



HFSP AWARDS 2013

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

Visual control of flight modes and transitions in birds

ALTSHULER Douglas	Dept. of Zoology University of British Columbia, Vancouver	CANADA (USA)
LENTINK David	Dept. of Mechanical Engineering Stanford University	USA (THE NETHERLANDS)
SRINIVASAN Mandyam	Queensland Brain Institute University of Queensland, Brisbane	AUSTRALIA

An innovative, interdisciplinary model system for studying the developmental origins of sleep and brain rhythms

BALABAN Evan	Psychology Dept. & Behavioral Neurosciences Program Stewart Biological Sciences Building, Montreal	CANADA (USA)
DI PASCOLI Stefano	Dept. of Information Engineering University of Pisa	ITALY
RATTENBORG Niels	Laboratory of Sleep and Flight in Birds Max Planck Institute for Ornithology, Seewiesen	GERMANY (USA)
VAQUERO Juan José	Depart. de Bioingeniería e Ingeniería Aeroespacial Universidad Carlos III de Madrid, Leganes	SPAIN

The birth and death of the chloroplast

BOCK Ralph	Dept. III Max Planck Institute of Molecular Plant Physiology, Potsdam-Golm	GERMANY
REICH Ziv	Dept. of Biological Chemistry Weizmann Institute of Science, Rehovot	ISRAEL

(T)Race back in space – Recovering protein evolvability from multifunctional ancestors

BORNBERG-BAUER Erich	Div. of Bioinformatics, School of Biological Sciences University of Muenster	GERMANY (AUSTRIA)
HOLLFELDER Florian	Dept. of Biochemistry University of Cambridge	UK (GERMANY)
TOKURIKI Nobuhiko	Michael Smith Laboratories University of British Columbia, Vancouver	CANADA (JAPAN)

From stochastic cell behavior to reproducible shapes: the coordination behind morphogenesis

BOUDAUD Arezki	Dép. de Reproduction et Développement des Plantes ENS Lyon	FRANCE
LI Chun Bui	Research Institute for Electronic Science Hokkaido University, Sapporo	JAPAN (HONG KONG)
ROEDER Adrienne	Weill Institute for Cell and Molecular Biology and Dept. of Plant Biology Cornell University, Ithaca	USA
SMITH Richard S.	Institute of PLant Sciences/Mathematical Biology University of Bern	SWITZERLAND (UK)

Investigating the role of secreted RNAs in bacterial virulence

COSSART Pascale	Bacteria-Cell Interaction Unit Pasteur Institute, Paris	FRANCE
PALMER Amy	Dept. of Chemistry and Biochemistry University of Colorado, Boulder	USA
SOREK Rotem	Dept. of Molecular Genetics The Weizmann Institute of Science, Rehovot	ISRAEL

Magnetic sense receptors in avian inner ear

DICKMAN J. David	Dept. of Neuroscience Baylor College of Medicine, Houston	USA
WINKLHOFER Michael	Dept. of Earth and Environmental Sciences Munich University	GERMANY

Neuroscience of knowledge: neural representation of concepts and their role in perception and memory

FREIWALD Winrich	Laboratory of Neural Systems The Rockefeller University, New York	USA (GERMANY)
DIAMOND Mathew E.	Tactile Perception and Learning Lab International School for Advanced Studies (SISSA), Trieste	ITALY
QUIAN QUIROGA Rodrigo	Dept. of Engineering University of Leicester	UK (ARGENTINA)
SOMPOLINSKY Haim	Racah Institute of Physics and Interdisciplinary Center for Neural Computation The Hebrew University of Jerusalem	ISRAEL
ZOCCOLAN Davide	Neurobiology and Cognitive Neuroscience Sectors International School for Advanced Studies, Trieste	ITALY

Actin and actin-related proteins: probing their nuclear function

GASSER Susan M.	Mechanisms of Cancer Dept. Friedrich Miescher Institute for Biomedical Research, Basel	SWITZERLAND
HARATA Masahiko	Laboratory of Molecular Biology Graduate School of Agricultural Science, Sendai	JAPAN
HEINIS Christian	Lab. of Therapeutic Proteins and Peptides EPFL, Lausanne	SWITZERLAND
HOZAK Pavel	Dept. of Biology of the Cell Nucleus Institute of Molecular Genetics AS CR, Prague	CZECH REPUBLIC

Dynamics of actin anchoring in synaptic plasticity and learning

HAYASHI Yasunori	Brain Science Institute RIKEN, Wako	JAPAN
MENENDEZ DE LA PRIDA Liset	Dept. of Functional & Systems Neurobiology Instituto Cajal CSIC, Madrid	SPAIN
PONCER Jean Christophe	Plasticity in Cortical Networks & Epilepsy' group, INSERM U839 Institut du Fer à Moulin, Paris	FRANCE
TING Alice	Dept. of Chemistry Massachusetts Institute of Technology, Cambridge	USA

