefit of society, particularly in the field of biomarkers, development of diagnostic kits, therapeutic procedures, therapeutic target identification and validation of new drug candidates.



Instituto de Salud Carlos III

Julia Medrano Chivite. Area Chief otri@isciii.es Monforte de Lemos,5 - 28029 Madrid -Madrid Phone: 34 91 822 2125 http://www.isciii.es



A public research body, whose mission is to foster, develop and render technical scientific services in the field of human health care.

SERVICES:

- Research into the different aspects relating to the application of genetic knowledge in diagnosis, therapy, the development of new drugs and epidemiology.
- The development of innovation in telematics, bio-IT, genomics and proteomics and other new technologies applied to health care.
- The conservation of international standards and the prepa-

ration and conservation of national standards.

- Awarding aid and subsidies for biomedical research.
- Drawing up reports about healthcare technologies and services aimed at consolidating decision-making at the different levels of the National Healthcare System.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Molecular Diagnosis.
Telematics and Bio-IT.
Proteomics and genomics.
Healthcare technologies



Instituto Maimónides de Investigación Biomédica de Córdoba (IMIBIC)

Carlos González Navarro. Business Development Manager innovacion@imibic.org

Avda. Menéndez Pidal s/n. Hospital Reina Sofía, Edificio de Consultas Externas, Nivel -1 -14004 Córdoba - Córdoba Phone: 34 957 736 484 http://www.imibic.org

IMIBIC is a Health Research Institute created April 24, 2008.

Its management body is the Foundation for Biomedical Research of Cordoba (FIBICO).

IMIBIC intends to be a reference Research Centre in Andalusia and the State level within the Institutes of Health recognised by the Health Carlos III.

Its Mission To develop and promote a multidisciplinary scientific forum in which to develop biomedical research projects that integrate core groups with others whose goals transcend towards translational research.

IMIBIC research focuses on five scientific programs around which different researchers collaborate to generate knowle-

dge that can be used to improve clinical practice and therefore the health of the population. These programs are:

- Cardiovascular disease.
- Obesity and metabolic syndrome.
- Oncology and onco-hematology.
- Chronic inflammatory diseases and infectious diseases.
- Senescence
- Liver and digestive diseases
- Renal and nephrourological diseases

Given the multidisciplinary nature of IMIBIC, areas of interest for future collaborations focus, generally in the health field, having a greater focus on those of: Nutrition, Metabolic Syndrome and Obesity, Inflammation and Oncology.

NEIKER - Instituto Vasco de Investigación y Desarrollo Agrario

Dra. Sonia Castañón de la Torre. Biotechnology Department Head info@neiker.net

Parque Tecnológico de Bizkaia. Parcela 812. C / Berreaga. - 48160 Derio - Bizkaia Phone: 34 94 4034300 http://www.neiker.net



SERVICES:

Activity is focused on R&D, laboratory analysis, technical advice for the Agricultural, Food and Environmental sectors, technical support under emergency alerts, new technology



transfer to emerging companies and development of new technology-based companies.

Main working fields: genomics, in-vitro cultures, identification and production of biomolecules, food biosecurity, application of biotechnology to animal health and environment.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Industrial applications for new biomolecules. New applications of genomics and in-vitro cultures. New drug development for the Animal Health sector. Diagnosis in Food biosecurity. Systems of environmental evaluation.



Parc Científic de Barcelona (PCB)

Salvador Maluquer administracio@pcb.ub.es Baldiri Reixac 4-8 - 08028 Barcelona - Barcelona Phone: 34 93 403 44 75 http://www.pcb.ub.es



Mission and abjectives:

To potentiate quality Research with the support of a wide range of technologies

To revitalize the relation between university and business To promote the creation of new companies and institutions To further the science-society dialogue and encourage careers in science

SERVICES:

Technological facilities by Technology Platforms and Scientific Services of the PCB and UB

- -Independent access to equipment.
- -Consultancy/ assessment service
- -Co-Development of specific techniques.
- -Sub-contracting of services.
- -Custom-designed research services
- -Partnership in research projects.

Innovation

- -Consultancy/ assessment service
- -TTO
- -Business Creation Center
- -Patent Center
- -Valorization and Licenses (AVCRI)

General services

-Reception, Meeting rooms, Auditorium, Cafeteria / Res¬taurant, Congresses and Meetings Unit, Research Pro¬jects Management Unit, science promotion, networking, etc..

