

Our meeting aims to bring together, for the first time in Spain, young researchers from all over the country working in the broad field of biomedicine. We expect to host a great variety of topics and will be pleased to receive works in both basic and translational science. Moreover, works will be presented via oral communication or poster and will be classified in different subjects. We propose seven different areas to define what we believe to be the future of biomedicine.

**Molecular basis of pathology:** The study of the molecular pathways linked to disease is a crucial starting point in order to understand and treat disease. In this first area we would like to consider cell and animal models that allow us to find biomarkers and develop new drugs.

**New therapeutic approaches:** The medical application of nanotechnology, which is based on manipulation of matter on an atomic, molecular, and supramolecular scale, is an expanding field. These structures presented in various forms such as polymers and nanoparticles intend to address problems in a tissue specific manner moving towards more precise treatments.

**Pharmacology:** Technology is important, but also is of great interest to study the effects and processing of drugs on their journey through the body (pharmacodynamics and pharmacokinetics). In addition, it will also be important the relation between human genetic variations and rejection of some drugs (pharmacogenetics), focusing towards personalized medicine.

**Neuroscience:** Of all the organs that make up the body the brain is the great unknown. After the human genome project, the "*Brain Research Through Advancing Innovative Neurotechnologies*" (BRAIN), aims to draw the map of the human brain in 15 years. We want to draw attention to work related to the study of the brain.

**Developmental biology and reproduction:** The growth and development of an organism is important to better understand how and adult organism works. Genetic control for cell growth, cell differentiation and morphogenesis are the three aspects we would like to consider.

**Engineering and gene regulation:** Since the rise of gene editing (CRISPR, TALENS...), we are getting more reliable models geared toward precision medicine. We also are interested in gene regulation, from gene to protein. The journey between these two points and their functions along the way are of great biological interest.

**Microbiology, parasitology and metagenomics:** Microorganisms shape human lifestyle in a great variety of ways as they are present in our lives from its beginning to its end. Studying the interactions between humans and microorganisms is of great importance in order to understand the nature of both complex systems in such different issues as diseases, antibiotic resistance or human development.

## I NATIONAL CONGRESS FOR BIOMEDICAL YOUNG RESEARCHERS PROGRAMME

### Monday, November 28<sup>th</sup>, 2016

<b>9:00-9:45</b>	OPENING of Registration
<b>9.45-10:00</b>	OPENING CEREMONY
<b>10:00-11:00</b>	PLENARY LECTURE. Dra. ANA MARIA CUERVO
<b>11:00-12:00</b>	COFFEE BREAK AND POSTER SESSION
<b>12:00-13:30</b>	SELECTED SHORT TALKS 1 (6 participants)
<b>13:30-15:00</b>	LUNCH
<b>15:00-16:30</b>	SELECTED SHORT TALKS 2 (6 participants)
<b>16:30-17:00</b>	COFFEE BREAK
<b>17:00-18:30</b>	ROUNDTABLE. Women in Science
<b>21:30</b>	GET TOGETHER DINNER

### Tuesday, November 29<sup>th</sup>, 2016

<b>10:00-11:30</b>	SELECTED SHORT TALKS 3 (6 participants)
<b>11:30-12:30</b>	COFFEE BREAK AND POSTER SESSION
<b>12:30-13:30</b>	PLENARY LECTURE. Dr. MANUEL SERRANO
<b>13:30-15:00</b>	LUNCH
<b>15:00-17:00</b>	SELECTED SHORT TALKS 4 (8 participants)
<b>17:00-17:30</b>	COFFEE BREAK
<b>17:30-19:00</b>	ROUNDTABLE. Building Your Career
<b>19:00</b>	AWARDS AND CLOSING CEREMONY