

International

Human Frontier Science Program

Organization

HFSP Funding opportunities for postdoctoral scientists and collaborations of independent investigators

University of Cambridge Funders' Fair - 14 March 2024

Dr. Barbara Pauly Director of Fellowships







HFSPO promotes and funds basic research

- innovative, cutting-edge research extending the frontiers of the life sciences
- focused on the elucidation of the sophisticated and complex mechanisms of living organisms (no applied projects)

HFSPO attaches the highest importance to

- scientific merit
- internationality (especially intercontinentality)
- interdisciplinarity



Elements that distinguish HFSP

No "red tape": Independent HFSP budget allowing for unrestricted international collaboration

No geo-tagging: Financial contributions to HFSP's annual budget in a "common pot" Putting Ideas First: HFSP Research means bottom-up investigator-driven approaches Not for profit: Intellectual property resulting from HFSP remains with inventors "HFSP Culture": Independent, impartial scientific peer review by international and interdisciplinary review committees.

Our Shared Values: Equity, inclusion, diversity, inclusion, freedom of research, open science



Basic Research in the Life Sciences: molecular level to ecosystems & including higher cognitive functions!

- Scientific research at the frontiers of knowledge
- Competition of ideas: high-risk, high-gain wanted!
- Interdisciplinarity: integration of different research fields (material science, chemistry, physics, mathematics, etc.)
- Innovative, original projects that hold promise for the future
- International (intercontinental) collaborations
- Scientific excellence
- Any frontier research topic in the life sciences

Vou are allowed to fail



Research that is not supported

HFSP does not support research projects that are:

- Applied and translational:
 - > clinical and pharmaceutical research (human participants, diagnostics, therapy development)
 - > applied technology or applied engineering
 - > studies concerned with improving agricultural production and yield
- Mostly environmental/conservation or agricultural/forestry research (unless about complex basic mechanisms of life), studies of bioremediation
- Data collecting, observational studies (-omics without functional questions)
- Research in for-profit environments (but collaboration are possible)

Many projects still lead to patents and applications – this is fine, but should not be the primary aim



Overview HFSP Support 2023

Postdoctoral Fellowships (600 scientists applying for ~ 65 awards/year)

- PhD in biology ("Long-Term")
- PhD in physics, chemistry, etc. ("Cross-Disciplinary")
- Research abroad in a new country 3 years support
- Salary support (plus child allowance, some support for travel etc)



Research Grants (~2200 applicants in ~700 proposals > 100-120 awardees in ~33 projects)

- International researcher teams (all "Research Grants")
- Starting investigators (Research Grants Early Career")
- One team one project 3 years support
- About \$120.000 p.a. per laboratory





For PhD candidates that...

- ...are driven by adventurous new ideas (high-risk, high-gain wanted)
- ...intend to expand their work beyond the scope of the PhD project
- …are willing to leave their scientific comfort zone and propose a significant change of fields/topics
- ...are motivated to move to a new research environment & country
- ...want to experiment with new methods and approaches
- ...aim to disrupt existing paradigms and established ways of thinking



- Long-Term Fellowships:
 - for applicants with a PhD in a biological field
 - to embark on a new project in a different field in the life sciences
- Cross-Disciplinary Fellowships:
 - for applicants with a PhD from outside the life sciences (e.g. in physics, chemistry, mathematics, engineering or computer sciences)
 - no prior training or research experience in the life sciences
 - want to move to biological research



Application criteria

Applicants must....

