



HFSP AWARDS 2014

RESEARCH GRANTS

- Program Grants and Young Investigators are listed separately
- The first named for each award is the Principal Investigator
- Nationality is in parentheses when different from country in which the laboratory is located

PROGRAM GRANTS

Probing and controlling single neuron synaptic function in the brain with light, intrabodies and sensors

ARNOLD Don	Dept. of Biological Sciences University of Southern California, Los Angeles	USA
DE KONINCK Yves	Dept. of Cellular & Molecular Neuroscience Université Laval	CANADA
GRIESBECK Oliver	Lab. of Cellular Dynamics Max-Planck Institute of Neurobiology, Martinsried	GERMANY

Molecular mechanisms and epigenetic control of beneficial transposons: lessons from ciliates

BARABAS Orsolya	Structural and Computational Biology Unit EMBL, Heidelberg	GERMANY (HUNGARY)
LANDWEBER Laura	Dept. of Ecology & Evolutionary Biology Princeton University	USA

Single-molecule studies of ribosome assembly: Coupling transcription and assembly

BOCKELMANN Ulrich	Nanobiophysics lab. ESPCI ParisTech	FRANCE (GERMANY)
NIERHAUS Knud	Institut für Medizinische Physik und Biophysik Charité Centrum für Grundlagenmedizin, Berlin	GERMANY
PETERMAN Erwin	Dept. of Physics and Astronomy and LaserLaB Amsterdam VU University Amsterdam	THE NETHERLANDS
UEDA Takuya	Dept. of Medical Genome Sciences The University of Tokyo	JAPAN

Deciphering non-coding RNA regulatory networks and their role in cancer cell biology

BROWN Brian	Dept. of Genetics and Genomic Sciences Mount Sinai School of Medicine, New York	USA (CANADA)
BOZZONI Irene	Dept. of Biology and Biotechnology Sapienza University, Rome	ITALY
PANDOLFI Pier Paolo	Dept. of Medicine/Division of Genetics Beth Israel Deaconess Medical Center Harvard Medical School, Boston	USA (ITALY)
RAJEWSKY Nikolaus	Dept. of Systems Biology of Gene Regulatory Elements Max-Delbrück Center for Molecular Medicine, Berlin-Buch	GERMANY

Understanding the human microbiome: structure-function feedback in polymicrobial micro-colonies

BROWN Sam	Centre for Immunity, Infection and Evolution University of Edinburgh	UK
WHITELEY Marvin	Section of Molecular Genetics and Microbiology University of Texas at Austin	USA

Oxidized lipidome: the unspoken language of non-apoptotic cell death

CONRAD Marcus	Institute of Developmental Genetics Helmholtz Center Munich - German Research Center for Environmental Health, Neuherberg	GERMANY
KAGAN Valerian	Dept. of Environmental and Occupational Health University of Pittsburgh	USA
KLEIN- SEETHARAMAN Judith	Dept. of Cardiovascular and Metabolic Health School of Medicine, University of Warwick, Coventry	UK (USA)
URSINI Fulvio	Dept. of Molecular Medicine/Lab. of Biochemistry University of Padova	ITALY

Unfolding the principles of genome folding and dynamics in bacteria

DAME Remus Thei	Lab. of Molecular Genetics Leiden Institute of Chemistry	THE NETHERLANDS
GRAINGER David	Institute for Microbiology and Infection School of Biosciences, University of Birmingham	UK
HEERMANN Dieter	Institute of Theoretical Physics Heidelberg University	GERMANY
JENSEN Grant J.	Division of Structural Biology Howard Hughes Medical Institute, Pasadena	USA

A neural circuit approach to cognition and its limits in microbrains

GIURFA Martin	Research Center on Animal Cognition CNRS, University Paul Sabatier, Toulouse	FRANCE (ARGENTINA)
CHITTKA Lars	Dept. of Biological and Experimental Psychology School of Biological and Chemical Sciences, Queen Mary University of London	UK (GERMANY)
RIFFELL Jeffrey	Dept. of Biology University of Washington, Seattle	USA

Optomechanics: a novel approach for studying the actomyosin cell cortex at multiple scales