Evolution of light perception networks in plants

HILTBRUNNER Andreas	Dept. of Molecular Plant Physiology Institute of Biology II, Freiburg	GERMANY (SWITZERLAND)
FLECK Christian	Laboratory of Systems and Synthetic Biology Wageningen University and Research Center	THE NETHERLANDS (GERMANY)
HUQ Enamul	Dept. of Molecular Cell and Developmental Biology University of Texas at Austin	USA

Developmental assembly and synthesis of membrane nano-domains for oscillating cardiac regulation

HOSHIJIMA Masahiko	Center for Research in Biological Systems University of California, San Diego, La Jolla	USA (JAPAN)
SOELLER Christian	School of Physics University of Exeter	UK (GERMANY)
TAKESHIMA Hiroshi	Dept. of Biological Chemistry Kyoto University	JAPAN

Artificial synthesis of the bacterial flagellar motor with DNA nanostructures

LEE Lawrence	Dept. of Structural and Computational Biology The Victor Chang Cardiac Research Institute, Darlinghurst	AUSTRALIA
BERRY Richard	Dept. of Physics University of Oxford	UK
NAMBA Keiichi	Graduate School of Frontier Biosciences Osaka University, Suita	JAPAN
TURBERFIELD Andrew	Dept. of Physics University of Oxford	UK

Assembly and activity of multidrug efflux machines

LUI SI Ben F.	Dept. Biochemistry University of Cambridge	UK (USA)
HAMOEN Leendert	Bacterial Cell Biology Swammerdam Institute for Life Sciences University of Amsterdam	THE NETHERLANDS
MURAKAMI Satoshi	Dept. of Life Science Tokyo Institute of Technology, Yokohama	JAPAN
POS Klaas	Institute of Biochemistry Goethe University Frankfurt	GERMANY (THE NETHERLANDS)
VAN VEEN Hendrik W.	Dept. of Pharmacology University of Cambridge	UK (THE NETHERLANDS)

Multimodal sensing in the natural environment

MOSS Cynthia	Dept. of Psychology University of Maryland, College Park	USA
HALLAM John	Mærsk Institute University of Southern Denmark, Odense	DENMARK (JERSEY)
PAGE Rachel	Gamboa Smithsonian Tropical Research Institute, Panama	PANAMA (USA)
SURLYKKE Annemarie	Institute of Biology University of Southern Denmark, Odense	DENMARK
YOVEL Yossi	Dept. of Zoology Tel-Aviv University	ISRAEL

Revealing the fundamental limits of cell growth

PAULSSON Johan	Dept. of Systems Biology, HMS Harvard University, Boston	USA (SWEDEN)
BOLLENBACH Tobias	Dept. of Biological Physics and Systems Biology IST Austria, Klosterneuburg	AUSTRIA (GERMANY)
EHRENBERG Måns	Dept. of Cell and Molecular Biology Uppsala University	SWEDEN
TOPRAK Erdal	Dept. of Biological Sciences and Bioengineering Sabanci University, Istanbul	TURKEY

Evolutionary innovation in bacterial signal processing networks

PINNEY John	Division of Molecular Biosciences Imperial College London	UK
DURAND Dannie	Dept. of Biological Sciences, Computer Science Carnegie Mellon University, Pittsburgh	USA
LAUB Michael T.	Dept. of Biology HHMI, Cambridge	USA

Evolutionary ecology of chronobiology in host-parasite interactions

REECE Sarah	Institute of Evolutionary Biology University of Edinburgh	UK
MAIER Bert	Laboratory of Chronobiology Institute for Medical Immunology, Berlin	GERMANY
MIDEO Nicole	Center for Infectious Disease Dynamics Pennsylvania State University, University Park	USA (CANADA)
SAVILL Nick	School of Biological Sciences University of Edinburgh	UK

Biomimetic nanoelectrodes for stable intracellular neural recordings

SCHAEFER* Andreas	Dept. of Behavioural Neurophysiology Max-Planck-Institut fuer medizinische Forschung, Heidelberg	GERMANY
MELOSH Nick	Dept. of Materials Science and Engineering Stanford University	USA

Memory and chance during nutrient sensing in budding yeast

SWAIN Peter	Center for Systems Biology University of Edinburgh	UK
MICHNICK Stephen W.	Dept. of Biochemistry University of Montreal	CANADA
VERSTREPEN Kevin	Laboratory for Systems Biology VIB, Heverlee	BELGIUM

Cell fate decision by integration of information from multiple plant hormones

VERNOUX Teva	Dép. de Reproduction et Developpement des Plantes Ecole Normale Supérieure, Lyon	FRANCE
GODIN Christophe	Virtual Plants project-team INRIA, Montpellier	FRANCE
SMOLKE Christina D.	Dept. of Bioengineering Stanford University	USA

Interplay between motility appendages, exopolysaccharides, and hydrodynamics in early biofilms

WONG Gerard	Dept. of Bioengineering The Regents of the University of California, Los Angeles	USA
GOLESTANIAN Ramin	Rudolf Peierls Centre for Theoretical Physics Dept. of Physics, Oxford	UK (IRAN)
MAIER Berenike	Biocenter and Institute for Theoretical Physics University of Cologne,	GERMANY
O'TOOLE George	Dept. of Microbiology & Immunology Dartmouth Medical School, Hanover	USA

