



## BMM7 / Res@cnic-sec / Getting to know CNIC Course

### Frontiers in Cardiovascular Research Course 2021-2022

Teams Link: [Haga clic aquí para unirse a la reunión](#)

#### January 10, 2022

##### Auditorium

14:30-15:00 Welcome by BMM7 coordinators:  
Valentín Fuster, José Javier Fuster, Pilar Martín (CNIC) & Teresa González (UAM)

#### Form and function of the cardiovascular system

##### Auditorium

15:00-15:45 Cardiovascular disease: Needs and opportunities for translational research  
**Héctor Bueno**, CNIC

#### January 11, 2022

##### Auditorium

14:30-15:15 Cardiovascular risk factors associated with cognitive decline and dementia  
**Marta Cortés Canteli**, CNIC

15:15-16:00 Metabolic disorders: Basic and molecular concepts in obesity and diabetes  
**Guadalupe Sabio**, CNIC

#### January 12, 2022

##### Auditorium / Hospital Carlos III

16:00-17:30 **Practical Workshop**: Anatomy and physiology of the heart (II): Basic concepts in cardiac echocardiography: in situ echocardiogram; interpretation of normal heart and basic anomalies  
**Inés García Lunar**, CNIC

### January 13, 2022

#### Auditorium

14:30-15:15 Molecular Basis of Cardiac Electrophysiology and Arrhythmias  
**Teresa González**, UAM

15:15-16:00 Providing energy to the heart  
**José Antonio Enríquez**, CNIC

### January 14, 2022

#### Auditorium

14:30-16:00 Developmental biology of the heart I  
**Antoon Moorman**, University of Amsterdam

### January 17, 2022

#### Auditorium

14:30-15:15 Developmental biology of the heart II  
**José Luis de la Pompa**, CNIC

15:15-16:00 Biomechanics of the cardiovascular system  
**Francisco Rojo**, UPM

### January 18, 2022

#### Auditorium

14:30-15:15 Anatomy and physiology of the vasculature: Types of vessels, constitution of vessels. Physiology of vasculature: resistance, blood pressure, etc.  
**Gonzalo Pizarro**, CNIC

15:15-16:00 Development of the vasculature: Vasculogenesis, angiogenesis and lymphangiogenesis  
**Rui Benedito**, CNIC

## Pathology of the cardiovascular system

### January 19, 2022

#### Online

12:00-13:30 Cardiovascular disease: Present and Future  
**Valentín Fuster**, CNIC

## January 20, 2022

### Auditorium

- 14:30-15:15 From drug re-purposing to gene therapy: A personalized approach to treat cardiac arrhythmias  
**Silvia Priori, CNIC**
- 15:15-16:00 Muscle regeneration and aging: rejuvenating strategies  
**Pura Muñoz, CNIC**

## January 21, 2022

### Auditorium

- 14:30-15:15 Pathophysiology of atherosclerosis: Insight gained from experimental models  
**Jacob Fog Bentzon, CNIC**
- 15:15-16:00 Beyond traditional risk factors: acquired mutations as a shared driver of cardiovascular disease and cancer  
**José J. Fuster, CNIC**

## January 24, 2022

### Auditorium

- 14:30-16:00 Translational research in myocardial disease: from ischemia/reperfusion injury to cardio-toxicity  
**Borja Ibáñez, CNIC**

## January 25, 2022

### Auditorium

- 14:30-15:15 Experimental models in cardiovascular research: Cardiac ischemia  
**Enrique Lara-Pezzi, CNIC**
- 15:15-16:00 Experimental models in cardiovascular research: Lentiviral-mediated gene therapy and mouse models of aortic diseases  
**Juan Miguel Redondo, CNIC**

## Cardiovascular genetics

**January 31, 2022**

### Auditorium

- 14:30-15:15 Introduction to cardiovascular genetics  
**Julián Palomino**, Hospital 12 de Octubre
- 15:15-16:00 From single molecules to heart disease  
**Jorge Alegre-Cebollada**, CNIC

## Population studies: Genomics, epidemiology and clinical trials

**February 1, 2022**

### Teams

- 14:30-15:15 Research and development in medicine: The industry's vision  
**Savion Gropper**, Boehringer Ingelheim Pharma GmbH & Co. KG

### Auditorium

- 15:15-16:00 The Fuster-CNIC-Ferrer cardiovascular polypill project: A new paradigm in cardiovascular therapeutics innovation  
**José M<sup>a</sup> Castellano**, CNIC

