BMM9/ Getting to know CNIC

Insight into cardiovascular pathology research: a comprehensive molecular, physiological, clinical and practical approach (BMM9) Course 2019-2020

January 9, 2020

Second Floor Seminar Room

14:30-15:10   Welcome by BMM9 coordinators

Form and function of the cardiovascular system

Second Floor Seminar Room

15:30-16:55   Cardiovascular diseases: Needs and opportunities for translational research
Héctor Bueno, CNIC

17:05-18:00   Cardiac computational modelling on supercomputers
Mariano Vázquez, BSC - ELEM Biotech

January 10, 2020

Auditorium

13:30-14:30   Cardiovascular Health: Present and future
Valentín Fuster, CNIC

Second Floor Seminar Room

15:30-17:20   Anatomy and physiology of the heart (I): Basic concepts of heart anatomy (i.e. pig heart dissection) / Anatomical basis of Congenital heart disease
José María Pérez-Pomares, Universidad de Málaga

January 13, 2020

Second Floor Seminar Room

14:30-15:25   Mechanisms controlling cardiac and vascular myocytes function
Angel Cogolludo, UCM

15:35-16:30   Biomechanics of the cardiovascular system
Francisco Rojo, UPM

16:35-18:30   Anatomy and physiology of the heart (II): Basic concepts in cardiac echocardiography: in situ echocardiogram; interpretation of normal heart and basic anomalies
Gabriela Guzmán, Hospital Universitario La Paz.

January 14, 2020

Second Floor Seminar Room

14:30-15:25   Molecular Basis of Cardiac Electrophysiology and Arrhythmias
Teresa González, UAM

15:35-16:30   How do cells and tissues sense, adapt and respond to mechanical forces? An emerging perspective in biomedicine
Miguel Angel del Pozo, CNIC

16:35-17:30   Introduction to cardiovascular genetics
Julián Palomino, Hospital 12 de Octubre

January 15, 2020

Second Floor Seminar Room

14:30-16:40   Developmental biology of the heart I
Antoon Moorman, University of Amsterdam

16:50-17:15   Developmental biology of the heart II
José Luis de la Pompa, CNIC

January 16, 2020

Second Floor Seminar Room

15:30-15:55   Post-translational modifications during cardiac development and disease
Joaquín Jacob Grego Bessa, CNIC

16:00-16:30   Transcriptional control of cardiovascular development
Luis Luna Zurita, CNIC

16:35-17:30   Anatomy and physiology of the vasculature: Types of vessels, constitution of vessels. Physiology of vasculature: resistance, blood pressure, etc.
Gonzalo Pizarro, CNIC

Pathology of the cardiovascular system

January 17, 2020

Second Floor Seminar Room

17:00-17:55   The artificial heart: past, present and future
Aida Suárez, Clínica Universitaria de Navarra, Madrid.

January 20, 2020

Second Floor Seminar Room

14:30-15:25   Pathophysiology of atherosclerosis: Insight gained from experimental models
Jacob Fog Bentzon, CNIC

15:35-16:30   Aging and cardiovascular disease: From the rarest to the most common
Vicente Andrés, CNIC

16:35-17:30   Clinical utility of advanced imaging and mathematical analysis of complex cardiac arrhythmias
David Filgueiras, CNIC

January 21, 2020

Second Floor Seminar Room

14:30-15:25   Inflammation and cardiovascular disease
David Sancho, CNIC

15:30-16:25   Metabolic disorders: Basic and molecular concepts in obesity and diabetes
Guadalupe Sabio, CNIC

16:30-17:25   Providing energy to the heart
José Antonio Enríquez, CNIC

January 22, 2020

Second Floor Seminar Room

14:30-15:25   Experimental models in cardiovascular research: Lentiviral-mediated gene therapy and mouse models of aortic diseases
Juan Miguel Redondo, CNIC

15:35-17:30   Myocardial diseases: From large animals to Clinical trials
Borja Ibáñez, CNIC

January 28, 2020

Second Floor Seminar Room

14:30-15:25   Experimental models in cardiovascular research: Cardiac ischemia
Enrique Lara-Pezzi, CNIC

15:35-16:30   Novel diagnosis and therapy for myocarditis
Pilar Martín, CNIC

16:35-17:30   Muscle regeneration and aging: rejuvenating strategies
Pura Muñoz, CNIC

17:35-18:30   Batokines and the unsuspected secretory role of brown adipose tissue: targeting the cardiovascular system?
Francesc Villarroya, Universidad de Barcelona.

