

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

## Sunday, 2019/9/1

### Venue

17:00 - 19:00 Arrival and Registration

Arrival & Registration,  
Welcome and Departure

19:00 - 19:30 Welcome Addresses and Introduction to the Course

Arrival & Registration,  
Welcome and Departure

19:30 - 20:30 WELCOME LECTURE

Keynote

19:30 - 20:30 **A tumour is much more than just a bundle of genetic information.**

Manuel SOBRINHO-SIMÕES, i3S – Instituto de Investigação e Inovação em Saúde (Porto, Portugal)

20:30 - 22:00 Welcome Drink Followed by Dinner

Food & Drink

## Monday, 2019/9/2

### Venue

08:00 - 09:00 Breakfast

Food & Drink

09:00 - 09:45 LECTURE 1

Lecture

09:00 - 09:45 **Understanding Metabolism and its Regulation**

David Fell, Oxford Brookes University (Oxford, UK)

09:45 - 10:30 LECTURE 2

Lecture

09:45 - 10:30 **PET – The image of metabolism**

Filomena Botelho, University of Coimbra (Coimbra, Portugal)

10:30 - 11:00 Coffee Break

Food & Drink

11:00 - 11:45 LECTURE 3

Lecture

11:00 - 11:45 **Metabolomics and the unveiling of new metabolic players in cancer**

Ana Gil, University of Aveiro (Aveiro, Portugal)

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

11:45 - 12:30 LECTURE 4

Lecture

11:45 - 12:30 **Mitochondria-associated ER membranes: a cancer perspective**  
Mariusz WIECKOWSKI, Nencki Institute of Experimental Biology (Warsaw, Poland)

12:30 - 14:00 Lunch & Poster Setup

Food & Drink

14:00 - 15:00 Flash Poster Presentations I (FPP01 - FPP10) + FPP21

Flash Poster Presentation & Poster Session

15:00 - 15:15 Short Break

Food & Drink

15:15 - 15:30 TUTORIAL 1

Tutorial, Technical Presentation & Short Talk

15:15 - 15:35 **Otto Warburg, the father of oncometabolism**  
Ana URBANO, University of Coimbra (Coimbra, Portugal)

15:30 - 16:15 LECTURE 5

Lecture

15:30 - 16:15 **Novel bioimaging methods for the dynamic assessment of mitochondria activity in live cells**  
Jana NIEDER, INL – International Iberian Nanotechnology Laboratory (Braga, Portugal)

16:15 - 16:45 TECHNICAL PRESENTATION

Tutorial, Technical Presentation & Short Talk

16:15 - 16:45 **Measure cancer cell metabolism to exploit cancer liabilities with Seahorse XF and soluble sensors**  
Alfredo MALDONADO, Agilent Technologies (Bilbao, Spain)

16:45 - 18:30 Pool Networking

Keynote

18:30 - 18:40 Light Refreshments

Food & Drink

18:40 - 20:00 Poster Session I (P01 - P06) + (FPP01 - FPP10) + FPP21

Flash Poster Presentation & Poster Session

20:00 - 21:30 Dinner

Food & Drink

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

Tuesday, 2019/9/3

Venue

08:00 - 09:00 Breakfast

Food & Drink

09:00 - 09:20 SHORT TALK 1

Tutorial, Technical  
Presentation & Short Talk

09:00 - 09:20 **The role of mitochondrial metabolism in breast cancer aggressiveness induced by hypercholesterolemia**

Sandrina NÓBREGA-PEREIRA, University of Lisbon (Lisbon, Portugal)

09:20 - 09:40 SHORT TALK 2

Tutorial, Technical  
Presentation & Short Talk

09:20 - 09:40 **ESCRT-I deprivation impairs cholesterol trafficking and activates lysosome-related metabolic regulators in colorectal cancer cells**

Marta KACZMAREK, International Institute of Molecular and Cell Biology in Warsaw (Warsaw, Poland)

09:40 - 10:25 LECTURE 6

Lecture

09:40 - 10:25 **Blocking increased purine synthesis promotes response to immunotherapy**

Ayelet EREZ, Weizmann Institute of Science (Rehovot, Israel)