**February 2, 2022**

### Auditorium

- 14:30-15:15 Interpreting statistics in clinical trials  
**Stuart Pocock**, CNIC/London School of Hygiene and Tropical Medicine
- 15:15-16:00 Cardiovascular epidemiology: Descriptive, intervention and health promotion studies  
**Juan Miguel Fernández Alvira**, CNIC

**February 3, 2022**

### Auditorium

- 14:30-15:15 How do cells and tissues sense, adapt and respond to mechanical forces? An emerging perspective in biomedicine  
**Miguel Ángel del Pozo**, CNIC
- 15:15-16:00 Oral antiplatelet treatment in ACS: From bench to bedside  
**Antonio Fernández-Ortiz**, CNIC

## Frontiers in cardiovascular research

**February 4, 2022**

### Auditorium

- 14:30-15:15 A novel circulating microRNA for the detection of acute myocarditis (NEJM 384:2014-27)  
**Pilar Martín, CNIC**
- 15:15-16:00 Behavioral immune landscapes of inflammation (Nature, in press)  
**Andrés Hidalgo, CNIC**

## Practical Workshops

**February 7, 2022**

### Seminar Room 2<sup>nd</sup> Floor

- 14:30-15:00 Introduction Seminar Microscopy Unit  
**Valeria Caiolfa, CNIC**
- 15:00-15:30 Cardiovascular disease modelling: culture, differentiation and gene editing in mESC and hiPSC  
**Giovanna Giovinazzo, CNIC**

**February 8, 2022**

### GROUP 1: Cell Culture Room

- 14:30-15:30 Cardiovascular disease modelling: culture, differentiation and gene editing in mESC and hiPSC  
**Elisa Santos, Belén Prados, CNIC**

### GROUP 2: Microscopy Unit 2<sup>nd</sup> Floor West

- 14:30-15:30 Advance confocal and live cell microscopy  
**Verónica Labrador, Alfonso Diaz CNIC**

### GROUP 1: Microscopy Unit 2<sup>nd</sup> Floor West

- 15:30-16:30 Advanced confocal and live cell microscopy  
**Moreno Zamai, Elvira Arza, Olga Gimenez CNIC**

### GROUP 2: Cell Culture Room

- 15:30-16:30 Cardiovascular disease modelling: culture, differentiation and gene editing in mESC and hiPSC  
**Elisa Santos, Belén Prados, CNIC**



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## February 9, 2022

### Sótano -3 – Animal pequeño

#### GROUP 1:

14:30-15:15 Cardiovascular image: RM  
**Daniel Calle, CNIC**

#### GROUP 2:

14:30-15:15 Cardiovascular image: PET  
**Lorena Cussó, CNIC**

#### GROUP 1:

15:15-16:00 Cardiovascular image: PET  
**Lorena Cussó, CNIC**

#### GROUP 2:

15:15-16:00 Cardiovascular image: RM  
**Daniel Calle, CNIC**

## February 10, 2022

### Seminar Room 2<sup>rd</sup> Floor

14:30-16:00 Model systems (II): Zebrafish  
**Eduardo Díaz, María Galardi, CNIC**

## February 11, 2022

#### GROUP 1:

14:30-15:15 Visit Animal Facility  
**Santiago Rodríguez, CNIC**

#### GROUP 2:

15:15-16:00 Visit Animal Facility  
**Santiago Rodríguez, CNIC**

## February 14, 2022

### Seminar Room 2<sup>nd</sup> Floor

14:30-16:00 Model systems (I): mouse-transgenesis  
**Juan de Dios Hourcade, CNIC**

## February 15, 2022

### Seminar Room 3<sup>rd</sup> Floor

14:30-16:00 Flow cytometry  
**Beatriz Álvarez, CNIC**

## February 16, 2022

### Seminar Room 3<sup>rd</sup> Floor

14:30-16:00 Proteomics  
Juan Antonio López, CNIC

## February 17, 2022

### Seminar Room 3<sup>rd</sup> Floor

14:30-16:00 Genomics  
Ana Dopazo, Rebeca Álvarez & Nuria Gómez, CNIC

## February 18, 2022

### Seminar Room 3<sup>nd</sup> Floor

14:30-16:00 Bioinformatics and Biostatistics  
Fátima Sánchez Cabo, Carlos Torroja, CNIC

## BMM7 students presentations

## February 25, 2022

### Seminar Room 3<sup>rd</sup> Floor

14:30-16:00 Students presentations

Moderators: José Javier Fuster, Pilar Martín and Teresa González (CNIC-UAM)