Mechanisms of Cell Proliferation: Normal and Cancerous

July 8 - 9, 2017

Chair

Deepak K. Jha

Mount Snow

89 Grand Summit Way West Dover, VT, US

Conference Description

The Gordon Research Seminar on Cell Growth and Proliferation is a unique forum for graduate students, post-docs, and other scientists with comparable levels of experience and education to present and exchange new data and cutting edge ideas.

This GRS will focus on how cell growth and division is regulated during normal development, and how they go awry in cancers. We will focus on mechanisms, including signaling, genetic, and epigenetic, that underlie normal development, and carcinogenesis.

Related Meeting



This GRS will be held in conjunction with the "Cell Growth and Proliferation" Gordon Research Conference (GRC). Those interested in attending both meetings must submit an application for the GRC in addition to an application for the GRS. Refer to the <u>associated GRC program page</u> for more information.

Conference Program

Saturday

2:00 pm - 5:00 pm

Arrival and Check-in

| 3:30 pm - 3:45 pm | Introductory Comments by GRC Site Staff / Welcome from the GRS Chair | |
|-------------------|---|--|
| 3:45 pm - 4:30 pm | Keynote Session: Cell Signaling and Cancer | |
| | Discussion Leader: Jan Inge Oevreboe (Huntsman Cancer | |
| | Institute, USA) | |
| 3:45 pm - 4:25 pm | Shiva Malek (Genentech, USA) | |
| | "Novel Mechanisms in Cell Signaling and Cancer" | |
| 4:25 pm - 4:30 pm | Discussion | |
| 4:30 pm - 6:00 pm | Poster Session | |
| 6:00 pm - 7:00 pm | Dinner | |
| 7:30 pm - 9:30 pm | Single Cell Biology and Cell Division | |
| | Discussion Leader: Philipp Kaldis (Institute of Molecular and Cell | |
| | Biology (IMCB), Singapore) | |
| 7:30 pm - 7:50 pm | Shixuan Liu (University of Toronto / Hospital for Sick Children, | |
| | Canada) | |
| | "Size Uniformity of Animal Cells Is Actively Maintained by a p38 | |
| | MAPK-Dependent Regulation of G1 Length" | |
| 7:50 pm - 8:00 pm | Discussion | |
| 8:00 pm - 8:20 pm | Samuel Cooper (Institute of Cancer Research, United Kingdom) | |
| | "Cell Cycle Signaling Analysis in Live Single Cell by Deep Learning" | |
| 8:20 pm - 8:30 pm | Discussion | |
| 8:30 pm - 8:50 pm | Stefano Santaguida (Massachusetts Institute of Technology, USA) | |
| | "Chromosome Mis-Segregation Generates Cell Cycle-Arrested | |
| | Cells with Complex Karyotypes that Are Eliminated by the Immune | |
| | System" | |
| 8:50 pm - 9:00 pm | Discussion | |
| 9:00 pm - 9:20 pm | Evgeny Zatulovskiy (Stanford University, USA) | |
| | "Investigating Molecular Basis of G1/S Transition and Size Control | |
| | in Mammalian Cells" | |

| 9:20 pm - 9:30 pm | Discussion | |
|---------------------|--|--|
| Sunday | | |
| 7:30 am - 8:30 am | Breakfast | |
| 9:00 am - 11:00 am | Cell Growth, Metabolism and Cell Cycle Discussion Leader: Shixuan Liu (University of Toronto / Hospital for Sick Children, Canada) | |
| 9:00 am - 9:20 am | Jacob Matson (University of North Carolina at Chapel Hill, USA) "Rapid Replication Origin Licensing Protects Stem Cell Pluripotency" | |
| 9:20 am - 9:30 am | Discussion | |
| 9:30 am - 9:50 am | Avinashnarayan Venkatanarayan (Genentech, Inc., USA) "Investigating cRAF Kinase-Independent Functions in KRAS-Driven Tumorigenesis" | |
| 9:50 am - 10:00 am | Discussion | |
| 10:00 am - 10:20 am | Aimee Marceau (University of California, Santa Cruz, USA) "Activity of the Cell Cycle and Oncogenic Transcription Factor FOXM1 Is Regulated by a Phosphorylation-Dependent Structural Switch" | |
| 10:20 am - 10:30 am | Discussion | |
| 10:30 am - 10:50 am | Jan Inge Oevreboe (Huntsman Cancer Institute, USA) "Translational Regulation of Cell Cycle" | |
| 10:50 am - 11:00 am | Discussion | |
| 11:00 am - 12:30 pm | Poster Session Coffee will be served in the poster area from 11:00 am - 11:30 am | |
| 12:30 pm - 1:30 pm | Lunch | |
| 1:30 pm - 2:30 pm | Mentorship Component: NIH Funding / Career Panel Discussion Leader: Aimee Marceau (University of California, Santa Cruz, USA) | |

| 1:30 pm - 1:40 pm | Amanda Melillo (National Institute of General Medical Sciences, NIH, USA) "NIGMS Funding, and Opportunities at NIH" |
|-------------------|---|
| 1:40 pm - 1:45 pm | Discussion |
| 1:45 pm - 2:30 pm | Panel Discussion Career Options in Academia and Beyond Jeanette Cook (University of North Carolina at Chapel Hill, USA) Seth Ettenberg (Unum Therapeutics, USA) Philipp Kaldis (Institute of Molecular and Cell Biology (IMCB), Singapore) Shiva Malek (Genentech, USA) Amanda Melillo (National Institute of General Medical Sciences, NIH, USA) |
| 2:30 pm - 3:00 pm | Evaluation Period Fill in GRS Evaluation Forms |
| 3:00 pm | Seminar Concludes |

Contributors

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| Thermo Fisher SCIENTIFIC | | |