

## **Empresas participantes en el Foro de Medicina Regenerativa (23/11/2011)**

3P BIOPHARMACEUTICALS <http://www.3pbio.com/>  
ALPHASIP <http://www.alphasip.es/>  
ASEBIO <http://www.asebio.com>  
BIOMOL INFORMATICS <http://www.biomol-informatics.com/>  
BIOPRAXIS <http://www.grupo-praxis.com>  
BIOROI-Consulting <http://www.bioroi.com/>  
BBRAUN <http://www.braun.es/>  
BRUKER ESPAÑOLA [www.bruker.es](http://www.bruker.es)  
BTI <http://bti-biotechnologyinstitute.com/es/>  
CIRUJÍA DE MÍNIMA INVASIÓN <http://www.ccmijesususon.com/>  
CITOSPIN [http://www.citospin.com/index\\_sp.html](http://www.citospin.com/index_sp.html)  
DIGNA BIOTECH <http://www.dignabiotech.com/>  
FARMAINDUSTRIA <http://www.farmaindustria.es>  
FENIN <http://www.fenin.es>  
FERRER <http://www.ferrergrupo.com>  
FORMAS ASESORES  
FUNDACIÓN INBIOMED <http://www.inbiomed.org>  
GENOMA ESPAÑA <http://www.gen-es.org>  
GRADOCCELL <http://www.gradocell.com/>  
HERAEUS <http://www.heraeus.es/>  
HISTOCELL <http://www.histocell.com/>  
HOSPITAL UNIVERSITARIO DE SALAMANCA <http://www.saludcastillayleon.es/CASalamanca/es>  
IATA <http://www.juntadeandalucia.es/terapiasavanzadas>  
INSTITUTO DE BIOINGENIERIA DE CATALUÑA <http://www.ibecbarcelona.eu/>  
INSTITUTO DE INVESTIGACIÓN SANITARIA LA FE <http://www.iislafe.es/>  
KCI MEDICAL SPAIN <http://www.kci-medical.es/ES-SPA/home>  
LABORATORIOS LACER <http://www.lacer.es/>  
LABORATORIOS ROVI <http://www.rovi.es/>  
MERCK <http://www.merck.es/>  
MICINN (actualmente Ministerio de Economía y Competitividad) <http://www.idi.mineco.gob.es/>  
MILTENYI BIOTEC ESPAÑA <http://www.miltenyibiotec.com/>  
TIGENIX <http://www.tigenix.com/>  
VIDACORD <http://www.vidacord.es/>  
UCB <http://www.ucbpharma.es/home>

## **Profile of the ISC III-ABCD groups**

The Department of Cell Biology and Development (ABCD) is currently composed by 14 groups (research units) and is expected in the coming months to incorporate other three groups. Except three groups, the rest are newly established (since 2007). The ABCD research units are involved in biomedical problems on two large groups about multifactorial diseases: neurodegenerative diseases and cancer. The experimental approaches of each of the units cover a wide spectrum of views that gives the ABCD a multidisciplinary character.

### **Javier García Castro**

Cellular Biotechnology Unit

[http://www.isciii.es/htdocs/centros/microbiologia/biotecnologia\\_celular.jsp](http://www.isciii.es/htdocs/centros/microbiologia/biotecnologia_celular.jsp)

Aspects related with basic biology and applications of mesenchymal stem cells. Implicated in several clinical trials, one of which is based in the use of autologous MSC as cellular anti-tumoral vehicles. Cancer stem cell for sarcomas. Mechanisms of MSC mobilization to peripheral blood. Tissue engineering for skeletal regeneration. MSC as anti-inflammatory agents.

### **Helena Mira Aparicio**

Molecular Neurobiology Unit

[http://www.isciii.es/htdocs/centros/microbiologia/neurobiologia\\_molecular.jsp](http://www.isciii.es/htdocs/centros/microbiologia/neurobiologia_molecular.jsp)

Description of the behavior of neural stem cells and their relationship with his cellular and molecular niche. Cancer stem cells derivatives of human glial tumors. Molecular level the post-transcriptional regulation for miRNAs of the genes expression necessary for the maintenance of the stemness of NSC. Mice models.