10:25 - 11:00 Coffee break

Food & Drink

11:00 - 11:45 IUBMB & FLAD-SPONSORED KEYNOTE LECTURE

IUBMB- SPONSORED  
KEYNOTE LECTURE

11:00 - 11:45 **Why don't we get more cancer: the critical role of extracellular matrix and microenvironment in malignancy and dormancy?**

Mina BISSELL, Lawrence Berkeley National Laboratory (Berkeley, CA, USA)

11:45 - 13:00 LECTURE 7

Lecture

11:45 - 12:30 **The role of nutrient metabolism in cancer progression**

Sarah-Maria FENDT, VIB Center for Cancer Biology (Leuven, Belgium)

16:00 - 18:10 Pool Networking

Keynote

18:10 - 18:20 Light Refreshments

Food & Drink

18:20 - 18:40 Address by FEBS Representative

Networking

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

18:20 - 18:40

Cláudio SOARES, ITQB-UNL (Lisbon, Portugal)

18:40 - 19:00 SHORT TALK 3

Tutorial, Technical  
Presentation & Short Talk

18:40 - 19:00 **Combining metabolome, transcriptome and proteome approaches to identify vulnerabilities in AML: role of PDKs**

Ayşegül ERDEM, University Medical Centre Groningen (Groningen, The Netherlands)

19:00 - 19:20 SHORT TALK 4

Tutorial, Technical  
Presentation & Short Talk

19:00 - 19:20 **Development of a novel high affinity anticalin-tracer directed against human CD98hc for diagnostic <sup>89</sup>Zr-PET and fluorescence tumor imaging**

Volker MORATH, Technical University of Munich (Munich, Germany)

19:20 - 19:40 SHORT TALK 5

Tutorial, Technical  
Presentation & Short Talk

19:20 - 20:00 **Assessing the metabolism at S phase through <sup>13</sup>C-tracing of DNA deoxynucleosides**

Inês MIRANDA-SANTOS, CNC – Center for Neuroscience and Cell Biology, University of Coimbra (Coimbra, Portugal)

20:00 - 21:30 Dinner

Food & Drink

Buçaco/Coimbra

13:00 - 16:00 SOCIAL PROGRAMME - Visit to Buçaco (lunch box included)

Networking

Wednesday, 2019/9/4

Venue

08:00 - 09:00 Breakfast

Food & Drink

09:00 - 09:45 LECTURE 8

Lecture

09:00 - 09:45 **The function and regulation of the SGK3 protein kinase**

Athanasios KARAPETSAS, University of Dundee (Dundee, UK)

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

09:45 - 10:30 LECTURE 9

Lecture

09:45 - 10:30 **Culture media composition determines how anti-cancer molecules affect cellular metabolism, mitochondrial dynamics, and growth**

Jeffrey STUART, Brock University (St. Catharines, ON, Canada)

10:30 - 11:00 Coffee Break

Food & Drink

11:00 - 11:45 LECTURE 10

Lecture

11:00 - 11:45 **CHCHD4/AIF - regulated mitochondrial import machinery in health and disease**

Nazanine MODJTAHEDI, INSERM – Institut Gustave Roussy (Villejuif, France)

11:45 - 12:30 LECTURE 11

Lecture

11:45 - 12:30 **Stroma-mediated reactivation of tumor growth in mitochondrial DNA-depleted cells**

Jakub ROHLENA, Institute of Biotechnology, BIOCEV (Prague, Czech Republic)

12:30 - 14:00 Lunch & Poster Setup

Food & Drink

14:00 - 15:00 Flash Poster Presentations II (FPP11 - FPP20)

Flash Poster Presentation & Poster Session

15:00 - 15:10 Short Break

Food & Drink

15:10 - 15:30 TECHNICAL PRESENTATION

Tutorial, Technical Presentation & Short Talk

15:10 - 15:30 **Cell energetics and cancer metabolism analysis in cancer R&D**

Barry BOCHNER, Biolog, Inc. (Hayward, California, USA)

15:30 - 15:50 TUTORIAL 2

Tutorial, Technical Presentation & Short Talk

15:30 - 15:50 **How (not) to lie with statistics**

Ernesto COSTA, University of Coimbra (Coimbra, Portugal)

15:50 - 16:10 TUTORIAL 3

Tutorial, Technical Presentation & Short Talk

15:50 - 16:10 **Fluorescence microscopy in cancer biology**

Luísa CORTES, CNC – Center for Neuroscience and Cell Biology (Coimbra, Portugal)

