

Poster Presentations

Posters will be presented either on Wednesday, Thursday or Friday. The day of presentation is indicated for each poster in the list below. The posters are listed in alphabetical order by presenting author, except where more than one member of a grant team has prepared a poster, in which case these are listed together.

- 1. Protein allostericity and the information flow between the biological and the digital worlds**
Kirill Alexandrov, Queensland University of Technology, Brisbane, Australia
Program Grant 2018 - **Thursday**
- 2. (Bio)electrochemical tools for integration of biological systems and electronic components**
Ioanis Katakis, Universitat Rovira i Virgili, Tarragona, Spain
Program Grant 2018 - **Thursday**
- 3. Development of a microtubule nucleation biosensor**
Aamir Ali, Institute for Research in Biomedicine (IRB), Barcelona, Spain
Long-Term Fellow 2018 - **Friday**
- 4. RNA-SEQ based functional screen for deciphering host-microbiome crosstalk**
Niv Antonovsky, The Rockefeller University, New York, USA
Long-Term Fellow 2018 - **Wednesday**
- 5. Characterizing circadian rhythms in red blood cells**
Gad Armony, Utrecht University, the Netherlands
Long-Term Fellow 2018 - **Friday**
- 6. Investigating the circuit basis of adolescence impulsivity**
Maithe Arruda Carvalho, University of Toronto Scarborough, Canada
Career Development Award 2018 – **Friday**
- 7. Reconstructing accurate cell lineages using somatic mutations: design, optimization and in situ reading of CRISPR recorders**
Michalis Averof, Institut de Génomique Fonctionnelle de Lyon (IGFL), France
Program Grant 2016 - **Wednesday**
- 8. Searching for life on Earth that may use UV radiation as a source of energy**
Armando Azua-Bustos, Center of Astrobiology, Madrid, Spain
Young Investigator Grant 2018 - **Friday**
- 9. Finding life able to use UV radiation as a source of energy**
Armando Azua-Bustos, Center of Astrobiology, Madrid, Spain
Young Investigator Grant 2018 - **Friday**
- 10. Neural correlates of perceptual decision making in larval zebrafish**
Armin Bahl, Harvard University, Cambridge, USA
Long-Term Fellow 2016 - **Thursday**
- 11. In vitro reconstitution of bacterial cell division**
Natalia Baranova, Institute of Science and Technology Austria, Klosterneuburg, Austria
Long-Term Fellow 2016 – **Thursday**
- 12. Sequencing metabolically labeled transcripts in single cells reveals diverse regulatory strategies**
Nicolas Battich, Hubrecht Institute, Utrecht, the Netherlands
Long-Term Fellow 2017 - **Friday**

- 13. Ordered 2D multi-component protein materials design: from local molecular interactions to biologically active materials**
Ariel Ben-Sasson, Institute for Protein Design, University of Washington, Seattle, USA
Cross-Disciplinary Fellow 2014 - [Wednesday](#)
- 14. Characterizing the activity of neural assemblies in the hippocampus across the full sleep-wake cycle**
Richard Boyce, Inserm, Marseille, France
Long-Term Fellow 2018 - [Thursday](#)
- 15. Molecular basis of avian influenza polymerase adaptation to humans**
Aldo Roman Camacho Zarco, Institute of Structural Biology, Grenoble, France
Long-Term Fellow 2017 - [Wednesday](#)
- 16. Intraluminal nutrients modulate intracellular calcium activity in the enteric nervous system of adult mice**
Jean-Baptiste Cavin, University of Calgary, Canada
Long-Term Fellow 2017 - [Wednesday](#)
- 17. Nuclear mis-shaping affects gene expression in plants**
Marie-Edith Chabou  , CNRS, Strasbourg, France
Program Grant 2018 - [Wednesday](#)
- 18. First steps towards next-generation human artificial chromosomes**
Alina Chan, Broad Institute of MIT & Harvard, Cambridge, USA
Long-Term Fellow 2015 – [Friday](#)
- 19. Towards room-temperature atomic-resolution structure determination of single fibrils, viruses and macromolecules using XFEL pulses**