### **Isabel Liste Noya**

Neural Regeneration Unit

[http://www.isciii.es/htdocs/centros/microbiologia/regeneracion\\_neural.jsp](http://www.isciii.es/htdocs/centros/microbiologia/regeneracion_neural.jsp)

Biology of neural stem cells, mainly derived from embryonic stem (ES) and induced pluripotent (iPS), as well as those obtained in the developing brain (both murine and human). Propagation and neural differentiation / different neural stem cell populations, mainly applied to the generation of dopaminergic neurons for studies of cell re-placement in Parkinson's disease.

### **Javier Alonso García de la Rosa**

Pediatric Solid Tumors Unit

[http://www.isciii.es/htdocs/centros/microbiologia/tumores\\_solidos.jsp](http://www.isciii.es/htdocs/centros/microbiologia/tumores_solidos.jsp)

Childhood sarcomas, especially Ewing's sarcoma. Molecular diagnosis and treatment of retinoblastoma tumors.

**Pilar Sánchez Gómez**

Neurooncology Unit

[http://www.isciii.es/htdocs/centros/microbiologia/neuro\\_oncologia.jsp](http://www.isciii.es/htdocs/centros/microbiologia/neuro_oncologia.jsp)

Molecules involved in the behavior regulation of the neural stem cells in their niches. Generation and/or maintenance of the cerebral human tumors. Cancer stem cells. Animal models.

## **Profiles of the CIBERER groups working in Regenerative Medicine**

[http://www.ciberer.es/index.php?option=com\\_wrapper&Itemid=87](http://www.ciberer.es/index.php?option=com_wrapper&Itemid=87)

### **Dr. Marcela del Río**

Unidad de Medicina Regenerativa (CIEMAT) y Departamento de Bioingeniería (UC3M), Madrid.

This team leads research in the field of rare skin diseases on both basic and translational aspects oriented to the clinics. One of the fundamental goals of this unit is to understand the pathogenic mechanisms of these diseases as a key link in developing innovative and effective therapeutic strategies. One such example is an skin substitute designed and developed by this unit using Bioengineering tissue techniques with human adult Stem Cells.

### **Isabel Varela-Nieto**

CSIC

Inner ear biology and development; Animal models for the study of human hearing loss; Inner ear microsurgery; In vivo Neurophysiology of hearing; Novel therapeutic interventions for the protection, repair, rejuvenation and regeneration of sensory cells.

### **Cristina Fillat**

IDIBAPS, CRG, Barcelona

Development of gene-based therapies. Special focus on diseases associated with mental retardation and anti-tumor therapies. Engineering viral vectors from adenovirus, adeno-associated virus and lentivirus with DNA, shRNA or microRNAs sequences. Design of tissue-specific vectors. Non-invasive imaging follow-up. Preclinical Studies in genetically-engineered mouse models and in xenograft mice. Neurobehavioral phenotyping. Contribution of candidate genes to neural stem cell biology. Cancer stem cell susceptibility to engineered therapies.

### **Javier Díaz-Nido**

Universidad Autónoma de Madrid-UAM

Viral and non-viral vectors for gene therapy of neurological diseases (Friedreich's ataxia). Human olfactory mucosa stem cells. Neuronal differentiation of stem cells. Cell reprogramming to generate "induced neuronal" cells.

### **Carmen Ayuso**

Fundación Jiménez Díaz

Nanoparticles application in ocular gene therapy. Generation of induced pluripotent stem cells (iPSCs) as a model of retinal dystrophies.

