



International

**Human Frontier
Science Program**

Organization

HFSP AWARDS 2021

LONG-TERM FELLOWSHIPS

as approved by the Board of Trustees (March 2021)

The HFSP fellowship program funds innovative, ground-breaking projects that have the potential to advance knowledge in the applicants' field of study or open a new approach to a research problem. High risk research is supported.

Long-term fellowships provide 3 years of support for applicants with a degree in the life science to obtain training in a new area of research in an outstanding laboratory of their choice in another country. Applicants are expected to broaden their horizon and to move into a new research field that is different from their doctoral studies or previous postdoctoral training.

AMEN Triana RUSSIA	From	Department of Experimental Neurodegeneration University Medical Center, Goettingen GERMANY	<i>Pex ex machina: the cell biological mechanics of locally-controlled peroxisome biogenesis</i>
	To	Global Health Institute EPFL Lausanne SWITZERLAND	Supervisors: VAN DER GOOT Françoise Gisou and D'ANGELO Giovanni
ANTON Leonie SWITZERLAND/ GERMANY	From	Biozentrum University of Basel SWITZERLAND	<i>Structural and functional characterization of Plasmodium falciparum rhoptries and its proteins</i>
	To	Microbiology and Immunology Columbia University New York USA	Supervisor: HO Chi-Min
ATHUKORALAGE Januka UK	From	School of Biology University of St Andrews UK	<i>Uncovering tripartite mobile genetic element-bacteria-human interactions with novel CRISPR-Cas tools</i>
	To	Department of Microbiology and Immunology University of California, San Francisco USA	Supervisor: BONDY-DENOMY Joseph
AVELLANEDA SARRIO Mario SPAIN	From	Department of Biophysics AMOLF Amsterdam THE NETHERLANDS	<i>Bioelectric patrolling: the role of the local membrane potential in immune cell migration</i>
	To	Laboratory of Cell Biology and Immunology Institute of Science and Technology Austria, Klosterneuburg AUSTRIA	Supervisor: SIXT Michael
BAILLES Anaïs FRANCE	From	Institut de Biologie du Développement de Marseille Aix-Marseille University FRANCE	<i>Role of cell-to-cell variability in patterning and morphogenesis</i>
	To	Max Planck Institute of Molecular Cell Biology and Genetics Dresden GERMANY	Supervisor: TOMANCAK Pavel

BATES Alexander UK/NEW ZEALAND	From	MRC Laboratory of Molecular Biology University of Cambridge UK	<i>A Cartesian coordinate system for generating flexible internal goals</i>
	To	Department of Neurobiology Harvard University Boston USA	Supervisor: WILSON Rachel
BERNSHTEIN Biana ISRAEL	From	Department of Molecular Genetics Weizmann Institute of Science Rehovot ISRAEL	<i>Dissecting tissue specific antibody mediated immunity to Rotavirus infection</i>
	To	Ragon Institute of MGH, MIT and Harvard Cambridge USA	Supervisor: ALTER Galit
BOLGER-MUNRO Madison CANADA	From	Department of Microbiology and Immunology University of British Columbia Vancouver CANADA	<i>Dissecting the mechanisms underlying cytoplasmic reorganization and embryo patterning in ascidians</i>
	To	Institute of Science and Technology Austria Klosterneuburg AUSTRIA	Supervisor: HEISENBERG Carl-Philipp
BRUNNER Julia Stefanie AUSTRIA	From	Institute for Vascular Biology Medical University Vienna AUSTRIA	<i>Identifying metabolic drivers of anti-tumor immunity</i>
	To	Cell Biology Program Memorial Sloan Kettering Cancer Center New York USA	Supervisor: FINLEY Lydia
CACCIANINI Laura ITALY	From	Physico-Chimie Institut Curie Paris FRANCE	<i>Visualizing the cohesin-RNA Polymerase II interaction at nanometer resolution</i>
	To	Department of Biology MIT Boston USA	Supervisor: VOS Seychelle

