

# Annual Award Report to HFSPO Members

## **European Commission FY 2024-2025**

(1 April 2024 - 31 March 2025)

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## 1 Executive summary

#### General

The HFSPO Board of Trustees approved the following awards for 2024:

- 34 Research Grants out of a total of 711 eligible Letters of Intent and 100 Full Proposals (34%). Of those awarded, 25 were Research Grants-Program and 9 were Research Grants-Early Career. *The success rate of HFSP Research Grants in 2024: 4.8%*
- 59 Postdoctoral Fellowships out of a total of 535 Letters of Intent and 107 Full Proposals (55%). Of those awarded, 48 were Long-Term Fellowships and 11 were Cross-Disciplinary Fellowships. <u>The success rate of HFSP Fellowships in 2024: 11%</u>

## **European Commission**

With awards starting in 2024, HFSPO will support:

- Sixteen EU based scientists who are involved in 14 out of the 34 HFSP Research Grants awarded in 2024. Five scientists are Research Grants-Early Career team members, of which one is a principal-investigator. Eleven scientists were awarded Research Grants-Program, of which five are principal investigators.
- Ten scientists from European countries who were awarded Long-Term Fellowships (eight) and Cross-Disciplinary Fellowships (two).
- Four Long-Term Fellows and one Cross-Disciplinary Fellow who will work in research institutions in Austria, Belgium and Portugal.

For awards in previous years, see Chapter 4 European Commission 1990-2024

## 2 Introduction to HFSP programs

The International Human Frontier Science Program Organization (HFSPO) funds an international program of research support for frontier research on the complex mechanisms of living organisms through the Human Frontier Science Program (HFSP). Research is funded at all levels of biological complexity from biomolecules to the interactions between organisms.

Key elements of HFSP's mission are to support innovative, cutting edge research at the frontiers of the life sciences, to encourage high risk research, to promote international collaboration in the spirit of science without borders, and to support early career researchers.

HFSP schemes are highly competitive, but also highly prestigious. This prestige, together with the fact that the schemes provide researchers with unique opportunities to work collaboratively across all countries and disciplines, attracts many outstanding applications each year.

HFSP Research Grants (Research Grants-Program and Research Grants-Early Career) provide 3 years of support for international teams involving at least two countries. Preference is given to intercontinental collaborations (rather than all N. American or all European teams). All team members are expected to broaden the character of their research compared to their ongoing research programs and interact with teams bringing expertise that is very different from their own so as to create novel approaches to problems in fundamental biology. All members of a Research-Grant Early Career team must be within 5 years of establishing their independent research group and no more than 10 years from their doctoral degree. Research Grant-Program teams may consist of team members at any stage of their career as independent investigators. Each grant is an award to at least two researchers from different countries. Furthermore, HFSP expects that by creating new exchanges, these international interactions will lead to innovative projects.

There is a single annual competition for HFSP Research Grants and a full description of the review process is available at:

https://www.hfsp.org/funding/hfsp-funding/research-grants#review procedures

**HFSP Fellowships** support innovative, ground-breaking projects that have the potential to advance knowledge in the applicants' field of study or open a new approach to a research problem. High risk research is supported.

Long-Term Fellowships support applicants with a degree in the life science to obtain training in a new area of research in an outstanding laboratory of their choice in another country. Cross-Disciplinary Fellowships are intended for postdoctoral fellows with a degree outside the life sciences (e.g. physical sciences, chemistry, mathematics, engineering or computer sciences) who wish to receive training in biology. HFSP Fellows receive 3 years of support to obtain training in an outstanding laboratory of their choice in another country. The annual competition for HFSP Fellowship awards is explained in detail at <a href="http://www.hfsp.org/funding/postdoctoral-fellowships">http://www.hfsp.org/funding/postdoctoral-fellowships</a>.

## 3 Awards in 2024 for the EU

HFSP support provided to EU and non-EU scientists working in EU laboratories, and EU scientists working abroad.

## 3.1. Overview

| Research Grants  |   |
|--|---|
| Number of grants awarded to leaders of international teams working in the EU (principal investigators):  Research Grants-Program | 5 |
| Research Grants-Early Career   | 1 |
| Scientists working in the EU who will collaborate in HFSP international research teams (co-investigators):                       |   |
| Research Grants-Program  | 6 |
| Research Grants-Early Career   | 7 |
|  |   |
| Fellowships  |   |
| Number of fellowships awarded to EU applicants:  |   |
| Long-Term Fellowships  | 8 |
| Cross-Disciplinary Fellowships   | 2 |
| Number of fellowships awarded to foreign scientists who wish to work in the EU:  |   |
| Long-Term Fellowships  | 4 |
| Cross-Disciplinary Fellowships   | 1 |

## 3.2 Research Grants 2024

# Grants awarded to leaders of international teams working in the EU (principal investigators)

## Research Grants-Program

| Dept. of Microbiology, Immunbiology<br>and Genetics<br>University of Vienna                                 | Temporal structures in complex deep-<br>sea versus surface marine life: from<br>molecules to communities  |
|---|---|
|   |   |
| Dept. of Aqua<br>Technical University of Denmark<br>Kgs. Lyngby   | Functional ecology of flagellates sheds new light on early eukaryotic evolution.  |
|   |   |
| Bacterial Signalling Lab.<br>Fundacao Calouste Gulbenkian<br>Oeiras   | Hormone-like Bacterial Signaling<br>Molecules as Mediators of Gut-Brain<br>Dialogues  |
|   |   |
| Dept. of Cellular and Systems Neurobiology<br>Instituto de Neurociencias de Alicante<br>Sant Joan d'Alacant | Understanding the molecular basis of animal cold thermosensation  |
| Dept. of Integrative cell and tissue dynamics<br>Institute for Bioengineering of Catalonia<br>Barcelona     | Physical forces and mechanotransduction during mouse embryo implantation  |
|   | and Genetics University of Vienna  Dept. of Aqua Technical University of Denmark Kgs. Lyngby  Bacterial Signalling Lab. Fundacao Calouste Gulbenkian Oeiras  Dept. of Cellular and Systems Neurobiology Instituto de Neurociencias de Alicante Sant Joan d'Alacant  Dept. of Integrative cell and tissue dynamics Institute for Bioengineering of Catalonia |

