

Summer School « Integrative biology in cardiovascular and metabolic diseases »

Château de Maffliers

15-19th March 2015, France - Program

talks: 40 min talk + 15 min questions & answers; discussion 15 min; session chair: students

SUNDAY, March 15th, 2015

14:30 – 15:30 Arrival of the Participants & Poster Hang-up

15:30 – 16:00 Welcome Address & Information

16:00 – 17:00 **Opening Lecture**

Chair: Paul Richards & Katrin Nitz

Why I like toxicology and why toxicology likes fat

Robert Barouki, Paris, [Lab Website](#)

Session I: Stem Cell-Based Therapy (IPS included)

Chair: Anaïs Kervadec & Wiebke Hamann

17:00 – 19:00 **Mimicking pancreas development toward future treatments of diabetes**

Francesca Spagnoli, Berlin (MDC), [Lab Website](#)

Pluripotent stem cells for the treatment of heart failure

Philippe Menasché, Paris, [Lab Website](#)

Discussion

19:00 – 20:30 Dinner

20:30 – 22:00 “Who is who?”

MONDAY, March 16th, 2015

Session II: Big Data

Chair: Stéphanie Espiard & Deimante Simaite & Aurélien Lorthioir

08:30 – 10:20 **Post-transcriptional gene regulation and deregulation in human diseases**

Wei Chen, Berlin (BIMSB), [Lab Website](#)

Databases and data warehouses: what should we expect?

Anita Burgun, Paris, [Lab Website](#)

10:20 – 10:50 Coffee Break

10:50 – 12:00 **Towards an automatized metabolomics/lipidomics platform for personalized medicine**

Stefan Kempa, Berlin (BIMSB), [Lab Website](#)

Discussion

12:00 – 13:00 Lunch

13:00 – 17:00 Guided Museum Tour at Château de Chantilly

17:00 – 17:30 Coffee Break

Session III: Techniques Generating Big Data

Chair: [Armelle Luscan](#) & [Ivana Zlatanova](#)

17:30 – 19:30 **Posttranscriptional and posttranslation regulation in cardiac disease**

Norbert Hübner, Berlin (MDC), [Lab Website](#)

The NGS revolution: Scientific and medical achievements and ethical considerations

Thierry Frébourg, Rouen, [Lab Website](#)

Discussion

19:30 – 21:00 [Dinner](#)

21:00 – 22:30 **Poster Session & Poster Talks I**

Jury: [Cristina Levi](#) & [Marouane Kheloufi](#)

[Santiago Andrade](#) & [Dina Chokr](#)

TUESDAY, March 17th, 2015

Session IV: Gene-Environment Interactions (Epigenetics, non-coding RNA, Microbiota)

Chair: [Yacine Haddad](#) & [Kira Kuschnerus](#) & [Nisa Renault](#)

08:30 – 10:20 **Microbiota in cardiometabolic diseases; challenges with big data**

Karine Clément, Paris, [Lab Website](#)

Transcriptional and chromatin states in neonatal cardiac muscle cells

Ana Pombo, Berlin (MDC, BIMSB), [Lab Website](#)

10:20 – 10:50 [Coffee Break](#)

10:50 – 12:55 **MicroRNAs: micro-managing the pancreatic beta cell**

Matthew Poy (MDC), [Lab Website](#)

Modeling gene-environment interactions in Crohn Disease

Jean-Pierre Hugot, Paris, [Lab Website](#)

Discussion

12:55 – 14:20 [Lunch](#)

Session V: Tissue-Immune System Interactions

Chair: [Bettina Serbin](#) & [Bernadette Nickl](#) & [Badr Kiaf](#)

14:20 – 16:10 **Sodium and innate immune cell activation**

Dominik Müller, Berlin (ECRC), [Lab Website](#)

Innate immune cells in diabetes

Agnès Lehuen, Paris, [Lab Website](#)

16:10 – 16:40 [Coffee Break](#)

16:40 – 17:50 **Adipose tissue and immune cells: Role in obesity-associated pathologies**

Anne Bouloumié, Toulouse, [Lab Website](#)

Discussion

18:00 – 20:00 **Poster Session & Poster Talks II**

Jury: [Cristina Levi](#) & [Marouane Kheloufi](#)

[Santiago Andrade](#) & [Dina Chokr](#)

20:00 – 21:30 [Dinner](#)

WEDNESDAY, March 18th, 2015

Session VI: New Preclinical Models (CRISPR, Single-Cell Seq)

Chair: Sandrine Luce & Adelheit Kratzer & Andréas Giraud

08:30 – 10:20 **Human muscle stem cells**

Simone Spuler (ECRC), [Lab Website](#)

Preclinical Models

Christian Boitard, Paris, [Lab Website](#)

10:20 – 10:50 Coffee Break

10:50 – 12:00 **Genome editing with TALE and CRISPR-Cas9 nucleases: principles and applications**

Carine Giovannangeli, Paris, [Lab Website](#)

Discussion

12:00 – 13:30 Lunch

Session VII: Tissue Remodeling (Fibrosis-Based, Metabolism and Cancer included)

Chair: Dina Chokr & Léa Guyonnet

13:30 – 15:30 **Cardiac adaptation in health and disease**

Michael Gotthardt, Berlin (MDC), [Lab Website](#)

The wound healing response, an inflammatory-driven process: the liver as an example

Sophie Lotersztajn, Paris, [Lab Website](#)

Discussion

15:30 – 16:00 Coffee Break

Workshops

16:00 – 18:00 Journal Club (2 groups)

18:00 – 19:30 Workshop techniques: Big data handling

Benedikt Obermayer, Berlin (MDC), [Lab Website](#)

20:00 – 21:00 Aperitif

21:00 – 22:30 Gala Dinner

THURSDAY, March 19th, 2015

Session VIII: Cell Diversity and Plasticity

Chair: Slobodan Culina & Meghna Thakkar

08:30 – 10:30 **Safeguarding differentiated cells - mechanisms that counteract direct reprogramming**

Baris Tursun, Berlin (BIMSB), [Lab Website](#)

Tissue engineering assisted by laser

Raphaël Devillard, Bordeaux, [Lab Website](#)

Discussion

10:30 – 11:00 Coffee Break

11:00 – 12:00 Poster award, Farewell & Closing Remarks

12:00 – 14:00 Lunch and Departure