- ...propose to work in a new country and with a new supervisor
 - Citizen of a HFSPO Member? -> Choose to go anywhere in the world
 - Not from a Member country? -> Choose a lab in any Member country
- ...apply within 3 years of PhD
- ...have at least one first-author paper (or preprint, at LOI stage)
- no preliminary results needed on the new project



HFSP Postdoctoral Fellowships Success Rate & Funding

- Award includes 3 year salary support plus travel, child and parental leave allowances
- Career building: HFSP fellowship can be deferred for up to one year
- Option to use 3rd year for **repatriation** to home country
- Success rate ~ 10 − 15%

| Country | Currency | yearly living allowance Year 1 | Yearly living allowance Year 2 | yearly living allowance Year 3 | Yearly child allowance (per child) | Yearly R/T allowance |
|---------|----------|--------------------------------------|--------------------------------------|--------------------------------------|--|-------------------------|
| India | INR | 2,678,868 | 2,723,520 | 2,768,160 | 267,887 | 507,036 |
| Japan | JPY | 6,898,740 | 7,013,712 | 7,128,696 | 689,874 | 784,692 |
| Korea | KRW | 68,281,452 | 69,419,484 | 70,557,504 | 6,828,145 | 8,395,260 |
| UK | GBP | 65,772 | 66,864 | 67,956 | 6,577 | 5,640 |
| USA | USD | 59,460 | 60,456 | 61,440 | 5,946 | 7,200 |



1. Letter of Intent

- Submission deadline 14 May 2024 (~600)
- 2. Triage (~ 10% not in scope & formal)
- 3. Initial review by Review Committee members
- 4. Ranking by scores
- 5. Top ~ 20% of LoI will receive an invitation to submit a full application
- 6. All others will be notified

HFSP Postdoctoral Fellowships

2-stage application process

2. Full Proposal

- 1. Submission deadline September 2024
- 2. Reviewed by 2-3 external experts
- 3. Reviewed by the initial LoI Review Committee members
- 4. Scoring w/o cut off
- 5. Meeting of the full Review Committee in January to discuss all full applications and establish the final ranking
- 6. Notification late March 2025

Review process and list of committee members available on https://www.hfsp.org/funding



HFSP Postdoctoral Fellowships Developing an application

Important in a successful application

In your Curriculum Vitae, give evidence of your ability to

- think independently and beyond conventional approaches
- adopt new approaches and methodology

Propose a Research Project that

- is clearly **your idea** (conceptual input from supervisor is OK)
- is creative, frontier and basic research, challenges existing paradigms, addresses barriers to progress in the field
- will introduce you to **new fields, theory and methodology** (a clear departure from your previous research)



HFSP Postdoctoral Fellowships Developing an application

Do not propose a project

- that is only an incremental step forward
- that is the logic next step after your PhD (you need to be willing to significantly change your field of research)
- that is a mainstream project in your host's lab
- that represents the next logical step for your host supervisor
- that fails to make clear *your* intellectual contribution

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HFSP Postdoctoral Fellowships Writing the Letter of Intent

The Letter of Intent is a very short format

- The letter of Intent is the critical step in the HFSP selection process
- Win the reader in your first sentence (don't say "malaria is killing millions every year")
- Simple language and style can be very convincing (reviewers are generalists and read many applications)
- Ask someone from outside the field to read it are abbreviations needed or can they be replaced? Are concepts clear?
- Do not write "this is interdisciplinary, international and innovative" that should be clear from the text
- Do not waste space to say how fantastic a project this is. Focus on the novelty/frontierness of the science itself



Next Call for Applications

Award year 2025:

Application site opens March 2024 Application deadline: **14 May 2024** Award announcement: end-March 2025



Look here: https://www.hfsp.org/funding/hfsp-funding/postdoctoral-fellowships



Awardees meetings

Initiated in 2001 and held once annually in a different HFSPO Member country

Next year's awardees meeting will take place in June 2024 in the National Academy of the USA in Washington

Additional activities





Additional activities

Nakasone award

- In honour of former Japanese prime minister Nakasone
- Annually awarded to a scientist who has made a major ground-breaking discovery
- Nominations by scientists:

You can nominate candidates for this award, watch out for the call next year!



2023 Nakasone awardee Rotem Sorek





Fellowship Awards: fellow@hfsp.org

Research Grants: grant@hfsp.org



HFSP Contacts & Helpful Resources





Thank you! – Questions?