## Research Grants-Early Career

| SPA | ١N |
|-----|----|
|-----|----|

RUIZ-GARCIA
Depto de Estructura de la Materia,
Miguel
Física Térmica y Electrónica
Universidad Complutense de Madrid
The Emergence of Collective
Intelligence: Understanding Human
Behavior through AI Agents

# Scientists working in the EU who will collaborate in HFSP international research teams (co-investigators)

## Research Grants-Program

| DE | LGII | IN A |
|----|------|------|
| DE | LUIL | JIVI |

PI: BABIN Marcel, Canada

**FRIPIAT Francois** Dept. of Geosciences, Environment

and Society

Université libre de Bruxelles (ULB)

Trapped in ice

#### **NETHERLANDS**

PI: TREPAT Xavier, Spain

HIIRAGI Takashi Dept. of Multi Cellular Coordination

**Hubrecht Institute** (Japan)

Utrecht

Physical forces and

mechanotransduction during mouse

embryo implantation

**SPAIN** 

PI: CASTRILLO Gabriel, UK (Spain)

**VALLI Adrian** Dept. of Plant Molecular Genetics (Argentina) National Center of Biotechnology (CSIC)

Madrid

3D-bioprinting meets machine learning: a novel tool to decipher the

determinants of viral tropism.

PI: COUDRET Christophe, France

**TUVAL Idan** Mediterranean Institute for Advanced

> Studies - CSIC **Esporles**

Illuminating Microbial Communication

Networks: The Phycosphere lab

PI: LESMAN Ayelet, Israel

ZAERA POLO Ramon Dept. of Continuum Mechanics and

Structural Analysis

Carlos III University of Madrid (UC3M)

Leganes

Vibrational information transfer

between living cells in the extracellular matrix

**SWEDEN** 

PI: VIANA Felix, Spain

**DALEN Love** Dept. of Zoology

Stockholm University

Understanding the molecular basis of

animal cold thermosensation

## Research Grants-Early Career

## **NETHERLANDS**

PI: DUNNING Luke, UK

**REIJERS Valerie** Dept. of Phyiscal Geography

Utrecht University (UU)

S3: Securing shifting sands - from

genes to geoengineering

PI: MANHART Michael, USA

**WORTEL Meike** Dept. of Microbiology

University of Amsterdam

How predictable is evolution? Ecoevolutionary dynamics of fungi across

biological scales

**SPAIN** 

PI: MONGERA Alessandro, UK (Italy)

ALMUEDO-CASTILLO Dept. of Gene regulation and

morphogenesis, Centro Andaluz de Biología Maria

del Desarrollo/CSIC

Sevilla

Mechanical control of hidden embryonic boundaries

**SWEDEN** 

PI: HUSNIK Filip, Japan (Czech Republic)

**STAIRS Courtney** 

(Canada)

Dept. of Biology **Lund University** 

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

## 3.3 Fellowships 2024

## Fellowships awarded to EU applicants

Long-Term Fellowships

## **AUSTRIA**

MIEHL Christoph Austria From Technical University Munich

Reward-based learning of assemblies in olfaction

ia Munich Germany

To The University of Chicago

Chicago USA Supervisors: DOIRON Brent OSWALD Anne-Marie

## **FINLAND**

**DUFVA Olli** 

Finland

From University of Helsinki

Helsinki Finland Deciphering genomic determinants of immunity in tumour organoid models at single-cell resolution

To Wellcome Sanger Institute

Cambridge

UK

Supervisor: GARNETT Mathew

## **GREECE**

LIAKOS Anastasios

Greece

From National and Kapodistrian University of

Athens Athens Greece Chromatin rejuvenation and DNA damage responses during ageing of human chromosomes

To University Medical Center Göttingen

Göttingen Germany Supervisor:

**PAPANTONIS Argyris** 

## **LITHUANIA**

**BOREIKAITE Vytaute** 

Lithuania

From University of Cambridge

Cambridge

UK

Structural basis of the human spliceosome quality control

To Research Institute of Molecular

Pathology Vienna Austria Supervisor:

PLASCHKA Clemens

## THE NETHERLANDS

**BORM Lars**The Netherlands

From

Karolinska Institutet

Stockholm Sweden Combining spatial-omics with AI to model developmental gene regulation in space and time

To VIB Institute for Biotechnology

Leuven Belgium Supervisor: AERTS Stein

**DE HAAN Diede** 

The Netherlands

From

Weizmann Institute of Science

Rehovot Israel Reconstructing the ancestral architecture of animal cells

To Institut Pasteur

Paris France Supervisor: BRUNET Thibaut

## **PORTUGAL**

**SILVA Marta** 

Portugal

From University of Barcelona

Barcelona Spain The neural basis of naturalistic

memory

To Columbia University

New York USA Supervisor: JACOBS Joshua

## **SPAIN**

**SANCHÍS CALLEJA** 

**Fátima** Spain From ETH Zurich Zurich

Switzerland

Understanding the role of

endometrial

compartmentalization in

menstruation

To Harvard University

Cambridge

USA

Supervisor: MCKINLEY Kara

Cross-Disciplinary Fellowships

## **AUSTRIA**

**RIEDL Michael** 

Austria

From Inst

Institute of Science and Technology

Austria

Klosterneuburg

Austria

Mechano-chemical coupling in

cytoplasmic flows: the competition between selforganization and chaos

To TU Dresden

Dresden Germany Supervisor: BRUGUES Jan

**SLOVENIA** 

**PAVLIC Alen** 

Slovenia

From

То

ETH Zurich Zurich

Switzerland

California Institute of Technology

Pasadena USA Ultrasound neuromodulation: search for the physical origin

Supervisor:

SHAPIRO Mikhail

## Fellowships awarded to foreign scientists who wish to work in the EU

## Long-Term Fellowships

## **AUSTRIA**

**BOREIKAITE Vytaute** 

Lithuania

From University of Cambridge

Cambridge

UK

Structural basis of the human spliceosome quality control

To Research Institute of Molecular

Pathology Vienna Austria Supervisor: PLASCHKA Clemens

## **BELGIUM**

**BORM Lars**The Netherlands

From Karolinska Institutet

Stockholm Sweden Combining spatial-omics with AI to model developmental gene regulation in space and time

