



Center for Genomics and Systems Biology VIII
NYU ABU DHABI SAADIYAT CAMPUS
Institute Conference Center, A6
February 6-8, 2018

Tuesday February 6, 2018 | DAY 1

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|---------------------------|--|
| 8:30 - 8:45 AM | Registration & Coffee |
| 8:45 - 9:00 AM | Welcoming Remarks
<i>Fabio Piano, NYUAD</i> |
| 9:00 AM - 12:00 PM | PANEL I: Biodiversity
<i>Chair: Michael Purugganan, NYU & NYUAD</i> |
| 9:00 - 9:30 AM | Revisiting the evolutionary history of the date palm
<i>Muriel Gros-Balthazard, New York University Abu Dhabi</i> |
| 9:30 - 10:00 AM | The wondrous cycles of polyploidy in plants
<i>Jonathan Wendel, Iowa State University</i> |
| 10:00 - 10:30 AM | Adjusting the valves: Stomatal development in time and space
<i>Dominique Bergmann, Stanford University</i> |
| 10:30 - 11:00 AM | Break & Refreshments |
| 11:00 - 11:30 AM | Genome sequencing of date palm wild relatives supports a role for introgressive hybridization in domestication
<i>Jonathan Flowers, NYU & NYUAD</i> |

- 11:30 AM - 12:00 PM Dynamic gene expression, metabolites, and microbial communities in a symbiotic sea anemone
Adam Reitzel, University of North Carolina
- 12:00 - 2:00 PM Lunch
- 12:00 - 2:00 PM **CAREER DISCUSSION FOR WOMEN SCIENTISTS LUNCHEON**
Moderator: Kirsten Sadler Edepli
Room A6 001
- 2:00 - 5:00 PM **PANEL II: Neuronal Systems**
Chair: *Claude Desplan, NYU & NYUAD*
- 2:00 - 2:30 PM Molecular and circuit mechanisms of behavioral evolution
Vanessa Ruta, Rockefeller University
- 2:30 - 3:00 PM Development and evolution of the human neocortex
Arnold Kriegstein, University of California-San Francisco
- 3:00 - 3:30 PM Neural motion: Looking for common principles of network dynamics, from insects to cephalopods to cortex
Gilles Laurent, Max Planck Institute-Frankfurt
- 3:30 - 4:00 PM **Break & Refreshments**
- 4:00 - 4:30 PM Molecular mechanisms of neural stem cell lineage progression
Simon Hippenmeyer, Institute of Science and Technology Austria
- 4:30 - 5:00 PM How do nerve cells compute the direction of motion?
Alexander Borst, Max Planck Institute-Munich
- 5:15 - 6:15 PM **CAMPUS TOUR**
- 6:30 - 8:00 PM **PUBLIC PROGRAM**
The Role of Technology in Feeding 10 Billion
Nina Fedoroff, Pennsylvania State University
- * Immediately followed by a public reception **

- 8:30 - 9:00 AM** **Registration & Coffee**
- 9:00 AM - 12:00 PM** **PANEL III: Cells, Development & Diseases**
Chair: Youssef Idaghdour, NYUAD
- 9:00 - 9:30 AM Local transcriptomes and proteomes in neurons
Erin Schuman, Max Planck Institute-Frankfurt
- 9:30 - 10:00 AM Non-communicable diseases and epigenetics
Maryam Matar, Founder of UAE Genetic Diseases Association
- 10:00 - 10:30 AM Genetic risk factors for diabetes in ethnic populations
Rana Dajani, Hashemite University
- 10:30 - 11:00 AM** **Break & Refreshments**
- 11:00 - 11:30 AM Moving in the crowded cell: Motors, forces, and disease
George Shubeita, NYUAD
- 11:30 - 11:45 AM An evolutionary scandal: 18 million years without sex
Kristin Gunsalus, NYU & NYUAD
- 11:45 AM - 12:00 PM Fighting parasitic worms with bacterial crystals
Hala Fahs, NYUAD
- 12:00 - 1:30 PM** **Lunch**
- 12:00 - 1:30 PM** **LUNCH WITH EDITORS**
Pamela Hines, Science
Catherine Potenski, Nature Genetics
Room A6 001
- 1:30 - 4:30 PM** **PANEL IV: Chemical & Functional Genomics**
Chair: Kristin Gunsalus, NYU & NYUAD
- 1:30 - 2:00 PM Comprehensive analysis of single and double mutants in yeast
Anastasia Baryshnikova, Calico Life Sciences
- 2:00 - 2:30 PM What do RNA-binding proteins bind?
Quaid Morris, University of Toronto

2:30 - 3:00 PM	Chromatin organization and gene regulation in the <i>C. elegans</i> germ line <i>Valerie Reinke, Yale University</i>
3:00 - 3:30 PM	Break & Refreshments
3:30 - 4:00 PM	Profiling the gene set controlling <i>C. elegans</i> embryonic development using an automated method that enables phenotypic comparison in 4D imaging data <i>Karen Oegema, University of California-San Diego</i>
4:00 - 4:30 PM	Screening neurodegenerative models with automated microscopy <i>Marc Bickle, Max Planck Institute of Molecular Cell Biology and Genetics</i>
4:30 - 6:00 PM	Poster Session
6:00 - 7:00 PM	KEYNOTE Shaping immune responses by the commensal microbiota <i>Dan Littman, New York University School of Medicine</i>

Thursday February 8, 2018 | DAY 3

8:30 - 9:00 AM	Coffee
9:00 AM - 12:00 PM	PANEL V: Synthetic Biology <i>Chair: Kourosh Salehi-Ashtiani, NYUAD</i>
9:00 - 9:30 AM	The lesser known half of the perennial crop equation: Diversity, diversification, and rootstock domestication in grafted grapevines <i>Allison Miller, University of Missouri</i>
9:30 - 10:00 AM	From combating vitamin A deficiency to witchweed control <i>Salim Al-Babili, King Abdullah University of Science and Technology</i>
10:00 - 10:30 AM	Shared resources by the numbers <i>Andras Gyoergy, NYUAD</i>
10:30 - 11:00 AM	Break & Refreshments

- 11:00 - 11:30 AM Designing RNA architectures to engineer and analyze systems on a large scale
James Carothers, University of Washington
- 11:30 AM - 12:00 PM Synthetic biology meets synthetic chemistry – *In vivo* activation of an
apo-metalloenzyme using synthetic cofactors
*Namita Khanna, Birla Institute of Technology and Science Pilani-Dubai
Campus*
- 12:00 - 12:30 PM Design, construction, and analysis of a synthetic minimal bacterial cell
John Glass, J.Craig Venter Institute
- 12:30 - 12:45 PM **Closing Remarks**
- 12:45 - 2:45 PM Lunch at Torch Club**

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