



International

# Human Frontier Science Program

Organization

Support for international interdisciplinary research collaborations

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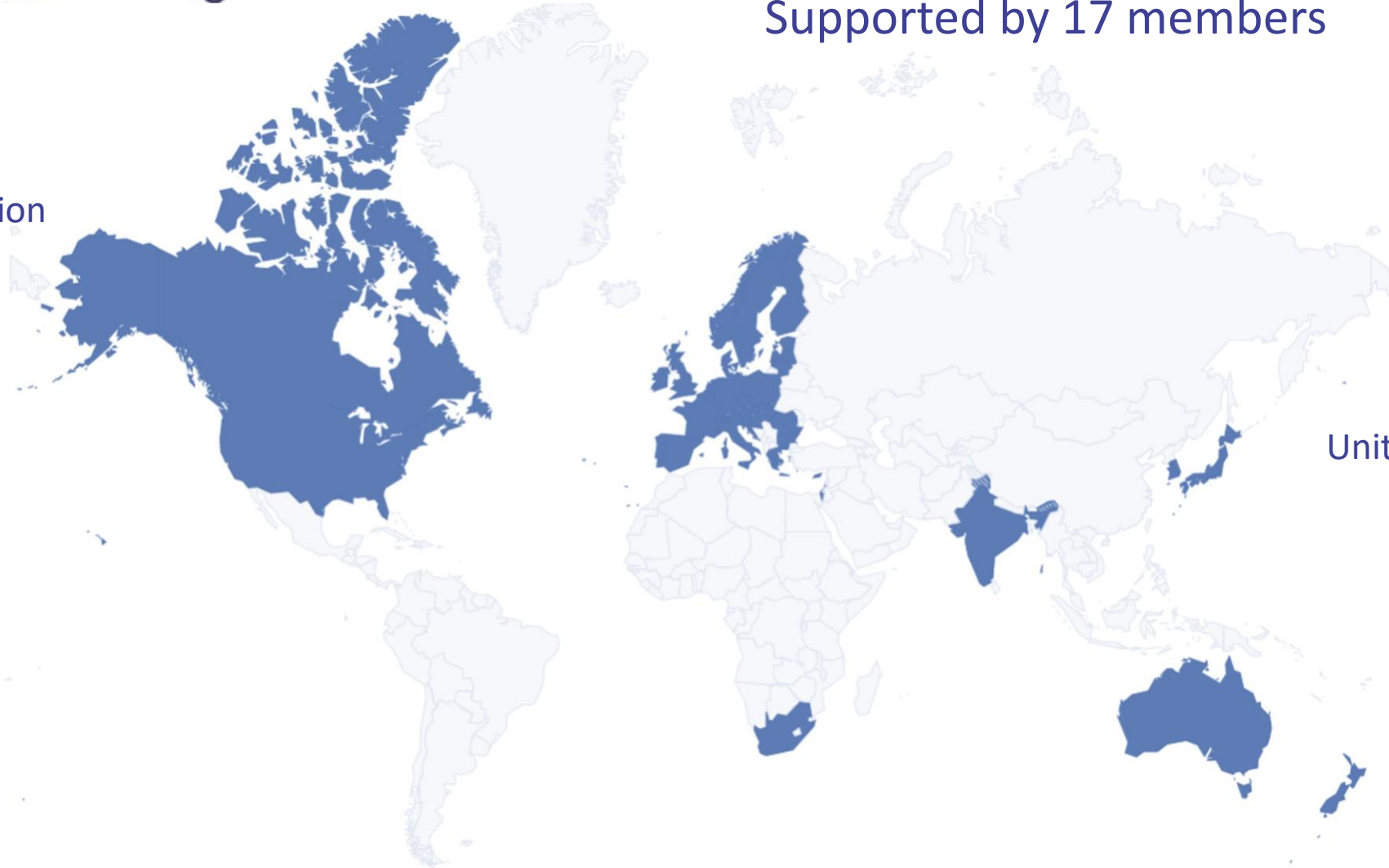
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# International Collaboration in Life

## Science Research

Supported by 17 members

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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# International Collaboration in Life Science Research

Supported by 17 members

## History

The heads of state of the G7 nations approved the proposal by former Prime Minister Nakasone of Japan for establishing the organization at their 1987 summit in Venice.

The international scientific community discussed the scope of the Program and in 1989 the Secretariat started working in Strasbourg (France) to prepare the first awards for 1990.

The original supporting Members were the countries of the **G7**, together with the **EU**. **Switzerland** joined in 1991. **Australia, the Republic of South Korea, India, New Zealand, Singapore, Israel, and Norway** have joined since 2004. **South Africa** joined in 2023.

More than 8000 scientists working in over 70 countries have been supported until now.





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# HFSP's Mission

## **HFSP 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)

## **HFSP attaches the highest importance to**

- scientific merit
- internationality (especially intercontinentality)
- interdisciplinarity



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## HFSP's Mission

### HFSP promotes and funds basic research by

- Research Grants – Program
- Research Grants – Early Career
- Long-Term Fellowships
- Cross-Disciplinary Fellowships
- HFSP Frontier Workshops

### HFSP supports diversity and inclusiveness by

- Accelerator Grants
- Scientists4Scientists Initiative
- Awardees Meetings
- Grant-writing Master Classes

<b>1280</b> research grants to 4605 scientists	<b>3533</b> postdoctoral Fellowships	<b>240</b> Research Grants – Early Career	<b>3344</b> Long-Term Fellowships
<b>189</b> Cross-Disciplinary Fellowships	<b>55</b> countries with research grant awardees	<b>74</b> nationalities of fellows	<b>637</b> Early Career team members