To VIB Institute for Biotechnology

Leuven Belgium Supervisor: AERTS Stein

**CAMPETELLA Florencia**Argentina/Spain

From Ma

Max Planck Institute for Chemical

Ecology Jena Germany Unraveling the genetic basis of natural variation in secretion

pathways

To VIB Institute for Biotechnology

Leuven Belgium Supervisor: VERSTREPEN Kevin

## **PORTUGAL**

**SÁNCHEZ Juan** Argentina From Instituto de Agrobiotecnología del

Litoral, UNL-CONICET

Santa Fe Argentina Unraveling the cellular and molecular dynamics of adult

neurogenic niches

To Champalimaud Foundation

Lisbon Portugal Supervisor: RHINER Christa

## Cross-Disciplinary Fellowships

## **AUSTRIA**

**HIDAKA Takuya** Japan From Kyoto University

Kyoto Japan Molecular mechanism of sister chromatid resolution in

replicated human chromosomes

To Institute of Molecular Biotechnology

Vienna Austria Supervisor: GERLICH Daniel

## 4 European Commission 1990-2024

This section summarizes European Commission's involvement in HFSPO funded research projects in 2024 and integrates a historical perspective with running totals over the last 10 years.

#### 4.1 HFSP Research Grants

The table below lists the number of EU based scientists at the Letter of Intent (LI) stage and those scientists who participated in a Full Proposal. The data shown in the table express the status at the time of submitting the application to HFSP. Scientists may have moved their laboratory to a different country in the years after receiving HFSPO support.

|           | Letters (        | of Intent (LI)      | t (LI) Full Proposals (FP) Awardees (AW) |                     |                  | dees (AW)            |
|-----------|------------------|---------------------|--|---------------------|------------------|----------------------|
| Year      | All team members | EU based scientists | All team<br>members                      | EU based scientists | Total<br>Awarded | EU based<br>Awardees |
| 1990-2014 | 28944*           | 4510                | 17891+                                   | 2213                | 3607             | 357                  |
| 2015      | 3092             | 498                 | 252                                      | 40                  | 98               | 10                   |
| 2016      | 2604             | 404                 | 272                                      | 32                  | 100              | 12                   |
| 2017      | 3208             | 490                 | 252                                      | 36                  | 98               | 12                   |
| 2018      | 2321             | 376                 | 251                                      | 30                  | 102              | 13                   |
| 2019      | 2394             | 364                 | 268                                      | 31                  | 105              | 10                   |
| 2020      | 2051             | 313                 | 256                                      | 42                  | 86               | 14                   |
| 2021      | 2062             | 369                 | 292                                      | 45                  | 94               | 11                   |
| 2022      | 2032             | 349                 | 206                                      | 35                  | 100              | 21                   |
| 2023      | 1672             | 276                 | 247                                      | 37                  | 107              | 18                   |
| 2024      | 1978             | 328                 | 313                                      | 53                  | 108              | 16                   |
| Total     | 52358            | 8277                | 20500                                    | 2594                | 4605             | 494                  |

<sup>\*</sup>there were no Letters of Intent in the application process before 2001

The table below lists the number of teams including EU based scientists in the last 10 years.

|      | Letters of Intent<br>(LI)         | Full Proposals<br>(FP)            | Awardees<br>(AW)                  | Success rate        | Success rate        | Total            |
|------|-----------------------------------|-----------------------------------|-----------------------------------|---------------------|---------------------|------------------|
| Year | Teams with<br>member (s)<br>in EU | Teams with<br>member (s)<br>in EU | Teams with<br>member (s)<br>in EU | based on Lis<br>(%) | based on FPs<br>(%) | Awarded<br>teams |
| 2015 | 396                               | 31                                | 9                                 | 2,3                 | 29,0                | 31               |
| 2016 | 315                               | 28                                | 10                                | 3,2                 | 35,7                | 32               |
| 2017 | 394                               | 30                                | 9                                 | 2,3                 | 30,0                | 30               |
| 2018 | 312                               | 27                                | 11                                | 3,5                 | 40,7                | 31               |
| 2019 | 300                               | 28                                | 9                                 | 3,0                 | 32,1                | 34               |
| 2020 | 262                               | 36                                | 12                                | 4,6                 | 33,3                | 28               |
| 2021 | 290                               | 41                                | 9                                 | 3,1                 | 22,0                | 28               |
| 2022 | 288                               | 29                                | 18                                | 6,2                 | 62,1                | 32               |
| 2023 | 235                               | 35                                | 18                                | 7,7                 | 51,4                | 34               |
| 2024 | 277*                              | 44**                              | 14***                             | 5,0                 | 31,8                | 34               |

<sup>\*2</sup> teams with 3 EU based members and 47 with 2 EU based members/

<sup>+</sup> for 1990/91, there is no information available on the number of applicants

<sup>\*\*8</sup> teams with 2 EU based members+ 1 move from FR to NL

<sup>\*\*\* 2</sup> teams with 2 EU based members.

## 4.2 HFSP Postdoctoral Fellowships

The table below shows the number of fellowship applications reviewed and awards granted to EU applicants and the number of fellowships applied for and carried out in the EU.

| Award year     | EU<br>fellowship<br>applicants | Total<br>applicants | EU<br>fellowship<br>awardees | Total<br>awards | EU countries<br>as proposed<br>host<br>countries by<br>fellowship<br>applicants | EU countries<br>as host<br>countries of<br>HFSP fellows |
|----------------|--------------------------------|---------------------|------------------------------|-----------------|---|---|
| 1990-<br>2014* | 3,071                          | 16,150              | 487                          | 2,844           | 1,108   | 102   |
| 2015           | 161                            | 788                 | 9                            | 75              | 93  | 6   |
| 2016           | 132                            | 697                 | 7                            | 75              | 77  | 5   |
| 2017           | 154                            | 776                 | 12                           | 72              | 84  | 7   |
| 2018           | 106                            | 588                 | 14                           | 90              | 72  | 15  |
| 2019           | 92                             | 580                 | 16                           | 82              | 76  | 5   |
| 2020           | 93                             | 544                 | 6                            | 65              | 82  | 7   |
| 2021           | 115                            | 665                 | 14                           | 56              | 92  | 6   |
| 2022           | 80                             | 493                 | 10                           | 65              | 99  | 8   |
| 2023           | 71                             | 429                 | 6                            | 50              | 74  | 5   |
| 2024**         | 83                             | 535                 | 10                           | 59              | 80  | 5   |
| Total          | 4,158                          | 22,245              | 591                          | 3,533           | 1,937   | 171   |

<sup>\*</sup> The number of candidates from and to the EU for award year 1990 to 1992 is not available.

