

# 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

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

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

### January 11, 2022

- 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

16:00-17:30 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

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

#### January 14, 2022

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



#### January 17, 2022

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

#### January 18, 2022

15:15-16:00 Angiogenesis and its relevance for cardiovascular disease **Rui Benedito,** CNIC

## Pathology of the cardiovascular system

#### January 19, 2022

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

#### January 20, 2022

- 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

- 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

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



### January 25, 2022

- 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

14:30-15:15	Introduction to cardiovascular genetics Julián Palomino, Hospital 12 de Octubre
15:15-16:00	Functional assessment of genetic variants linked to heart disease Jorge Alegre-Cebollada, CNIC

#### Population studies: Genomics, epidemiology and clinical trials

#### February 1, 2022

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

 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

14:30-15:15How do cells and tissues sense, adapt and respond to mechanical forces? An<br/>emerging perspective in biomedicine<br/>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

- 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

- 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 **Microscopy Unit 2<sup>nd</sup> Floor West** GROUP 2: Advance confocal and live cell microscopy 14:30-15:30 Verónica Labrador, Alfonsa Diaz CNIC Microscopy Unit 2<sup>nd</sup> Floor West GROUP 1: Advanced confocal and live cell microscopy 15:30-16:30 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



## February 9, 2022

Sótano -3 – Animal pequeño

#### GROUP 1:

- 14:30-15:15Cardiovascular image: RM<br/>Daniel Calle, CNICGROUP 2:Cardiovascular image: PET<br/>Lorena Cussó, CNICGROUP 1:Cardiovascular image: PET<br/>Lorena Cussó, CNICGROUP 2:Cardiovascular image: PET<br/>Lorena Cussó, CNIC
- 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 Quintas, 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)