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

ARNO LD
Don
Dept. of Biological Sciences
University of Southern California, Los Angeles
USA

DE KONINCK
Yves
Dept. of Cellular & Molecular Neuroscience
Université Laval
CANADA

GRIESBECK
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Lab. of Cellular Dynamics
Max-Planck Institute of Neurobiology, Martinsried
GERMANY

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

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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
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(GERMANY)

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Institut für Medizinische Physik und Biophysik
Charité Centrum für Grundlagenmedizin, Berlin
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Dept. of Physics and Astronomy and LaserLaB Amsterdam
VU University Amsterdam
THE NETHERLANDS

UEDA
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Dept. of Medical Genome Sciences
The University of Tokyo
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Deciphering non-coding RNA regulatory networks and their role in cancer cell biology

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Dept. of Genetics and Genomic Sciences
Mount Sinai School of Medicine, New York
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Dept. of Biology and Biotechnology
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PANDOLFI
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Dept. of Medicine/Division of Genetics
Beth Israel Deaconess Medical Center
Harvard Medical School, Boston
USA
(ITALY)

RAJEW SKY
Nikolaus
Dept. of Systems Biology of Gene Regulatory Elements
Max-Delbruck 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
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Dept. of Environmental and Occupational Health
University of Pittsburgh
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KLEIN-SEETHARAMAN
Judith
Dept. of Cardiovascular and Metabolic Health
School of Medicine, University of Warwick, Coventry (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
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Institute for Microbiology and Infection
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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
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Research Center on Animal Cognition
CNRS, University Paul Sabatier, Toulouse (ARGENTINA)
FRANCE

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Dept. of Biological and Experimental Psychology
School of Biological and Chemical Sciences, Queen Mary University of London (GERMANY)
UK

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Dept. of Biology
University of Washington, Seattle
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Optomechanics: a novel approach for studying the actomyosin cell cortex at multiple scales

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Dept. of Biophysics
Biotechnology Center, TU Dresden

BRYANT
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Depts. of Bioengineering / Structural Biology
Stanford University

YAP
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Dept. of Molecular Cell Biology
Institute for Molecular Bioscience,
University of Queensland, Brisbane

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

KAMMENGA
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Lab. of Nematology
Wageningen University

ALLESINA
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Dept. of Ecology & Evolution
University of Chicago

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

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National Centre for Biological Sciences
Tata Institute of Fundamental Research, Bangalore

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Lab. for Computational Biology & Biophysics
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Dept. of Physics, Chemistry and Pharmacy
Center for Biomembrane Physics
University of Southern Denmark, Odense M

JOHANNES
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Traffic, Signaling and Delivery Lab. - UMR144
Institut Curie, Paris

Mechanosensation: from the periphery to the brain and back

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Research Unit Sensory Biology & Organogenesis
Helmholtz Zentrum München, Neuherberg

ELGOYHEN
Ana Belen
Instituto de Investigaciones en Ingenieria Genética y Biología Molecular (INGEBI-CONICET), Buenos Aires

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Harvard University, Cambridge
Adapting metazoan opsins for optogenetic applications

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Biomolecular Research Lab.
Paul Scherrer Institute, Villigen
SWITZERLAND (AUSTRIA)

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

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AVENIR Group "EndoCannabinoids and NeuroAdaptation"
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Functional and Systems Neurobiology
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RIKEN Brain Science Institute, Wako-Shi
JAPAN

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Intelligent Systems Research Centre
University of Ulster, Londonderry
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Using experiment, simulation, and theory to understand social evolution in yeast and bacteria

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Harvard University, Cambridge
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Frontal neuronal language networks through primate evolution

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Neuroscience Institute, Georgia State University
And Division of Psychobiology, Yerkes Regional Primate Research Center, Emory University, Atlanta
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Dept of Integrative Neuroscience, U846
INSERM, Bron
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An engineering approach to understand local translation in cell-fate decisions

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Center for iPS Cell Research and Application
Kyoto University

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Ecole Normale Supérieure, Paris

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

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Harvard University, Cambridge

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

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A psychophysical and neuroengineering approach to human magnetoreception

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Division of Geological and Planetary Sciences
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Dept. of Complexity Science and Engineering,
Bio-complexity, Brain science
Graduate School Information Science and Technology, The University of Tokyo
Sensors and modulators of autophagy networks in vivo

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Probabilistic computation of location in the rodent and human hippocampus

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Sensory-motor integration in cerebrospinal fluid contacting neurons

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

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Dept. of Molecular Neuroplasticity
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( RUSSIA)
A control systems approach to understanding brain and behavior

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Ear Institute
University College London

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Dept. of Psychiatry, Cell Biology and Physiology, Biomedical Engineering
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An extracellular RNAi pathway as a mechanism of parasite-host communication

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Center for RNA Computational Genomics
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Nucleoid proteins and DNA structure, global regulation of the bacterial transcription network.

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

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

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

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

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University of Pennsylvania Perelman School of Medicine  
USA

GERVAIN  
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Laboratoire - Psychologie de la Perception  	CNRS et Université Paris Descartes  
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Real-time imaging of fast conformational dynamics of ion channel gating with plasmonic nano-antennas

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University of Kentucky, Lexington  
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VOSCH  
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DENMARK (BELGIUM)

Modeling information flow between tissues during metabolic adaptation and dysfunction

RUAS  
Jorge  
Molecular & Cellular Exercise Physiology Group  
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German Cancer Research Center (DKFZ), Heidelberg  
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and Life Sciences Institute  
University of Michigan, Ann Arbor  
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Predicting cell type-specific signaling pathway response

SHERWOOD  
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Victor Chang Cardiac Research Institute, Darlinghurst  
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Beyond simple choices: computational and neuronal mechanisms for complex spatial behaviors

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PEZZUOLO  
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>XIANG</td>
<td>Dept. of Neurobiology</td>
<td>University of Massachusetts Medical School, Worcester</td>
<td>USA</td>
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<tr>
<td>Yang</td>
<td></td>
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<tr>
<td>HAN</td>
<td>Dept. of Biochemistry and Molecular Pharmacology</td>
<td>University of Massachusetts Medical School, Worcester</td>
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</tr>
<tr>
<td>Gang</td>
<td></td>
<td>(China)</td>
<td>USA</td>
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<tr>
<td>XUE</td>
<td>School of Life Sciences</td>
<td>University of Science and Technology of China, Hefei</td>
<td>CHINA</td>
</tr>
<tr>
<td>Tian</td>
<td></td>
<td></td>
<td>CHINA</td>
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</tbody>
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