<sup>\*\*</sup> The figures for 2024 reflect the awards approved by the Board of Trustees in March 2024 and may be subject to change.

## 5 International distribution of 2024 awards

As last year, this section shows tabular breakdown according to country (location of laboratory), nationality and host country (of HFSP fellowship holders) for 2024 Awards.

In addition, this year, new figures present a country comparison for the complete record and the last 10 years of HFSP awards for MSP and a separate presentation for the awardees in or from European countries.

#### 5.1 Research Grants 2024

**34** grants were awarded (25 Research Grants-Program and 9 Research Grants-Early Career). Each grant is an award to at least two researchers from different countries. The Principal Investigator is responsible for submitting the application and coordinating the collaboration.

The countries in which the 34 Principal Investigators and the 74 co-applicants work are shown in Table I, together with the total number of applications. Their nationalities are shown in Table II.

Table I Applicants / Awardees listed by COUNTRY - Research Grants

|                     | Letters of Intent* |        | Fu      | II Propos | als   | Awardees |       |       |       |
|---------------------|--------------------|--------|---------|-----------|-------|----------|-------|-------|-------|
| RG-P= Program       | RG-P               | RG-EC  | TOTAL   | RG-P      | RG-EC | TOTAL    | RG-P  | RG-EC | TOTAL |
| RG-EC= Early Career |                    |        |         |           |       |          |       |       |       |
| Australia           | 67                 | 5      | 72      | 8         | 1     | 9        | 3     | 0     | 3     |
| Canada              | 76                 | 18     | 94      | 10        | 2     | 12       | 3     | 1     | 4     |
| EU                  | 262(a)             | 66(a)  | 328(a)  | 40(b)     | 13(b) | 53(b)    | 11(c) | 5(c)  | 16(c) |
| France              | 105                | 6      | 111     | 20        | 1     | 21       | 9     | 0     | 9     |
| Germany             | 148                | 28     | 176     | 21        | 3     | 24       | 7     | 2     | 9     |
| India               | 41                 | 9      | 50      | 5         | 0     | 5        | 0     | 0     | 0     |
| Israel              | 69                 | 14     | 83      | 19        | 1     | 20       | 8     | 0     | 8     |
| Italy               | 64                 | 10     | 74      | 5         | 1     | 6        | 1     | 0     | 1     |
| Japan               | 95                 | 12     | 107     | 13        | 3     | 16       | 4     | 2     | 6     |
| Korea               | 8                  | 5      | 13      | 1         | 0     | 1        | 0     | 0     | 0     |
| New Zealand         | 6                  | 0      | 6       | 1         | 0     | 1        | 1     | 0     | 1     |
| Norway              | 22                 | 3      | 25      | 2         | 1     | 3        | 0     | 1     | 1     |
| Singapore           | 28                 | 3      | 31      | 5         | 0     | 5        | 0     | 0     | 0     |
| South Africa        | 10                 | 7      | 17      | 2         | 1     | 3        | 0     | 1     | 1     |
| Switzerland         | 45                 | 5      | 50      | 6         | 1     | 7        | 1     | 0     | 1     |
| UK                  | 144                | 24     | 168     | 31        | 9     | 40       | 12    | 6     | 18    |
| USA                 | 371                | 87     | 458     | 62        | 14    | 76       | 20    | 7     | 27    |
| Non MSPs            | 92(a')             | 23(a') | 115(a') | 8(b')     | 3(b') | 11(b')   | 2(c') | 1(c') | 3(c') |
| TOTAL               | 1653               | 325    | 1978    | 259       | 54    | 313      | 82    | 26    | 108   |

<sup>\*</sup>Eligible Letters of Intent

#### (a) EU Letters of Intent

RG-P: Austria 18, Belgium 15, Czech Republic 16, Denmark 20, Estonia 2, Finland 4, Greece 2, Hungary 3, Ireland 9, Malta 1, Netherlands 54, Poland 5, Portugal 17, Romania 2, Slovakia 1, Slovenia 3, Spain 60, Sweden 30.

RG-EC: Austria 5, Belgium 5, Czech Republic 1, Denmark 4, Estonia 1, Finland 1, Greece 2, Ireland 3, Netherlands 17, Portugal 5, Slovakia 1, Slovenia 1, Spain 14, Sweden 6.

## (b) EU Full Proposals

RG-P: Austria 3, Belgium 4, Czech Republic 2, Denmark 3, Hungary 1, Ireland 2, Netherlands 8, Poland 2, Portugal 4, Slovenia 1, Spain 7, Sweden 3.

RG-EC: Austria 1, Belgium 1, Netherlands 6, Spain 4, Sweden 1.

#### (c) EU Awardees

RG-P: Austria 1, Belgium 1, Denmark 1, Netherlands 1, Portugal 1, Spain 5, Sweden 1.

RG-EC: Netherlands 2, Spain 2, Sweden 1.

#### (a') Non MSPs Letters of Intent

RG-P: Argentina 10, Brazil 14, Cameroon 1, Chile 10, China 14, Colombia 5, Costa Rica 1, Cuba 1, DR Congo 1, Ethiopia 1, Ghana 2, Malaysia 1, Mexico 4, Nigeria 1, Pakistan 2, Panama 1, Peru 1, Serbia 1, Taiwan 5, Tunisia 1, Turkey 6, Uganda 1, United Arab Emirates 3, Uruguay 4, Vietnam 1.

