



International

**Human Frontier
Science Program**

Organization

HFSP AWARDS 2021

CROSS-DISCIPLINARY 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.

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.

ARNON Zohar ISRAEL	From	School of Molecular Cell Biology and Biotechnology Tel Aviv University ISRAEL	<i>Engineered collagen fibrils through controlled microfluidics and DNA directed processes</i>
	To	Department of Chemical Engineering and of Applied Physics and Materials Science Columbia University New York USA	Supervisor: GANG Oleg
BOWAL Kimberly CANADA/GERMANY	From	Department of Chemical Engineering and Biotechnology University of Cambridge UK	<i>Spatiotemporal patterning of polydisperse multispecies microbial communities</i>
	To	John A. Paulson School of Engineering and Applied Sciences Harvard University Cambridge USA	Supervisor: MAHADEVAN Lakshminarayanan
CAMPRUBI Eloi SPAIN	From	Department of Earth Sciences Utrecht University THE NETHERLANDS	<i>Geo-electrochemical synthesis of organosulfur compounds as the hub of proto-metabolism</i>
	To	Earth-Life Science Institute Tokyo Institute of Technology JAPAN	Supervisor: NAKAMURA Ryuhei
CHAJWA Rahul INDIA	From	Department of Physics Tata Institute of Fundamental Research Bengalore INDIA	<i>Birth, life and death of marine snow: real-time observations and biophysics of a sinking eco-system</i>
	To	Department of Bioengineering Stanford University USA	Supervisor: PRAKASH Manu
JAKUSZEIT Theresa GERMANY	From	Cavendish Laboratory University of Cambridge UK	<i>Cell migration in complex environments as a crucial step in the immune response</i>
	To	Cell Biology and Cancer Department Institut Curie Paris FRANCE	Supervisor: PIEL Matthieu

MARTÍNEZ CALVO Alejandro SPAIN	From	Fluid Mechanics Group Universidad Carlos III de Madrid Leganés SPAIN	<i>Dynamics of active matter in complex and heterogeneous habitats</i>
	To	Department of Chemical and Biological Engineering Princeton University USA	Supervisor: DATTA Sujit
OU Arnold AUSTRALIA	From	University of Western Australia Perth AUSTRALIA	<i>Compaction and organization of macroH2A containing heterochromatin in therapy-induced senescence</i>
	To	Laboratory of Genome Architecture and Dynamics Rockefeller University New York USA	Supervisor: RISCA Viviana
PELLETIER James USA	From	Department of Physics Massachusetts Institute of Technology Cambridge USA	<i>Interdependence of transport and gene regulation during dormancy and growth in axillary buds</i>
	To	Department of Systems Biology National Centre for Biotechnology / CSIC Madrid SPAIN	Supervisor: ARES Saúl
RANI Garima INDIA	From	Department of Physics Institute of Mathematical Sciences Chennai INDIA	<i>Discerning topological defects as hotspots of biological activity in microbial systems</i>
	To	Department of Physics and Materials Science University of Luxembourg LUXEMBOURG	Supervisor: SENGUPTA Anupam
RECKZEH Elena GERMANY	From	Department of Chemical Biology Max Planck Institute of Molecular Physiology, Dortmund GERMANY	<i>Intestinal organoid-based bioavailability platform: Biovanoids</i>
	To	Institute for Developmental Biology and Stem Cell Research Hubrecht Institute, Utrecht THE NETHERLANDS	Supervisor: CLEVERS Hans

SOITU Cristian ROMANIA	From	Department of Engineering Science University of Oxford UK	<i>Information flow in the brain at single-neuron resolution</i>
	To	Department of Neuroscience Cold Spring Harbor Laboratory USA	Supervisor: ZADOR Anthony
THOMAS GEORGE Jerrin INDIA	From	Department of Chemistry Indian Institute of Science Education and Research Pune INDIA	<i>Molecular insights into RNA-directed integration by transposon-encoded CRISPR–Cas systems</i>
	To	Department of Biochemistry and Molecular Biophysics Columbia University New York USA	Supervisors: GONZALEZ Ruben and STERNBERG Samuel
TSAO Kelvin CANADA	From	Chemistry and Biomolecular Sciences University of Ottawa CANADA	<i>Recording neural activity over long time periods using a novel chemi-genetic integrator</i>
	To	Department of Chemistry The University of Tokyo JAPAN	Supervisor: CAMPBELL Robert
WALSH Stephen IRELAND	From	Department of Chemistry University of Cambridge UK	<i>Investigation of anti-androgen resistance in prostate cancer via CRISPR-suppressor scanning</i>
	To	Department of Chemistry and Chemical Biology Harvard University Cambridge USA	Supervisor: LIAU Brian
WATSON Emma AUSTRALIA/UK	From	School of Chemistry The University of Sydney AUSTRALIA	<i>Development of a logic-gated network to control natural killer cell recruitment in immuno- oncology</i>
	To	Department of Organic Chemistry University of Geneva SWITZERLAND	Supervisor: WINSSINGER Nicolas

WIEMANN
Jasmina
GERMANY

From Department of Earth and Planetary
Sciences
Yale University
New Haven
USA

***BioGEMS: Elucidating the
evolution of animal
BIOmineralisation through
GEOcheMiStry and GENoMicS***

To Department of Earth Sciences
University of Oxford
UK

Supervisor:
BENSON Roger