

# ***Circadian clocks and metabolic health***

## ***From basic science to clinical implications***

Thursday, June 23

8:45-9:00 Introduction of the Symposium by **Etienne Challet** (Strasbourg, F)

**Session 1: *Molecular mechanisms*** (Chair: **Frédéric Gachon**, Lausanne, CH)

9:00-9:40 **Céline Feillet** (University of Nice, F)

*Coupling between the circadian clocks and the cell cycle*

9:40-10:20 **Kiran Padmanabhan** (ENS Lyon, F)

*Epigenetic control of circadian clocks*

10:20-10:50 coffee break

10:50-11:30 **Frédéric Gachon** (Nestlé Institute of Health Sciences, Lausanne, CH)

*Effects of circadian and feeding rhythms on mRNA transcription and translation in the liver*

11:30-12:10 **Ute Rogner** (Pasteur Institute, Paris, F)

*Role of the clock gene *Arntl2* in autoimmunity and type 1 diabetes*

12:10-12:50 **Wolfgang Driever** (University of Freiburg, G)

*Non-retinal photoreception in zebrafish: deep brain light sensors and the pineal system*

12:50-14:10 Lunch time

**Session 2: *Physiological mechanisms*** (Chair: **Paul Pévet**, Strasbourg, F)

14:10-14:50 **Stephan Collins** (IGBMC, Université de Strasbourg and CSGA, Université de Bourgogne-Franche Comté, F)

*Mechanisms underlying the rhythmic secretion of insulin*

14:50-15:30 **Aleksey Matveyenko** (Mayo Clinic College of Medicine, USA)

*Role of the pancreatic islet clock in glucose homeostasis*

15:30-16:10 **Atish Mukherji and Pierre Chambon** (USIAS, IGBMC, Univ of Strasbourg, F)

*Shifting eating from the active to the rest phase results in a 12 h misalignment between the circadian peripheral and central clocks, which leads to a metabolic syndrome*

16:10-16:40 coffee break

16:40-17:20 **Shigenobu Shibata** (Waseda University, J)

*Entrainment of the liver clock by scheduled feeding*

17:20-18:00 **Henrik Oster** (University of Lübeck, D)

*Synchronization of the circadian timing system by light and food*

Friday, June 24

**Session 3: Clinical implications** (Chair: **Andries Kalsbeek**, Amsterdam, NL)

8:30-9:10 **Anne Eckert** (University of Basel, CH)

*Impaired brain metabolism and rhythmicity during aging*

9:10-9:50 **Marc Cuesta** (McGill University, CA)

*Glucocorticoids as circadian synchronizers in humans*

9:50-10:30 **Jonathan Johnston** (University of Surrey, UK)

*Human circadian rhythms, metabolism and chrononutrition*

10:30-11:00 coffee break

11:00-11:40 **Andries Kalsbeek** (University of Amsterdam, NL)

*Circadian control of glucose metabolism*

11:40-12:20 **Eleanor Scott** (University of Leeds, UK)

*Circadian influences on cardiometabolic diseases*

12:20-13:00 **Christian Cajochen** (University of Basel, CH)

*Disturbed sleep in humans and metabolic consequences*

13:00-14:30 Lunch time