



HFSP AWARDS 2024

FELLOWSHIPS

as approved by the Board of Trustees (March 2024)

The HFSP fellowship program funds innovative, ground-breaking projects that have the potential to advance knowledge in the applicants' fields 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 sciences 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.

Cross-disciplinary fellowships are intended for postdoctoral fellows with a degree from outside the life sciences (e.g. physical sciences, chemistry, mathematics, engineering or computer sciences) who wish to receive training in biology. Fellows receive 3 years of support to obtain training in an outstanding laboratory of their choice in another country. Applicants for this fellowship are expected to move into a new research field through a significant change in discipline.

LONG-TERM FELLOWSHIPS

ABDULLA Amith Zafal India	From	Ecole Normale Supérieure de Lyon Lyon France	<i>Design and build a synthetic single cell epigenetic oscillator</i>
	To	Brandeis University Waltham USA	Supervisors: KONDEV Jane RAGUNATHAN Kaushik
ANSIL B. R. India	From	National Centre for Biological Sciences Bangalore India	<i>Why do stressed bats shed more viruses?</i>
	To	University of Oklahoma Norman USA	Supervisors: BANERJEE Arinjay BECKER Daniel
BENCIVENGA Federica Italy	From	Sapienza University of Rome Rome Italy	<i>Neural mechanisms for dynamic action planning and execution as we move through space</i>
	To	University of Montreal Montreal Canada	Supervisors: CISEK Paul GREEN Andrea
BIGLARI Nasim Germany/Iran	From	Max Planck Institute for Metabolism Research Cologne Germany	<i>Investigating the effects of chronic stress on gut-brain interactions</i>
	To	Massachusetts Institute of Technology Cambridge USA	Supervisor: ANIKEEVA Polina
BOREIKAITE Vytaute Lithuania	From	University of Cambridge Cambridge UK	<i>Structural basis of the human spliceosome quality control</i>
	To	Research Institute of Molecular Pathology Vienna Austria	Supervisor: PLASCHKA Clemens

LONG-TERM FELLOWSHIPS

BORM Lars Netherlands	From	Karolinska Institutet Stockholm Sweden	<i>Combining spatial-omics with AI to model developmental gene regulation in space and time</i>
	To	VIB Institute for Biotechnology Leuven Belgium	Supervisor: AERTS Stein
BUCHANAN Charles UK/Ireland	From	University of Oxford Oxford UK	<i>Protein dynamics and function in the evolutionary history of the CO2 fixing enzyme Rubisco</i>
	To	Max Planck Institute for Terrestrial Microbiology Marburg Germany	Supervisor: HOCHBERG Georg
CAMPETELLA Florencia Argentina/Spain	From	Max Planck Institute for Chemical Ecology Jena Germany	<i>Unraveling the genetic basis of natural variation in secretion pathways</i>
	To	VIB Institute for Biotechnology Leuven Belgium	Supervisor: VERSTREPEN Kevin
CHIBA Kosuke Japan	From	Osaka University Osaka Japan	<i>Targeted epigenome editing using induced proximity-based small molecules</i>
	To	University of California, Berkeley Berkeley USA	Supervisor: NOMURA Daniel
DAHL Kristin USA	From	University of Colorado Aurora USA	<i>Analysis of molecular changes of the nervous system in C. elegans upon circadian rhythm entrainment</i>
	To	Biozentrum University of Basel Basel Switzerland	Supervisor: SPANG Anne

LONG-TERM FELLOWSHIPS

DAVOINE Federico Uruguay	From	Universidad de la República Montevideo Uruguay	<i>Genetically encoded voltage indicators to uncover the role of Golgi cells in pattern classification</i>
	To	Institut de Biologie de l'Ecole Normale Supérieure Paris France	
DE HAAN Diede Netherlands	From	Weizmann Institute of Science Rehovot Israel	<i>Reconstructing the ancestral architecture of animal cells</i>
	To	Institut Pasteur Paris France	
DORON Adi Israel	From	The Hebrew University of Jerusalem Jerusalem Israel	<i>The neuronal mechanisms underlying state-dependent odor preference</i>
	To	Harvard Medical School Boston USA	
DUFVA Olli Finland	From	University of Helsinki Helsinki Finland	<i>Deciphering genomic determinants of immunity in tumour organoid models at single-cell resolution</i>
	To	Wellcome Sanger Institute Cambridge UK	
FINK Justus Wilhelm Germany	From	ETH Zurich Zurich Switzerland	<i>Microbial consortia with direct electron transfer: in situ visualization of community robustness</i>
	To	California Institute of Technology Pasadena USA	