RG-EC: Argentina 1, Bangladesh 1, Botswana 1, Brazil 2, Cameroon 1, Chile 1, China 5, Ethiopia 1, Kenya 1, Lebanon 1, Mexico 1, Taiwan 2, Thailand 1, Uganda 1, United Arab Emirates 2, Zimbabwe 1.

#### (b') Non MSPs Full Proposals

 $RG-P: Argentina\ 2,\ Chile\ 1,\ China\ 4,\ Uruguay\ 1.$ 

RG-EC: Ethiopia 1, Hong Kong 1, Taiwan 1.

#### (c') Non MSPs Awardees

RG-P: Argentina 1, China 1.

RG-EC: Ethiopia 1.

Table II Applicants / Awardees listed by NATIONALITY - Research Grants

|                     | Letters of Intent* |        | Fu      | ıll Proposa    | als   | Awardees |       |       |       |
|---------------------|--------------------|--------|---------|----------------|-------|----------|-------|-------|-------|
| RG-P= Program       | RG-P               | RG-EC  | TOTAL   | RG-P           | RG-EC | TOTAL    | RG-P  | RG-EC | TOTAL |
| RG-EC= Early Career |                    |        | . •     |                |       |          |       |       | . •   |
| Australia           | 52                 | 6      | 58      | 3              | 1     | 4        | 1     | 0     | 1     |
| Canada              | 74                 | 22     | 96      | 11             | 5     | 16       | 2     | 2     | 4     |
| EU                  | 290(a)             | 65(a)  | 355(a)  | 49(b)          | 11(b) | 60(b)    | 11(c) | 6(c)  | 17(c) |
| France              | 91                 | 13     | 104     | 16             | 1     | 17       | 7     | 0     | 7     |
| Germany             | 153                | 24     | 177     | 21             | 2     | 23       | 9     | 1     | 10    |
| India               | 59                 | 24     | 83      | 14             | 4     | 18       | 3     | 0     | 3     |
| Israel              | 74                 | 16     | 90      | 19             | 1     | 20       | 8     | 0     | 8     |
| Italy               | 106                | 18     | 124     | 12             | 5     | 17       | 4     | 2     | 6     |
| Japan               | 101                | 10     | 111     | 16             | 2     | 18       | 5     | 1     | 6     |
| Korea               | 10                 | 4      | 14      | 1              | 0     | 1        | 0     | 0     | 0     |
| New Zealand         | 10                 | 0      | 10      | 3              | 0     | 3        | 2     | 0     | 2     |
| Norway              | 7                  | 2      | 9       | 0              | 1     | 1        | 0     | 1     | 1     |
| Singapore           | 11                 | 2      | 13      | 1              | 0     | 1        | 0     | 0     | 0     |
| South Africa        | 8                  | 6      | 14      | 1              | 2     | 3        | 0     | 2     | 2     |
| Switzerland         | 28                 | 4      | 32      | 3              | 0     | 3        | 1     | 0     | 1     |
| UK                  | 94                 | 11     | 105     | 18             | 3     | 21       | 9     | 3     | 12    |
| USA                 | 317                | 57     | 374     | 51             | 12    | 63       | 15    | 6     | 21    |
| Non MSPs            | 163(a')            | 41(a') | 204(a') | 19 <b>(b')</b> | 4(b') | 23(b')   | 4(c') | 2(c') | 6(c') |
| TOTAL               | 1653**             | 325    | 1978**  | 259**          | 54    | 313**    | 82**  | 26    | 108** |

<sup>\*</sup>Eligible Letters of Intent, \*\*Unknown nationalities: 5 RGP for letters of Intent and 1 RG-P for full proposals and awards

#### (a) EU Letters of Intent

RG-P: Austria 13, Belgium 17, Bulgaria 1, Croatia 3, Cyprus 1, Czech Republic 12, Denmark 13, Estonia 2, Finland 7, Greece 12, Hungary 10, Ireland 13, Malta 1, Netherlands 45, Poland 10, Portugal 20, Romania 5, Slovakia 4, Slovenia 3, Spain 76, Sweden 22. RG-EC: Austria 3, Belgium 2, Croatia 2, Czech Republic 1, Denmark 3, Greece 6, Hungary 1, Ireland 5, Netherlands 9, Poland 1, Portugal 5, Slovakia 1, Slovenia 2, Spain 21, Sweden 3.

#### (b) EU Full Proposals

RG-P: Belgium 2, Croatia 1, Czech Republic 1, Denmark 3, Finland 2, Greece 4, Hungary 1, Ireland 4, Netherlands 8, Poland 2, Portugal 6, Slovenia 1, Spain 11, Sweden 3.

RG-EC: Czech Republic 1, Netherlands 3, Poland 1, Spain 6.

#### (c) EU Awardees

RG-P: Belgium 1, Denmark 2, Portugal 2, Spain 5, Sweden 1.

RG-EC: Czech Republic 1, The Netherlands 2, Spain 3.

## (a') Non MSPs Letters of Intent

RG-P: Albania 1, Argentina 16, Belarus 1, Brazil 22, Cameroon 1, Chile 10, China 30, Colombia 8, Costa Rica 1, Cuba 1, DR Congo 1, Egypt 1, Ethiopia 1, Ghana 2, Iceland 1, Indonesia 1, Iran 1, Madagascar 1, Malaysia 5, Mexico 6, Nigeria 3, Pakistan 3, Panama 1, Papua New Guinea 1, Peru 2, Russia 7, Senegal 1, Serbia 1, Taiwan 5, Thailand 1, Tunisia 1, Turkey 13, Uganda 1, Ukraine 4, United Arab Emirates 1, Uruguay 3, Vietnam 4.

RG-EC: Algeria 1, Argentina 4, Bangladesh 1, Brazil 3, Cameroon 2, Chile 1, China 10, Ethiopia 1, Kenya 2, Lebanon 1, Macedonia 1, Malaysia 1, Mexico 2, Russia 2, Taiwan 3, Thailand 1, Uganda 1, Vietnam 1, Zimbabwe 3.