Taking snapshots of photosynthetic water oxidation: simultaneous X-ray spectroscopy and crystallography

YANO Junko	Physical Biosciences Division Lawrence Berkeley National Laboratory	USA (JAPAN)
BERGMANN Uwe	Linac Coherent Light Source SLAC National Accelerator Laboratory, Menlo Park	USA
WERNET Philippe	Institute for Methods and Instrumentation for Synchrotron Helmholtz-Zentrum Berlin Radiation Research	GERMANY
ZOUNI Athina	Dept. for Chemistry Technical University, Berlin	GERMANY

YOUNG INVESTIGATORS

Defining the functional and structural interface between voltage-activated sodium channels and beta-subunits

BOSMANS Dept. of Physiology USA
Frank Johns Hopkins University School of Medicine, Baltimore (BELGIUM)

VAN PETEGEM Dept. of Biochemistry and Molecular Biology CANADA
Filip University of British Columbia, Vancouver (BELGIUM)

Interplay between mechanical and biological mechanisms during cell cortex assembly – RENEWAL APPLICATION

CHARRAS London Centre for Nanotechnology UK
Guillaume University College London (CANADA)

PALUCH* MPI-CBG GERMANY
Ewa Max Planck Institute of Molecular Cell Biology and (POLAND)
Genetics, Dresden

ROMET-LEMONNE Dept. of Cytoskeleton Dynamics and Motility FRANCE
Guillaume Lab. of Structural Enzymology and Biochemistry (LEBS),
Gif-Sur-Yvette

ROUX Institute for Research in Immunology and Cancer (IRIC) CANADA
Philippe Université de Montréal

Mechanical properties of tiled composites – lessons from shark skeletons

DEAN Dept. of Biomaterials GERMANY
Mason Max Planck Institute for Colloids & Interfaces, Potsdam (USA)

WEAVER Wyss Institute for Biologically Inspired Engineering USA
James Harvard University, Cambridge

Neurons feel the force - new photonic tools to unravel the development of the nervous system

GATHER IAPP GERMANY
Malte C. TU Dresden

FRANZE Dept. of Physiology, Development and Neuroscience UK
Kristian University of Cambridge (GERMANY)

SCARCELLI Dermatology - Wellman Center for photomedicine USA
Giuliano Harvard Medical school, Cambridge (ITALY)

Identifying and characterizing bacterial cytoskeletal elements and small molecules that target them– RENEWAL APP

GITAI Zemer	Dept. of Molecular Biology Princeton University	USA
KOLLMAN Justin	Dept. of Anatomy and Cell Biology McGill University, Montreal	CANADA (USA)
THANBICHLER Martin	Max Planck Research Group Max Planck Institute for Terrestrial Microbiology, Marburg	GERMANY
WEIBEL Douglas B.	Dept. of Biochemistry and Dept. of Biomedical Engineering University of Wisconsin-Madison,	USA

The role of alternative splicing in tissue specific protein interaction networks

KIM Philip M	Terrence Donnelly Centre for Cellular and Biomolecular Research University of Toronto	CANADA (GERMANY)
FALTER-BRAUN Pascal	Dept. of Plant Systems Biology Technical University Munich (TUM), Freising	GERMANY
KAIDA Daisuke	Frontier Research Core for Life Sciences University of Toyama	JAPAN

Optogenetic manipulation and functional characterization of adult neurogenesis in the olfactory bulb

KOMIYAMA Takaki	Section of Neurobiology and Dept. of Neurosciences University of California, San Diego, La Jolla	USA (JAPAN)
GRADINARU Viviana	Biology/Gradinaru Lab California Institute of Technology, Pasadena	USA (ROMANIA)
IMAYOSHI Itaru	The Hakubi Center, Institute for Virus Research Kyoto University	JAPAN

Assessing the function of neocortical Layer 1 with genetically-encoded indicators of synaptic activity

PETREANU Leopoldo	Champalimaud Neuroscience Programme Champalimaud Foundation, Lisboa	PORTUGAL (ARGENTINA)
TIAN Lin	Biochemistry and Molecular Medicine/ Tian Lab University of California, Davis/School of Medicine, Sacramento	USA (CHINA)

Pathways ensuring the integrity of mitochondrial DNA

SFEIR Dept. of Developmental Genetics USA
Agnel Skirball Institute of Biomolecular Medicine, New York (LEBANON)

BRUNET Laboratoire de Biophysique FRANCE
Erika Museum national d'histoire naturelle, Paris

Foot in motion: materials, mechanics and control

VENKADESAN Control and Morphology Lab INDIA
Madhusudhan National Centre for Biological Sciences, Bangalore

BANDI Collective Interactions Unit JAPAN
Mahesh Okinawa Institute of Science and Technology Graduate (INDIA)
University, Onna

MANDRE School of Engineering USA
Shreyas Brown University, Providence (INDIA)

* in the process of moving to UK