Henry Chapman, DESY, Hamburg, Germany
Program Grant 2017 - [Thursday](#)
- 20. Characterization of breast cancer-induced bone mineral changes and development of a bio-mimetic culture platform to probe their role in bone metastasis**
Aaron Chiou, Cornell University, Ithaca, USA
Program Grant 2017 - [Wednesday](#)
- 21. Breast cancer metastasis to bone**
Neta Varsano, Weizmann Institute of Science, Rehovot, Israel
Program Grant 2017 – [Wednesday](#)
- 22. Architecture of the postsynaptic scaffold**
Adam Claridge-Chang, Duke-NUS Medical School, Singapore
Program Grant 2018 - [Thursday](#)
- 23. Novel morphological and functional insights in python cardiac biology**
Claudia Crocini, University of Colorado, Boulder, USA
Long-Term Fellow 2017 - [Thursday](#)
- 24. The effect of ethanol metabolism on the gut microbiota and the immune system**
Diogo da Fonseca Pereira, Harvard T. H. Chan School of Public Health, Cambridge, USA
Long-Term Fellow 2016 – [Friday](#)
- 25. A home-made AFM-TIRFM microscope for studying packed enzymes within individual protein nanocages**
Pedro De Pablo, Universidad Autonoma de Madrid, Spain
Program Grant 2018 – [Wednesday](#)

- 26. Interrogating bacterial social interactions in droplets**
Johannes A.G.M. De Visser, Wageningen University, the Netherlands
Program Grant 2015 - [Thursday](#)
- 27. Synthetic reconstitution of cortical polarity in naïve, unpolarized mammalian cells**
Emmanuel Derivery, MRC Laboratory of Molecular Biology, Cambridge, UK
Career Development Award 2017 - [Friday](#)
- 28. A minimal biochemical route towards de novo formation of synthetic phospholipid membranes**
Neal Devaraj, University of California, San Diego, La Jolla, USA
Young Investigator Grant 2017 – [Wednesday](#)
- 29. Identification of master regulator transcription factors with single-cell CRISPR screens**
Silvia Domcke, University of Washington, Seattle, USA
Long-Term Fellow 2018 - [Wednesday](#)
- 30. RNA memories: trans-generational epigenetic inheritance of RNA-mediated gene silencing**
Thomas Duchaine, McGill University, Montreal, Canada
Program Grant 2015 - [Friday](#)
- 31. Mechanisms of resistance to ionising radiation in Drosophila neural stem cells**
André Eid, The Francis Crick Institute, London, UK
Long-Term Fellow 2018 - [Wednesday](#)
- 32. Transparency in Lepidoptera (butterflies and moths): structural diversity and impact on water repellency**
Marianne Elias, Institute of Systematics, Evolution, Biodiversity, Paris, France
Program Grant 2016 - [Friday](#)
- 33. The molecular and cellular basis for wing transparency**
Nipam Patel, Marine Biological Laboratory, Woods Hole, USA
Program Grant 2016 – [Friday](#)
- 34. Rebuilding and reimagining the last common ancestor, a ribo-organism**
Andrew Ellington, The University of Texas, Austin, USA
Program Grant 2017 - [Thursday](#)
- 35. The hematopoietic landscape of naked mole rats**
Stephan Emmrich, University of Rochester, USA
Long-Term Fellow 2016 - [Wednesday](#)
- 36. Chromatin dynamics during somitogenesis in mouse embryos**
Emilia Esposito, EMBL, Heidelberg, Germany
Long-Term Fellow 2017 – [Thursday](#)
- 37. Discovering the circadian regulation of sleep through novel experimental and modeling tools**
Daniel Forger, University of Michigan, Ann Arbor, USA
Program Grant 2018 - [Friday](#)
- 38. Imaging brain activity and connectivity in intact behaving animals**
Scott Fraser, University of Southern California, Los Angeles, USA
Program Grant 2017 – [Thursday](#)
- 39. Enhancer dynamics in living Drosophila embryos**
Takashi Fukaya, The University of Tokyo, Japan
Long-Term Fellow 2015 – [Wednesday](#)

- 40. How to change old habits: evolutionary adaptation to DNA replication challenges**
Marco Fumasoni, Harvard University, Cambridge, USA
Long-Term Fellow 2016 - [Thursday](#)
