



HFSP AWARDS 2025

RESEARCH GRANTS

for approval by the Board of Trustees (March 2025)

Research Grants – Program and Research Grants – Early Career provide 3 years of support for international teams involving at least two countries. Preference is given to intercontinental collaborations (rather than all N. American or all European teams). All team members are expected to broaden the character of their research compared to their ongoing research programs and interact with teams bringing expertise that is very different from their own so as to create novel approaches to problems in fundamental biology. All members of an Early Career team must be within 5 years of establishing their independent research group and no more than 10 years from their doctoral degree. Program Grant teams may consist of team members at any stage of their career as independent investigators.

Program and Early Career Grants are listed separately, alphabetically. The first named for each award is the Principal Investigator. Nationality is in parentheses when different from country in which the laboratory is located.

RESEARCH GRANTS – PROGRAM

Eyes inside out: Visual coding without a multilayered retina in squid and worms

BADEN
Tom
School of Life Sciences
The University of Sussex
Brighton
UK
(Germany)

BOK
Michael
Dept. of Biology
Lund University
Sweden
(USA)

Behavioral adaptation to arsenic-rich environments

BARGMANN
Cornelia
Lab. of Neural Circuits and Behavior
The Rockefeller University
New York
USA

BRAENDLE
Christian
Institute of Biologiy Valrose (IBV)
University of Côte d'Azur,
Nice
France
(Switzerland)

NEW
Elizabeth
School of Chemistry
The University of Sydney
Australia

SHINYA
Ryoji
School of Agriculture
Meiji University
Kawasaki
Japan

Molecular memories in single cells: An integrated approach to how cells learn

BHAMLA
Saad
School of Chemical and Biomolecular Engineering
Georgia Institute of Technology
Atlanta
USA

CHEN
Wanze
Institute of Synthetic Biology
Shenzhen Institute of Advanced Technology,
China

DUSSUTOUR
Audrey
Research Center on Animal Cognition
University Paul Sabatier
Toulouse
France

Decoding the evolution of anticipation and decision making in uncertain environments

DAL BELLO
Martina
Dept. of Ecology and Evolutionary Biology
Yale University
West Haven
USA
(Italy)

GRILLI
Jacopo
Dept. of Quantitative Life Sciences
The International Centre for Theoretical Physics
Trieste
Italy

MCGLYNN
Shawn
Earth-Life Science Institute
Institute of Science Tokyo
Japan
(USA)

RESEARCH GRANTS – PROGRAM

1+1=1: Bioengineering synthetic symbiosis to illuminate how a microalga becomes an endosymbiont

DECELLE Johan	Cell and Plant Physiology lab. CNRS- CEA Grenoble	France
DUCAT Daniel	Dept. of Biochemistry and Molecular Biology Michigan State University East Lansing	USA
KOHLHEYER Dietrich	Institute of Bio- and Geosciences Biotechnology (IBG-1) Research Center Jülich	Germany

Neurometabolic mechanisms for social foraging

EL HADY Ahmed	Dept. of Collective behavior University of Konstanz	Germany (Egypt)
CHOI Jee Hyun	Bio-Medical Science & Technology Korea Institute of Science and Technology (KIST) Seoul	Rep. of Korea
FROEMKE Robert	Depts. of Otolaryngology, Neuroscience and Physiology New York University Grossman School of Medicine	USA

Visualizing and dissecting spatial translation dynamics across developmental time

GHAVI-HELM Yad	Institut de Génomique Fonctionnelle de Lyon (IGFL) ENS Lyon	France
ASHE Hilary	Faculty of Biology, Medicine and Health University of Manchester	UK
SAWH Ahilya	Dept. of Biochemistry University of Toronto	Canada

Growth rate control in methanotrophs: engineering a biological sink for atmospheric methane

HAURYLIUK Vasili	Dept. of Experimental Medical Science Lund University	Sweden
BASAN Markus	Dept. of Systems Biology Harvard Medical School Boston	USA
TVEIT Alexander Tøsdal	Dept. of Arctic and Marine Biology UiT - The Arctic University of Norway, Faculty for Biology Fisheries and Economics Tromsø	Norway

RESEARCH GRANTS – PROGRAM

Harmony in Dynamics: Exploring Emergent Cooperation through Participatory Art and Neuroscience

HERSHBERG Uri	Dept. of Human Biology University of Haifa	Israel (USA)
AYAZ Hasan	School of Biomedical Engineering Science & Health System, Drexel University Philadelphia	USA
PERONDI Luciano	Culture del progetto Iuav University of Venice	Italy

