



International

# Human Frontier Science Program

Organization

Support for international interdisciplinary research collaborations

Dr. Almut Kelber  
Director of Research Grants



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# International Collaboration in Life Science Research

Supported by



Australia  
Canada  
European Commission  
France  
Germany  
India  
Israel  
Italy  
Japan

Republic of Korea  
New Zealand  
Norway  
Singapore  
South Africa  
Switzerland  
United Kingdom  
United States of America





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## HFSP's Mission

### **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



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## 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



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## 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!
- **I**nterdisciplinarity: integration of different research fields (material science, chemistry, physics, mathematics, etc.)
- **I**nnovative, original projects that hold promise for the future
- **I**nternational (intercontinental) collaborations
- Scientific excellence
- **Any frontier research topic in the life sciences**

## 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**





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# Overview HFSP Support 2024

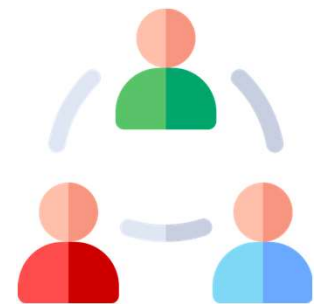
## Postdoctoral Fellowships (600 scientists applying for ~ 60 awards/year)

- 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





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# HFSP Research Grants

## All Research Grants

- team grants for 2-4 scientists
- any basic topic at the frontiers of the life sciences
- a research question that is new for all team members

## Research Grants – Program

- scientists at any career stage in their independent career

## Research Grants – Early Career

- all team members must be
  - within 5 years of their first independent position
  - within 10 years after PhD





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# HFSP Research Grants

## Two Step Review Process

### Letter of Intent

1. Initiation deadline **19 March 2024**
2. Submission deadline **28 March 2024**  
(~700 Letters of Intent)
3. Triage (~ 10% not in scope)
4. Review by Review Committee members
5. Discussion of ~250 most promising LOIs by Selection Committee
6. 80 - 100 invitations to submit proposal  
(beginning of July)
7. Notification to all teams mid-July

### Full Proposal

1. Submission deadline **mid-September**
2. Reviewed by up to 6 external experts
3. Reviewed and ranked by 3 Review Committee members
4. Discussed at the Review Committee meeting end of January
5. Approval by Board of Trustees (late March)
6. Notification **end of March 2025**

**Guidelines for applicants and  
Review Committee members can be found on [www.hfsp.org](http://www.hfsp.org)**



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## HFSP Research Grants

### Success rate and funding

#### Funding

- **Three-year grants**
- Principal applicant must be in an HFSP member country, others can be anywhere
  - **300 000 US\$ annually (team of 2) to 500 000 US\$ (team of 4, maximum)**
  - Not available for salary of the applicants
  - There is a reduction if more than one member works in the same country

#### Success rate

- **~ 2200 scientists submit ~700 Lols**
- 250-300 scientists invited to submit ~ 80-100 full proposals >
- **~ 100 scientists funded in ~ 33 grant awards**
- ~40% of invited proposals are supported
- **~ 4 – 5% of initial LOIs are supported**



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# HFSP Research Grants in Norway

## Since 1990:

- **239 applicants from Norway (before 2024 cycle), on average 7 per year**
- **10 Research Grant awardees in Norway (before 2024)**
- **Thus, a 4-5% success rate (equal to the general success rate)**

## Last years

- **2022: 6 applicants in Norway, 1 awardee\***
- **2023: 8 applicants in Norway, 1 awardee\*\***
- **2024: 14 applicants in Norway – awards to be announced end of March**

\* **Basil El Jundi**, Trondheim with team members in Ecuador, Germany and USA,  
Project: Unravelling the mechanisms of brain and behavioral elaboration in ecologically diverse butterflies

\*\* **Pawel Burkhardt**, Bergen, with the second team member in Germany  
Project: Decoding the gelatinous origins of brain evolution



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# HFSP Research Grants

## Successful HFSP projects

### **Stimulate novel, daring ideas and innovative approaches in basic life sciences**

- preliminary results not required and not wanted
- Investigator driven, no priority areas