#### (b') Non MSPs Full Proposals

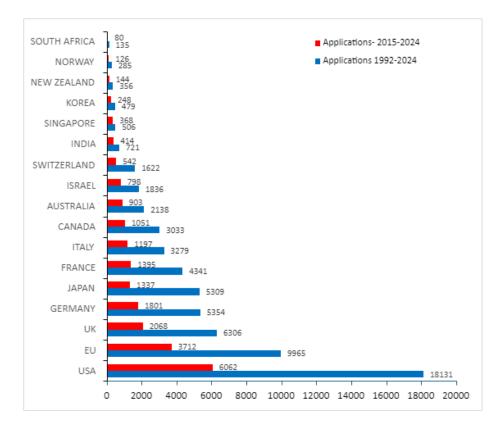
RG-P: Argentina 3, Chile 1, China 4, Colombia 1, Egypt 1, Madagascar 1, Malaysia 2, Russia 2, Turkey 1, Ukraine 2, Uruguay 1. RG-EC: Algeria 1, Ethiopia 1, Russia 1, Taiwan 1.

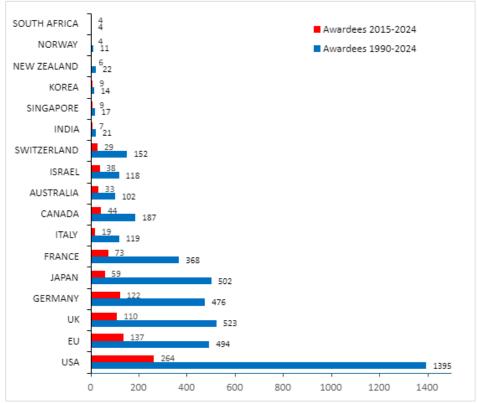
#### (c') Non MSPs Awardees

RG-P: Argentina 2, Madagascar 1, Russia 1.

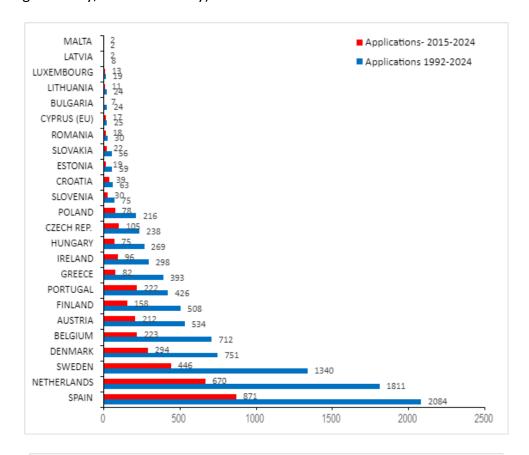
RG-EC: Ethiopia 1, Russia 1.

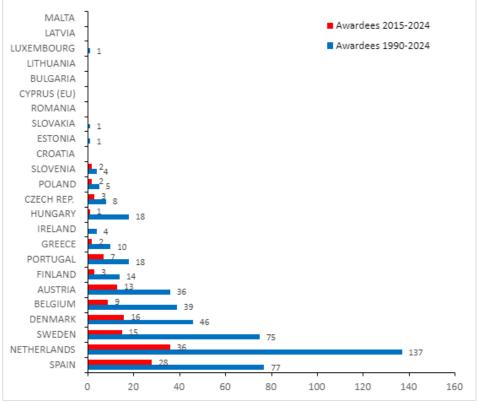
**Fig. 1**: Number of Research Grant applicants 1992-2024 and in the last ten years (2015-2024) (upper panel) and Research Grant awardees 1990-2024 and 2015-2024 (lower panel) by country where the research laboratory was located (until 2001 Research Grants were evaluated in single step of Full Proposals but as of 2002 the numbers represent submitted Letters of Intent).





**Fig. 2**: Number of Research Grant applicants 1992-2024 and 2015-2024 (upper panel) and Research Grant awardees 1990-2024 and 2015-2024 (lower panel) in European countries (excluding Germany, France and Italy).





#### 5.2 Fellowships 2024

In 2024, 535 fellowship letters of intent were reviewed. 48 Long-Term Fellowships and 11 Cross-Disciplinary Fellowships were awarded to young post-doctoral scientists who wish to work in a laboratory abroad.

**Table III Applications / Awards listed by NATIONALITY** (as approved by the Board in March 2024)

|   | Le  | tters of In | tent     | Full Proposals |     |         |     | Awards |         |  |
|---|-----|-------------|----------|----------------|-----|---------|-----|--------|---------|--|
| LTF = Long-Term<br>CDF=Cross-Disciplinary | LTF | CDF         | TOTAL    | LTF            | CDF | TOTAL   | LTF | CDF    | TOTAL   |  |
| Australia                                 | 11  | 0           | 11       | 1              | 0   | 1       | 0   | 0      | 0       |  |
| Canada                                    | 11  | 0           | 11       | 1              | 0   | 1       | 1   | 0      | 1       |  |
| EU  | 74  | 9           | 83 (a)   | 16             | 2   | 18 (b)  | 8   | 2      | 10 (c)  |  |
| France                                    | 35  | 0           | 35       | 7              | 0   | 7       | 3   | 0      | 3       |  |
| Germany                                   | 23  | 6           | 29       | 5              | 4   | 9       | 3   | 3      | 6       |  |
| India                                     | 76  | 15          | 91       | 11             | 1   | 12      | 6   | 1      | 7       |  |
| Israel                                    | 12  | 4           | 16       | 4              | 0   | 4       | 2   | 0      | 2       |  |
| Italy                                     | 24  | 3           | 27       | 4              | 2   | 6       | 1   | 2      | 3       |  |
| Japan                                     | 34  | 2           | 36       | 9              | 1   | 10      | 7   | 1      | 8       |  |
| Korea                                     | 17  | 3           | 20       | 2              | 1   | 3       | 0   | 0      | 0       |  |
| New Zealand                               | 0   | 0           | 0        | 0              | 0   | 0       | 0   | 0      | 0       |  |
| Norway                                    | 0   | 0           | 0        | 0              | 0   | 0       | 0   | 0      | 0       |  |
| Singapore                                 | 3   | 0           | 3        | 1              | 0   | 1       | 1   | 0      | 1       |  |
| South Africa                              | 0   | 0           | 0        | 0              | 0   | 0       | 0   | 0      | 0       |  |
| Switzerland                               | 2   | 1           | 3        | 0              | 0   | 0       | 0   | 0      | 0       |  |
| UK  | 12  | 0           | 12       | 2              | 0   | 2       | 1   | 0      | 1       |  |
| USA                                       | 20  | 1           | 21       | 5              | 1   | 6       | 3   | 0      | 3       |  |
| Other                                     | 112 | 25          | 137 (a') | 23             | 4   | 27 (b') | 12  | 2      | 14 (c') |  |
| TOTAL                                     | 466 | 69          | 535      | 91             | 16  | 107     | 48  | 11     | 59      |  |