LONG-TERM FELLOWSHIPS

GABEL Clinton USA	From	Purdue University West Lafayette USA	<i>Uncovering the secret world of microbial enzymatic decorated nanowires</i>
	To	Philipps-Universität Marburg Marburg Germany	Supervisor: SCHULLER Jan
HERSH Taylor USA	From	Dalhousie University Nova Scotia Canada	<i>Vocal communication and the evolution of hyper-cooperative societies</i>
	To	University of Bristol Bristol UK	Supervisor: KING Stephanie
HSU Sheng-Chieh Taiwan	From	National Tsing Hua University Hsinchu Taiwan	<i>Unmasking the role of nuclear antioxidant systems in human disease</i>
	To	University of Texas Southwestern Medical Center Dallas USA	Supervisors: DEBERARDINIS Ralph GARCIA-BERMUDEZ Javier
HUSSIEN Amro Sudan	From	ETH Zurich Zurich Switzerland	<i>Decoding mechano-epigenetic memories in tissue regeneration</i>
	To	Max Planck Institute for Molecular Biomedicine Muenster Germany	Supervisor: WICKSTRÖM Sara
JAUREGUI-LOZANO Juan Colombia/Bolivia	From	Purdue University West Lafayette USA	<i>Elucidating the role of R-loops in hematopoiesis and bone marrow niche remodeling in aging</i>
	To	European Molecular Biology Laboratory Heidelberg Germany	Supervisor: ZAUGG Judith

LONG-TERM FELLOWSHIPS

KHUNTIA Purnati India	From	Tata Institute of Fundamental Research Hyderabad India	<i>Molecular mechanisms and tissue mechanics driving spinal cord regeneration</i>
	To	University of Côte d'Azur Nice France	Supervisors: CIGLIOLA Valentina RAUZI Matteo
KOL Adi Israel	From	The Hebrew University of Jerusalem Jerusalem Israel	<i>The role of simultaneous population dynamics in associative learning</i>
	To	Friedrich Miescher Institute Basel Switzerland	Supervisor: LUETHI Andreas
LEPRINCE Erwan France	From	Aix-Marseille University Marseille France	<i>Role of visual and emotion circuits in shaping neural spatial representations of aversive stimuli</i>
	To	University of Cambridge Cambridge UK	Supervisor: BELTRAMO Riccardo
LIAKOS Anastasios Greece	From	National and Kapodistrian University of Athens Athens Greece	<i>Chromatin rejuvenation and DNA damage responses during ageing of human chromosomes</i>
	To	University Medical Center Göttingen Göttingen Germany	Supervisor: PAPANTONIS Argyris
MEHDIRATTA Kritee India	From	CSIR-Institute of Genomics and Integrative Biology New Delhi India	<i>Unraveling spatial landscape of Mycobacterium tuberculosis transcriptome and its role in TB pathology</i>
	To	Harvard T. H. Chan School of Public Health Boston USA	Supervisor: RUBIN Eric

LONG-TERM FELLOWSHIPS

MIEHL Christoph Austria	From	Technical University Munich Munich Germany	<i>Reward-based learning of assemblies in olfaction</i>
	To	The University of Chicago Chicago USA	Supervisors: DOIRON Brent OSWALD Anne-Marie
MUGNAINI Matias Argentina	From	University of Buenos Aires Buenos Aires Argentina	<i>Neural dynamics of social role- taking and role-reversal in the medial prefrontal cortex</i>
	To	Humboldt-Universität Berlin Germany	Supervisor: BRECHT Michael
NAGANO Masahiro Japan	From	Kyoto University Kyoto Japan	<i>Dissecting long-range gene regulation of cell differentiation through biophysical approaches</i>
	To	Massachusetts Institute of Technology Cambridge USA	Supervisor: HANSEN Anders
NAITOU Yuki Japan	From	Kyushu University Fukuoka Japan	<i>Visualizing specific lipid processing and uncovering molecular mechanisms using gut organoids</i>
	To	TU Dresden Dresden Germany	Supervisor: HONIGMANN Alf
NAKASHASHI Ayuno Japan	From	Université de Montréal Montréal Canada	<i>Closing the neural and behavioural feedback loop of social interactions in freely-behaving primates</i>
	To	Deutsches Primatenzentrum GmbH Göttingen Germany	Supervisor: GAIL Alexander