**Grupos CIBER-BBN participantes en el Foro de Medicina Regenerativa  
(23/11/2011)**

1. Grupo de Materiales Avanzados y Nanobiotecnología. Universidad de Valladolid. (BIOFORGE-UVA)  
<http://bbn.ciber-bbn.es/grupos/detail?id=171&locale=es&show=lineas>
2. Centro de Biomateriales. Universidad Politécnica de Valencia. (CBM-UPV)  
<http://bbn.ciber-bbn.es/grupos/detail?id=165&locale=es&show=lineas>
3. Grupo de Investigación en Biocerámicas Avanzadas. Universidad Complutense de Madrid. (COFIBIC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=170&locale=es&show=lineas>
4. Grupo de Investigación en Biomateriales, Biomecánica e Ingeniería de Tejidos. Instituto de Bioingeniería de Cataluña. (GBBIT-IBEC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=121&locale=es&show=lineas>
5. Grupo de Liberación Dirigida de Fármacos. Hospital Universitario Vall d' Hebrón. Barcelona. (GDLF-HUVH)  
<http://bbn.ciber-bbn.es/grupos/detail?id=129&locale=es&show=lineas>
6. Grupo de Mecánica Estructural y Modelado de Materiales. Instituto de Investigación en Ingeniería de Aragón. Universidad de Zaragoza. (GEMM-I3A)  
<http://bbn.ciber-bbn.es/grupos/detail?id=100&locale=es&show=lineas>
7. Grupo de Investigación Traslacional en Biomateriales e Ingeniería Tisular. Universidad de Alcalá de Henares. (GITBIT-UAH)  
<http://bbn.ciber-bbn.es/grupos/detail?id=92&locale=es&show=lineas>
8. Grupo de Tecnología Sanitaria. Instituto de Biomecánica de Valencia. (GTS-IBV)  
<http://bbn.ciber-bbn.es/grupos/detail?id=162&locale=es&show=lineas>
9. Grupo de Investigación de Microbiología Aplicada. Instituto de Biotecnología y Biomedicina. Universidad Autónoma de Barcelona (IBB-UAB)  
<http://bbn.ciber-bbn.es/grupos/detail?id=132&locale=es&show=lineas>
10. Grupo de Investigación de Ingeniería Tisular de la Unidad de Salud. Fundación TECNALIA. San Sebastián. (ITUS- TECNALIA)  
<http://bbn.ciber-bbn.es/grupos/detail?id=167&locale=es&show=lineas>
11. Laboratorio de Bioingeniería y Regeneración Tisular. Universidad de Málaga. (LABRET-UMA)  
<http://bbn.ciber-bbn.es/grupos/detail?id=160&locale=es&show=lineas>
12. Grupo de Nanomedicina. Instituto de Bioingeniería de Cataluña. Barcelona. (NANOMED –IBEC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=125&locale=es&show=lineas>
13. Grupo de Nanociencia Molecular y Materiales Orgánicos. Instituto de Ciencia de Materiales de Barcelona. (NANOMOL-CSIC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=130&locale=es&show=lineas>

14. Grupo de Investigación de Neuroprótesis y Neuroingeniería. Universidad Miguel Hernández. Elche. (NN-UMH)  
<http://bbn.ciber-bbn.es/grupos/detail?id=177&locale=es&show=lineas>
15. Sistemas de Liberación de Fármacos y Productos Biotecnológicos. Universidad del País Vasco. Vitoria. (SLFPB-EHU)  
<http://bbn.ciber-bbn.es/grupos/detail?id=166&locale=es&show=lineas>
16. Grupo de Investigación de Terapia Celular. Centro de Investigación Cardiovascular. Barcelona. (TC-CIC, CSIC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=169&locale=es&show=lineas>
17. TERMOMAG. Instituto de Ciencia de Materiales de Aragón. CSIC-Universidad de Zaragoza. (TERMOMAG-CSIC)  
<http://bbn.ciber-bbn.es/grupos/detail?id=182&locale=es&show=lineas>
18. Programa de Plataformas de Equipamiento (Servicios de investigación) CIBER-BBN.  
[http://bbn.ciber-bbn.es/programas?locale=es#plataformas\\_equipamiento](http://bbn.ciber-bbn.es/programas?locale=es#plataformas_equipamiento)