#### (a) EU Letters of Intent

LTF: Austria 4, Belgium 3, Bulgaria 1, Croatia 2, Cyprus, EU part 2, Czech Republic 1, Denmark 3, Estonia 2, Finland 1, Greece 11, Hungary 3, Ireland 1, Lithuania 1, The Netherlands 9, Poland 5, Portugal 4, Romania 1, Slovakia 2, Spain 17, Sweden 1 CDF: Austria 1, Greece 1, The Netherlands 3, Poland 1, Slovenia 1, Spain 2

#### (b) EU Full Proposals

LTF: Austria 1, Belgium 1, Cyprus, EU part 1, Finland 1, Greece 2, Hungary 1, Lithuania 1, The Netherlands 3, Portugal 1, Spain 4 CDF: Austria 1, Slovenia 1

#### (c) EU Awardees

LTF: Austria 1, Finland 1, Greece 1, Lithuania 1, The Netherlands 2, Portugal 1, Spain 1 CDF: Austria 1, Slovenia 1

## (a') Letters of Intent from other nationalities

LTF: Algeria 1, Argentina 4, Bangladesh 2, Brazil 3, Cameroon 1, Chile 2, China 21, Colombia 1, Cuba 3, Egypt 1, Iran 3, Lebanon 2, Malaysia 4, Mexico 1, Morocco 1, Myanmar 1, Nigeria 3, Pakistan 6, Peru 1, Philippines 2, Russia 4, Serbia 1, Sudan 2, Taiwan 2, Turkey 4, Ukraine 1, Uruguay 1, Vietnam 1, dual nationalities 33

CDF: Argentina 1, Bangladesh 1, Brazil 3, Chile 1, China 5, Colombia 1, Indonesia 1, Iran 1, Jordan 1, Mexico 1, Nigeria 1, Pakistan 2, Turkey 2, dual nationalities 4

#### (b') Full Proposals from other nationalities

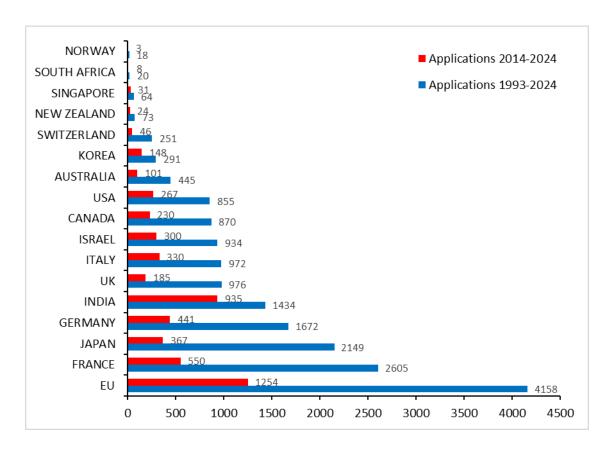
LTF: Argentina 2, China 2, Malaysia 3, Pakistan 1, Sudan 1, Taiwan 2, Turkey 1, Uruguay 1, dual nationalities 10 CDF: Brazil 1, China 1, Indonesia 1, dual nationality 1

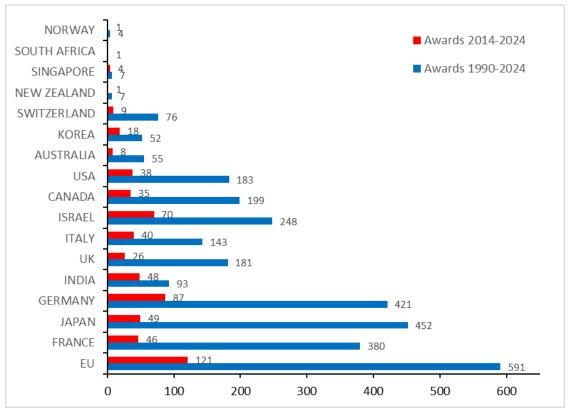
#### (c') Awardees from other nationalities

LTF: Argentina 2, China 1, Sudan 1, Taiwan 2, Uruguay 1, dual nationalities 5

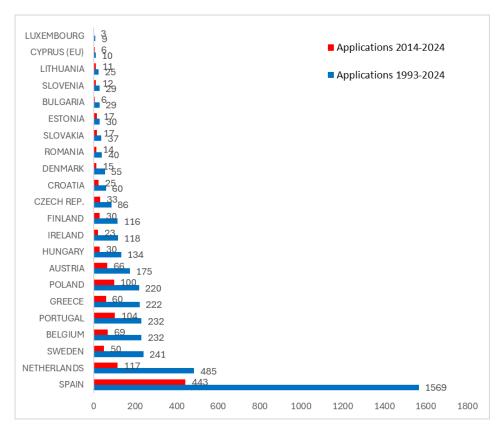
CDF: Indonesia 1, dual nationality 1

**Fig. 3**: Number of Fellowship applicants 1993-2024 and 2014-2024 (upper panel) and Fellowship awardees 1990-2024 and 2014-2024 (lower panel) by nationality





**Fig. 4**: Number of European Fellowship applicants 1993-2024 and 2014-2024 (upper panel) and Fellowship awardees 1990-2024 and 2014-2024 (lower panel) by nationality