Exploring Interdisciplinary Frontiers to Understand Tick-Virus Dynamics at a Global Scale

KOTSYFAKIS Michail	Lab. of Arthropod Disease Vector Biology IMBB-FORTH, Heraklion	Greece
DIABATE Abdoulaye	Dept. of Biomedical Sciences Centre MURAZ-BURKINA FASO Bobo-Dioulasso	Burkina Faso
KAR Sirri	Dept. of Biology Tekirdag Namik Kemal University	Turkey
MANS Ben	Onderstepoort Veterinary Research Agricultural Research Council Pretoria	South Africa

Mapping and modeling protein evolution on the abundance-activity-toxicity isoclines of fitness

LANDRY Christian	Dept. of Biology Laval University Québec	Canada
MORIYA Hisao	Dept. of Agriculture Okayama University	Japan
REYNOLDS Kimberly	Dept. of Bioinformatics University of Texas Southwestern Medical Center Dallas	USA

What drives plant-like growth in filamentous cyanobacteria?

LEA-SMITH David	School of Biological Sciences University of East Anglia Norwich	UK
LEDERER Albena	Dept. of Chemistry and Polymer Science Stellenbosch University	South Africa (Germany)
MURRELL Michael	Dept. of Biomedical Engineering Yale University, New Haven	USA

RESEARCH GRANTS – PROGRAM

Musculoskeletal system of head-first burrowers: an interdisciplinary approach

MOAZEN Mehran	Dept. of Mechanical Engineering University College London	UK
ADRIAENS Dominique	Dept. of Biology Ghent University	Belgium
BIRKEDAL Henrik	Dept. of Chemistry Aarhus University	Denmark
KOHLSDORF Tiana	Dept. of Biology University of Sao Paulo (USP) Ribeirão Preto	Brazil

Plant-like solar tracking in a photosymbiotic animal

MODEPALLI Vengamanaidu	Marine Biological Association (MBA) Plymouth	UK (India)
PETROU Katherina	School of Life Sciences, Faculty of Science University of Technology Sydney	Australia

Hippocampal coding of space during sleep-swimming

RATTENBORG Niels	Dept. of Avian sleep MPI for Biological Intelligence Seewiesen	Germany (USA)
ULANOVSKY Nachum	Dept. of Brain Sciences Weizmann Institute of Science Rehovot	Israel

Rediscovering Vienna's Lost "Epigenetic" Treasure

REHAVI Oded	Dept. of Neurobiology Tel Aviv University Ramat Aviv	Israel
GAPP Katharina	Dept. of Health Sciences and Technology ETH Zürich	Switzerland (Austria)
SASAKURA Yasunori	Shimoda Marine Research Center University of Tsukuba	Japan

RESEARCH GRANTS – PROGRAM

Universal Biochemistry of RNA in the Cold

RITORT Felix	Dept. of Condensed Matter Physics University of Barcelona	Spain
HOLLIGER Philipp	Dept. of Protein & Nucleic Acid Chemistry MRC Lab. of Molecular Biology Cambridge	UK (Switzerland)
WOODSON Sarah A.	Dept. of Biophysics Johns Hopkins University - Krieger School of Arts & Sciences, Baltimore	USA

Microbial and chemical mechanisms of rapid fear signaling

ROBERTS S. Craig	Faculty of Natural Sciences University of Stirling	UK
KALAN Lindsay	Dept. of Biochemistry & Biomedical Sciences McMaster University, Faculty of Health Sciences Hamilton	Canada
WILLIAMS Jonathan	Dept. of Atmospheric Chemistry MPI for Chemistry Mainz	Germany

Vibrational sensing and production in fishes: investigations of the underwater vibroscape

ROBERTS Louise	Dept. of Earth, Ocean and Ecological Sciences University of Liverpool	UK
AMORIM Clara	Dept. of Animal Biology / MARE ULisboa University of Lisbon	Portugal
MILLER James	Dept. of Ocean Engineering University of Rhode Island Kingston	USA
SISNEROS Joseph	Dept. of Psychology University of Washington Seattle	USA

RESEARCH GRANTS – PROGRAM

Dancing genomes – mapping chromatin's material properties with retinal development & disease

ROBSON Michael	Robson lab Max Delbrück Center for Molecular Medicine Berlin	Germany (UK)
HANSEN Anders	Dept. of Biological Engineering Massachusetts Institute of Technology - MIT Cambridge	USA
MICHIELETTO Davide	School of Physics University of Edinburgh	UK (Italy)
TENREIRO Sandra	Degeneration and Ageing Lab Universidade Nova de Lisboa - NOVA Medical School	Portugal