### **Include scientists from outside the life sciences in the team**

- to bring new understanding and methodology
- international/intercontinental teams

### **Develop new lines of research through new interdisciplinary collaborations**

- working together on bold, novel, potentially transformative ideas
- Solve problems that a single lab could not tackle



## HFSP Research Grants

### Developing an application

- **Start early! Start NOW**
- Build a team that is
  - international, preferably intercontinental
  - Interdisciplinary, with complementary expertise for the research project
  - New without previous collaboration and joint publications in the area of the proposed project
  - Blue sky, frontier, paradigm-shifting...
- **HFSP is not looking for preliminary results – nor do our reviewers**



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# HFSP Research Grants

## Developing an application – Good Ideas

Each team member should bring a **completely novel approach** to the research question

- Think of a question at the absolute **frontier of your field**
  - don't shy away from **risk**, but explain **how** the idea **may** work
- Make sure that **each investigator is essential to the team** (no add on's of famous names)
  - teams of 2-3 (Early Career) and no more than 4 member (Program Grants) are most successful
- Convince that **close, ongoing interaction** between team members is essential
- Clearly **articulate the iterations** between theoretical and experimental work
- If models are included, give clear information on approaches



## HFSP Research Grants

### Developing an application – Bad Ideas

#### Avoid:

- “The next logical step” in your or another team member’s ongoing research
- Applications that can be funded by your national research funding agencies
- Collaborations within a single country
- More than one member from the same institution
- Adding someone famous for the name, not the contribution (“~~Add-on~~”)
- Starting with “we will improve the therapy of...” or “we will cure the ...” – the **research question has to be basic**, potential for application is no hinder but should not be in focus



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# HFSP Research Grants

## 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/team this is. Focus on the novelty/frontierness of the science itself



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# HFSP Research Grants

## Writing the HFSP Full Proposal

### The Full Proposal has space for detailed information

- It will reveal whether the project or collaboration is genuine or simply the mainstream of one participating laboratory
- No preliminary data! If the project has already been started, it does not need HFSP funding... but proof of concept may be ok for risky methods.
- Do not list all possible methods that could be used, say what you plan to do, and if it is risky, which is the plan B
- Specify models and computational methods – the committee has this competence
- Read the literature, don't miss important papers - reviewers know the literature
- Think about which reviewers to list. HFSP will invite some reviewers suggested by the applicants, some suggested by Review Committee members and some selected by the HFSP office. Don't list your collaborators, they are conflicted!



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## HFSP Research Grants Next Call for Applications

Award year 2025:  
Announcement mid-December 2023  
Application site opens January 2024  
Initiation deadline: **19 March 2024**  
Application deadline: **28 March 2024**  
Award announcement: end-March 2025



Look here: <https://www.hfsp.org/funding/hfsp-funding/research-grants>



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HFSP Secretariat, Strasbourg

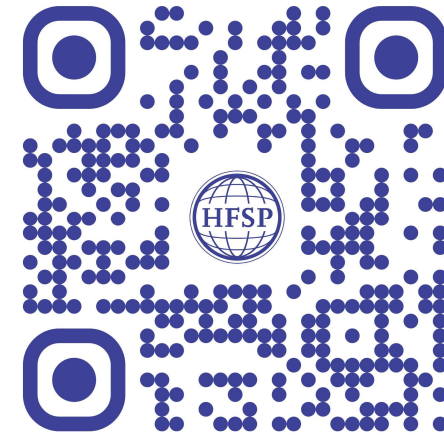
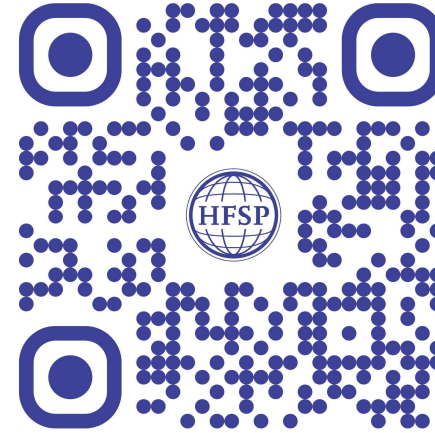
## HFSP Contacts & Helpful Resources

