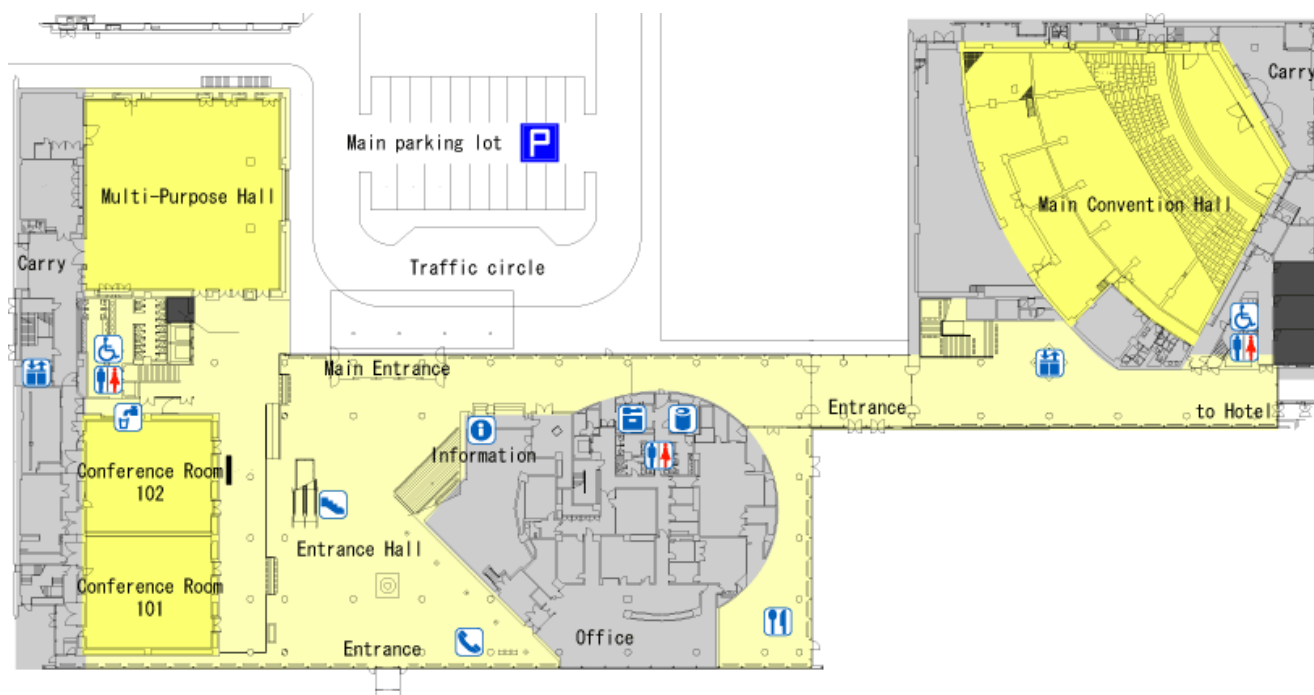


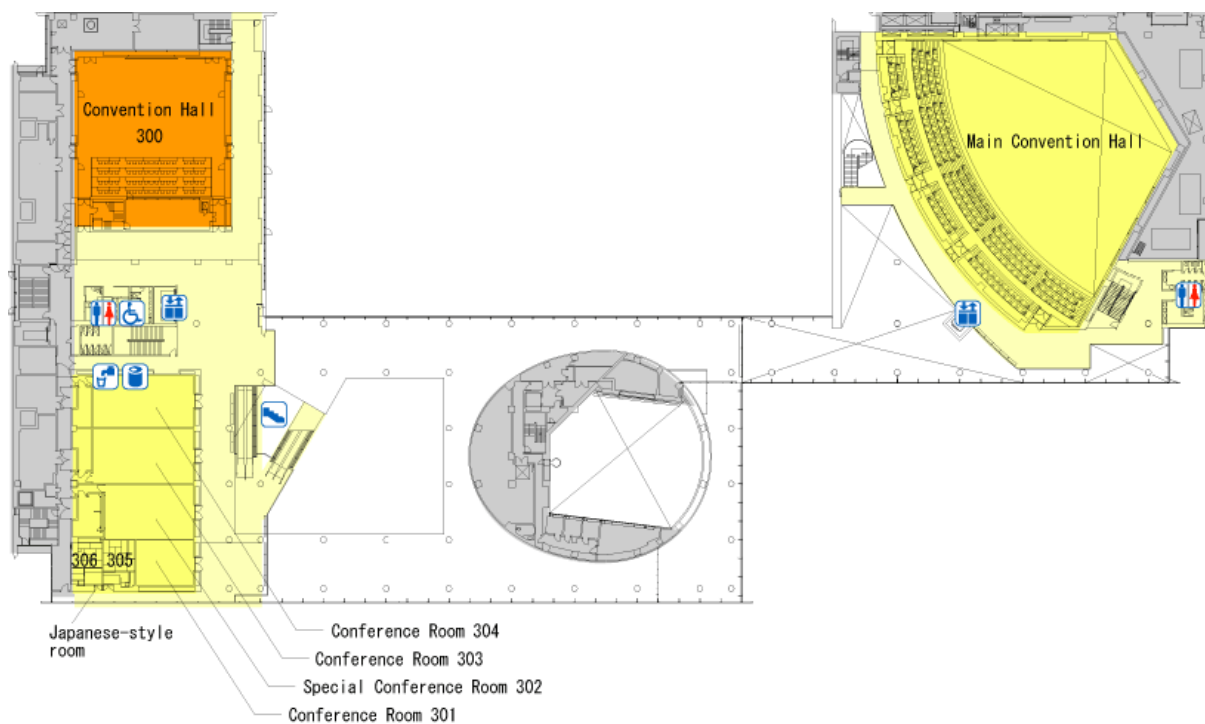


**30th Anniversary Celebration
&
19th HFSP Awardees Meeting**

**9 - 12 July 2019
Tokyo & Tsukuba, Japan**



Floor plan 1F Tsukuba International Congress Center



Floor plan 3F Tsukuba International Congress Center



**30th Anniversary Celebration
&
19th HFSP Awardees Meeting**

Acknowledgements

HFSPo is grateful for the support of MEXT (Ministry of Education, Culture, Sports, Science and Technology, Japan), METI (Ministry of Economy, Trade and Industry, Japan) and AMED (Japan Agency for Medical Research and Development).