LONG-TERM FELLOWSHIPS

NOGUCHI Asako Japan	From	The University of Tokyo Tokyo Japan	<i>Memory trace in a neuron: dissecting dendritic mechanisms of learning</i>
	To	Columbia University New York USA	Supervisor: LOSONCZY Attila
OKAMOTO Hiroyuki Japan	From	The University of Tokyo Tokyo Japan	<i>Illuminating orphan GPCR signaling by novel biochemical approaches</i>
	To	University of California, San Francisco San Francisco USA	Supervisor: MANGLIK Aashish
PARIKH Shivang India	From	Tel Aviv University Tel Aviv Israel	<i>Parasite immune evasion in a murine microcosm of the human immune system</i>
	To	Massachusetts General Hospital Boston USA	Supervisor: BATISTA Facundo
RAMANADANE Karthik France	From	University of Zurich Zurich Switzerland	<i>Unravelling the molecular mechanisms of thyroglobulin endocytosis mediated by the R2 receptor</i>
	To	Human Technopole Milano Italy	Supervisor: COSCIA Francesca
REINERT Sandra Germany	From	Ludwig-Maximilians-Universität München Munich Germany	<i>Understanding the formation of schema representations in prefrontal cortex</i>
	To	University College London London UK	Supervisors: BEHRENS Timothy MRSIC-FLOGEL Thomas

LONG-TERM FELLOWSHIPS

SÁNCHEZ Juan Argentina	From	Instituto de Agrobiotecnología del Litoral, UNL-CONICET Santa Fe Argentina	<i>Unraveling the cellular and molecular dynamics of adult neurogenic niches</i>
	To	Champalimaud Foundation Lisbon Portugal	Supervisor: RHINER Christa
SANCHÍS CALLEJA Fátima Spain	From	ETH Zurich Zurich Switzerland	<i>Understanding the role of endometrial compartmentalization in menstruation</i>
	To	Harvard University Cambridge USA	Supervisor: MCKINLEY Kara
SILVA Marta Portugal	From	University of Barcelona Barcelona Spain	<i>The neural basis of naturalistic memory</i>
	To	Columbia University New York USA	Supervisor: JACOBS Joshua
SOUDIER Paul France	From	Paris-Saclay University Orsay France	<i>A quantitative in vitro approach to virus infection</i>
	To	University of Minnesota Minneapolis USA	Supervisor: NOIREAUX Vincent
STOKAR-AVIHAIL Avigail Israel/USA	From	Weizmann Institute of Science Rehovot Israel	<i>Mapping the interactions between bacteria in the microbiome for targeted strain replacement</i>
	To	European Molecular Biology Laboratory Heidelberg Germany	Supervisor: TYPAS Athanasios

LONG-TERM FELLOWSHIPS

SUTHERLAND Emmajay UK	From	University of St Andrews St Andrews UK	<i>Chemical glycobiology to investigate the cell surface glycocode</i>
	To	University of Washington Seattle USA	Supervisor: RILEY Nicholas
TAN Yi Han Singapore	From	National University of Singapore Singapore Singapore	<i>Understanding the host-microbe arms race through the TLR5-flagellin axis</i>
	To	Max Planck Institute for Biology Tübingen Tübingen Germany	Supervisor: LEY Ruth
VIJAYAN Sajesh India	From	Indian Institute of Science Education and Research Thiruvananthapuram, Kerala India	<i>Following dance vibrations on a swarm: the emergent mechanics of honey bee collectives</i>
	To	University of Western Ontario London Canada	Supervisor: MHATRE Natasha
VOITOV Ivan Canada	From	University of Basel Basel Switzerland	<i>The biophysics of causality – sensing and control of network dynamics by single neurons</i>
	To	Columbia University New York USA	Supervisor: POLLEUX Franck
WANG Lu-Yi Taiwan	From	The University of Melbourne Melbourne Australia	<i>Adhesive mechanism of poison frog tadpoles: how to attach on soft and wet surfaces</i>
	To	University of Cambridge Cambridge UK	Supervisor: FEDERLE Walter