16:10 - 16:30 TUTORIAL 4

Tutorial, Technical Presentation & Short Talk

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

16:10 - 16:30 **Modeling angiogenesis and tumor growth**  
Rui TRAVASSO, University of Coimbra (Coimbra, Portugal)

16:30 - 18:30 (Option 1) Speed dating with the Experts (Option 2)  
Pool Networking

Networking

18:30 - 18:40 Light Refreshments

Food & Drink

18:40 - 20:00 Poster Session II (P07 - P12) + (FPP11 - FPP20)

Flash Poster Presentation &  
Poster Session

20:00 - 22:00 Dinner

Food & Drink

## Thursday, 2019/9/5

Venue

08:00 - 09:00 Breakfast

Food & Drink

09:00 - 09:45 LECTURE 12

Lecture

09:00 - 09:45 **Targeting multicompartmetabolism in human malignancies**  
Ubaldo Martinez-OUTSCHOORN, Thomas Jefferson University (Philadelphia, PA, USA)

09:45 - 10:30 LECTURE 13

Lecture

09:45 - 10:30 **Control of lysosomal membrane integrity: opportunities for clinical intervention**  
Marja JÄÄTTELÄ, Danish Cancer Society Research Center (Copenhagen, Denmark)

10:30 - 11:00 Coffee Break

Food & Drink

11:00 - 11:20 SHORT TALK 6

Tutorial, Technical  
Presentation & Short Talk

11:00 - 11:20 **TRAIL induces apoptosis but not necroptosis in colorectal and pancreatic cancer cells preferentially via the TRAIL-R2/DR5 receptor**  
Zuzana NAHACKA, Czech Academy of Sciences (Prague, Czech Republic)

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

11:20 - 11:40 SHORT TALK 7

Tutorial, Technical  
Presentation & Short Talk

11:20 - 11:40 **Metabolic reprogramming of ER+ breast cancer cells in response and resistance to the CDK4/6 inhibitor Palbociclib**

Nicla LORITO, University of Florence (Florence, Italy)

11:40 - 12:00 SHORT TALK 8

Tutorial, Technical  
Presentation & Short Talk

11:40 - 12:00 **Characterization of the vemurafenib-resistant melanoma cells' resistance mechanisms**

Ewelina DRATKIEWICZ, University of Wroclaw (Wroclaw, Poland)

12:00 - 12:20 SHORT TALK 9

Tutorial, Technical  
Presentation & Short Talk

12:00 - 13:00 **Metabolic alterations in a model of glioblastoma stem-like cells**

Joana PEIXOTO, Instituto de Investigação e Inovação em Saúde (Porto, Portugal)

Buçaco/Coimbra

13:00 - 20:00 Social Programme - Visit to the Old Campus of the University of Coimbra

Networking

TBA

20:00 - 22:00 Course Dinner

Food & Drink

Friday, 2019/9/6

Venue

08:00 - 09:00 Breakfast & Poster Setup

Food & Drink

09:00 - 09:45 LECTURE 14

Lecture

09:00 - 09:45 **Metabolism, quality control and pluripotency in embryonal carcinoma cells**

Paulo OLIVEIRA, CNC – Center for Neuroscience and Cell Biology (Coimbra, Portugal)

09:45 - 10:30 LECTURE 15

Lecture

09:45 - 10:30 **Metabolic regulation of the cancer stem cell phenotype**

Joana PAREDES, i3S – Instituto de Investigação e Inovação em Saúde (Porto, Portugal)

10:30 - 10:45 Coffee Break

Food & Drink

# FEBS Advanced Lecture Course 2019 | Oncometabolism: From Conceptual Knowledge to Clinical Applications

10:45 - 11:30 ESCI-SPONSORED KEYNOTE CLOSING  
LECTURE

Keynote

10:45 - 11:30 **Oncometabolism and immunometabolism converging into oncoimmunology**  
Guido KROEMER, INSERM (Paris, France)

11:30 - 12:30 Best Short Talk and Poster Prize Awards & Closing  
Remarks

Networking

12:30 - 14:00 Lunch, with Best Poster Prize Awards and Closing  
Remarks

Food & Drink

14:00 - 14:30 Departure

Arrival & Registration,  
Welcome and Departure