GRILL Stephan	Dept. of Biophysics Biotechnology Center, TU Dresden	GERMANY
BRYANT Zev	Depts. of Bioengineering / Structural Biology Stanford University	USA
YAP Alpha	Dept. of Molecular Cell Biology Institute for Molecular Bioscience, University of Queensland, Brisbane	AUSTRALIA

Crossing the ultimate tipping point: predicting death in *C. elegans*

KAMMENGA Jan E.	Lab. of Nematology Wageningen University	THE NETHERLANDS
ALLESINA Stefano	Dept. of Ecology & Evolution University of Chicago	USA (ITALY)

Dissecting the mechanochemistry of membrane invagination with designer DNA-based probes

KRISHNAN Yamuna	Dept. of Biochemistry, Biophysics and Bioinformatics National Centre for Biological Sciences Tata Institute of Fundamental Research, Bangalore	INDIA
BATHE Mark	Dept. of Biological Engineering Lab. for Computational Biology & Biophysics Massachusetts Institute of Technology, Cambridge	USA
IPSEN John	Dept. of Physics, Chemistry and Pharmacy Center for Biomembrane Physics University of Southern Denmark, Odense M	DENMARK
JOHANNES Ludger	Traffic, Signaling and Delivery Lab. - UMR144 Institut Curie, Paris	FRANCE (GERMANY)

Mechanosensation: from the periphery to the brain and back

LÓPEZ-SCHIER Héran	Research Unit Sensory Biology & Organogenesis Helmholtz Zentrum München, Neuherberg	GERMANY (ARGENTINA)
ELGOYHEN Ana Belen	Instituto de Investigaciones en Ingeniería Genética y Biología Molecular (INGEBI-CONICET), Buenos Aires	ARGENTINA
ENGERT Florian	Dept. of Molecular and Cellular Biology Harvard University, Cambridge	USA (GERMANY)

Adapting metazoan opsins for optogenetic applications

LUCAS Robert	Faculty of Life Sciences University of Manchester	UK
SCHERTLER Gebhard F.X.	Biomolecular Research Lab. Paul Scherrer Institute, Villigen	SWITZERLAND (AUSTRIA)
TERAKITA Akihisa	Dept. of Biology and Geosciences Graduate School of Science, Osaka City University	JAPAN

Mitochondrial G Protein signaling in astrocytes: a new player in the tripartite synapse

MARSICANO Giovanni	NeuroCentre Magendie. AVENIR Group "EndoCannabinoids and NeuroAdaptation" INSERM U862, Université Bordeaux 2	FRANCE (ITALY)
ARAQUE Alfonso	Functional and Systems Neurobiology Cajal Institute, CSIC, Madrid	SPAIN
HIRASE Hajime	Lab. for Neuron-Glia Circuitry RIKEN Brain Science Institute, Wako-Shi	JAPAN
MCDAID Liam	Intelligent Systems Research Centre University of Ulster, Londonderry	UK (IRELAND)

Using experiment, simulation, and theory to understand social evolution in yeast and bacteria

MURRAY Andrew	Dept. of Molecular and Cellular Biology Harvard University, Cambridge	USA
NELSON David R.	Dept. of Physics Harvard University, Cambridge	USA
TADDEI François	Génétique Moléculaire Evolutive et Médicale U1001 INSERM Paris Descartes site Cochin	FRANCE

Frontal neuronal language networks through primate evolution

PETRIDES Michael	Dept. of Neurology & Neurosurgery Montreal Neurological Institute McGill University	CANADA
HOPKINS William	Neuroscience Institute, Georgia State University And Division of Psychobiology, Yerkes Regional Primate Research Center, Emory University, Atlanta	USA
PROCYK Emmanuel	Dept of Integrative Neuroscience, U846 INSERM, Bron	FRANCE

An engineering approach to understand local translation in cell-fate decisions

SAITO Hirohide	Dept. of Reprogramming Science Center for iPS Cell Research and Application Kyoto University	JAPAN
GUEROUI Zoher	Dept. of Chemistry Ecole Normale Supérieure, Paris	FRANCE
WANG Dan Ohtan	Institute for Integrated Cell-Material Sciences Kyoto University	JAPAN

