

Cardiovascular Diseases (BMM9) and Getting to Know CNIC course Course 2013-2014

A. Lectures: 13 - 30 January (09:30- 12:15 h)

I. Form and function of the cardiovascular system (13- 15 January)

13 January (09.30 to 12.15 h)

Third Floor Seminar Room

09.30-10.45: Anatomy and Physiology of the Heart (I): Basic concepts of heart anatomy (i.e. pig heart dissection).

Teacher: **José María Pérez-Pomares** (Univ. Málaga)

11.00- 12.15: Anatomy and Physiology of the Heart (II): Basic concepts in cardiac electrophysiology (in situ ECG, interpretation of normal ECG and basic anomalies) and basic concepts of heart mechanics (ejection fraction, 'cardiac output').

Teacher: **Borja Ruiz Mateos** (Hosp. Clínico San Carlos)

14 January (09.30 to 12.15 h)

Ground Floor "Auditorium"

09.30-10.45: Developmental Biology of the heart I

Teacher: **Antoon Moorman** (Univ. Amsterdam)

11.00- 12.15: Developmental Biology of the heart II

Teacher: **José Luís de la Pompa** (CNIC)

15 January (09.30 to 12.45 h)

Ground Floor "Auditorium"

09.30-10.45: Anatomy and Physiology of the vasculature: types of vessels, constitution of vessels. Physiology of vasculature: resistance, blood pressure, etc

Teacher: **Rodrigo Fernández Jiménez** (CNIC)

11.00- 12.15: Development of the vasculature: Vasculogenesis, angiogenesis and lymphangiogenesis.

Teacher: **Rui Benedito** (CNIC)

II. Pathology of the cardiovascular system (16- 22 January)

16 January (09.30 to 12.45 h)

Third Floor Seminar Room

09.30-10.45: Ischemic cardiovascular disease (I): pathophysiology of myocardial infarction.(differential diagnosis versus heart arrest and heart failure).

11.00- 12.15: Ischemic cardiovascular disease (II): experimental approaches to myocardial infarction (imaging and pig as experimental animal model).

Teacher: **Borja Ibáñez (CNIC)**

17 January (09.30 to 11.00 h)

Ground Floor "Auditorium"

Cardiovascular disease: present and future

Teacher: **Valentín Fuster (CNIC)**

20 January (09.30 to 12.45 h)

Ground Floor "Auditorium"

09.30-10.45: Inflammation and cardiovascular disease.

Teacher: **David Sancho (CNIC)**

11.00- 12.15: Metabolic disorders: Basic and molecular concepts in obesity and diabetes.

Teacher: **Guadalupe Sabio (CNIC)**

21 January (09.30 to 12.45 h)

Ground Floor "Auditorium"

09.30-10.45: New intercellular communication mechanisms in the immune response

Teacher: **Francisco Sánchez-Madrid (CNIC)**

11.00- 12.15: Aging and cardiovascular disease: From the rarest to the most common

Teacher: **Vicente Andrés (CNIC)**

22 January (09.30 to 13.00 h)

Third Floor Seminar Room

09.30-10.30: Experimental models in cardiovascular research: Cardiac ischemia.

Teacher: **Enrique Lara-Pezzi (CNIC)**

10.45-11.45: Experimental models in cardiovascular research: Vascular injury, hypertrophy and aneurysm

Teacher: **Juan Miguel Redondo (CNIC)**

12.00-13.00: Novel diagnosis and therapy for Myocarditis

Teacher: **Pilar Martín (CNIC)**

III. Repair mechanisms in the cardiovascular system (23 January)

23 January (09.30 to 12.45 h)

Ground Floor "Auditorium"

09.30-10.45: Cardiac stem cells.

Teacher: **Beatriz G. Gálvez (CNIC)**

11.00- 12.15: Regeneration of the heart.

Teacher: **Nadia Mercader (CNIC)**

IV. Population studies: genomics, epidemiology and clinical trials (24 -29 January)

24 January (09.30 to 12.30 h)

Third Floor Seminar Room

Genomic approaches to cardiovascular disease: epigenetics and GWA.

Teacher: **José M. Ordovás (CNIC)**

28 January (09.30 to 12.30 h)

Third Floor Seminar Room

09.30-10.45: Clinical trials.

Teacher: **Ginés Sanz (CNIC)**

11.00- 12.15: Research and Development in Medicine: The industry's vision

Teacher: **Savion Gropper (Laboratorios Ferrer)**

29 January (09.30 to 12.00 h)

Third Floor Seminar Room

Design and interpretation of epidemiological studies: Framingham.

Teacher: **Manuel Franco** (Universidad de Alcalá de Henares)

PESA study: a case example at CNIC.

Teacher: **José Luis Peñalvo** (CNIC)

V. Frontiers in Cardiovascular Research (30 January)

30 January (09.30 to 13.00 h)

Ground Floor "Auditorium"

09.30-10.30: "Rhythmic modulation of the hematopoietic niche through neutrophil clearance"

Teacher: **Andrés Hidalgo** (CNIC)

10.45-11.45: "Effect of Early Metoprolol on Infarct Size in ST-Segment-Elevation Myocardial Infarction Patients Undergoing Primary Percutaneous Coronary Intervention: The Effect of Metoprolol in Cardioprotection During an Acute Myocardial Infarction (METOCARD-CNIC) Trial."

Teacher: **Borja Ibáñez** (CNIC)

12.00-13.00: "Myc-driven endogenous cell competition in the early mammalian embryo."

Teacher: **Miguel Torres** (CNIC)

Extra Workshops (for Course "Getting to Know CNIC") 20- 21 February

20 February (10.00 to 13.00 h)

Third Floor Seminar Room

10.00 to 10.20 h

CNIC Predoctoral Programme

Teacher: **Julia Redondo** (CNIC)

10.25 to 10.45 h

Finance Department

Teacher: **Jose Alberto Alonso** (CNIC)

10.50 to 11.50 h

"The importance of the projects-&-results management in biosciences: CNIC Projects & TT Office"

Teachers: **Luzma García, Noelia López** (CNIC)

21 February (09.30 to 12.00 h)

Third Floor Seminar Room

09.30 to 09.55 h

Human Resources Department

Teacher: **Antonio Ureña (CNIC)**

10.00 to 12.00 h

How to look for bibliographic references and citations

Teacher: **Alicia Fátima Gómez (CNIC)**