- 41. Understanding the function and regulation of binucleated polyploid cells in the C. elegans intestine**
Matilde Galli, Hubrecht Institute, Utrecht, the Netherlands
Career Development Award 2017 – [Friday](#)
- 42. Understanding the principles of tissue repair that accelerate tumor initiation**
Sara Gallini, Yale University, New Haven, USA
Long-Term Fellow 2017 - [Wednesday](#)
- 43. Completing the cycle: lighting up the central dogma for a predictive understanding of genetic clocks**
Hernan Garcia, University of California, Berkeley, USA
Program Grant 2016 - [Wednesday](#)
- 44. Layer-specific and arousal-state dependent attentional modulation in visual cortex**
Peyman Golshani, University California, Los Angeles, USA
Program Grant 2018 - [Friday](#)
- 45. Noise correlations as signatures of hierarchical inference in V1**
Gergo Orban, MTA Wigner Institute, Budapest, Hungary
Program Grant 2018 - [Friday](#)
- 46. Semaphorin signaling via MICAL3 induces symmetric cell division to expand breast cancer stem-like cells**
Noriko Gotoh, Cancer Research Institute, Kanazawa University, Japan
Long-Term Fellow 1998 - [Wednesday](#)
- 47. Nanoscale analysis of membrane neurotransmitter cross-talk in the physiopathological brain**
Laurent Groc, CNRS - University of Bordeaux, France
Program Grant 2016 - [Wednesday](#)
- 48. You talking to me? Mapping cell-cell signals in root meristem patterning**
Bruno Guillotin, New York University, USA
Long-Term Fellow 2018 – [Friday](#)
- 49. Elucidating atypical centrosome and nuclear microtubule organization in malaria parasites**
Julien Guizetti, Centre for Infectious Diseases, Heidelberg, Germany
Career Development Award 2018 - [Friday](#)
- 50. NASC-SEQ monitors RNA synthesis in single cells**
Gert-Jan Hendriks, Karolinska Institutet, Stockholm, Sweden
Long-Term Fellow 2017 - [Thursday](#)
- 51. Neuronal birth order correlates with neuropil layer targeting in the Drosophila optic lobe**
Isabel María Holguera, New York University, USA
Long-Term Fellow 2017 – [Friday](#)
- 52. 7-deazaguanine modifications: new shields in the phage/host arm's race**
Geoffrey Hutinet, University of Florida, Gainesville, USA
Program Grant 2018 - [Wednesday](#)
- 53. Highly parallel high-speed nanoscopy**
Wiebke Jahr, Institute for Science and Technology Austria, Klosterneuburg, Austria
Long-Term Fellow 2018 – [Thursday](#)

- 54. Benign helminth ameliorates gut inflammation**
Kateřina Jirků Pomajbíková, Czech Academy of Sciences, Budweis, Czech Republic
Young Investigator Grant 2015 - [Wednesday](#)
- 55. Enzyme design with de novo design protein scaffolds**
Indrek Kalvet, University of Washington, Seattle, USA
Cross-Disciplinary Fellow 2018 – [Thursday](#)
- 56. Identification of genetic modifiers of α -Synuclein propagation through a high-content, genome-wide RNAi screen**
Eleanna Kara, University Hospital of Zurich, Switzerland
Long-Term Fellow 2017 - [Friday](#)
- 57. Wireless implantable epidural LED array for unconstrained optogenetic manipulation of neurons in the mouse spinal cord**
Claudia Kathe, EPFL, Geneva, Switzerland
Long-Term Fellow 2017 - [Friday](#)
- 58. Micro-endoscopic two-photon imaging and optogenetics with single-cell resolution**
Ori Katz, Hebrew University of Jerusalem, Israel
Program Grant 2015 - [Wednesday](#)
- 59. Uncovering the mechanisms underlying the formation of the cerebral cortex using gyrencephalic ferrets**
Hiroshi Kawasaki, Graduate School of Medicine, Kanazawa University, Japan
Young Investigator Grant 2007 – [Wednesday](#)
- 60. The regulation of cell cycle length in early development**
Manuela Rebecka Kieninger, University of Cambridge, UK
Long-Term Fellow 2017 - [Friday](#)
- 61. Mechanical regulated gene expression during T-cell activation**
Enrico Klotzsch, ETH, Zürich, Switzerland
