



HFSP AWARDS 2011

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

Mechanical properties of reconstituted actin stress fibers

BLANCHOIN Laurent	Institute of Life Sciences Research and Technologies (iRTSV), CEA Grenoble	FRANCE
DE LA CRUZ Enrique M.	Dept. of Molecular Biophysics and Biochemistry Yale University New Haven	USA
FLETCHER Daniel	Dept. of Bioengineering & Biophysics University of California, Berkeley	USA

Coherent diffractive imaging of viruses

BOGAN Mike	Stanford PULSE Institute for Ultrafast Energy Science SLAC National Accelerator Lab. Menlo Park	USA (CANADA)
SCHLICHTING Ilme	Dept. of Biomolecular Mechanisms Max Planck Institute for Medical Research Heidelberg	GERMANY
SPENCE John	Dept. of Physics Arizona State University Tempe	USA

Characterization of conformational space in prion proteins using single-molecule techniques

BUSTAMANTE Carlos J.	Dept. of Molecular Cell & Biology, Physics, & Chemistry University of California, Berkeley HHMI, Berkeley	USA
LEGNAME Giuseppe	Neurobiology Sector/Prion Biology Lab. SISSA (International School for Advanced Studies) Trieste	ITALY
SAMORÌ Bruno	Dept. of Biochemistry University of Bologna	ITALY
TANAKA Motomasa	Tanaka Reserach Unit RIKEN Brain Science Institute Wako, Saitama	JAPAN

Deconstructing avian cone photoreceptors: a system of self-organizing optical microdevices

CORBO Joseph	Dept. of Pathology and Immunology Washington University School of Medicine St. Louis	USA
KELBER Almut	Dept. of Biology Lund University	SWEDEN (GERMANY)
MEYER-HERMANN Michael	Dept. of Systems Immunology Helmholtz Centre for Infection Research (HZI) Braunschweig	GERMANY
ROBERTS Nicholas	School of Biological Sciences University of Bristol	UK

Oscillations and synchronization in signaling: a synthetic biology approach

DI BERNARDO Diego	Systems Biology Lab. Telethon Institute of Genetics and Medicine Fondazione Telethon, Naples	ITALY
HASTY Jeff	Dept. of Bioengineering University of California, San Diego La Jolla	USA
PICCOLO Stefano	Dept. of Histology, Microbiology and Medical Biotechnology University of Padua	ITALY

Plasticity of non-centrosomal microtubule networks

GOSHIMA Gohta	Division of Biological Science Graduate School of Science, Nagoya University	JAPAN
JANSON Marcel	Lab. of Plant Cell Biology Wageningen University	NETHERLANDS
KRUSE Karsten	Dept. of Theoretical Physics Saarland University Saarbrücken	GERMANY

The dark side of a bright molecule: determinants of glycogen-induced cell dysfunction

GUINOVART Joan J	Molecular Medicine Programme Institute for Research in Biomedicine Barcelona	SPAIN
DUSZYNSKI Jerzy	Dept. of Biochemistry Nencki Institute of Experimental Biology Warsaw	POLAND
GODZIK Adam	Dept. of Bioinformatics and Systems Biology Sanford - Burnham Medical Research Institute La Jolla	USA

The birth of the circadian clock

KADENER Sebastian	Dept. of Biological Chemistry Silberman Institute of Life Sciences The Hebrew University of Jerusalem	ISRAEL (ARGENTINA)
MESHORER Eran	Dept. of Genetics Hebrew University of Jerusalem	ISRAEL
REGEV Aviv	Dept. of Biology Massachusetts Institute of Technology / HHMI Broad Institute of MIT and Harvard, Cambridge	USA (ISRAEL)

Origin and functionality of extracellular brain activity

KOCH Christof	Division of Biology California Institute of Technology Pasadena	USA
BUZSAKI György	Center for Molecular and Behavioral Neuroscience Rutgers University Janelia Farm Research Campus, HHMI, Newark	USA
MARKRAM Henry	Lab. of Neural Microcircuitry Brain and Mind Institute Ecole Polytechnique Federale de Lausanne	SWITZERLAND (ISRAEL)

Structural and functional assembly of ribbon synapses in the retina

LAGNADO Leon	Neurobiology Division MRC Laboratory of Molecular Biology Cambridge	UK
SCHMITZ Frank	Dept. of Neuroanatomy Institute of Anatomy and Cell Biology Saarland University, Homburg/Saar	GERMANY
WONG Rachel O.	Dept. of Biological Structure University of Washington Seattle	USA (AUSTRALIA)

Ancient ibis mummies from egypt: DNA evolution

LAMBERT David	Griffith School of Environment and School of Biomolecular and Physical Sciences, Griffith University Brisbane	AUSTRALIA
HOLLAND Barbara	Dept. of Mathematics and Physics University of Tasmania Hobart	AUSTRALIA (NEW ZEALAND)
IKRAM Salima	Dept. of Sociology, Anthropology, Psychology & Egyptology American University in Cairo	EGYPT
WILLERSLEV Eske	Dept. of Ancient DNA and Evolution Niels Bohr Institute and Institute of Biology University of Copenhagen	DENMARK