LONG-TERM FELLOWSHIPS

WEGLAGE Moritz Germany	From	Karolinska Institutet Stockholm Sweden	<i>Does the striatum use cerebellar motor state predictions to guide rapid and complex movement?</i>
	To	Harvard University Cambridge USA	Supervisor: ÖLVECZKY Bence
XU Jin China	From	Zhejiang University Hangzhou China	<i>Exploring novel riboswitches in plants: uncovering new regulatory mechanisms for plant metabolism</i>
	To	John Innes Centre Norwich UK	Supervisor: DING Yiliang
YOSHIDA Mari Japan	From	Nagoya University Nagoya Japan	<i>A nucleus-driven paradigm of mechanotransduction and morphogenesis</i>
	To	Institut Curie Paris France	Supervisor: BELLAIĆHE Yohanns

CROSS-DISCIPLINARY FELLOWSHIPS

BAIKIE Tomi UK/Finland	From	University of Cambridge Cambridge UK	<i>Non-contact measurements of electrochemical potentials in skin</i>
	To	Massachusetts Institute of Technology Cambridge USA	Supervisors: AHN Andrew BALDO Marc
BISARDI Matteo Italy	From	Université Paris Cité Paris France	<i>Coupling massive gene synthesis with generative sequence models to decipher antibiotic resistance</i>
	To	University of British Columbia Vancouver Canada	Supervisor: TOKURIKI Nobuhiko
DAL CENGIO Sara Italy	From	Universitat de Barcelona Barcelona Spain	<i>Evolutionary dynamics and self-organization in active populations</i>
	To	Massachusetts Institute of Technology Cambridge USA	Supervisor: TAILLEUR Julien
FRIDIANTO Kevin Timothy Indonesia	From	National University of Singapore Singapore Singapore	<i>Elucidating electrophile-sensor signaling proteins at the contact sites between bacteria and host</i>
	To	École Polytechnique Fédérale de Lausanne Lausanne Switzerland	Supervisor: AYE Yimon
GRÜNING Gesa Germany	From	Carl von Ossietzky University Oldenburg Oldenburg Germany	<i>Is quantum coherence important in coupling the antenna system to the photosystem in cryptophytes?</i>
	To	University of New South Wales Sydney Australia	Supervisor: CURMI Paul

CROSS-DISCIPLINARY FELLOWSHIPS

HIDAKA Takuya Japan	From	Kyoto University Kyoto Japan	<i>Molecular mechanism of sister chromatid resolution in replicated human chromosomes</i>
	To	Institute of Molecular Biotechnology Vienna Austria	Supervisor: GERLICH Daniel
KITZMANN Winald Germany	From	Johannes Gutenberg University of Mainz Mainz Germany	<i>Teaching excitons how to walk: spatial reorganization in an artificial light-harvesting system</i>
	To	Massachusetts Institute of Technology Cambridge USA	Supervisor: SCHLAU-COHEN Gabriela
MATREUX Thomas Germany	From	Ludwig Maximilian University Munich Munich Germany	<i>Early Earth conditions as a selector for functional RNAs</i>
	To	Ecole Supérieure de Physique et de Chimie Industrielles de la Ville de Paris Paris France	Supervisor: NGHE Philippe
PAVLIC Alen Slovenia	From	ETH Zurich Zurich Switzerland	<i>Ultrasound neuromodulation: search for the physical origin</i>
	To	California Institute of Technology Pasadena USA	Supervisor: SHAPIRO Mikhail
RIEDL Michael Austria	From	Institute of Science and Technology Austria Klosterneuburg Austria	<i>Mechano-chemical coupling in cytoplasmic flows: the competition between self-organization and chaos</i>
	To	TU Dresden Dresden Germany	Supervisor: BRUGUES Jan

CROSS-DISCIPLINARY FELLOWSHIPS

SHARMA Vinay
India

From Technion Israel Institute of Technology
Haifa
Israel

***Brain-wide mapping of
neurochemical activity using
liposomal nanoparticle reporters***

To Massachusetts Institute of Technology
Cambridge
USA

Supervisor:
JASANOFF Alan