Young Investigator Grant 2017 - [Thursday](#)
- 62. Neural coding principles of sensory perception and learning revealed by multiplane 2-photon imaging**
Michael Kohl, University of Oxford, UK
Young Investigator Grant 2015 - [Wednesday](#)
- 63. Neocortical inhibitory interneuron subtypes display distinct responses to rate and synchrony of spiking activity**
Michael Kohl, University of Oxford, UK
Young Investigator Grant 2015 - [Wednesday](#)
- 64. Novel designer mammalian cells for a new class of cell-based drug delivery platforms**
Ryosuke Kojima, University of Tokyo, Japan
Long-Term Fellow 2014 – [Friday](#)
- 65. Computations underlying feature selectivity in secondary visual cortex**
Georg Kosche, Institute of Molecular and Clinical Ophthalmology, Friedrich Miescher Institute, Basel, Switzerland
Long-Term Fellow 2017 – [Thursday](#)
- 66. Raising T cells against tumour-derived (neo-)antigens using epithelial organoid cultures**
Kai Kretzschmar, Hubrecht Institute, Utrecht, the Netherlands
Long-Term Fellow 2015 - [Friday](#)
- 67. Live biochemical characterization of marine micro-environments**
Zachary Landry, ETH, Zurich, Switzerland
Long-Term Fellow 2018 - [Wednesday](#)

- 68. Cryo-EM reveals glycoprotein-solute carrier interplay**
Yongchan Lee, Max Planck Institute of Biophysics, Frankfurt am Main, Germany
Long-Term Fellow 2018 - [Thursday](#)
- 69. Characterizing distributed regulation by enhancers with live imaging of endogenous transcription in developing embryos**
Michal Levo, Princeton University, USA
Long-Term Fellow 2016 - [Friday](#)
- 70. Sexually dimorphic control of anxiety and socio-sexual behaviors by oxytocin receptor expressing interneurons in the MPFC**
Kun Li, The Rockefeller University, New York, USA
Long-Term Fellow 2014 - [Wednesday](#)
- 71. Maternal infection prenatally imprints long-term 'immunological scar' on offspring**
Ai Ing Lim, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, USA
Long-Term Fellow 2018 - [Thursday](#)
- 72. Translational regulation: a novel factor required for β -tubulin autoregulation**
Zhewang Lin, MRC Laboratory of Molecular Biology, Cambridge, UK
Long-Term Fellow 2017 - [Friday](#)
- 73. Pre-zygotic mating preference infers genomic incompatibility**
Gaowen Liu, University of Lausanne, Switzerland
Long-Term Fellow 2017 - [Wednesday](#)
- 74. Programming lineage choice in the injured spinal cord**
Enric Llorens-Bobadilla, Karolinska Institutet, Stockholm, Sweden
Long-Term Fellow 2017 - [Thursday](#)
- 75. Probing bacterial energetics under external stresses**
Chien-Jung Lo, National Central University, Taoyuan, China, Republic of (Taiwan)
Program Grant 2015 - [Friday](#)
- 76. Circadian mechanism driving seasonal rhythms in mammals**
Andrew Loudon, University of Manchester, UK
Program Grant 2015 - [Wednesday](#)
- 77. Molecular basis of seasonal changes in behavior**
Takashi Yoshimura, Nagoya University, Japan
Program Grant 2015 - [Wednesday](#)
- 78. Constructing accessory lymph nodes in situ for local control of tumor growth**
Burkhard Ludwig, Kantonsspital St.Gallen, Switzerland
Program Grant 2016 - [Wednesday](#)
- 79. Neural mechanisms of vocal production control in echolocating bats**
Jinhong Luo, Central China Normal University, Wuhan, China
Career Development Award 2019 - [Thursday](#)
- 80. Single-cell transcriptomics of the acoele *Hofstenia* reveals the evolution of bilaterian cell types and stem cell regulation**
Yi-Jyun Luo, Harvard University, Cambridge, USA
Long-Term Fellow 2017 - [Friday](#)

- 81. Cellular basis for post-embryonic growth of the Axolotl brain**
Katharina Lust, Research Institute of Molecular Pathology, Vienna, Austria
Long-Term Fellow 2018 - [Wednesday](#)
- 82. Examining the logic of gene activation using a library of random peptides**
Jens Magnusson, Stanford University, USA