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Medicinal chemistry, nanotechnology, structure-based drug discovery, ecotoxicology, proteomics, transcriptomics, animal models of disease.

Red de Entidades de Investigación Clínica Hospitalaria y Biosanitaria (REGIC)

Gloria Palomar / Elena Aristoy. Presidenta / Administración administracion@regic.org Avenida Campanar, nº 21 Escuela de Enfermería, 6ª planta despacho 619 – 46009 Valencia - Valencia Phone: 34 961973453 http://www.regic.org

To create a collaborative environment between the partners for the promotion and development of valorization management activities and knowledge transfer to the productive sector. Moreover, to provide a forum for coordination, information exchange and integration of policies and interests of the partner entities, developing common strategies and seeking for solutions to the main challenges of the biomedical and hospital sector in relation to the transfer of knowledge.

REGIC is aimed at helping its partners to stimulate research; enhance knowledge of the research and innovation of our partners, promoting the collaboration with enterprises for the transfer of research results, clinical validation of new technologies, etc. In addition, REGIC has among its purposes to collaborate in the creation of policies and good practices for research and innovation.

Sociedad Española De Bioquimica y Biologia Molecular (SEBBM)

Isabel Perdiguero. Technical Secretariat sebbm@sebbm.es Vitruvio, 8 - 2º - 28006 Madrid - Madrid Phone: 34 91 561 33 81 http://www.sebbm.es



SERVICES:

- Technology development and transfer in biochemistry and molecular biology and biotechnology.
- R&D Research in Biochemistry and molecular biology and biotechnology



- R&D training in Biochemistry and molecular biology and biotechnology
- R&D services in Biochemistry and molecular biology and biotechnology

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

To promote transfer of results and technology between members of the Society and partners of ASEBIO.

To co-organize courses, workshops of interest in Biotechnology.

To participate in Congresses and Meetings in Biotechnology.

SOCIEDAD ESPAÑOLA DE NEUROCIENCIA (SENC)

Juan Lerma. President secretaria.tecnica@senc.es C/ Londres 17 - 28028. Madrid - Madrid Phone: 34 913612600 http://www.senc.es



SENC is a non-profit organization founded in 1985 having as main objectives:

Promote the development of knowledge in the area of neuroscience, bringing together scientists from different disciplines, and facilitate the integration of research directed at all levels of organization of the nervous system.

Promote education in the field of neuroscience.

Promote the relationship with national and international peer organizations and societies.

Inform the public on the results and implications of the ongoing research in the areas of neuroscience.

SENC is a scientific society whose objectives are as above. In order to promote neuroscience research and encourage the transfer of knowledge to the society, the SENC organizes a biennial Congress and monographic conferences (e.g. Cajal Winter Conference), as well as training and outreach activities (global week of brain Spain, etc).

TechBA Madrid

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TechBA (Technology Business Accelerator) created in 2005 by the Ministry of the Economy of Mexico and the United States-Mexico Foundation for Science (FUMEC), has the purpose to support top-tier Mexican companies in bringing their innovative technology, products and services into global markets.

The TechBA Program promotes a series of actions to improve business development in key technological sectors. Our objective is to help individuals and companies identify opportunities at the intersection of technology and markets, allowing them to increase their value capture. Our support extends to the development of a management team $\boldsymbol{\mathcal{B}}$ international business plans, risk management, funding, lead customer acquisition and partner development with a global approach.

The TechBA acceleration process facilitates access to market, financial and managerial skills and technological resources of highly entrepreneurial ecosystems. Participant companies are carefully chosen through a rigorous evaluation process. As a result of this process, the companies rapidly increase their value and become players in the international technology business market.

TechBA Madrid is a business accelerator specialized in sectors such as: ICTs, Mobile Technologies, Biotechnology, Advanced Manufacturing & Aerospace; supporting top tier Mexican innovative SMEs to develop global market opportunities from the heart of Europe.

Universidad CEU San Pablo

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The San Pablo CEU University, a nonprofit educational institution, has nearly 80 years devoted to human, academic and professional training of students. Since then, the University always has been committed resolutely to research, one of the main axes of their project of excellence, with 11€ million invested in 101 active projects in 2012. In this year, CEU San Pablo University began to offer the biotechnology degree, double degree in Pharmacy + Biotechnology and their bilingual version in joint program with The Chicago University (USA).

