MAYosis 2024 Program

Thursday, May 2, 2024: 10AM EDT (7AM PDT)
Moderators: Neil Hunter, Chloé Girard, Luca Comai, Kanae Masuda

10:00-10:12 EDT: Caroline Blanc, Université de Lausanne, Switzerland (PI: Marie Delattre)
When a segregation bias of chromatids maintains heterozygosity in parthenogenetic nematode

10:17-10:32 EDT: Keynote speaker: Christine Mézard, Institut Jean-Pierre Bourgin, France
New screen: a series of new meiotic players in plant meiosis

10:42-10:54 EDT: Celja Uebel, Stanford University, USA (PI: Anne Villeneuve)
Ensuring crossover maturation with COSA-2 "Crossover Glue"

10:59-11:11 EDT: Vernon Monteiro, University of Toronto, Canada (PI: Thomas Hurd)
“Game(tes) On!” – RNA-binding protein, Ataxin-2, promotes premeiotic DNA replication and genome stability

11:16-11:31 EDT: Keynote speaker: John Weir, MPRGL Friedrich Miescher Laboratory, Germany
Roles of Mer3 helicase in crossover formation

11:41-11:53 EDT: Aleksandra Byrska, University of Warwick, UK (PI: Andrew D. McAinsh)
Cas9-based chromosome labelling reveals large-scale age-dependent centromere reorganisation in human eggs

Thursday, May 9, 2024: 10AM EDT (7AM PDT)
Moderators: Satoshi Namekawa, Richard Schultz, Jasmine Esparza

10:00-10:12 EDT: Karel Janko, Institute of Animal Physiology and Genetics, Czech
Hybridization-Induced Deviations in Meiosis: Unraveling the Pathways to Asexuality

10:17-10:29 EDT: Cristina Marin-Garcia, Unversitat Autonoma de Barcelona, Spain (PI: Aurora Ruiz-Herrera)
Meiotic functional constraints in wild mice carrying Robertsonian translocations

10:34-10:46 EDT: André Marques, Max Planck Institute for Plant Breeding Research, Germany
Crossover patterning dynamics under chromosome breaks and fusions in holocentric Rhynchospora species

10:51-11:03 EDT: Wenzhe Li, UC Davis, USA (PI: Francis McNally)
Spatial and Temporal Control of Centrioles and Chromosomes in C.elegans Meiotic Embryos

11:08-11:23 EDT: Keynote speaker: Takashi Akera, NIH/NHLBI, USA
Mis-regulation of meiotic cohesin protection is a reproductive isolating barrier in mice

11:33-11:45 EDT: Talia Hatkevich, Duke University, USA (PI: Blanche Capel)
Gonadal sex and temperature independently influence germ cell differentiation and meiotic progression in Trachemys scripta

11:50-12:02 EDT: Meret Arter, Memorial Sloan Kettering Cancer Center, USA (PI: Scott Keeney)
Characterizing the rapid evolution of meiotic recombination proteins

Thursday, May 16, 2024: 10AM EDT (7AM PDT)
Moderators: Sean Burgess, Bernard de Massy, Ivan Olaya

10:00-10:12 EDT: Noopur Joshi, Cleveland State University, USA (PI: Valentin Boerner)
The Dot1-mediated H3K79 methylation mark limits recombination and meiotic cell divisions during heat stress to preserve gamete quality

10:17-10:29 EDT: Kip Lacy, Rockefeller University, USA (PI: Daniel Kronauer)
Unselfish meiotic drive maintains heterozygosity in a parthenogenetic ant

10:34-10:49 EDT: Keynote speaker: Piotr Ziółkowski, Adam Mickiewicz University, Poland
What is MSH2 for in meiotic recombination? A look from the plant perspective

10:59-11:11 EDT: Yuka Kitamura, UC Davis, USA (PI: Satoshi Namekawa)
CTCF-mediated 3D chromatin predetermines the meiotic gene expression program in the male germline

11:16-11:28 EDT: Ching-Ho Chang, Fred Hutchinson Cancer Center, USA (PI: Harmit Malik)
Genetic conflicts shape rapid evolution of young Drosophila protamines

11:33-11:45 EDT: Alex Zelensky, Erasmus MC, Netherlands
Chromosome Pairing Through Tensioned DNA Tethers Revealed by BRCA2 Meiotic Domain Deletion

Thursday, May 23, 2024: 10AM EDT (7AM PDT)
Moderators: Francis McNally, Regina Bohn, Wenzhe Li

10:00-10:12 EDT: Yan Yun, Shantou Central Hospital, China
Oocytes from juvenile mice have high levels of chromosome segregation errors due to excess cohesion

10:17-10:29 EDT: Alyssa Quiogue, University of Oregon (IMB), USA (PI: Bruce Bowerman)
Sub-cortical microtubules oppose actomyosin-driven membrane ingression throughout the oocyte during C. elegans meiosis I polar body extrusion

10:34-10:46 EDT: Chris Morgan, John Innes Centre, UK (PI: Martin Howard)
Exploring HEI10 coarsening dynamics with live-imaging

10:51-11:03 EDT: Alain Garcia De Las Bayonas, UC Berkeley, USA (PI: Nicole King)
The adhesion GPCR cupidon regulates mating in the closest relatives of animals

11:08-11:23 EDT: Keynote speaker: Simone Koehler, EMBL, Germany
Real-time imaging of crossover formation in C. elegans

11:33-11:45 EDT: Xuefeng Meng, MIT/Whitehead Institute, USA (PI: Yukiko Yamashita)
Asymmetric segregation of Stellate during meiosis leads to meiotic drive in Drosophila melanogaster

Thursday, May 30, 2024: 10AM EDT (7AM PDT)
Moderators: JoAnne Engebrecht, Frédéric Baudat, Bruce Draper

10:00-10:12 EDT: Karine Levy, Hebrew University of Jerusalem, Israel (PI: Yaniv Elkouby)
Coordinated Control of Chromosomal Pairing and Centrosome Regulation by the bouquet-MTOC machinery in Meiosis and Oocyte Polarity

10:17-10:32 EDT: Keynote speaker: Verena Jantsch, Max Perutz Labs, Austria
Facilitating Meiotic Chromosome Dynamics: Insights into Chromatin Reorganization and Movement

10:42-10:54 EDT: Alex (Chih-Yu) Yang, Harvard University, USA (PI: Nancy Kleckner)
Homologous pairing is facilitated by axis development-mediated chromosome bundling and nuclear organization before karyogamy in Sordaria

10:59-11:11 EDT: Joseph Davy, MRC Laboratory of Medical Sciences, UK (PI: Enrique Martinez-Perez)
Biochemical and biophysical investigation of C. elegans meiotic cohesin complexes

11:16-11:28 EDT: Elvira Nikalayevich, Centre for Interdisciplinary Research in Biology, Collège de France, France (PI: Marie-Emilie Terret and Marie-Hélène Verlhac)
Aberrant cortex contractions impact mammalian oocyte quality

11:33-11:48 EDT: Keynote speaker: Frank Uhlmann, Francis Crick Institute, UK
Life without Loop Extrusion