DE MANUEL MONTERO Marc SPAIN	From	Universitat Pompeu Fabra Barcelona SPAIN	<i>Estimating male mutation bias across vertebrates</i>
	To	Department of Biological Sciences Columbia University New York USA	Supervisor: PRZEWORSKI Molly
FALO SANJUAN Julia SPAIN	From	Department of Physiology, Development and Neuroscience University of Cambridge UK	<i>Predicting enhancer function from sequence through in silico evolution and high-throughput screening</i>
	To	Department of Molecular and Cell Biology University of California Berkeley USA	Supervisor: EISEN Michael
GANAPATHY Srividya USA/INDIA	From	Department of Imaging Physics Delft University of Technology THE NETHERLANDS	<i>Investigating neurodevelopment in cortical organoids using voltage and neurotransmitter imaging</i>
	To	Department of Pediatrics, Cellular and Molecular Medicine University of California, San Diego USA	Supervisor: MUOTRI Alysson
GRIFFITHS Cameron CANADA	From	Department of Medical Microbiology and Immunology University of Alberta Edmonton CANADA	<i>How host cell post-transcriptional regulatory adaptations impact chronic coxsackievirus B3 infection</i>
	To	Department of Biomedical Engineering University of Virginia Charlottesville USA	Supervisor: JANES Kevin
HARRISON Angela AUSTRALIA	From	Department of Biochemistry and Molecular Biology Monash University Clayton AUSTRALIA	<i>Protein correlation profiling analysis of the Nipah virus-host interface</i>
	To	Centre for Gene Regulation and Expression University of Dundee UK	Supervisor: LAMOND Angus

HASEGAWA Tetsuo JAPAN	From	Division of Rheumatology Keio University Tokyo JAPAN	<i>The role of metabolism in regulating pathological osteoclastogenesis in arthritis</i>
	To	Bloomberg-Kimmel Institute Johns Hopkins University Baltimore USA	Supervisor: PEARCE Edward
HERRERO DEL VALLE Alba SPAIN	From	INSERM Université de Bordeaux FRANCE	<i>Molecular determinants of selective viral RNA recognition by MDA5</i>
	To	Department of Medicine University of Cambridge UK	Supervisor: MODIS Yorgo
KAPADIA Nitin CANADA/UK	From	Department of Biology McGill University Montreal CANADA	<i>Molecular dynamics of size sensing at the single cell level</i>
	To	Cell Cycle Laboratory The Francis Crick Institute London UK	Supervisor: NURSE Paul
KHAN Anzer INDIA	From	Department of Molecular Medicine Central European Institute of Technology Brno CZECH REPUBLIC	<i>Elucidating key neuroinflammation pathway(s) involved in the brain of Drosophila</i>
	To	Global Health Institute École Polytechnique Fédérale de Lausanne SWITZERLAND	Supervisor: LEMAITRE Bruno
KISS Máté HUNGARY	From	VIB Center for Inflammation Research Vrije Universiteit Brussels BELGIUM	<i>The role of cancer-induced hematopoietic stem cell activation in the development of atherosclerosis</i>
	To	Department of Pathology and Immunology University of Geneva - Agora Cancer Center Lausanne SWITZERLAND	Supervisor: PITTET Mikael

LERCHER Alexander AUSTRIA	From	CeMM Center for Molecular Medicine Austrian Academy of Sciences Vienna AUSTRIA	<i>How transcriptional and epigenetic networks shape lung-resident memory T cells and tissue immunity</i>
	To	Laboratory of Virology and Infectious Disease Rockefeller University New York USA	Supervisor: RICE Charles
MOHAMMED GARBA Yunusa NIGERIA	From	Department of Human Anatomy Gombe State University NIGERIA	<i>Understanding adaptability of egg-laying behavior in Aedes aegypti</i>
	To	Department of Zoology University of British Columbia Vancouver CANADA	Supervisor: MATTHEWS Benjamin
NGUYEN Tu Anh VIETNAM	From	Department of Biological Sciences National University of Singapore and Temasek Life Sciences Laboratory SINGAPORE	<i>Understanding the regulation of neuropathology-associated protein and RNA repeats in Dictyostelium</i>
	To	Department of Biology Whitehead Institute for Biomedical Research Cambridge USA	Supervisor: JAIN Ankur
OZBAYKAL-GULER Gizem TURKEY	From	Department of Microbiology Institut Pasteur Paris FRANCE	<i>Use of Shigella-septin interactions to explore biophysical cues in cell-autonomous immunity</i>
	To	Department of Infection Biology London School of Hygiene and Tropical Medicine UK	Supervisor: MOSTOWY Serge
PALDI Flora HUNGARY	From	Wellcome Centre for Cell Biology University of Edinburgh UK	<i>The fate of functional chromatin states through mitosis: a single-cell analysis</i>
	To	Department of Genome Dynamics Institut de Génétique Humaine Montpellier FRANCE	Supervisor: CAVALLI Giacomo