Long-Term Fellow 2018 - [Wednesday](#)
- 83. Characterization of dopamine and striatal neurons' responses during associative learning**
Sara Matias, Harvard University, Cambridge, USA
Long-Term Fellow 2018 – [Friday](#)
- 84. Does the functional organization of cross-modal cortical feedback reflect the statistics of experienced sensory stimuli?**
Camille Mazo, Champalimaud Centre for the Unknown, Lisbon, Portugal
Long-Term Fellow 2018 - [Wednesday](#)
- 85. Pioneering therapies: elucidating the molecular assembly of a transcription factor with nucleosome complexes using cryo-EM**
Alicia Michael, Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland
Long-Term Fellow 2018 - [Thursday](#)
- 86. Exploring cell type-specific variation in the cell division machinery**
Beata Mierzwa, Ludwig Institute for Cancer Research, San Diego, USA
Long-Term Fellow 2018 - [Friday](#)
- 87. Applications of genome editing technologies in the mammalian brain in vivo**
Takayasu Mikuni, Niigata University, Japan
Long-Term Fellow 2014 - [Wednesday](#)
- 88. Phase separation of Synapsin 1 drives clustering of lipid vesicles**
Dragomir Milovanovic, Yale University School of Medicine, New Haven, USA
Long-Term Fellow 2016 - [Wednesday](#)
- 89. Chromatin is an active rheological element of the nucleus buffering the genome from force-induced damage**
Yekaterina Miroshnikova, Helsinki Institute of Life Science, University of Helsinki, Finland
Long-Term Fellow 2018 – [Wednesday](#)
- 90. Novel roles of nuclear actin polymerization in establishing nuclear structures and in embryonic development**
Kei Miyamoto, Faculty of Biology-Oriented Science and Technology, Kinki University, Wakayama-ken, Japan
Program Grant 2016 – [Friday](#)
- 91. Impact of horizontal gene transfer on natural microbial ecosystems**
Ryo Miyazaki, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan
Young Investigator Grant 2016 - [Wednesday](#)
- 92. Defining the capacity of cells to keep the proteome folded over space and time**
Nagaraj Moily, The University of Melbourne, Parkville, Australia
Program Grant 2017 – [Friday](#)
- 93. Role of the RNA modification 5-methylcytosine on ribozyme catalytic activity**
Dylan Mooijman, EMBL, Heidelberg, Germany
Long-Term Fellow 2018 – [Wednesday](#)
- 94. Layilin is enriched in CD8⁺ T cells infiltrating human melanoma and contributes to anti-tumor immunity**
Joshua Moreau, University of California, San Francisco, USA
Long-Term Fellow 2018 - [Friday](#)

95. **Continuity of epigenetic information from the sperm to the embryo**
Ferenc Mueller, University of Birmingham, UK
Program Grant 2015 - [Thursday](#)
96. **Optimal regulation of gene expression for the precision of noisy timing events**
Andrew Mugler, Purdue University, West Lafayette, USA
Program Grant 2016 - [Thursday](#)
97. **The role of transient circuits in cortical development**
Martin Munz, Friedrich Miescher Institute, Basel, Switzerland
Long-Term Fellow 2016 - [Wednesday](#)
98. **Emergence of a bilaterally symmetric musculoskeletal system during zebrafish embryogenesis**
Sundar Ram Naganathan, EPFL, Lausanne, Switzerland
Long-Term Fellow 2016 – [Thursday](#)
99. **Cohesin mediated spatial organisation of higher order chromatin structure**
Kota Nagasaka, Research Institute of Molecular Pathology, Vienna, Austria
Long-Term Fellow 2017 - [Friday](#)
100. **Single-cell analysis of mouse limb buds towards deciphering the digit pattern specification process**
Fumio Nakaki, EMBL, Barcelona, Spain
Long-Term Fellow 2017 - [Wednesday](#)
101. **Clasp stabilization of plus ends created by severing promotes microtubule creation and reorientation**
Masayoshi Nakamura, Nagoya University, Japan
Career Development Award 2017 – [Friday](#)
102. **A FRET biosensor for necroptosis uncovers two different modes of the release of DAMPs**
