



**MINISTÈRE
CHARGÉ
DE L'ENSEIGNEMENT
SUPÉRIEUR
ET DE LA RECHERCHE**

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FRANCE – EGYPT

Scientific impact of the PHC IMHOTEP (2009-2024)

MESR-DAEI / MEAE

2025

<http://www.enseignementsup-recherche.gouv.fr>

GENERAL PRESENTATION OF THE PROGRAM

Creation : 2005

The purpose of this program is to develop excellence scientific and technological exchanges between the French and Egyptian laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students.

Total budget (France + Egypt) : around 224 000 € / year

>> including budget from the French part : around 112 000 € / year

>> including budget from the Egyptian part : around 112 000 € / year

Average budget per project (France + Egypt) : around 10 000 € / year

Number of new funded projects per year : around 11

**From 2009-2024 :
580 applications submitted
183 projects funded**

Campus France (2009-2024)

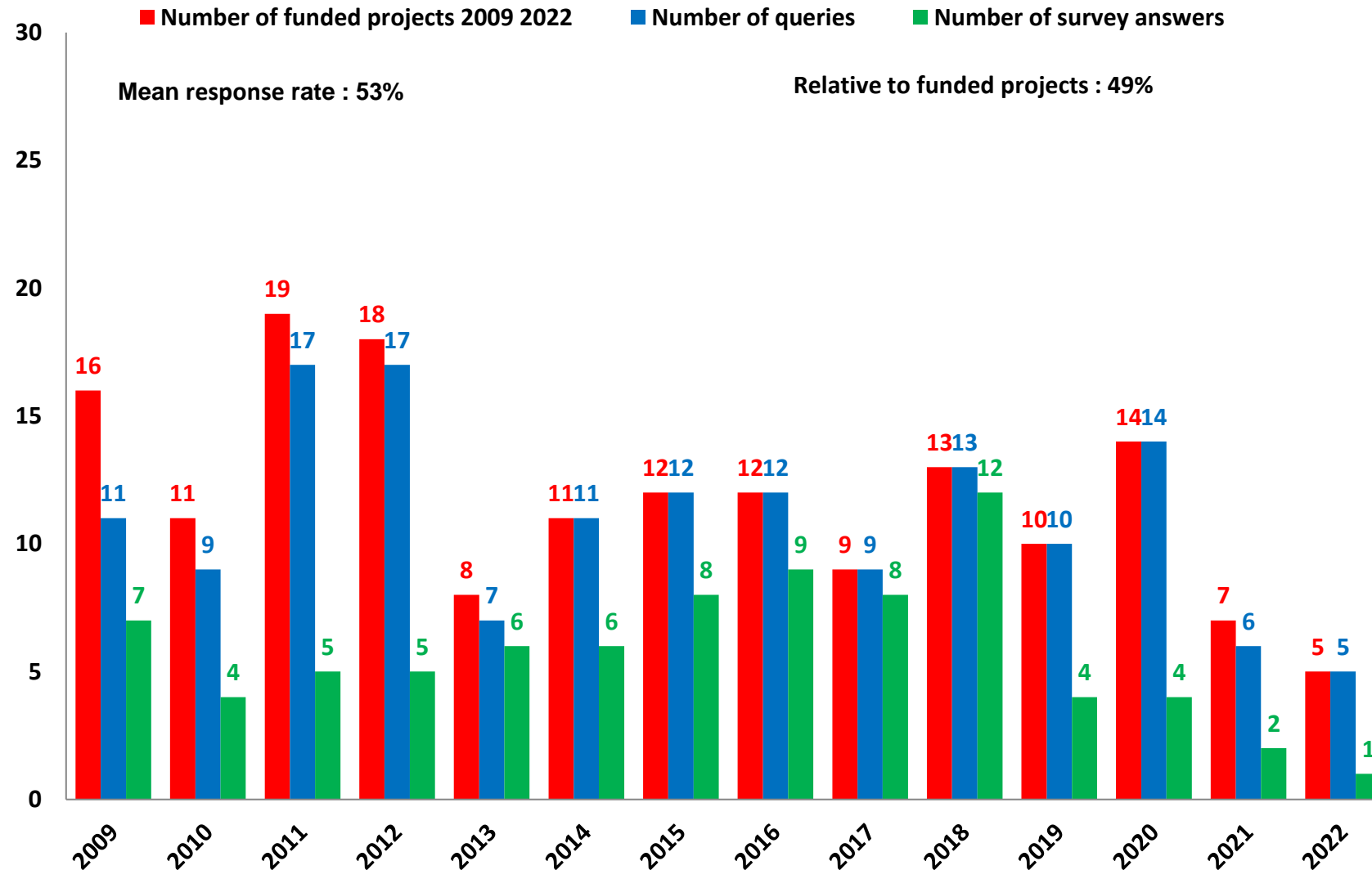
- Information about the PHC IMHOTEP applications
- List of mobilities (from France to Egypt and from Egypt to France)
- Survey 1 : 2009-2018 ; Survey 2 : 2019-2024

Survey (2009-2022)