The development of the C. elegans nervous system at synaptic resolution

SAMUEL Aravinthan	Dept. of Physics Harvard University, Cambridge	USA
BESSEREAU Jean-Louis	Centre de Génétique et de Physiologie Moléculaires et Cellulaires University Claude Bernard Lyon 1, Villeurbanne	FRANCE
LICHTMAN Jeff W.	Dept. of Molecular and Cellular Biology Harvard University, Cambridge	USA
ZHEN Mei	Lunenfeld-Tanebaum Research Institute Univeristy of Toronto	CANADA

Quantitative structure-function analysis of cerebral cortex assembly at clonal level

SHI Song-Hai	Developmental Biology Program Sloan-Kettering Institute for Cancer Research, New York	USA (CHINA)
HIPPENMEYER Simon	Genetic Dissection of Cerebral Cortex Development Group Institute of Science and Technology Austria, Klosterneuburg	AUSTRIA (SWITZERLAND)
HUANG Kun	Dept. of Biomedical Informatics The Ohio State University, Columbus	USA (CHINA)
SIMONS Benjamin	Cavendish Lab., Dept. of Physics University of Cambridge	UK

A psychophysical and neuroengineering approach to human magnetoreception

SHIMOJO Shinsuke	Division of Biology California Institute of Technology, Pasadena	USA (JAPAN)
KIRSCHVINK Joseph	Division of Geological and Planetary Sciences California Institute of Technology, Pasadena	USA
MATANI Ayumu	Dept. of Complexity Science and Engineering, Bio-complexity, Brain science Graduate School Information Science and Technology, The University of Tokyo	JAPAN

Sensors and modulators of autophagy networks in vivo

SIDHU Sachdev	Dept. of Molecular Genetics Donnelly Centre for Cellular and Biomolecular Research, University of Toronto	CANADA
DIKIC Ivan	Institute of Biochemistry 2 Johann Wolfgang Goethe University Medical School, Frankfurt A/M	GERMANY (CROATIA)
KOMATSU Masaaki	Protein Metabolism Project Tokyo Metropolitan Institute of Medical Science	JAPAN
SANDER Chris	Computational Biology Center Memorial Sloan-Kettering Cancer Center, New York	USA (GERMANY)

Probabilistic computation of location in the rodent and human hippocampus

WOLBERS Thomas	Aging & Cognition Research Group German Centre for Neurodegenerative Diseases, Magdeburg	GERMANY
FIETE Ila	Center for Learning and Memory, The University of Texas at Austin	USA
NOLAN Matthew	Center for Neuroscience Research University of Edinburgh	UK

Sensory-motor integration in cerebrospinal fluid contacting neurons

WYART Claire	Dept. of Optogenetic Dissection of Spinal Circuits Brain and Spine Institute (ICM), UPMC, Paris	FRANCE (USA)
DELMAS Patrick	CRN2M - Center for Neurobiology and Neurophysiology, UMR 7286, Aix Marseille University	FRANCE
LEWIS Katharine	Dept. of Biology Syracuse University	USA (UK)

Bridge over troubled synapses: synthetic extracellular protein scaffolds for neuronal connectivity

YUZAKI Michisuke	Dept. of Physiology Graduate School of Medicine, Keio University, Tokyo	JAPAN
ARICESCU Alexandru	Division of Structural Biology Wellcome Trust Centre for Human Genetics, Oxford	UK
DITYATEV Alexander	Dept. of Molecular Neuroplasticity German Center for Neurodegenerative Diseases (DZNE), Magdeburg	GERMANY (RUSSIA)

YOUNG INVESTIGATORS

A control systems approach to understanding brain and behavior

BIZLEY Jennifer	Ear Institute University College London	UK
FROHLICH Flavio	Dept. of Psychiatry, Cell Biology and Physiology, Biomedical Engineering University of North Carolina at Chapel Hill	USA (SWITZERLAND)