Hiroyasu Nakano, Toho University School of Medicine, Tokyo, Japan
Young Investigator Grant 2000 - [Wednesday](#)
103. **The role of lysosomes in neural stem cell aging**
Paloma Navarro Negredo, Stanford University, USA
Long-Term Fellow 2018 – [Thursday](#)
104. **Mechanisms of virus-vector interactions mediating disease transmission**
James Ng, University of California, Riverside, USA
Program Grant 2015 – [Wednesday](#)
105. **Neuroendocrine control of mating-induced germline stem cell proliferation in the fruit fly *Drosophila melanogaster***
Ryusuke Niwa, University of Tsukuba, Japan
Long-Term Fellow 2005 – [Thursday](#)
106. **Microbiota shapes intestinal neural circuits via AHR sensing**
Yuuki Obata, The Francis Crick Institute, London, UK
Long-Term Fellow 2016 – [Friday](#)
107. **Neural substrates of homophones and syntactic categories: an evolutionary perspective**
Mieko Ogura, Tsurumi University, Yokohama, Japan
Program Grant 2001 - [Wednesday](#)
108. **Plasticity in the embryonic cell lineage of *Caenorhabditis elegans***
Hayao Ohno, Memorial Sloan Kettering Cancer Center, New York, USA
Long-Term Fellow 2017 - [Thursday](#)

- 109. Structure and function of extracellular O-GlcNAc**
Tetsuya Okajima, Nagoya University Graduate School of Medicine, Japan
Career Development Award 2005 - **Friday**
- 110. Mechanistic insight into CIF peptide ligands binding and signalling activation in plant root development**
Satohiro Okuda, University of Geneva, Switzerland
Long-Term Fellow 2016 - **Wednesday**
- 111. Dissecting the molecular mechanism of proto-oncogene tyrosine kinase SRC recruitment by GPCR-activated β arrestins**
Natalia Pakharukova, Duke University, Durham, USA
Long-Term Fellow 2018 - **Thursday**
- 112. The role of cryptic genetic variation in regulating the transcriptional response to new and stressful environments in flies**
Luisa Pallares, Princeton University, USA
Long-Term Fellow 2017 - **Friday**
- 113. Polyphenism, obesity and cancer: searching for alternate states of tumor susceptibility**
Ilaria Panzeri, Max Planck Institute of Immunobiology and Epigenetics, Freiburg, Germany
Long-Term Fellow 2018 - **Wednesday**
- 114. From strings of nucleotides to collective behavior: lessons from *Vibrio cholerae***
Kai Papenfort, LMU Munich, Martinsried, Germany
Career Development Award 2016 - **Thursday**
- 115. Learning-related plasticity of top-down information in auditory cortex layer 1**
Maria Belen Pardi, Max Planck Institute for Brain Research, Frankfurt am Main, Germany
Long-Term Fellow 2016 - **Friday**
- 116. Intracellular temperature: a new paradigm for cell biology**
Taras Plakhotnik, The University of Queensland, Brisbane, Australia
Program Grant 2018 – **Friday**
- 117. Localized heat sensing and manipulation at subcellular resolutions to study thermogenesis and responses in cells and tissues**
Madoka Suzuki, Osaka University, Japan
Program Grant 2018 – **Friday**
- 118. New role of inositol 1,4,5-trisphosphate receptors: ultralocal intracellular heat sources?**
Vadim Zeeb, ITEB RAS, Pushchino, Moscow, Russia
Program Grant 2018 – **Friday**
- 119. Multivariate control of transcript to protein variability in single mammalian cells**
Doris Popovic, University of Zurich, Switzerland
Long-Term Fellow 2016 - **Wednesday**
- 120. Distinct patterns of ribosomal DNA expression: a novel determinant of gene expression**
Fernando Alberto Rabanal, Max Planck Institute for Developmental Biology, Tübingen, Germany
Long-Term Fellow 2018 – **Wednesday**
- 121. Modafinil, a cognitive enhancing drug, alters the exocytosis process in PC12 cells**
Elias Ranjbari, University of Gothenburg, Sweden
Cross-Disciplinary Fellow 2017 – **Friday**

- 122. Physiological and molecular impacts of the microbiome associated with the sea anemone *Nematostella vectensis***