The San Pablo CEU University, through the Schools of Pharmacy and Medicine, has over 80 teaching and research laboratories equipped with the best instruments. It also has two research centers, the Center for Metabolomics and Bioanalysis and Institute of Applied Molecular Medicine (IMMA), and other research facilities (X-Ray diffraction, Mass Spectrometry, Nuclear Magnetic Resonance, etc.).



The School of Pharmacy imparts the degrees of Pharmacy, Biotechnology, Human Nutrition and Dietetics and Optics. The degree in Pharmacy and the simultaneous degree in Pharmacy + Biotechnology can be taken in English with the International Program Clinical Trials Management conducted by The University of Chicago.

In addition, the School of Pharmacy has obtained the AENOR and IQNET quality seals, thanks to its system of quality management in accordance with the UNE-EN ISO 9001-2008, to the activities of theoretical and practical training in the Practicum in pharmaceutical office during the 5th year of the pharmacy degree.

From the course 2013-2014, the Institute of Technology of CEU San Pablo University will offer the new degree in Biomedical Engineering.



Universidad de Navarra

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Higher education, basic and applied research and specialised medical attention.



Universidad Europea de Madrid

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Providing students with an excellent university education in order to acquire both academic knowledge and practical skills which will allow them a rapid incorporation into the professional world.

Promoting an international perspective by encouraging students to study at Universities abroad and facilitating internships in foreign companies.

SERVICES:

- A university education that includes Bachelor s and Graduate Degrees in a broad range of programs.
- Bachelor s Degrees and Double Degrees are offered in Pharmacy and Biotechnology, in Health and Biomedical sciences area. Their cutting-edge practical approach prepa-

res students to work both in research and management of biotechnology companies.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Internships required for students in their final year of studies in Biotechnology companies.

Undergraduate and Graduate training in Biotechnology: courses, seminars, etc.

Collaboration agreements with private companies to develop research projects at UEM Laboratories.

Universidad Francisco de Vitoria

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The School of Biosciences at Francisco de Vitoria University aims to train professionals of the biotechnology and health sciences areas with excellent capabilities that will enable them to be the new generation of men and women who respond to the challenges posed by today's society.

Our goal is to form innovative, critical, creative and demanding people, professionals who understand their science as a service to the society with the objective to improve the quality of life. The training programs provide a solid theoretical, practical, technological and humanistic formation, which allow the appropriate personal and professional skill development.

The Faculty of Biosciences at Francisco de Vitoria University currently offer seven Official Degree qualifications:

- Biotechnology + Course of Expert in Biotechnology Research Methodology.

- Pharmacy + Course of Expert in Biotechnology Applications and Management of Pharmaceutical Companies.
- Pharmacy + Biotechnology
- Medicine
- Nursing
- Physiotherapy
- Psychology

Two Master Degree programs are offered in collaboration with other higher education institutions.

Several research projects in the areas of Biotechnology, Biomedicine, Medicine and Bioethics, are developed at the Francisco de Vitoria Biosciences Research Institute associated to the Faculty.



Universidad Pablo de Olavide

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Mission and Objectives:

To achieve such a research dimension that constitutes an outstanding reference at the international level.

To promote both technology transfer and wealth development.

To support innovation.

To promote social development.

SERVICES:

Education and Training. Research. Advice on business administration and management.

AREAS OF INTEREST FOR FUTURE COLLABORATIONS:

Collaboration with university research teams. Collaboration agreement for professional training of students and graduates of the university. Location of entrepreneurial firms in the UPO campus.

Veterindustria

Santiago de Andrés. Director General veterindustria@veterindustria.com San Agustín, 15-1º Derecha - 28014 Madrid - Madrid Phone: 34 91 369 21 34 http://www.veterindustria.com

Mission and Objectives:

To defend the collective interests of the associated companies that manufacture and/ or commercialise the following products and services in Spain: Veterinary medicines, animal healthcare and nutritional products and additives for animal nutrition, through its different co-ordination, advisory and communication services, to thus promote all the aspects of the Animal Healthcare and Nutrition Industry, benefiting both the sector and society in general. To promote research, technology development and innovation in the field of animal health through the creation of the Spanish Technology Platform for Animal Health, Vet+i.