An extracellular RNAi pathway as a mechanism of parasite-host communication

BUCK Amy	Centre for Immunity, Infection & Evolution University of Edinburgh	UK
ABREU-GOODGER Cei	Center for RNA Computational Genomics National Laboratory of Genomics for Biodiversity LANGEBIO, Irapuato	MEXICO
CLAYCOMB Julie	Dept. of Molecular Genetics University of Toronto	CANADA (USA)

Nucleoid proteins and DNA structure, global regulation of the bacterial transcription network.- RENEWAL APP

COSENTINO LAGOMARSINO Marco	UMR 7238 - Genomique des Microorganismes CNRS, UPMC, Paris	FRANCE (ITALY)
CICUTA Pietro	Cavendish Lab. University of Cambridge	UK (ITALY)
DORFMAN Kevin	Dept. of Chemical Engineering and Materials Science University of Minnesota - Twin Cities, Minneapolis	USA
SCLAVI Bianca	LBPA, Biology and Applied Pharmacology Lab. Ecole Normale Supérieure - Cachan	FRANCE (ITALY)

Understanding emergence and loss of synchrony in excitable tissues using nanomechanical biosensors

FEINBERG Adam	Depts of Biomedical Engineering and Materials Science and Engineering, Carnegie Mellon University, Pittsburgh	USA
VAN DER MEER Peter	Experimental Cardiology Section, Dept. of Cardiology University Medical Center Groningen	THE NETHERLANDS

Development of brain mechanisms underlying speech preference in infants: is speech special?

GEFFEN Maria	Dept. of Otorhinolaryngology University of Pennsylvania Perelman School of Medicine	USA
GERVAIN Judith	Laboratoire - Psychologie de la Perception CNRS et Université Paris Descartes	FRANCE (HUNGARY)

Real-time imaging of fast conformational dynamics of ion channel gating with plasmonic nano-antennas

RICHARDS Christopher	Dept. of Chemistry University of Kentucky, Lexington	USA
KURATA Harley	Dept. of Anesthesiology, Pharmacology, and Therapeutics University of British Columbia, Vancouver	CANADA
VOSCH Tom	Dept. of Chemistry University of Copenhagen	DENMARK (BELGIUM)

Modeling information flow between tissues during metabolic adaptation and dysfunction

RUAS Jorge	Molecular & Cellular Exercise Physiology Group Dept. of Physiology and Pharmacology Karolinska Institutet, Stockholm	SWEDEN (PORTUGAL)
TEIXEIRA Ana	Dept. of Cell and Molecular Biology Karolinska Institute, Stockholm	SWEDEN (PORTUGAL)
VEGIOPOULOS Alexandros	Junior Group Metabolism and Stem Cell Plasticity (A171) German Cancer Research Center (DKFZ), Heidelberg	GERMANY
WU Jun	Dept. of Molecular & Integrative Physiology and Life Sciences Institute University of Michigan, Ann Arbor	USA (CHINA)

Predicting cell type-specific signaling pathway response

SHERWOOD Richard	Dept. of Medicine, Division of Genetics Brigham and Women's Hospital, Boston	USA
HO Joshua	Dept. of Molecular, Structural and Computational Biology Victor Chang Cardiac Research Institute, Darlinghurst	AUSTRALIA

Beyond simple choices: computational and neuronal mechanisms for complex spatial behaviors

VAN DER MEER Matthijs	Dept. of Biology and Centre for Theoretical Neuroscience University of Waterloo	CANADA (THE NETHERLANDS)
KEMERE Caleb	Rice Realtime Neural Engineering Lab. Dept. of Electrical and Computer Engineering Rice University, Houston	USA
PEZZULO Giovanni	Institute of Cognitive Sciences and Technologies National Research Council of Italy, Rome	ITALY

Wireless optogenetic interrogation of non-image forming photoreceptor function by Nano-antennae

XIANG Yang	Dept. of Neurobiology University of Massachusetts Medical School, Worcester	USA (CHINA)
HAN Gang	Dept. of Biochemistry and Molecular Pharmacology University of Massachusetts Medical School, Worcester	USA (CHINA)
XUE Tian	School of Life Sciences University of Science and Technology of China, Hefei	CHINA