Adam Reitzel, University of North Carolina, Charlotte, USA
Young Investigator Grant 2016 - [Wednesday](#)
- 123. Mechanics of adhesion molecules probed by molecular dynamics and high-speed force spectroscopy**
Felix Rico, Aix Marseille University, Inserm / CNRS, Marseille, France
Program Grant 2018 - [Friday](#)
- 124. Structures and simulations of protocadherin-15, a protein essential for inner ear mechanotransduction**
Marcos Sotomayor, The Ohio State University, Columbus, USA
Program Grant 2018 - [Thursday](#)
- 125. FOXP2 prion-like activity during embryonic development: a possible role in neural crest differentiation**
Shady Saad, Stanford University, USA
Long-Term Fellow 2018 - [Wednesday](#)
- 126. Resurrected ancestral proteins as scaffolds for the evolution of new enzymes**
Jose Manuel Sanchez Ruiz, University of Granada, Spain
Program Grant 2017 – [Friday](#)
- 127. Inheritance and transduction of environmental information in asexually reproducing plants**
Hikaru Sato, The Swedish University of Agricultural Sciences, Uppsala, Sweden
Long-Term Fellow 2018 – [Wednesday](#)
- 128. Spontaneous depolarization wave in the embryonic CNS analyzed with voltage-sensitive dye recording**
Katsushige Sato, Komazawa Women's University Faculty of Human Health, Tokyo, Japan
Program Grant 2009 – [Wednesday](#)
- 129. Death of *E. coli* in starvation**
Severin Schink, Harvard Medical School, Boston, USA
Long-Term Fellow 2018 - [Friday](#)
- 130. Optimized MR imaging with switchable xenon contrast agents**
Leif Schröder, Leibniz-Forschungsinstitut fuer Molekulare Pharmakologie, Berlin, Germany
Program Grant 2016 – [Wednesday](#)
- 131. Transsulfuration activity determines cellular sensitivity to cysteine limitation**
Simon Schwoerer, Memorial Sloan Kettering Cancer Center, New York, USA
Long-Term Fellow 2018 – [Friday](#)
- 132. The symbiotic relationship between adenovirus, adeno-associated virus and human host**
Niv Scott, The Salk Institute for Biological Studies, San Diego, USA
Long-Term Fellow 2016 - [Wednesday](#)
- 133. In situ cryo-electron tomography suggests multiple functions for actin in clathrin-mediated endocytosis**
Daniel Serwas, University of California, Berkeley, USA
Long-Term Fellow 2018 - [Friday](#)
- 134. High-resolution microscopy of self-antigen transfers from live peripheral cells to immune cells**
Nina Serwas, University of California, San Francisco, USA
Long-Term Fellow 2018 - [Friday](#)
- 135. Prochlorococcus rely on mixotrophy and microbial interactions rather than on chlorotic resting stages to survive long-term stress**
Daniel Sher, University of Haifa, Israel
Program Grant 2016 - [Thursday](#)

- 136. Whole genome comparative analysis uncovers genetic modules mediating host-bacteria interactions**
Daniel Sher, University of Haifa, Israel
Program Grant 2016 - [Thursday](#)
- 137. Probabilistic integration of genomic and metabolomic data towards predictive metabolic modeling of ocean microbiomes**
Daniel Sher, University of Haifa, Israel
Program Grant 2016 - [Thursday](#)
- 138. Recombination as a target for antiviral therapy in RNA viruses**
Shin-Ru Shih, College of Medicine, Taoyuan, China, Republic of (Taiwan)
Program Grant 2015 - [Wednesday](#)
- 139. Optimization of photosynthesis under fluctuating light intensity by regulating ion movement across the thylakoid membrane in chloroplasts**
Toshiharu Shikanai, Kyoto University, Japan
Program Grant 2015 - [Thursday](#)
- 140. A PURE-ly synthetic ribosome biogenesis in DNA compartments on a chip**
Yoshihiro Shimizu, RIKEN Quantitative Biology Center (QBiC), Suita, Japan
Program Grant 2017 – [Friday](#)
- 141. How birds lost their tails, the developmental mechanisms underneath a major evolutionary event**
Daniel Sieiro Mosti, Brigham and Women's Hospital, Boston, USA