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Practical Information

30th Anniversary Celebration

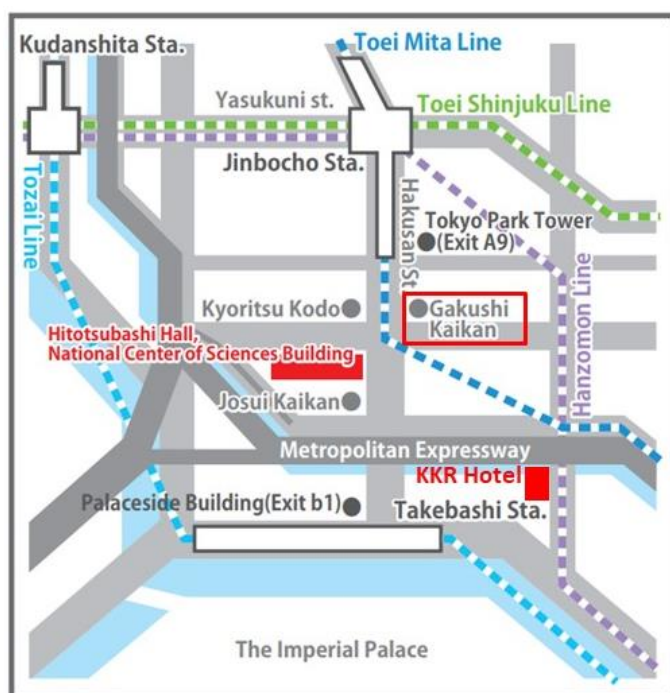
Tokyo, Tuesday, 9 July 2019

Meeting venue

Hitotsubashi Hall, The National Center of Sciences Building, 2F, 2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo 101-8439. The anniversary meeting will take place in Hitotsubashi Hall (2nd floor) and the anniversary reception will take place at 18:00 in meeting rooms 1-4 of Hitotsubashi Hall (2nd floor).

