



Press Release

Glass frogs, correlates of thought and camouflage of fish among the winners of the 2018 HFSP Postdoctoral Fellowships

The International Human Frontier Science Program Organization (HFSP) announced today the 91 fellowship awards to the world's most outstanding young life scientists, chosen through rigorous international selection out of a total of 633 applications from 56 countries. The HFSP fellows will begin their research in a new field of biology in a laboratory in a new country, in accord with HFSP's aim of promoting international collaboration in life science research.

HFSP Long-Term Fellowships are for postdoctoral scientists in biology. A total of 79 Long-Term Fellowships have been awarded to the very best of the world's young scientists who have proposed original approaches at the frontier of life science research. The projects are diverse; for example, there is one project aiming to study the biophysical and chemical basis of biological transparency and near infra-red reflectance in 'glass frogs', two common and important camouflage strategies that are difficult to achieve in complex living organisms. Equally novel is another project that will search for the neural correlates of consciousness, delineating the causal relationship between brain activity and the content of human thoughts.

HFSP Cross-Disciplinary Fellowships support young scientists with a non-life science PhD degree such as chemistry or physics. This year, 12 new fellows will make a bold change in research direction by leaving their non-biological realm to embark on research that is at the interface of biology and neighboring disciplines. Not surprisingly their approaches challenge traditional thinking, for example, when using algorithms to analyze stochastic signals in stock market indices, and apply them to infer causal relations in molecular pathways active in cells. Another project proposes using super-resolution biological imaging techniques to study the physical architecture of natural photonic guanine crystals to investigate the tunable 'silvery' stripe colors in fish, used for camouflage, vision, communication, and mate recognition.

HFSP's fellowships enjoy an excellent reputation and offer a built-in return component. Starting in their second year of tenure, HFSP fellows can draw up plans for setting up their own independent laboratory. Fellows can then use the remaining time of their tenure to move to the new location. A fellowship is worth about \$180,000 spread over three years and includes support for research costs and child care.

The lists of all 2018 HFSP awards are available at <http://www.hfsp.org/awardees/newly-awarded>.

The Human Frontier Science Program is an international program of research support implemented by the International Human Frontier Science Program Organization (HFSP) based in Strasbourg, France. Its aims are to promote intercontinental collaboration and training in cutting-edge, interdisciplinary research focused on the life sciences. HFSP receives financial support from the governments or research councils of Australia, Canada, France, Germany, India, Italy, Japan, the Republic of Korea, New Zealand, Norway, Singapore, Switzerland, the UK, the USA, as well as from the European Union.