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

- **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
- Peer Review by a single interdisciplinary panel for all grant proposals
- Scientific research at the frontiers of knowledge
- Competition of ideas: high-risk, high-gain wanted (no preliminary data)
- Scientific excellence
- **Any frontier research topic in the life sciences**



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# 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)

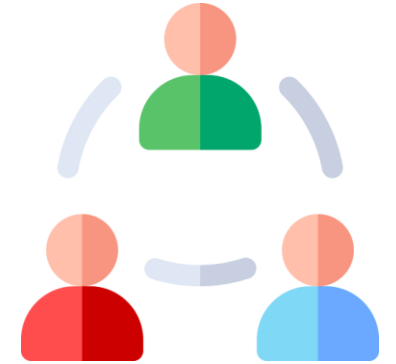
**Many projects still lead to patents and applications – this is fine, but should not be the primary aim**



# Overview HFSP Support 2024

## Research Grants (~2200 applicants in ~800 proposals > 100-120 awardees in ~34 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



## 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)







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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

**NEW**

## Accelerator Grants

allow awarded teams to add a member from one of 7 eligible countries:  
India, S-Africa, S-Korea, Singapore, Japan, New Zealand and **Norway**



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# HFSP Research Grants

## Two Step Review Process

### Letters of Intent

1. Initiation deadline **18 March 2025**
2. Submission deadline **27 March 2025**  
(~700 Letters of Intent)
3. ~ 10% not in scope are removed
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

### Invited Full Proposals

1. Submission deadline **mid-September 2025**
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 2026**



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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

- **~ 2000 scientists submit ~800 Lols**
- 250-300 scientists invited to submit ~ 80-100 invited full proposals
- **~ 100 scientists funded in ~ 34 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)

## Recent years

- 2022: 6 applicants in Norway, 1 awardee\*
- 2023: 8 applicants in Norway, 1 awardee\*\*
- 2024: 14 applicants in Norway – 1 awardee\*\*\*

\* **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

\*\*\* **Meley Rannestad**, Norwegian University of Life Sciences, with the second team member in Ethiopia

Project: A novel approach to tropical dendroclimatology using hyperspectral imaging and deep learning



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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



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# HFSP Research Grants

## Developing an application – Good Ideas

- Build an international, intercontinental team – **start NOW**
- Each team member should bring a **unique approach** to the research question, and **each investigator should be essential to the team**
- Think of a question at the absolute **frontier of your field** and **new for yourself**  
Don't shy away from **risk**, but explain **how** the idea **may** work  
Don't suggest anything you are already working on – no preliminary data!
- Convince that **close, ongoing interaction** between team members will happen
- Clearly **articulate the iterations** between theoretical and experimental work
- If models are included, give clear information on approaches



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# 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



# 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

## Next Call for Applications

Award year 2026:

Announcement mid-December 2024

Application site opens January 2025

Deadlines:

Initiation of Letter of Intent: **18 March 2025**

Submission of Letter of Intent: **27 March 2025**

Submission of invited Full Proposals: September 2025

Award announcement: end-March 2026

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



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## Application

- All teams awarded March 2025 can apply with a new member\* and a new sub-project
- Application guidelines are published in April
- The accelerator member collaborates on the application
- Application site opens July 2025
- Application deadline: September 2025
- Announcement of awards: March 2026

\* Eligible countries in which the new member can work:

India, S-Africa, S-Korea, Singapore, Japan, New Zealand and **Norway**

# HFSP Accelerator Grants

A new instrument for more equity, inclusion and diversity in **frontier** life sciences **research**

## Award

- If awarded, the new member joins for years 2 and 3 of the original grant period
- The awarded team received 100 000 USD in addition to the original grant in years 2 and 3
- The team decides about the fair distribution of funds
- All team members may use remaining funds to complete the project in year 4

**Scientific excellence — Inclusion – Diversity – Equity – Frontier life sciences research**



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# HFSP Postdoctoral Fellowships

## For PhD candidates that...

- ...are driven by adventurous new ideas (**high-risk, high-gain** wanted)
- ...intent 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



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# HFSP Postdoctoral Fellowships

- **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



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# HFSP Fellowships in Norway

## Since 1990:

- 19 applicants from Norway
- 4 Norwegian Fellowship awardees
- 4 Fellowship awardees chose Norway as host country

## Recent years

- 2021: Inga A Frøland Steindal:

Saving the reef: identifying molecular and environmental factors underlying spawning in *A.millepora*

James Cook University, Queensland, Australia



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# HFSP Postdoctoral Fellowships

## 2-stage application process

### Letters of Intent

1. Submission deadline **15 May 2025** (~600)
2. ~ 10% not in scope or ineligible are removed
3. Initial review by Review Committee members
4. Ranking by scores
5. Top ~ 20% of Lol will receive an invitation to submit a full application
6. All others will be notified

### Invited Full Proposals

1. Submission deadline **September 2025**
2. Reviewed by 2-3 external experts
3. Reviewed by the initial Lol 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 2026**

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



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# HFSP Postdoctoral Fellowships

## Application criteria

Applicants must....

- ...propose to work in a **new country** and with a **new supervisor**
  - Citizen of a HFSP 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**



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# 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)





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# 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

## Next Call for Applications

Award year 2025:

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Submission Invited Full Proposals: September 2025

Award announcement: end-March 2026

Look here:

<https://www.hfsp.org/funding/hfsp-funding/postdoctoral-fellowships>



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# HFSP Contacts & Helpful Resources

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

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

Fellowships:  
[fellow@hfsp.org](mailto:fellow@hfsp.org)

**Thank you! – Questions?**



HFSP Secretariat, Strasbourg