Directions: Hitotsubashi Hall is a 5-minute walk from the KKR hotel.

From the Mercure Ginza hotel you can either take a taxi (10 minutes) or the Tokyo metro (30 minutes). Take the Ginza line from Ginza station to Nihonbashi station, change to the Tozai line and take the train to Takebashi station. The venue is 5 minutes' walk from the station (see map below).



Registration: you can pick up your badge for the Anniversary Meeting and Awardees Meeting in Hitotsubashi Hall on Monday, 8 July and Tuesday, 9 July. The registration desk will be open from 9:00 -16:30 and is located in room 103 (ground floor).

Luggage drop-off: the luggage drop-off room will be open from 9:00 on Tuesday, 9 July and is located in room 102 of Hitotsubashi Hall (ground floor).

Conference hotels

KKR Hotel Tokyo

1-4-1, Otemachi, Chiyoda Ku, 100-0004 Tokyo, Tel: (+81)3-3287-2921

Mercure Ginza

2-9-4 Ginza Chuo Ku, 104-0061 Tokyo, Tel: (+81)3-4335-1111

19th HFSP Awardees Meeting

Tsukuba, Wednesday, 10 July – Friday, 12 July 2019

Meeting venue

Tsukuba International Congress Center (Epochal Tsukuba), 2-20-3, Takezono, Tsukuba, Ibaraki, 305-0032, Japan, Tel: (+81)29-861-0001. You will find a map of the venue on the inside of the back cover.

Registration

The registration desk is in front of the multi-purpose hall on the ground floor of the congress center and will be open on:

Wednesday, 10 July, 8:00 – 18:15

Thursday, 11 July, 8:30 – 17:00

Friday, 12 July, 8:30 – 17:00

Conference hotels

Okura Frontier

1-1364-1 Azuma, Tsukuba, Ibaraki, 305-0031, Tel: (+81)29-852-1112 (Main building)

2-20-1 Takezono, Tsukuba, Ibaraki, 305-0032, Tel: (+81)29-860-7700 (Epochal building)

Plenary lectures and oral sessions

The scientific sessions will take place in Convention Hall 300 (3rd floor) of the Tsukuba International Congress Center. Technical assistance is available to assist speakers with loading their presentation slides. An LCD projector connected to a computer which supports Windows and Macintosh is available in the auditorium. You can also connect your own Mac or PC to the projector. If you have a Mac you should bring an adaptor to connect to the projector. Please report to the registration desk on the morning of your talk for instructions. Presenters of talks scheduled before the morning coffee break should present themselves at the registration desk by 8:30 on the day of their talk.

If you are giving a 3-minute poster talk please bring your presentation on a USB memory stick so that it can be copied on to a single computer. You can copy your presentation on to the master computer during the morning coffee break or at the latest during the lunch break on the day of your talk.

Poster sessions

The poster sessions will take place in the multipurpose hall on the ground floor next to the registration desk. The poster boards are 90 x 210 cm (w x h). Please refer to the poster listing in the meeting program for the number and day of your presentation. Posters will be on display for the entire meeting. You can mount your poster on Wednesday morning and take it down following the last poster session on Friday afternoon. Posters should be mounted on the stand corresponding to your number at the latest during the lunch break on the day of presentation. There will be no printing service available at the conference venue. We strongly advise you to bring your poster with you to Tsukuba as options to print locally are limited.

However, if necessary, you can print your poster at the following print shops:

Tsukuba Business Center

Opening hours: 8:30-18:00 (Monday-Friday)

Location: 300-2635 4-4-3 Tokodai, Tsukuba (15 minutes by car from the congress center)

Cost: around 6,000-8,000 JPY for A0 size

You can send the data by email (info@t-7676.com) in advance and pick it up later to avoid waiting.