PIJUAN-SALA Blanca SPAIN	From	Department of Haematology University of Cambridge UK	<i>Deciphering how transcription factors modulate transcriptional bursting through enhancers</i>
	To	Genome Biology Unit European Molecular Biology Laboratory Heidelberg GERMANY	Supervisors: CROCKER Justin and FURLONG Eileen
PRAVATA Veronica ITALY	From	Gene Expression and Regulation University of Dundee UK	<i>Cracking the AMPylation code in neurodevelopment</i>
	To	Developmental Neurobiology Max Planck Institute of Psychiatry Munich GERMANY	Supervisor: CAPPELLO Silvia
ROSENBLUM Daniel ISRAEL	From	Shmunis School of Biomedicine and Cancer Research Tel Aviv University ISRAEL	<i>Mechanisms and consequences of inflammation-induced changes to skin epithelial stem cell niches</i>
	To	Grossman School of Medicine New York University USA	Supervisor: NAIK Shruti
SANGUINETTI SCHECK Juan Ignacio URUGUAY	From	Bernstein Center for Computational Neuroscience Humboldt University Berlin GERMANY	<i>The evolution of neophobia: comparative neurophysiology of deer mice in the wild</i>
	To	Department of Organismic and Evolutionary Biology Harvard University Cambridge USA	Supervisor: HOEKSTRA Hopi
SCHNEIDER Falk GERMANY	From	MRC Weatherall Institute of Molecular Medicine University of Oxford UK	<i>Quantitative imaging of transcription factor dynamics during zebrafish development</i>
	To	Bridge Institute University of Southern California Los Angeles USA	Supervisor: FRASER Scott

SCHWAYER Cornelia AUSTRIA	From	Department of Life Science Institute of Science and Technology Austria Klosterneuburg AUSTRIA	<i>ERK-mediated symmetry breaking in intestinal organoid formation</i>
	To	Department of Quantitative Biology Friedrich Miescher Institute for Biomedical Research Basel SWITZERLAND	Supervisor: LIBERALI Prisca
SINGH Sumnima NEPAL	From	Inflammation Laboratory Instituto Gulbenkian de Ciencia Oeiras PORTUGAL	<i>Role of stress-induced modulation of B cell function in cardiovascular disease</i>
	To	Center for Systems Biology Massachusetts General Hospital Boston USA	Supervisor: SWIRSKI Filip
SOUQUET Louise FRANCE	From	Centre de Recherche en Paléontologie Muséum National d'Histoire Naturelle Paris FRANCE	<i>The mechanics of cephalopod remarkable feeding system: how to bite without a joint</i>
	To	Department of Mechanical Engineering University College London UK	Supervisor: MOAZEN Mehran
STAPORNWONGKUL Kristina Sukanya GERMANY	From	Epithelial Cell Interactions Laboratory The Francis Crick Institute London UK	<i>The mechanistic role of metabolism during germ layer specification and symmetry breaking</i>
	To	Tissue Biology and Disease Modelling European Molecular Biology Laboratory Barcelona SPAIN	Supervisor: TRIVEDI Vikas
STEINDAL Inga Frøland NORWAY	From	Department of Cell and Developmental Biology University College London UK	<i>Saving the reef: identifying molecular and environmental factors underlying spawning in A.millepora</i>
	To	Arc Centre of Excellence for Coral Reef Studies James Cook University Townsville AUSTRALIA	Supervisor: MILLER David

