



HFSP AWARDS 2009

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

Neuronal connectivity: unraveling the cell-surface recognition code

BAIER Herwig	Dept. of Physiology University of California San Francisco	USA (GERMANY)
TRAUNER Dirk	Dept. of Chemistry and Pharmacology Ludwig Maximilians University of Munich	GERMANY (AUSTRIA)
WRIGHT Gavin	Cell Surface Signalling Laboratory Wellcome Trust Sanger Institute, Cambridge	UK

RNA folding as a mediator of stress response in plants

BEVILACQUA Philip C.	Dept. of Chemistry The Pennsylvania State University, University Park	USA
ASSMANN Sarah M.	Dept. of Biology The Pennsylvania State University, University Park	USA
LILLEY David M. J.	Cancer Research UK Nucleic Acid Structure Res. Group University of Dundee	UK
MAJOR Francois	Dept. of Computer Science and Operations Res. University of Montreal	CANADA

Cheating the cold. How do Antarctic fishes use antifreeze to survive in ice-laden water?

BRIMBLE Margaret	Dept. of Chemistry The University of Auckland	NEW ZEALAND
DEVRIES Arthur	Dept. of Animal Biology University of Illinois, Urbana	USA

Understanding supramolecular architectures in photosynthesis by space and time resolved spectroscopy

COGDELL Richard J.	Dept. of Biochemistry and Molecular Biology University of Glasgow	UK
HASHIMOTO Hideki	Dept. of Physics Osaka City University	JAPAN
MOORE Thomas A.	Center for Bioenergy and Photosynthesis, Dept. of Chemistry and Biochemistry Arizona State University, Tempe	USA
POLLI Dario	Dept. of Physics Polytechnic institute of Milan	ITALY

Physiological forces in LN development and function: engineering an artificial lymph node

COLES Mark C.	Dept. of Biology Centre for Immunology and Infection University of York	UK
CUPEDO Tom	Dept. of Hematology Erasmus University Medical Center, Rotterdam	THE NETHERLANDS
STROOCK Abraham	Dept. of Chemical and Biomolecular Engineering Cornell University, Ithaca	USA

Mechanotransduction in oligodendrocyte precursor cell differentiation

GUCK Jochen	Dept. of Physics University of Cambridge	UK (GERMANY)
FRANKLIN Robin	Dept. of Veterinary Medicine University of Cambridge	UK
VAN VLIET Krystyn	Dept. of Materials Science and Engineering Massachusetts Institute of Technology, Cambridge	USA

First encounters of pathogens with the host: fundamentals of pathogen recognition and killing

HAAGSMAN Henk P.	Dept. of Infectious Diseases and Immunology University of Utrecht	THE NETHERLANDS
BARRON Annelise E.	Dept. of Bioengineering Stanford University	USA

Promotion of NMD by mechanistic differences between premature and normal translation termination

JACOBSON Allan	Dept. of Molecular Genetics and Microbiology University of Massachusetts Medical School, Worcester	USA
EHRENBERG Måns	Dept. of Cell and Molecular Biology Uppsala University	SWEDEN
VAN TILBEURGH Herman	Institute of molecular and cellular Biophysics and Biochemistry University of Paris Sud, Orsay	FRANCE (THE NETHERLANDS)

Cell-to-cell propagation of neurodegenerative disease-linked protein aggregates

KOPITO Ron R.	Dept. of Biology Stanford University	USA
BRUNDIN Patrik	Neuronal Survival Unit, Dept. of Experimental Medical Science Lund University	SWEDEN
HEUSER John	Dept. of Biophysics Washington University School of Medicine, St Louis	USA
MELKI Ronald	Enzymology and Structural Biochemistry Lab. CNRS, Gif-sur-Yvette	FRANCE

Mechanoregulation of nuclear architecture and genome function: a novel mechanism in stem cell fate