Mechanical and morphological evolution of the insect heart

SAUNDERS Timothy	Dept. of Biomedical Sciences University of Warwick Coventry	UK
PANFILO Kristen	Dept. of Molecular Genetics (190g) University of Hohenheim Stuttgart	Germany (USA)
SARRAZIN Andres	Instituto de Química Pontificia Universidad Catolica de Valparaiso	Chile
YOUNG Jennifer	Dept. of Biomedical Engineering National University of Singapore	Singapore (USA)

Prebiotic route to informational polymers based on H-phosphonate chemistry

ŠPONER Judit	Dept. of Structure and Dynamics of Nucleic Acids Institute of Biophysics, Czech Academy of Sciences Brno	Czech Republic (Hungary)
PASEK Matthew	Dept. of Earth and Environmental Sciences Rensselaer Polytechnic Institute Troy	USA

RESEARCH GRANTS – PROGRAM

Evolutionary biophysics of spiralian asymmetric divisions

TURLIER
Hervé
Center for Interdisciplinary Research in Biology (CIRB) - France
CNRS - College de France
Paris

BARONE
Vanessa
Dept. of Biology
Stanford University
Pacific Grove
USA
(Italy)

MARTÍN-DURÁN
Jose
Dept. of Biology
Queen Mary University of London
UK
(Spain)

A molecular roadmap for the emergence of air breathing

VARGA
Máté
Dept. of Genetics
Eotvos Lorand University
Budapest
Hungary

FABIAN
Peter
Dept. of Experimental Biology
Masaryk University
Brno
Czech Republic
(Slovak Republic)

ONAI
Takayuki
Dept. of Anatomy
University of Fukui
Japan

Trapping targets of dynamic translation to identify novel cellular “band aids”

ZHULYN
Olena
Developmental & Stem Cell Biology Program
The Hospital for Sick Children
Toronto
Canada

LAGHA
Mounia
The Institute of Molecular Genetics
University of Montpellier
France

KELLEHER
Neil
Dept. of Chemistry and Molecular Biosciences
Northwestern University - Evanston Campus
USA

VAN OUDENAARDEN
Alexander
Hubrecht Institute
Developmental Biology and Stem Cell Research
Utrecht
Netherlands

RESEARCH GRANTS – EARLY CAREER

Coordination of Cell Consortia via Soluble Factors

BLAESCHKE Franziska	Dept. of Pediatric Immuno-Oncology German Cancer Research Center (DKFZ) Heidelberg	Germany
HICKEY John	Dept. of Biomedical Engineering Duke University Durham	USA
ROVIRA CLAVE Xavier	Spatial Biotechnology Group Institute for Bioengineering of Catalonia Barcelona	Spain

Sub-second dopamine dynamics in human basal ganglia during beat perception and rhythmic action

CANNON Jonathan	Dept. of Psychology Neuroscience & Behaviour McMaster University Hamilton	Canada (USA)
BANG Dan	Dept. of Clinical Medicine Aarhus University	Denmark

MetaCrystal: Metabolic principles of intracellular crystallization

JIMENEZ-ROJO Noemi	Dept. of Biochemistry and Molecular Biology University of the Basque Country (UPV/EHU) Leioa	Spain
MATEUS Rita	Biophysical Principles of Vertebrate Growth Lab MPI of Molecular Cell Biology and Genetics Dresden	Germany (Portugal)
MONJE Viviana	Dept. of Chemical and Biological Engineering SUNY - State University of New York, Buffalo	USA

Building Mineral Pore Networks and Primitive Peptides to Assemble Biomolecules

PREINER Martina	Microcosm Earth Center MPI for Terrestrial Microbiology Marburg	Germany
LONGO Liam	Earth-Life Science Institute Institute of Science Tokyo	Japan (USA)
MATHIS Cole	Center for Biocomputation Arizona State University Tempe	USA

RESEARCH GRANTS - EARLY CAREER

Filamentous self-assembly - a common mechanism driving transcription factor function?

SUSKIEWICZ Marcin Jozef	Dept. of Molecular, Structural and Chemical Biology Center for Molecular Biophysics, CNRS Orléans	France (Poland)
STALLER Max	Dept. of Molecular and Cell Biology University of California, Berkeley	USA
WROBEL Antoni	Dept. of Biochemistry University of Oxford	UK (Poland)