Print shop Isis

Opening hours: 9:30-17:30 (Monday-Friday)

Location: 305-0005 1-18-3 Amakubo, Tsukuba (10 minutes by car from the congress center)

Cost: around 6,000-8,000 JPY for A0 size

Lunch and coffee breaks

Morning coffee breaks will take place in the foyer of Convention Hall 300 and refreshments will be served during the afternoon poster sessions in the multipurpose hall. On Wednesday, 10 July bento boxes will be available for lunch in the foyer. On Thursday and Friday, a buffet lunch will take place in rooms 101-102 on the ground floor.

Social program

Wednesday, 10 July, 19:30 **Dinner reception at Sansuitei**
254 Onozaki, Tsukuba, Ibaraki

Friday, 12 July, 19:30 **Farewell reception at the Okura Frontier Hotel (Subaru room)**
1-1364-1 Azuma, Tsukuba, Ibaraki

Scientific excursions

Participants in the scientific excursions to the International Institute for Integrative Sleep Medicine (IIIS), The National Institute of Advanced Industrial Science and Technology (AIST) and the BioResource Research Center at RIKEN should meet in front of the registration desk on the ground floor at 14:55 on Thursday, 11 July. The buses will leave from the congress center at 15:00. Note that this event is for registered participants only.

Wifi

A free wifi service is available at the venue. The network name is **hfspo.tsukuba.2019** and the password is **hfspo.2019**.

Photography

Many awardees show unpublished data. You should not take photographs of slides with data during oral presentations or of posters without permission from the authors.

Social media

We encourage you to write about the meeting on your blog, on Facebook or on Twitter. If you use Twitter, please consider using the tag #HFSPmtg in your tweets. However, since awardees often show unpublished data, you should not broadcast results without permission from the authors.

30th Anniversary Celebration

Tuesday, 9 July

Opening Remarks & Welcome

13:30-14:00 **Shigekazu Nagata**, President of HFSP
Representative of the Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Representative of the Ministry of Economy, Trade and Industry (METI)
Hirofumi Nakasone, Member of the House of Councillors, National Diet of Japan

2019 HFSP Nakasone Award Ceremony

14:00-14:05 **Introduction**
Warwick Anderson, Secretary-General of HFSP

14:05-14:20 **Award ceremony & acceptance speech**
Hirofumi Nakasone, Member of the House of Councillors, National Diet of Japan
Michael Hall, Biozentrum, University of Basel, Switzerland

14:20-14:50 **Coffee break**

Invited Lectures (Chair: **Makoto Suematsu**, President, Japan Agency for Medical Research and Development (AMED))

14:50-15:10 **HFSP - a model program for international science**
Torsten Wiesel, President Emeritus, The Rockefeller University, New York, USA
and former Secretary-General of HFSP

15:10-16:00 **Serendipities of acquired immunity**
Tasuku Honjo, Kyoto University, Japan

16:00-16:20 **Coffee break**

16:20-17:10 **Innate immunity: from insects to humans**
Jules Hoffman, University of Strasbourg, France

17:10-18:00 **From basic science to advanced medicine**
Ada Yonath, Weizmann Institute of Science, Rehovot, Israel

Closing Remarks

18:15-19:50 **Reception** (Hitotsubashi Hall, rooms 1 – 4)

Welcome remarks: **Nobutaka Hirokawa**, The University of Tokyo, Japan and former President of HFSP

20:00 Buses depart from Hitotsubashi Hall for Tsukuba

19th HFSP Awardees Meeting

Wednesday, 10 July

Opening Remarks & Welcome

8:30-9:00 **Warwick Anderson**, Secretary-General of HFSP
Representative of the Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Tatsuo Igarashi, Mayor of Tsukuba City

Oral Session 1 (Chair: Apurva Sarin)

9:00-9:20 **Adapting metazoan opsins for optogenetic applications**
Gebhard Schertler, ETH Zurich and Paul Scherrer Institute, Villigen, Switzerland
Program Grant 2014

9:20-9:40 **Cellular recovery from DNA damage is mediated via asymmetric chromosome segregation and cell division**
Anjana Badrinarayanan, National Centre for Biological Sciences (TIFR), Bangalore, India
Career Development Award 2017