LEE David A.	Cell and Tissue Engineering Group School of Engineering and Materials Science Queen Mary, University of London	UK
CREMER Thomas	Faculty of Biology Ludwig Maximilians University, Munich	GERMANY
DISCHER Dennis	Biophysical Engineering & NanoBio-Polymers Lab. School of Engineering and Applied Science, Philadelphia	USA
MAUCK Robert	McKay Orthopaedic Research Lab., Dept. of Orthopaedic Surgery University of Pennsylvania, Philadelphia	USA

CNS development probed by random access non-linear optical electrophysiology

LOEW Leslie M.	Center for Cell Analysis and Modeling University of Connecticut Health Center, Farmington	USA
PAVONE Francesco	European Laboratory for Non-linear Spectroscopy University of Florence, Sesto Fiorentino (FI)	ITALY
SATO Katsushige	Dept. of Physiology Tokyo Medical and Dental University Graduate School and Faculty of Medicine	JAPAN

Structural studies of yeast translation initiation

LORSCH Jon	Dept. Of Biophysics and Biophysical Chemistry Johns Hopkins University School of Medicine, Baltimore	USA
HINNEBUSCH Alan	Gene Regulation and Development Lab. NICHD, National Institutes of Health, Bethesda	USA
RAMAKRISHNAN Venki	Molecular Biology Lab. MRC Laboratory of Molecular Biology, Cambridge	UK (USA)

In search of conserved mRNA localization and anchoring mechanisms

MACARA Ian	Center for Cell Signaling University of Virginia School of Medicine, Charlottesville	USA
BROWN Chris	Dept. of Biochemistry University of Otago, Dunedin	NEW ZEALAND
SPANG Anne	Dept. of Biochemistry-Growth and Development University of Basel	SWITZERLAND (GERMANY)

Two-photon monitoring and modulation of cerebrovasculature and neuronal excitability

MACVICAR Brian	Brain Research Centre / Dept. of Psychiatry University of British Columbia, Vancouver	CANADA
CHARPAK serge	INSERM U603 University Paris Descartes	FRANCE
ELLIS-DAVIES Graham	Dept. of Pharmacology and Physiology Drexel University College of Medicine, Philadelphia	USA (UK)

A multidisciplinary approach to microtubule-kinetochore attachment

MUSACCHIO Andrea	Dept. of Experimental Oncology European Institute of Oncology, Milan	ITALY
HOWARD Jonathon	Max-Planck-Institute of Molecular Cell Biology and Genetics, Dresden	GERMANY (USA)
TAKEYASU Kunio	Lab. of Plasma Membrane and Nuclear Signaling Kyoto University Graduate School of Biostudies, Kyoto	JAPAN
TANAKA Tomoyuki	Wellcome Trust Centre for Gene Regulation & Expression College of Life Sciences, Dundee	UK (JAPAN)

Serotonin and decision-making: integrating interspecies experimental and computational approaches

NAKAMURA Kae	Dept. of Physiology Kansai Medical University, School of Medicine, Moriguchi City	JAPAN
COOLS Roshan	F.C. Donders Centre for Cognitive Neuroimaging Radboud University Nijmegen	THE NETHERLANDS
DAW Nathaniel	Center for Neural Science and Dept. of Psychology New York University	USA

The molecular dynamics and imaging of Eph receptor-guided cell positioning in tissue assembly

PAWSON Anthony James	Samuel Lunenfeld Research Institute Mount Sinai Hospital, Toronto	CANADA
BASTIAENS Philippe	Dept. of Systemic Cell Biology Max Planck Institute of Molecular Physiology, Dortmund	GERMANY (THE NETHERLANDS)
LACKMANN Martin	Biochemistry & Molecular Biology Protein Interaction & Cancer Research Lab. Monash University, Clayton	AUSTRALIA
NEEL Benjamin	Division of Stem Cell & Dev. Biology Ontario Cancer Institute, Toronto	CANADA (USA)

Decoding and recoding sensation

PETERSEN Carl	Lab. of Sensory Processing Brain Mind Institute, Lausanne	SWITZERLAND (UK)
BRODY Carlos D.	Princeton Neuroscience Institute and Dept. of Molecular Biology Princeton University	USA
CALLAWAY Edward	Systems Neurobiology Laboratories The Salk Institute for Biological Sciences, La Jolla	USA
DIAMOND Mathew	Tactile Perception and Learning Lab. International School for Advanced Studies (SISSA), Trieste	ITALY