How to build a kidney: quantitative modeling of kidney morphogenesis across time and space

LITTLE Melissa Helen	Institute for Molecular Bioscience University of Queensland Brisbane	AUSTRALIA
BYRNE Helen	School of Mathematical Sciences University of Nottingham	UK
MCMAHON Andrew	Dept. of Stem Cell and Regenerative Biology Harvard University Cambridge	USA (UK)
SMYTH Ian	Dept. of Biochemistry and Molecular Biology Monash University Melbourne	AUSTRALIA

Cell cooperation in cancer

LYONS James Guy	Discipline of Dermatology Central Clinical School University of Sydney, Camperdown	AUSTRALIA
GUTKIND Jorge Silvio	Oral and Pharyngeal Cancer Branch National Institute of Dental and Craniofacial Research National Institutes of Health, Bethesda	USA
MYERSCOUGH Mary	School of Mathematics and Statistics The University of Sydney New South Wales	AUSTRALIA

Conformational changes of chromosomes during the cell cycle

MARTI-RENOM Marc A.	Dept. of Bioinformatics and Genomics Principe Felipe Research Center Valencia	SPAIN
BYSTRICKY Kerstin	Dept. of Eukaryotic Molecular Biology University Paul Sabatier CNRS, Toulouse	FRANCE (GERMANY)
DEKKER Job	Program in Gene Function and Expression University of Massachusetts Medical School Worcester	USA (NETHERLANDS)

Cell stress and proteostasis dysfunction in aging and disease

MORIMOTO Richard	Dept. of Biochemistry, Molecular Biology and Cell Biology Northwestern University Evanston	USA
HARTL Franz-Ulrich	Dept. of Cellular Biochemistry Max-Planck-Institute for Biochemistry Martinsried	GERMANY
NAGATA Kazuhiro	Dept. of Molecular Biosciences Faculty of Life Sciences Kyoto Sangyo University, Kyoto	JAPAN

4D analysis of haematopoietic stem cell – niche interactions in vivo, in vitro, in silico

POMPE Tilo	Max Bergmann Center of Biomaterials Leibniz Institute of Polymer Research Dresden	GERMANY
LO CELSO Cristina	Section of Immunology and Infection Division of Cell and Molecular Biology Imperial College, London	UK (ITALY)
ROEDER Ingo	Institute for Medical Informatics and Biometry (IMB) Medical Faculty Carl Gustav Carus Dresden University of Technology	GERMANY
ZANDSTRA Peter W.	Institute of Biomaterials and Biomedical Engineering University of Toronto	CANADA

Cell migration in complex environments: from in vivo experiments to theoretical models

SENS Pierre	Gulliver Lab., Dept. of Biological Physics CNRS, ESPCI Paris	FRANCE
ARANDA-ESPINOZA Helim	Fischell Dept. of Bioengineering University of Maryland College Park	USA (MEXICO)
RAZ Erez	Institute for Cell Biology ZMBE-Center for Molecular Biology of Inflammation University of Muenster	GERMANY (ISRAEL)
SIXT Michael	Sixt Lab., Dept. of Cell Biology and Immunology Institute of Science and Technology Austria Klosterneuburg	AUSTRIA (HUNGARY)

Cellular information processing and decision making: from noise to robust phenotypes

STUMPF Michael	Division of Molecular Biosciences Imperial College London	UK (GERMANY)
KHAMMASH Mustafa	Mechanical Engineering/Center for Control, Dynamical Systems, and Computation University of California at Santa Barbara	USA
KLUG David	Chemistry and Chemical Biology Centre Imperial College London	UK
KURODA Shinya	Dept. of Biophysics and Biochemistry University of Tokyo Bunkyo-Ku	JAPAN

Substrate recognition by MARCH ubiquitin ligases: a paradigm of membrane-associated immunoregulation

VILLADANGOS José	Dept. of Immunology The Walter and Eliza Hall Institute of Medical Research Parkville	AUSTRALIA (SPAIN)
CALL Matthew	Division of Structural Biology The Walter and Eliza Hall Institute of Medical Research Parkville	AUSTRALIA (USA)
IM Wonpil	Molecular Biosciences and Center for Bioinformatics The University of Kansas Lawrence	USA (REP. OF KOREA)
ISHIDO Satoshi	Lab. for Infectious Immunity RIKEN Research Center for Allergy and Immunology Yokohama	JAPAN

Deciding and revising: a unifying framework for decision making and motor control

WOLPERT Daniel	Computational and Biological Learning Lab. Dept. of Engineering University of Cambridge	UK
SHADLEN Michael N.	HHMI and Dept. of Physiology & Biophysics University of Washington Medical School Seattle	USA

Photo-controlled transcription factors for probing how mice form memories

WOOLLEY Andrew	Dept. of Chemistry University of Toronto	CANADA
ARNDT Katja	Institute for Biochemistry and Biology University of Potsdam	GERMANY
JOSSELYN Sheena	Dept. of Neurosciences & Mental Health Hospital for Sick Children University of Toronto	CANADA (USA)
KARANICOLAS John	Dept. of Molecular Biosciences and Center for Bioinformatics Haworth Hall, Room 3042 Lawrence	USA (CANADA)