9:40-10:00 **Epigenetic identify driven by DNA damage induces aging**
Motoshi Hayano, Keio University School of Medicine, Tokyo, Japan and Harvard Medical School, Boston, USA
Long-Term Fellow 2014

10:00-10:40 **Coffee break**

Oral Session 2 (Chair: Leonardo Chelazzi)

10:40-11:00 **Computational design of self-assembling protein nanomachines**
Alexis Courbet, University of Washington, Seattle, USA
Long-Term Fellow 2016

11:00-11:20 **Regulation of photosynthesis by ion fluxes: making the link**
Ildiko Szabo, University of Padova, Italy
Program Grant 2015

11:20-11:40 **The emergence of gene-expression order in noisy environments**
Cheemeng Tan, University of California Davis, USA
Young Investigator Grant 2015

11:40 – 12:00 **Interactions among marine microbes as they grow and die: linking experiments and genome-scale models**
Daniel Sher, University of Haifa, Israel
Program Grant 2016

12:00-13:20 **Lunch**

Oral Session 3 (Chair: Daniela Rhodes)

- 13:20-13:40 **Quantifying of protein kinetic dynamics in the plastid division machinery at single molecule resolution**
Yamato Yoshida, Ibaraki University, Japan
Career Development Award 2018
- 13:40-14:00 **Bacterial influence on feeding and temperature control**
Ilana Gabanyi, Institut Pasteur, Paris, France
Long-Term Fellow 2017
- 14:00-14:20 **Chemistry and biology of polyphosphate**
Rashna Bhandari, CDFD, Hyderabad, India
Program Grant 2016

Poster Talks 1 (Chair: Hendrik Stunnenberg)

- 14:20-14:23 **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
- 14:23-14:26 **Nuclear mis-shaping affects gene expression in plants**
Marie-Edith Chabouté, CNRS, Strasbourg, France
Program Grant 2018
- 14:26-14:29 **The hematopoietic landscape of naked mole rats**
Stephan Emmrich, University of Rochester, USA
Long-Term Fellow 2016
- 14:29-14:32 **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
- 14:32-14:35 **Nanoscale analysis of membrane neurotransmitter cross-talk in the physiopathological brain**
Laurent Groc, Interdisciplinary Institute for Neurosciences, University of Bordeaux, France
Program Grant 2016
- 14:35-14:38 **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
- 14:38-14:41 **Phase separation of synapsin 1 drives clustering of lipid vesicles**
Dragomir Milovanovic, Yale School of Medicine, New Haven, USA
Long-Term Fellow 2016
- 14:41-14:44 **Chromatin is an active rheological element of the nucleus buffering the genome from force-induced damage**
Yekaterina Miroshnikova, University of Helsinki, Finland and Max Planck Institute for Biology of Ageing, Cologne, Germany
Long-Term Fellow 2018
- 14:44-14:47 **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

14:47-14:50 **Achieving substrate specificity in nuclear RNA quality control**
Eva-Maria Weick, Sloan-Kettering Institute, New York, USA
Long-Term Fellow 2016

14:50-17:00 **Poster Session 1**
(with refreshments)

2019 HFSP Nakasone Award Lecture

17:00-17:15 **Introduction**
Warwick Anderson, Secretary-General of HFSP

17:15-18:15 **mTOR signaling in growth and metabolism**
Michael Hall, Biozentrum, University of Basel, Switzerland

19:30 **Dinner reception at Sansuitei**

Thursday, 11 July

Oral Session 4 (Chair: Tadashi Uemura)

- 9:00-9:20 **Green life in the dark**
Marcel Babin, University of Laval, Quebec, Canada
Program Grant 2016
- 9:20-9:40 **Combined DUV Raman and fluorescence spectroscopy to localize biomass and identify microbial activity: how identifying microorganisms 4850' underground informs the search for life on Mars**
Haley Sapers, California Institute of Technology, Pasadena and University of Southern California, Los Angeles, USA
Long-Term Fellow 2016
- 9:40-10:00 **Dissecting cytoskeletal dynamics across the malaria parasite lifecycle**
Friedrich Frischknecht, Heidelberg University, Germany
Young Investigator Grant 2016