Fellowship Awards:  
*[fellow@hfsp.org](mailto:fellow@hfsp.org)*

Research Grants:  
*[grant@hfsp.org](mailto:grant@hfsp.org)*

Website: *[www.hfsp.org](http://www.hfsp.org)*

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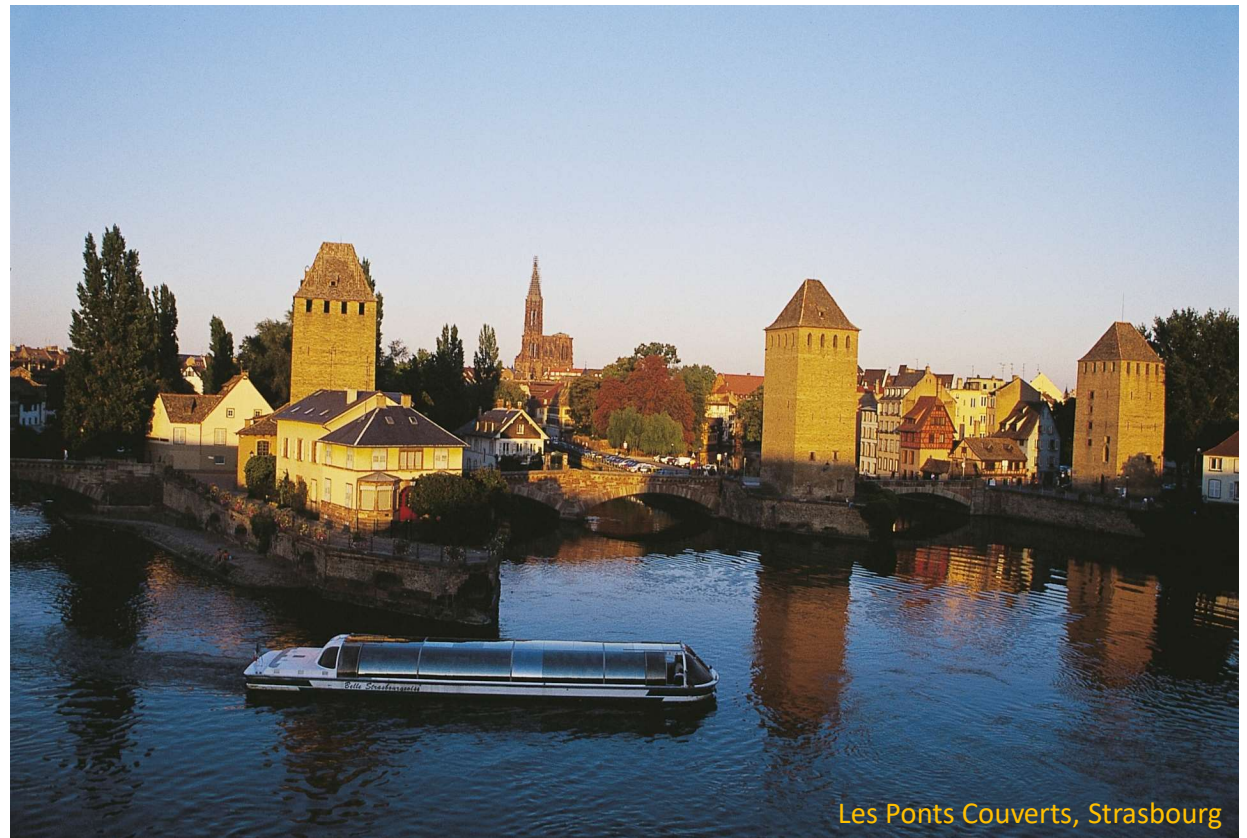


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# Thank you! – Questions?



HFSP Secretariat, Strasbourg



Les Ponts Couverts, Strasbourg