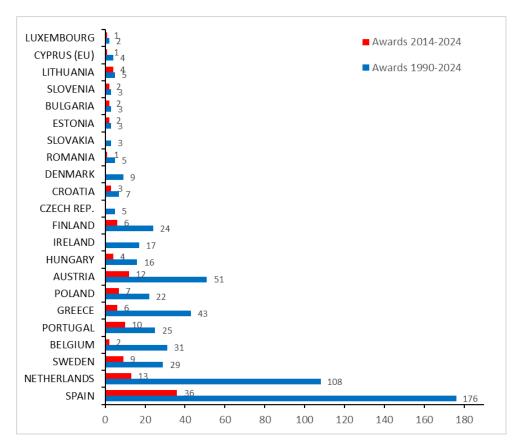


Table IV Applications / Awards listed by HOST COUNTRY

(as approved by the Board in March 2024)

|   | Le  | Letters of Intent Full F |        |     |     | Proposals Awards |     |     |       |
|---|-----|--------------------------|--------|-----|-----|------------------|-----|-----|-------|
| LTF = Long-Term<br>CDF=Cross-Disciplinary | LTF | CDF                      | TOTAL  | LTF | CDF | TOTAL            | LTF | CDF | TOTAL |
| Australia                                 | 7   | 2                        | 9      | 1   | 1   | 2                | 0   | 1   | 1     |
| Canada                                    | 24  | 3                        | 27     | 3   | 2   | 5                | 2   | 1   | 3     |
| EU  | 75  | 5                        | 80 (a) | 13  | 1   | 14 (b)           | 4   | 1   | 5 (c) |
| France                                    | 27  | 5                        | 32     | 5   | 2   | 7                | 4   | 1   | 5     |
| Germany                                   | 38  | 4                        | 42     | 13  | 1   | 14               | 10  | 1   | 11    |
| India                                     | 0   | 0                        | 0      | 0   | 0   | 0                | 0   | 0   | 0     |
| Israel                                    | 5   | 0                        | 5      | 0   | 0   | 0                | 0   | 0   | 0     |
| Italy                                     | 4   | 1                        | 5      | 1   | 0   | 1                | 1   | 0   | 1     |
| Japan                                     | 2   | 0                        | 2      | 0   | 0   | 0                | 0   | 0   | 0     |
| Korea                                     | 0   | 0                        | 0      | 0   | 0   | 0                | 0   | 0   | 0     |
| New Zealand                               | 3   | 0                        | 3      | 0   | 0   | 0                | 0   | 0   | 0     |
| Norway                                    | 2   | 0                        | 2      | 0   | 0   | 0                | 0   | 0   | 0     |
| Singapore                                 | 6   | 0                        | 6      | 0   | 0   | 0                | 0   | 0   | 0     |
| South Africa                              | 1   | 0                        | 1      | 0   | 0   | 0                | 0   | 0   | 0     |
| Switzerland                               | 33  | 3                        | 36     | 3   | 1   | 4                | 2   | 1   | 3     |
| UK  | 60  | 8                        | 68     | 14  | 0   | 14               | 6   | 0   | 6     |
| USA                                       | 174 | 38                       | 212    | 37  | 8   | 45               | 19  | 5   | 24    |
| Other                                     | 5   | 0                        | 5 (a') | 1   | 0   | 1 (b')           | 0   | 0   | 0     |
| TOTAL                                     | 466 | 69                       | 535    | 91  | 16  | 107              | 48  | 11  | 59    |

## (a) EU host countries in Letters of Intent

LTF: Austria 8, Belgium 6, Croatia 1, Denmark 5, Estonia 1, Finland 3, Ireland 1, The Netherlands 16, Portugal 3, Spain 15, Sweden 16 CDF: Austria 1, The Netherlands 1, Portugal 1, Spain 2

## (b) EU host countries in Full Proposals

LTF: Austria 2, Belgium 2, Croatia 1, The Netherlands 3, Portugal 1, Spain 2, Sweden 2 CDF: Austria 1

## (c) EU host countries of Awardees

LTF: Austria 1, Belgium 2, Portugal 1

CDF: Austria 1

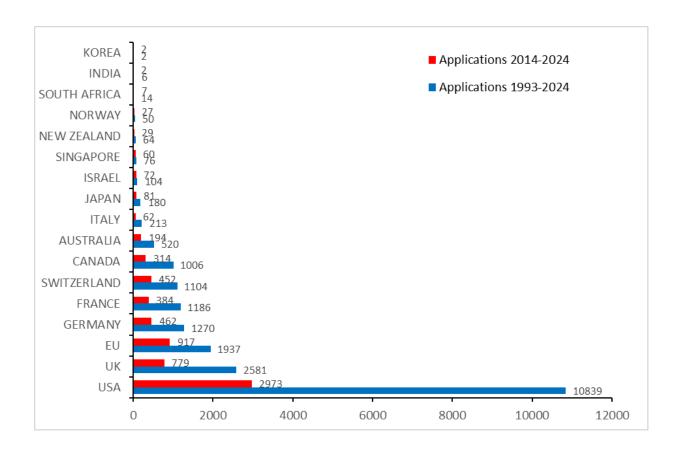
## (a') Other host countries in Letters of Intent

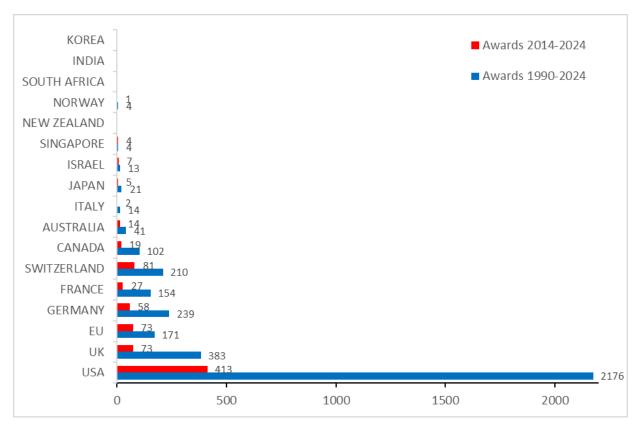
LTF: Brazil 1, China 1, United Arab Emirates 3

## (b') Other host countries in Full Proposals

LTF: United Arab Emirates 1

**Fig. 5**: Fellowship applications 1993-2024 and 2014-2024 (upper panel) and Fellowship awardees 1990-2024 and 2014-2024 (lower panel) per host country





**Fig. 6**: Fellowship applications 1993-2024 and 2014-2024 (upper panel) and Fellowship awardees 1990-2024 and 2014-2024 (lower panel) per host country in Europe