STYR Boaz ISRAEL/POLAND	From	Department of Physiology and Pharmacology Tel Aviv University ISRAEL	<i>Neuronal mechanisms underlying group social interactions in bats</i>
	To	Department of Bioengineering University of California Berkeley USA	Supervisor: YARTSEV Michael
SUGIYAMA Yuki JAPAN	From	Department of Gene Function and Phenomics National Institute of Genetics Mishima JAPAN	<i>Revealing autolytic mechanisms of sieve element differentiation by improved phloem induction system</i>
	To	Sainsbury Laboratory University of Cambridge UK	Supervisor: HELARIUTTA Yrjö
SZARUGA-BRACKE Maria POLAND	From	Center for Brain and Disease Research VIB / KU Leuven BELGIUM	<i>Harnessing phospho-signalling in protein quality control systems to foster cellular resilience</i>
	To	Department of Neurobiology MRC Laboratory for Molecular Biology Cambridge UK	Supervisor: BERTOLOTTI Anne
THOMPSON Ken CANADA	From	Department of Zoology University of British Columbia Vancouver CANADA	<i>Experimentally investigating the maintenance of cancer-causing genes in natural populations</i>
	To	Department of Biology Stanford University USA	Supervisor: SCHUMER Molly
TRAUNMUELLER Lisa Karina AUSTRIA	From	Department of Neurobiology Biozentrum, University of Basel SWITZERLAND	<i>Contribution of activity-regulated neuropeptide function to synaptic plasticity and memory</i>
	To	Department of Neurobiology Harvard Medical School Boston USA	Supervisor: GREENBERG Michael

VALLEAU Dylan CANADA	From	Department of Chemical Engineering and Applied Chemistry University of Toronto CANADA	<i>The systematic evaluation of the apicomplexan ubiquitination system</i>
	To	Whitehead Institute for Biomedical Research Cambridge USA	Supervisor: LOURIDO Sebastian
VLAHOS Alex CANADA	From	Institute for Biomaterials and Biomedical Engineering University of Toronto CANADA	<i>Programmable protease circuits to control vaccine immunogenicity</i>
	To	Department of Chemical Engineering Stanford University USA	Supervisor: GAO Xiaojing
VOIGT Fabian GERMANY	From	Brain Research Institute University of Zurich SWITZERLAND	<i>Algorithms and circuit mechanisms underlying distance estimation in larval zebrafish</i>
	To	Department of Molecular and Cellular Biology Harvard University Cambridge USA	Supervisor: ENGERT Florian
WEBER Ramona GERMANY	From	Department of Biochemistry Max Planck Institute for Developmental Biology Tübingen GERMANY	<i>Mechanisms of 5'UTR-mediated translational dysregulation in cancer</i>
	To	Institute for Regenerative Medicine University of Zurich SWITZERLAND	Supervisor: SENDÖL Ataman
YARDEN RABINOWITZ Yasmin ISRAEL/USA	From	Department of Neuroscience Hebrew University Jerusalem ISRAEL	<i>S1DZ neuronal representations during social behavior and the effect of cytokines on this activity</i>
	To	Department of Brain and Cognitive Sciences Massachusetts Institute of Technology Cambridge USA	Supervisor: CHOI Gloria

YU
Haopeng
CHINA

From College of Life Sciences
Northwest A&F University
Xianyang
CHINA

***Artificial intelligence-driven
identification of in vivo RNA
structure motifs in RNA
degradation***

To Department of Cell and Developmental
Biology
John Innes Centre
Norwich
UK

Supervisor:
DING Yiliang

ZAGANELLI
Sofia
ITALY

From Laboratory of Experimental Biophysics
EPFL
Lausanne
SWITZERLAND

***Elucidating the role of nuclear
envelope budding as a
non-canonical route for
exporting large-RNPs***

To Department of Molecular, Cellular and
Developmental Biology
University of Colorado
Boulder
USA

Supervisor:
VOELTZ Gia