Invited Lecture (Chair: Melanie Welham)

- 10:00-10:45 **From basic science to advanced medicine**
Ada Yonath, Weizmann Institute of Science, Rehovot, Israel

10:45-11:10 **Coffee break**

Special Session: talks by HFSP alumni in Japan (Chair: Guntram Bauer)

- 11:10-11:30 **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
- 11:30-11:50 **Neuroendocrine control of female germline stem cell proliferation in the fruit fly *Drosophila melanogaster***
Ryusuke Niwa, Faculty of Life and Environmental Sciences, University of Tsukuba and Structural Biology Research Center, High Energy Accelerator Research Organization KEK, Tsukuba, Japan
Long-Term Fellow 2005
- 11:50-12:10 **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

12:10-13:10 **Lunch**

Oral Session 5 (Chair: Yik Ying Teo)

- 13:10-13:30 **A dung beetle's life: towards understanding the role of locomotion in path integration and its consequences for precision when navigating**
Emily Baird, Stockholm University and Lund University, Sweden
Program Grant 2017

- 13:30-13:50 **Towards self-reproduction of protocells and minimal cells: evolution versus engineering**
Yusuke Maeda, *Kyushu University, Fukuoka, Japan*
Program Grant 2015
- 13:50-14:10 **Revealing bacterial free energy dynamics during loss of viability**
Teuta Pilizota, *School of Biological Sciences, University of Edinburgh, UK*
Program Grant 2015

Poster Talks 2 (Chair: Helmut Grubmueller)

- 14:10-14:13 **Neural correlates of perceptual decision making in larval zebrafish**
Armin Bahl, *Harvard University, Cambridge, USA*
Long-Term Fellow 2016
- 14:13-14:16 **In vitro reconstitution of bacterial cell division**
Natalia Baranova, *Institute of Science and Technology Austria, Klosterneuburg, Austria*
Long-Term Fellow 2016
- 14:16-14:19 **Towards room-temperature atomic-resolution structure determination of single fibrils, viruses and macromolecules using XFEL pulses**
Henry Chapman, *DESY, University of Hamburg, Germany*
Program Grant 2017
- 14:19-14:22 **Novel morphological and functional insights in python cardiac biology**
Claudia Crocini, *University of Colorado, Boulder, USA*
Long-Term Fellow 2017
- 14:22-14:25 **Rebuilding and reimagining the last common ancestor, a ribo-organism**
Andrew Ellington, *University of Texas, Austin, USA*
Program Grant 2017
- 14:25-14:28 **Imaging brain activity and connectivity in intact behaving animals**
Scott Fraser, *University of Southern California, Los Angeles, USA*
Program Grant 2017
- 14:28-14:31 **Highly parallel high-speed nanoscopy**
Wiebke Jahr, *Institute for Science and Technology Austria, Klosterneuburg, Austria*
Long-Term Fellow 2018
- 14:31-14:34 **Continuity of epigenetic information from the sperm to the embryo**
Ferenc Mueller, *Institute of Cancer and Genomic Sciences, University of Birmingham, UK*
Program Grant 2015
- 14:34-14:37 **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
- 14:37-14:40 **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
- 14:40-17:00 **Poster Session 2**
(with refreshments)

Friday, 12 July

Oral Session 6 (Chair: Vidita Vaidya)

- 9:00-9:20 **Biomolecule-enhanced functional ultrasound imaging of neural activity in the mouse brain**
David Maresca, California Institute of Technology, Pasadena, USA
Cross-Disciplinary Fellow 2016
- 9:20-9:40 **Parvalbumin and somatostatin interneurons have distinct contribution to the propagation of neural codes in the neocortex**
Michael Kohl, University of Oxford, UK
Young Investigator Grant 2015
- 9:40-10:00 **Programming self-organizing multicellular structures with synthetic cell-cell signaling**
Satoshi Toda, University of California, San Francisco, USA
Long-Term Fellow 2016
- 10:00-10:20 **Evolution of transparent wings in butterflies and moths: how and why?**
Marianne Elias, Institute of Systematics and Evolution of Biodiversity, Paris, France
Program Grant 2016