Visualizing nanometer-scale structural plasticity of synapses in real time using AFM

YASUDA Ryohei	Dept. of Neurobiology Duke University Medical Center Durham	USA (JAPAN)
ANDO Toshio	Dept. of Physics Kanazawa University	JAPAN

YOUNG INVESTIGATORS

From genes to circuits: the evolution of species-specific communication in *Drosophila*

ALBERT Joerg	The Ear Institute University College London	UK (GERMANY)
AERTS Stein	Center for Human Genetics, Lab of Computational Biology University of Leuven	BELGIUM
KAMIKOUCHI Azusa	School of Life Sciences/Lab. of Cellular Neurobiology Tokyo University of Pharmacy and Life Sciences	JAPAN
MURTHY Mala	Dept. of Molecular Biology and Neuroscience Princeton University	USA

Dissecting cytoskeletal dynamics across the malaria parasite lifecycle

BAUM Jacob	Division of Infection and Immunity The Walter and Eliza Hall Institute Melbourne	AUSTRALIA
FRISCHKNECHT Friedrich	Dept. of Infectious Diseases, Parasitology University of Heidelberg Medical School Heidelberg	GERMANY
KOVAR David	Dept. of Molecular Genetics and Cell Biology The University of Chicago	USA

Structural and functional characterization of ligand recognition by chemosensory receptors

BENTON Richard	Center for Integrative Genomics University of Lausanne	SWITZERLAND (UK)
JIN Rongsheng	Neuroscience, Aging and Stem Cell Research Center Sanford-Burnham Institute for Medical Research La Jolla	USA (PEOPLE'S REP. OF CHINA)
TANG Chun	State Key Lab. of Magnetic Resonance and Atomic Molecular Physics Wuhan Institute of Physics and Mathematics Chinese Academy of Sciences, Wuhan	PEOPLE'S REPUBLIC OF CHINA

Visualization and identification of bone marrow niches by imaging and computational technology

ISHII Masaru	Lab. of Biological Imaging Immunology Frontier Research Center Osaka University	JAPAN
KLAUSCHEN Frederick	Institute of Pathology Charite University Medicine Berlin	GERMANY

Multi-level conflicts in evolutionary dynamics of restriction-modification systems

KUSSELL Edo	Dept. of Biology and Physics New York University	USA
GUET Calin	Dept. of Quantitative Biology Institute of Science and Technology Austria Klosterneuburg	AUSTRIA (ROMANIA)
WAKAMOTO Yuichi	Research Center for Complex Systems Biology University of Tokyo	JAPAN

Dynamics of cell state transitions in reprogramming: a live imaging, probabilistic modeling approach

MEISSNER Alexander	Dept. of Stem Cell and Regenerative Biology Harvard University Broad Institute, Cambridge	USA (GERMANY)
NACHMAN Iftach	Dept. of Biochemistry Faculty of Life Sciences Tel Aviv University, Ramat Aviv	ISRAEL

Excited-state structure of the emitter and color-tuning mechanism of the firefly bioluminescence

NAUMOV Pance	Graduate School of Engineering Osaka University	JAPAN (MACEDONIA)
DIDIER Pascal	Lab. of biophotonics and pharmacology Faculty of pharmacy University of Strasbourg, Illkirch	FRANCE
HINTERMANN Lukas	Dept. of Chemistry Technical University of Munich Garching	GERMANY (SWITZERLAND)
SLIWA Michel	Infrared and Raman Spectrochemistry lab. (LASIR) University Lille 1 / CNRS Villeneuve D'ascq	FRANCE

Adaptive behavior of *C. elegans* in complex sensory environments

RYU William	Dept. of Physics University of Toronto	CANADA (USA)
BARTUMEUS Frederic	CEAB-CSIC Center for Advanced Studies of Blanes	SPAIN
NEMENMAN Ilya	Depts of Physics and Biology Emory University Atlanta	USA

Network merging analysis of duplicate genome function in recently hybridized species

SHIMIZU Kentaro	Systems Biology / Functional Genomics Institute of Plant Biology University of Zurich	SWITZERLAND (JAPAN)
HAY Angela	Dept. of Plant Sciences University of Oxford	UK (NEW ZEALAND)
SESE Jun	Dept. of Computer Science Ochanomizu University Bunkyo	JAPAN

A microfabricated coral to unravel the microbial ecology of coral disease

STOCKER Roman	Dept. of Civil and Environmental Engineering MIT Cambridge	USA (ITALY)
SEYMOUR Justin	Dept. of Plant Functional Biology and Climate Change Cluster University of Technology, Sydney	AUSTRALIA
VARDI Assaf	Dept. of Plant Sciences The Weizmann Institute of Science Rehovot	ISRAEL

Molecular dissection of Casparian strip function in nutrient homeostasis in higher plants

TAKANO Junpei	Research Faculty of Agriculture Hokkaido University Sapporo	JAPAN
GELDNER Niko	Plant Cell Biology Lab. (DBMV) University of Lausanne	SWITZERLAND (GERMANY)