Cardiovascular genetics

January 29, 2020

Second Floor Seminar Room

16:30-17:25   From drug re-purposing to gene therapy: A personalized approach to treat cardiac arrhythmias
Silvia Priori, CNIC

Population studies: Genomics, epidemiology and clinical trials

January 30, 2020

Second Floor Seminar Room

14:30-15:25   The Fuster-CNIC-Ferrer cardiovascular polypill project: A new paradigm in cardiovascular therapeutics innovation
José Mª Castellano, CNIC

Practical Workshops

Second Floor Seminar Room

14:30-16:25   Biomedical Sciences and Biostatistics
Fátima Sánchez Cabo, Carlos Torroja, CNIC

Population studies: Genomics, epidemiology and clinical trials

Second Floor Seminar Room

16:35-17:30   Oral antiplatelet treatment in ACS: From bench to bedside
Antonio Fernández-Ortiz, CNIC

Frontiers in cardiovascular research

Auditorium

14:30-15:00   p38gamma is essential for cell cycle progression and liver tumorigenesis
Guadalupe Sabio, CNIC

15:00-15:30   DNGR-1 in dendritic cells limits tissue damage by dampening neutrophil recruitment
David Sancho, CNIC

15:30-16:00   oxLDL Receptor in Lymphocytes Prevents Atherosclerosis and Predicts Subclinical
Disease
Pilar Martín, CNIC

16:00-16:30   Severe Cardiac Dysfunction and Death Caused by Arrhythmogenic Right Ventricular
Cardiomyopathy Type 5 Are Improved by Inhibition of Glycogen Synthase Kinase-
3beta
Enrique Lara, CNIC

BMM9 students presentations

Second Floor Seminar Room

14:30-16:30   Students presentations

February 5, 2020

Second Floor Seminar Room

14:30-16:30   Students presentations
Moderators: Jorge Alegre-Cebollada, Guadalupe Sabio and Teresa González (CNIC-UAM)

Population studies: Genomics, epidemiology and clinical trials

February 6, 2020

Second Floor Seminar Room

14:30-15:25   Interpreting statistics in clinical trials
Stuart Pocock, CNIC/London School of Hygiene and Tropical Medicine

15:35-16:30   Cardiovascular epidemiology: Descriptive, intervention and health promotion
studies
Juan Miguel Fernández Alvira, CNIC

Practical Workshops

February 6, 2020

16:30-17:30   Visit Animal Facility
Santiago Rodríguez, CNIC

February 7, 2020

Sótano -3 – Animal pequeño

GROUP 1:
15:30-16:30   Cardiovascular image: RM
Yeny Rojas, CNIC
GROUP 2:
15:30-16:30   Cardiovascular image: PET
Izaskun Bilbao, CNIC
GROUP 1:

16:30-17:30   Cardiovascular image: PET
Izaskun Bilbao, CNIC
GROUP 2:

16:30-17:30   Cardiovascular image: RM
Yeny Rojas, CNIC

February 10, 2020

Second Floor Seminar Room

GROUP 1:
14:30-16:30   Model systems (I): mouse-transgenesis
José Mª Fernández, CNIC

First Floor Seminar Room

GROUP 2:
14:30-16:30   Model systems (I): mouse-transgenesis
Juan de Dios Hourcade, CNIC

Second Floor Seminar Room

16:30-18:00   Cell analysis techniques: Cytometry and high content screening
María Montoya, CNIC

February 11, 2020

Second Floor Seminar Room

15:00-16:00   Preclinical molecular imaging
Beatriz Salinas, Instituto de Investigación Sanitaria Gregorio Marañón **/** CNIC / Universidad Carlos III de Madrid

16:05-17:00   Development of the vasculature: Vasculogenesis, angiogenesis and lymphangiogenesis
Rui Benedito, CNIC

February 12, 2020

Second Floor Seminar Room

14:00-14:25   Introduction Seminar Microscopy Unit
Valeria Caiolfa, CNIC

14:30-14:55   Introduction Seminar on Pluripotent Cell Technology Unit - Cardiovascular disease modelling
Giovanna Giovinazzo, CNIC

GROUP 1:
15:00-17:00   Cardiovascular disease modelling: Culture, differentiation and gene editing in hiPSC
Elisa Santos, Belén Prados, CNIC

GROUP 2:

15:00-17:00   Advance confocal and live cell microscopy
                 Verónica Labrador, Elvira Arza, CNIC

February 13, 2020

Second Floor Seminar Room

GROUP 1:
14:00-16:00   Advanced confocal and live cell microscopy
                 Moreno Zamai, CNIC
GROUP 2:
14:00-16:00   Cardiovascular disease modelling: culture, differentiation and gene editing in hiPSC
                 Elisa Santos, Belén Prados, CNIC

February 14, 2020

Second Floor Seminar Room

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

16:00-17:30   Genomics
                 Ana Quintas & Cristina Espadas, CNIC

February 17, 2020

Second Floor Seminar Room

14:30-17:00   Model systems (II): Zebrafish
                 Laura Andrés, Eduardo Díaz, María Galardi, CNIC