10:20-10:50 **Coffee break**

Oral Session 7 (Chair: Thomas Daniel)

- 10:50-11:10 **Investigating how the tumor microenvironment contributes to glioblastoma recurrence following macrophage-targeted therapies**
Anoek Zomer, University of Lausanne, Switzerland
Long-Term Fellow 2016
- 11:10-11:30 **Circannual rhythms - the long time domain in biology**
Andrew Loudon, University of Manchester, UK
Program Grant 2015
- 11:30-11:50 **Universal surface patterning mechanisms in plants and animals: an integrative study of dynamics of materials properties, stress and size with relation to surface patterns**
Beverley Glover, University of Cambridge, UK
Program Grant 2017
- 11:50-12:10 **Collective intercellular communication through ultra-fast hydrodynamic trigger waves**
Arnold Mathijssen, Stanford University, USA
Cross-Disciplinary Fellow 2017

12:10-13:30 **Lunch**

Oral Session 8 (Chair: Beverley Glover)

- 13:30-13:50 **Sequencing of the entire brain at the single-cell resolution: principles of molecular classification and periodic system of neurons**
Leonid Moroz, University of Florida, Gainesville, USA
Program Grant 2017

13:50-14:10 **(T)race back in space: reconstructing ancestral multifunctional enzymes and their evolutionary trajectories to modern proteins**
Erich Bornberg-Bauer, University of Münster, Germany
Program Grant 2013

14:10-14:30 **Can grid cell ensembles represent multiple spaces?**
Alessandro Treves, SISSA, Trieste, Italy
Program Grant 2016

Poster Talks 3 (Chair: Vic Arcus)

14:30-14:33 **Investigating the circuit basis of adolescence impulsivity**
Maithe Arruda Carvalho, University of Toronto Scarborough, Canada
Career Development Award 2018

14:33-14:36 **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

14:36-14:39 **Wireless implantable epidural LED array for unconstrained optogenetic manipulation of neurons in the mouse spinal cord**
Claudia Kathe, École Polytechnique Fédérale de Lausanne, Switzerland
Long-Term Fellow 2017

14:39-14:42 **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

14:42-14:45 **Clasp stabilization of plus ends created by severing promotes microtubule creation and reorientation**
Masayoshi Nakamura, Nagoya University, Japan and Carnegie Institution for Science, Stanford, USA
Career Development Award 2017

14:45-14:48 **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

14:48-14:51 **Intracellular temperature: a new paradigm for cell biology**
Taras Plakhotnik, University of Queensland, Brisbane, Australia
Program Grant 2018

14:51-14:54 **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

14:54-14:57 **Costs and benefits of social relationships in the collective motion of bird flocks**
Alex Thornton, University of Exeter, Penryn, UK
Program Grant 2017

14:57-15:00 **Energetics of microbial maintenance and its contribution to global carbon flux**
Fabai Wu, California Institute of Technology, Pasadena, USA
Long-Term Fellow 2017

15:00-15:15	Closing Remarks <i>Torsten Wiesel, President Emeritus, The Rockefeller University, New York, USA and former Secretary-General of HFSP</i>
15:15-17:00	Poster Session 3 <i>(with refreshments)</i>
19:30	Farewell reception <i>The Okura Frontier Hotel (Subaru room)</i>

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 Chabouté, *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 acoel *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](#)

AREA GUIDE FOR OKURA FRONTIER HOTEL TSUKUBA



OKURA FRONTIER HOTEL
TSUKUBA

Okura Frontier Selection

■ Main/Annex bldg.

1-1364-1 Azuma, Tsukuba-City, Ibaraki 305-0031, Japan Tel 81(29)852-1112 Fax 81(29)852-5623

■ EPOCHAL bldg.

2-20-1 Takezono, Tsukuba-City, Ibaraki 305-0032, Japan Tel 81(29)860-7700 Fax 81(29)860-7701

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HFSP 30th Anniversary
Tokyo, July 9 2019

19th HFSP Awardees Meeting
Tsukuba, 10 – 12 July 2019



Acknowledgements

HFSP is grateful for the support of



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