Long-Term Fellow 2018 - [Thursday](#)
- 142. Modulation of single cell volume and mass growth by intrinsic and extrinsic factors**
Nishit Srivastava, Institut Curie, Paris, France
Long-Term Fellow 2018 – [Friday](#)
- 143. Models, robots and real animals converge to show amphibious locomotion is stabilized by environmental forces and sensory feedback**
Emily Standen, University of Ottawa, Canada
Program Grant 2017 – [Friday](#)
- 144. Functional analysis of the protein tyrosine phosphatase LAR in the endocytosis of tetanus toxin in mammalian motor neurons**
Sunaina Surana, UCL Queen Square Institute of Neurology, London, UK
Long-Term Fellow 2017 – [Thursday](#)
- 145. Optical trapping in the fish inner ear to study sound localization**
Michael Taylor, The University of Queensland, Brisbane, Australia
Cross-Disciplinary Fellow 2016 - [Friday](#)
- 146. Lung-on-a-chip microdevices for studies of host-pathogen interactions in tuberculosis**
Vivek Thacker, EPFL, Lausanne, Switzerland
Long-Term Fellow 2015 - [Thursday](#)
- 147. Costs and benefits of social relationships in the collective motion of bird flocks**
Alex Thornton, University of Exeter, Penryn, UK
Program Grant 2017 - [Friday](#)
- 148. In vitro reconstitution of Filopodia - what we learned**
Feng-Ching Tsai, Curie Institute, Paris, France
Program Grant 2016 – [Friday](#)

- 149. Structural visualization of activating seven and single transmembrane receptors**
Naotaka Tsutsumi, Stanford University School of Medicine, USA
Long-Term Fellow 2016 – [Wednesday](#)
- 150. Modeling down syndrome associated leukemia using CRISPR/Cas9 genomic engineering**
Elvin Wagenblast, Princess Margaret Cancer Centre, Toronto, Canada
Long-Term Fellow 2016 – [Friday](#)
- 151. Achieving substrate specificity in nuclear RNA quality control**
Eva-Maria Weick, Sloan-Kettering Institute, New York, USA
Long-Term Fellow 2016 - [Wednesday](#)
- 152. Hummingbirds flexibly partition sugars in nectar to meet energy demands**
Kenneth Welch, University of Toronto Scarborough, Canada
Program Grant 2016 - [Thursday](#)
- 153. Energetics of microbial maintenance and its contribution to global carbon flux**
Fabai Wu, CalTech, Pasadena, USA
Long-Term Fellow 2017 - [Friday](#)
- 154. See cholesterol metabolism: specialized, expanded and exploited**
Chengchao Xu, Whitehead Institute for Biomedical Research, Cambridge, USA
Long-Term Fellow 2016 - [Wednesday](#)
- 155. Identification and characterization of P53-inducible long noncoding RNAs in human embryonic stem cells**
Kazuyuki Yamagata, Graduate School of Medicine, Chiba, Japan
Long-Term Fellow 2010 - [Thursday](#)
- 156. Neurobiological investigation of vocal production learning in the mammalian brain**
Michael Yartsev, University of California, Berkeley, USA
Program Grant 2016 – [Friday](#)
- 157. An in vivo time-lapse imaging screen, coupled with automated dendrite feature detection and quantification, reveals the molecular mechanisms of major dendrite branch formation**
Li Foong Yoong, Center for Brain Science, RIKEN Institute, Saitama, Japan
Long-Term Fellow 2009 - [Thursday](#)
- 158. Sequencing resources, genetic tools, and advanced imaging methods to functionally characterize the three hearts and pacemakers of pygmy squid**
Masa-Aki Yoshida, Shimane University, Oki, Japan
Program Grant 2017 – [Wednesday](#)
- 159. Single cell histone mark acquisition sheds light on the epigenetic changes occurring during cell differentiation**
Peter Zeller, Hubrecht Institute, Utrecht, the Netherlands
Long-Term Fellow 2018 – [Thursday](#)
- 160. Targeted fluorescent in situ sequencing platform for in-cell detection of RNAs & proteins in lab-engineered models for human gastrulation**
Nancy Fang, University of British Columbia, Vancouver, Canada
Long-Term Fellow 2016 - [Thursday](#)