



FACULTY OF SCIENCE
Charles University



Institute of Animal Physiology
and Genetics CAS

Oocyte day

January 22, 2019

10:00 AM – 4:40 PM

Viničná 7, Prague 2
Lecture Hall "Fotochemie"

Participation is free of charge, students are welcome

Please, register using [online form \(link\)](#)

Program:

In commemoration of the half-centennial anniversary of identification of starfish 1-methyladenine, the first oocyte maturation hormone in metazoans: Its signaling pathways that lead to meiotic G2/M-phase transition

Takeo Kishimoto, *Ochanomizu University, Tokyo, Japan*

Mammalian oocyte surgery

Josef Fulka, *Institute of Animal Science, Prague – Uhřetín, Czech Republic*

Chromosome-specific errors in meiosis shape the J curve of human aneuploid conceptions

Jennifer Rose Gruhn, *University of Copenhagen, DNRF Center for Chromosome Stability, Copenhagen, Denmark*

Human egg maturity assessment for optimal timing of in vitro fertilization

Zuzana Holubcová, *Masaryk University, Faculty of Medicine, Brno; Reprofit International s.r.o., Brno, Czech Republic*

Roles of three Aurora kinases (A, B, C) in spindle formation and chromosome segregation during mammalian oocyte meiosis

David Drutovic, *Institute of Animal Physiology and Genetics ASCR, Pigmod Centre, Libečov, Czech Republic*

Endocrine disrupting effect of bisphenol S (BPS): deleterious for oocyte quality in extremely low doses

Jan Nevoral, *Charles University, Faculty of Medicine in Pilsen, Biomedical Center, Pilsen, Czech Republic*

New Leica THUNDER for advanced widefield imaging in live cells and embryology

Martin Kopecký, *Pragolab, Prague*

Evolution of genes and gene expression in oocytes

Petr Svoboda, *Institute of Molecular Genetics ASCR, Prague, Czech Republic*

Oocyte: translation in space and time

Andrej Susor, *Institute of Animal Physiology and Genetics ASCR, Libečov, Czech Republic*

Organized by

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Oocyte Day Program:

- 10:00 – 10:05 **Meeting opening**
- 10:05 – 10:15 **Introduction**
Jan Motlik, *Institute of Animal Physiology and Genetics ASCR, Libechov, Czech Republic*
- Key note lecture
10:15 – 11:15 **In commemoration of the half-centennial anniversary of identification of starfish 1-methyladenine, the first oocyte maturation hormone in metazoans: Its signaling pathways that lead to meiotic G2/M-phase transition**
Takeo Kishimoto, *Ochanomizu University, Tokyo, Japan*
- 11:15 – 11:45 **Mammalian oocyte surgery**
Josef Fulka, *Institute of Animal Science, Prague – Uhřetín, Czech Republic*
- 11:45 – 12:10 **coffee break**
- Key note lecture
12:10 – 13:00 **Chromosome-specific errors in meiosis shape the J curve of human aneuploid conceptions**
Jennifer Rose Gruhn, *University of Copenhagen, DNRF Center for Chromosome Stability, Copenhagen, Denmark*
- 13:00 – 13:20 **Human egg maturity assessment for optimal timing of in vitro fertilization**
Zuzana Holubcová, *Masaryk University, Faculty of Medicine, Brno; Reprofit International s.r.o., Brno, Czech Republic*
- 13:20 – 14:20 **lunch**
- 14:20 – 14:40 **Roles of three Aurora kinases (A, B, C) in spindle formation and chromosome segregation during mammalian oocyte meiosis**
David Drutovic, *Institute of Animal Physiology and Genetics ASCR, Pímod Centre, Libechov, Czech Republic*
- 14:40 – 15:00 **Endocrine disrupting effect of bisphenol S (BPS): deleterious for oocyte quality in extremely low doses**
Jan Nevoral, *Charles University, Faculty of Medicine in Pilsen, Biomedical Center, Plzeň, Czech Republic*
- 15:00 – 15:20 **coffee break**
- 15:20 – 15:40 **New Leica THUNDER for advanced widefield imaging in live cells and embryology**
Martin Kopecky, *Pragolab, Prague*
- 15:40 – 16:10 **Evolution of genes and gene expression in oocytes**
Petr Svoboda, *Institute of Molecular Genetics ASCR, Prague, Czech Republic*
- 16:10 – 16:30 **Oocyte: translation in space and time**
Andrej Susor, *Institute of Animal Physiology and Genetics ASCR, Libechov, Czech Republic*
- 16:30 – 16:40 **concluding remarks**