

# HFSP AWARDS 2025

## ACCELERATOR GRANTS

**approved by the Board of Trustees (March 2025)**

**Accelerator Grants, Grants** – a new scheme started as a three-year pilot, allows teams who have been awarded a research grant the year before (at this point, 2024) to add an additional team member, from one of seven countries (India, Japan, Republic of Korea, New Zealand, Norway, Singapore, South Africa).

Accelerator Grants awarded 2025 are listed alphabetically, with respect to the Principal Investigator (PI) of the team. The first named for each awarded team is the PI, followed by all the other members of the Research Grant team awarded 2024, and last (but not least), and in **bold** letters, the Accelerator member. Nationality is in parentheses when different from country in which the laboratory is located.

## ACCELERATOR GRANTS

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### Expanding the Chemical Space of Bioactive Modified Nucleotides to Endogenous Metal Ions

Beltrao Pedro	Dept. of Biology ETH Zürich	Switzerland
Correia-Melo Clara	Dept. of Microbiome in Ageing Leibniz Institute on Aging Fritz Lipmann Institute, Jena	Germany (Portugal)
Fugger Kasper	Dept. of Cancer Biology UCL Cancer Institute	UK (Denmark)
<b>Hartinger Christian</b>	<b>School of Chemical Sciences The University of Auckland</b>	<b>New Zealand (Aotearoa) (Austria)</b>

### Strengthening the data analysis pipeline for avian Diffuse Optical Tomography through AI

Botero Carlos	Dept. of Integrative Biology The University of Texas at Austin	USA
Culver Joseph	Dept. of Radiology Washington University in St.Louis	USA
Güntürkün Onur	Dept. of Psychology and Institute for Cognitive Neuroscience Ruhr University Bochum	Germany
<b>Yoon Young-Gyu</b>	<b>School of Electrical Engineering Korea Advanced Institute of Science and Technology (KAIST), Daejeon</b>	<b>Rep. of Korea</b>

### Monitoring ATP synthase re-organization linked to LTP by Cryo-Tomography

Busch Karin	Dept. of Biology University of Münster	Germany
Jonas Elizabeth	Dept. of Internal Medicine Yale University New Haven	USA
Tomkinson Nicholas	Dept. of Pure and Applied Chemistry University of Strathclyde Glasgow	UK
<b>Tanaka Yoshikazu</b>	<b>Graduate School of Life Sciences Tohoku University Sendai</b>	<b>Japan</b>

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### Assessing the morphological space of self-assembling abiotic chemistries as potential confounding biosignatures

Cleaves Henderson	Dept. of Chemistry The Howard University Washington	USA
McMahon Sean	School of Physics and Astronomy University of Edinburgh	UK
Van Zuilen Mark	Marine Biodiversity Lab. Stichting Naturalis Biodiversity Center Leiden	Netherlands
<b>Rajamani Sudha</b>	<b>Dept of Biology Indian Institute of Science Education and Research Pune (IISER Pune)</b>	<b>India</b>

### Resurrecting the Multiple Origins of Tyrosine Kinase Activity and Phosphotyrosine Recognition

Creixell Pau	CRUK Cambridge Institute The University of Cambridge	UK (Spain)
Metzger Brian	Dept. of Biological Sciences Purdue University West Lafayette	USA
<b>Shukla Arun</b>	<b>Dept of Biological Sciences and Bioengineering Indian Institute of Technology Kanpur</b>	<b>India</b>

### Decoding invisibility: from genome evolution to tissue optical properties in transparent fish

Del Bene Filippo	Dept. of Development Institut de la Vision Paris	France (Italy)
Johnsen Sonke	Dept. of Biology Duke University Durham	USA
Ramialison Mirana	Stem Cell Medicine Murdoch Childrens Research Institute Parkville	Australia (Madagascar)
<b>Laudet Vincent</b>	<b>Marine Eco-Evo-Devo Unit Okinawa Institute of Science and Technology Graduate University</b>	<b>Japan (France)</b>

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### **Cross-talk between the skin microbiome, immunity and sensory innervation in neurophysiology**

Di Giovanni Simone	Dept. of Brain Sciences Imperial College of Science, Technology and Medicine London	UK (Italy)
Elinav Eran	Dept. of Systems Immunology Weizmann Institute of Science Rehovot	Israel
Fan Rong	Dept. of Biomedical Engineering Yale University New Haven	USA
<b>Shin Woojung</b>	<b>Dept of Bio and Brain Engineering Korea Advanced Institute of Science and Technology (KAIST), Daejeon</b>	<b>Rep. of Korea</b>

### **Capturing evolution in action using ancestral genotypes resurrected from sand dune seed banks**

Dunning Luke	School of Biosciences University of Sheffield	UK
Reijers Valerie	Dept. of Physical Geography Utrecht University	Netherlands
Wengrove Meagan	School of Civil and Construction Engineering Oregon State University Corvallis	USA
<b>Konlechner Teresa</b>	<b>Dept of Geography University of Otago Dunedin</b>	<b>New Zealand (Aotearoa)</b>

### **Mechanisms and origins of glycosylation in giant viruses**

Fischer Matthias	Dept. of Biomolecular Mechanisms MPI for Medical Research Heidelberg	Germany
De Castro Cristina	Dept. of Chemical Sciences University of Naples Federico II	Italy
Ogata Hiroyuki	Institute for Chemical Research Kyoto University, Uji Campus	Japan
<b>Kulkarni Suvam</b>	<b>Dept of Chemistry Indian Institute of Technology Bombay Mumbai</b>	<b>India</b>

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### **Deciphering the evolution, cellular biology and biogeochemistry of symbioses in anaerobic eukaryotes**

Husnik Filip	Okinawa Institute of Science and Technology Graduate University Onna-son, Okinawa	Japan (Czech Republic)
Beinart Roxanne	Graduate School of Oceanography University of Rhode Island Narragansett	USA
Stairs Courtney	Dept. of Biology Lund university	Sweden (Canada)
<b>Nomaki Hidetaka</b>	<b>X-star Japan Agency for Marine-Earth Science and Technology (JAMSTEC) Yokosuka</b>	<b>Japan</b>

### **Scaling the impact of viruses from single cells to the global methane cycle**

Malik Ashish	School of GeoSciences University of Edinburgh	UK (India)
Anantharaman Karthik	Dept. of Bacteriology University of Wisconsin Madison	USA
Emerson Joanne	Dept. of Plant Pathology University of California Davis	USA
Nicol Graeme	Laboratoire Ampère CNRS – Ecole Centrale de Lyon Ecully	France (UK)
<b>Makhalanyane Thulani</b>	<b>Dept of Microbiology Stellenbosch University</b>	<b>South Africa</b>

### **Mechanoradicals as a novel form of mechanosensing: from protein stretching to animal aging**

Zaidel-Bar Ronen	Dept. of Cell and Developmental Biology Tel Aviv University	Israel
Dunn Alexander	Dept. of Chemical Engineering Stanford University	USA
Gräter Frauke	Dept. of Biomolecular Mechanics MPI for Polymer Research, Mainz	Germany
<b>Yan Jie</b>	<b>Mechanobiology Institute and Dept of Physics National University of Singapore</b>	<b>Singapore</b>