Inositides distribution and quantitation using multi-isotope imaging mass spectrometry

SAIARDI Adolfo	MRC Cell Biology Unit Laboratory For Molecular And Cellular Biology, London	UK (ITALY)
LECHENE Claude	Dept. of National Resource for Imaging Mass Spectrometry Harvard Medical School, Cambridge	USA

The multiple timescales of motor memory

SHADMEHR Reza	Dept. of Biomedical Engineering Johns Hopkins School of Medicine, Baltimore	USA
KALASKA John	Dept. of Physiology University of Montréal	CANADA
KITAZAWA Shigeru	Dept. of Neurophysiology Juntendo University School of Medicine, Bunkyo-Ku	JAPAN
MIALL R. Christopher	School of Psychology University of Birmingham	UK
ROSSETTI Yves	Dept. of Space and Action INSERM Unit 864, Bron	FRANCE

Quantitative analysis of the DNA loop-domain model for long range regulation of transcription

SHEARWIN Keith	School of Molecular and Biomedical Science Molecular Life Sciences Building, Adelaide	AUSTRALIA
DUNLAP David	Dept. of Cell Biology Emory University, Atlanta	USA
SWIGON David	Dept. of Mathematics University of Pittsburgh	USA (CZECH REPUBLIC)

Multiscale mechanisms of epithelial patterning and morphogenesis: theory and experiments

SHVARTSMAN Stanislav	Lewis-Sigler Institute for Integrative Genomics Princeton University	USA
AUDOLY Basile	Insitut Jean le Rond d'Alembert University Pierre and Marie Curie, Paris	FRANCE
DAHMAN Christian	Dept. of Epithelial Dynamics Max Planck Institute of Molecular Cell Biology and Genetics, Dresden	GERMANY
PISMEN Leonid	Dept. of Chemical Engineering Technion - Israel Institute of Technology, Haifa	ISRAEL

Implications of tail structural features on molecular mechanisms and biological functions of myosins

SOWDHAMINI Ramanathan	National Centre for Biological Sciences Tata Institute of Fundamental Research, Bangalore	INDIA
FLYVBJERG Henrik	Dept. of Micro- and Nanotechnology Technical University of Denmark, Kongens Lyngby	DENMARK
SPUDICH James	Dept. of Biochemistry Stanford University	USA

Actin turnover homeostasis and spatial heterogeneity of regulators in artificially polarized cells

WATANABE Naoki	Dept. of Pharmacology Kyoto University Faculty of Medicine	JAPAN
VAVYLONIS Dimitrios	Dept. of Physics Lehigh University, Bethlehem	USA (GREECE)

Listening through the looking glass: perception and neural encoding of mirror images in biosonar

WIEGREBE Lutz	Dept. of Neurobiology Biocenter, Planegg-Martinsried	GERMANY
SIEMERS Björn	Sensory Ecology Group Max Planck Institute for Ornithology, Seewiesen	GERMANY
ULANOVSKY Nachum	Dept. of Neurobiology Weizmann Institute of Science, Rehovot	ISRAEL

Sensitive molecular imaging of in situ axonal pathfinding mechanisms by low-level probe trapping

WOUTERS Fred S.	Dept. of Physiology and Pathophysiology Goettingen Medical School	GERMANY (THE NETHERLANDS)
BRUCHEZ Marcel P.	Dept. of Chemistry and Molecular Biosensors and Imaging Center Carnegie Mellon University, Pittsburgh	USA
HOLT Christine	Dept. of Physiology, Development and Neuroscience University of Cambridge	UK

