

## Res@CNIC-SEC 2019: Frontiers in Cardiovascular Research

Venue for talks: First Floor seminar room unless specify otherwise  
Other activities during the day: At Research Group assigned

### PROGRAM

#### 08 January 2019

09.00 – 09.15 Welcome

#### Introductory Lectures: basic concepts in experimental biology

09.15 – 10.00 **Microscopy:** Valeria Caiolfa (CNIC)

10.00 - 10.45 **Proteomics:** Juan Antonio López (CNIC)

10.45 - 11.30 **Genomics and genetic engineering:** Alberto Benguría y Ana Quintas (CNIC)

#### Break

12.00 - 12.45 **Knock-out mice:** Sagrario Ortega (CNIO)

#### Biosafety Course

12:45 - 14:00 Javier Moreno / Raquel Delgado (CNIC)

#### Animal Facility Visit

15.00 - 16.00 Santiago Rodríguez Colilla (CNIC)

#### Form and function of the cardiovascular system

#### 09 January 2019

09.30 – 10.30 Cardiovascular diseases: Needs and opportunities for translational research  
Hector Bueno (CNIC)

10.30 - 11.30 Interpreting statistics in Clinical Trials.  
Stuart Pocock (CNIC / London School of Hygiene and Tropical Medicine)

#### 10 January 2019

09.30 - 10.30 Mechanisms controlling cardiac and vascular myocytes function  
Teresa González (UAM)

10.30 - 11.30 Developmental Biology of the heart  
José Luis de la Pompa (CNIC)

11.35 - 12.35 Cardiac computational modelling on supercomputers  
Mariano Vazquez (BSC)

## Pathology of the cardiovascular system

### 11 January 2019

09.30 - 10.30 Inflammation and cardiovascular disease  
David Sancho (CNIC)

10.30 - 11.30 From drug re-purposing to gene therapy: a personalized approach to treat cardiac arrhythmias  
Silvia Priori (CNIC/Università degli Studi di Pavia/IRCCS Fondazione Salvatore Maugeri)

### 14 January 2019

09.30 - 10.30 Clinical Utility of Advanced Imaging and Mathematical Analysis of Complex cardiac Arrhythmias  
David Filgueiras (CNIC)

10.30 - 11.30 Cardioprotection: From mechanisms to clinical trials  
Xavier Rosselló (CNIC)

### 15 January 2019

09.30 - 10.30 Pathophysiology of atherosclerosis: insight gained from experimental models.  
Jacob Fog Bentzon (CNIC)

10.30 - 11.30 Aging and cardiovascular disease: From the rarest to the most common  
Vicente Andrés (CNIC)

### 16 January 2019

09.30 - 10.15 Experimental models in cardiovascular research: Cardiac ischemia.  
Enrique Lara-Pezzi (CNIC)

10.15 - 11.30 Ischemic cardiovascular disease (I): pathophysiology of myocardial infarction (differential diagnosis versus heart arrest and heart failure).  
Borja Ibáñez (CNIC)

11.35 - 12.50 Ischemic cardiovascular disease (II): experimental approaches to myocardial infarction (imaging and pig as experimental animal model).  
Borja Ibáñez (CNIC)

### 17 January 2019

- 9.30 - 10.30 Mechanisms in vascular wall remodeling and pathophysiology of aortic diseases.  
Juan Miguel Redondo (CNIC)
- 10.30 - 11.30 Novel diagnosis and therapy for Myocarditis  
Pilar Martín (CNIC)

### Cardiovascular Genetics

#### 18 January 2019

- 09.30 - 10.30 Introduction to Cardiovascular Genetics  
Julián Palomino (Hospital Universitario Doce de Octubre)
- 10.30 - 11.30 Functional assessment of genetic variants linked to heart disease  
Jorge Alegre Cebollada (CNIC)

### Population studies: Genomics, Epidemiology and Clinical Trials

#### 21 January 2019

- 09.30 - 10.30 Cardiovascular epidemiology: Descriptive, intervention and health promotion studies.  
Juan Miguel Fernández Alvira (CNIC)

#### 22 January 2019

- 09.30 - 10.30 The Fuster-CNIC-Ferrer Cardiovascular Polypill Project: a new paradigm in cardiovascular therapeutics innovation.  
José M<sup>a</sup> Castellano (CNIC)
- 10.30 - 11.30 Estudio PESA  
Antonio Fernández-Ortiz (CNIC)

### Closing Lecture

#### 8 February 2019

CNIC Auditorium

- 12.00 - 13.00 Cardiovascular disease: Present and future  
Valentín Fuster (CNIC)

### RES@CNIC: participants' presentations

#### 25 - 28 February (16:00- 18:00 h)

Six presentations each day. Each presentation will last 15 min + 5 min discussion

Moderators: **Borja Ibáñez; Antonio Fernández-Ortiz; Héctor Bueno; David Filgueiras; Mercedes Ricote**