YOUNG INVESTIGATORS

Quantitative study of polarized cell growth in vivo and in silico

CARAZO SALAS Rafael Edgardo	Institute of Biochemistry ETH Zurich, Zurich	SWITZERLAND (COSTA RICA)
CSIKASZ-NAGY Attila	Centre for Computational and Systems Biology The Microsoft Research - University of Trento, Povo (Trento)	ITALY (HUNGARY)
SATO Masamitsu	Dept. of Biophysics and Biochemistry Graduate School of Science, Tokyo	JAPAN

Temporal and spatial control of bacterial cell wall morphogenesis

CARBALLIDO LOPEZ Rut	Dept. of Microbial Genetics .N.R.A., Jouy-en-Josas I	FRANCE (SPAIN)
VEZENOV Dmitri	Dept. of Chemistry Lehigh University, Bethlehem	USA (RUSSIA)
WEDLICH- SOELDNER Roland	Dept. of Cellular Dynamics and Cell patterning Max-Planck Institute of Biochemistry, Martinsried	GERMANY

Nucleoid proteins and DNA structure, global regulation of the bacterial transcription network

COSENTINO LAGOMARSINO Marco	Theoretical Group, Dept. of Physics University of Milan, Milan	ITALY
CICUTA Pietro	Cavendish Lab. University of Cambridge, Cambridge	UK (ITALY)
DORFMAN Kevin	Dept. of Chemical Engineering and Materials Science University of Minnesota - Twin Cities, Minneapolis	USA
SCLAVI Bianca	LBPA, CNRS UMR 8113 ENS of Cachan, Cachan	FRANCE (ITALY)

High resolution folding/binding kinetics of single protein molecules within nanofluidic structures

EDEL Joshua	Dept. of Chemistry Imperial College London, London	UK
JEMTH Per	Dept. of Medical Biochemistry and Microbiology Uppsala University, Uppsala	SWEDEN
KIM MINJUN	School of Biomedical Engineering, Science, and Health Systems Drexel University, Philadelphia	USA (KOREA, REPUBLIC OF)

Probing the role of lipids in cell division

EGGERT Ulrike	Dept. of Cancer Biology Dana-Farber Cancer Institute, Boston	USA (GERMANY)
ROUX Aurelien	Lab. of Physical Chemistry Curie UMR168 CNRS/Institut Curie, Paris	FRANCE
SAKURAI Kaori	Dept. of Institute of Symbiotic Science and Technology Tokyo University of Agriculture and Technology, Tokyo	JAPAN

A hybrid approach to revealing intermediate structures of Herpes Simplex Virus during infection

GRÜNEWALD Kay	Dept. of Molecular Structural Biology Max-Planck-Institute of Biochemistry, Martinsried	GERMANY
ALBER Frank	Dept. of Molecular and Computational Biology University of Southern California (USC), Los Angeles	USA (GERMANY)
CRISTEA Ileana M.	Dept. of Molecular Biology Princeton University, Princeton	USA (ROMANIA)
TOPF Maya	School of Crystallography Birkbeck College, University of London, London	UK (ISRAEL)

Developing novel chemical approaches to control protein folding and self-assembly in health and disease

LASHUEL Hilal	Dept. of Brain Mind Institute Swiss Federal Institute of Technology Lausanne, Lausanne	SWITZERLAND (USA)
BRIK Ashraf	Dept. of Chemistry Ben-Gurion University of the Negev, Beer Sheva	ISRAEL

Integrating biochemical and physical mechanisms of actin and major sperm protein-driven propulsion

PLASTINO Julie	Dept. of Biomimetism of cellular movement Institut Curie, Paris	FRANCE (USA)
KOENDERINK Gijjsje	Biological Soft Matter Group FOM Institute for Atomic and Molecular Physics [AMOLF], Amsterdam	THE NETHERLANDS
KREPLAK Laurent	Dept. of Physics and Atmospheric Science Dalhousie University, Halifax	CANADA (FRANCE)

Decoding physical and mechanistic roles of histone modifications with designer nucleosomes

VAN NOORT John	Dept. of Physics of Life Processes Leiden University, Leiden	THE NETHERLANDS
CHIN Jason William Karl	Lab. of Molecular Biology Medical Research Council, Cambridge	UK