- Target : French Principal Investigators of selected projects between 2009 and 2022
- Survey 1 (2009-2018) duration : from March to May 2020
60% response ratio (70 respondents for 115 queries)
- Survey 2 (2019-2022) duration : from January to February 2025
31% response ratio (11 respondents for 35 queries)

ANSWERS TO THE SURVEYS

Average response rate to the surveys : **53 % (81 answers)**





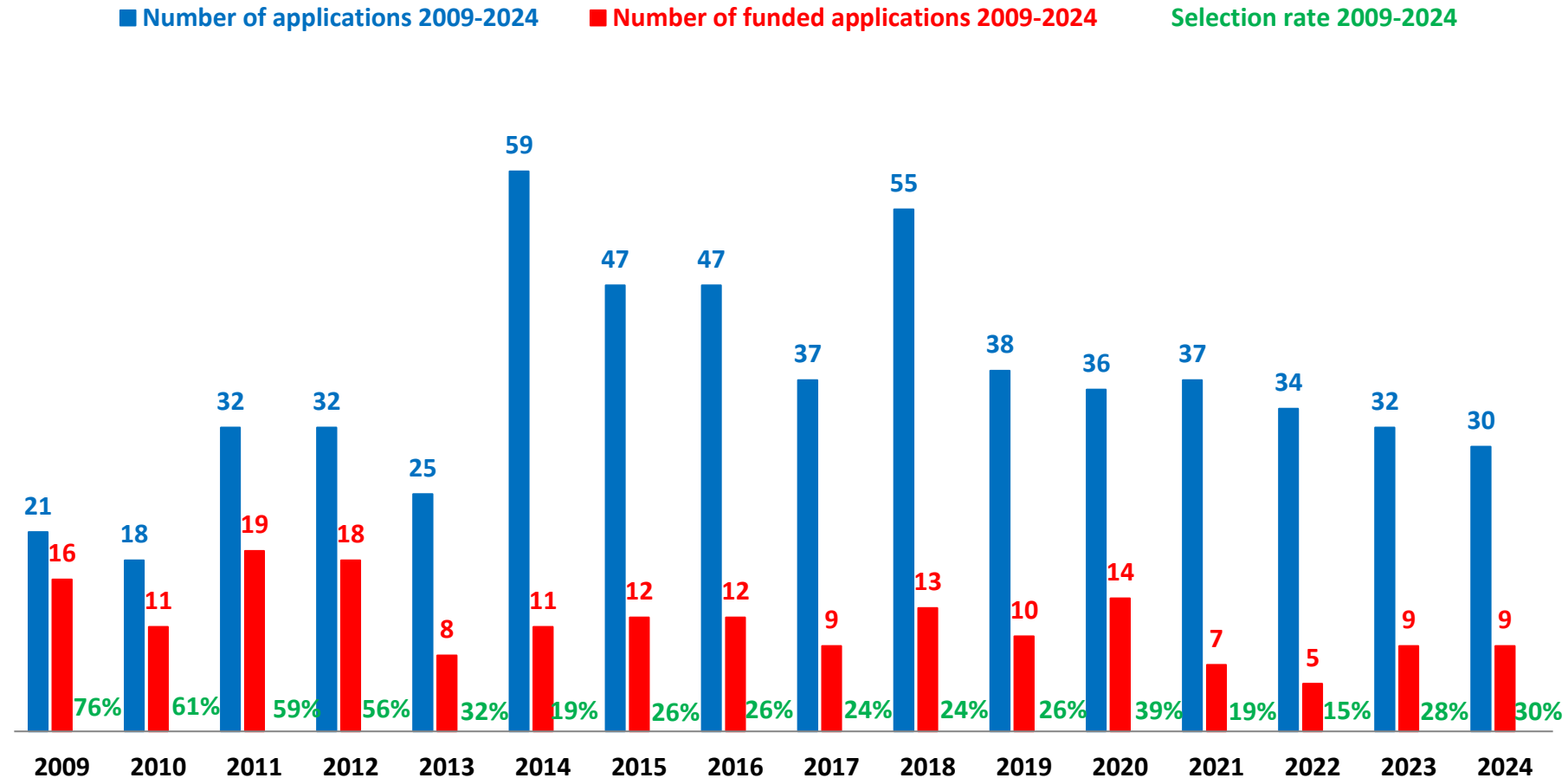
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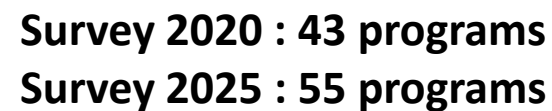
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2009-2024 KEY POINTS

NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2009-2024: **32%**





BEFORE THE IMHOTEP PROJECT

**56% of the laureates have already previously cooperated with Egypt
(data from 81 responses)
(mean of all programs : 47%)**

**This previous cooperation was with the same partner for 77% of the laureates
(data from 44 responses)
(mean of all programs : 56%)**

**This previous cooperation was financed by the PHC IMHOTEP for 26% of the
laureates
(data from 35 responses)
(mean of all programs : 19%)**

BEFORE THE IMHOTEP PROJECT

With which scientific collaboration program ?	
PHC IMHOTEP	41%
French Government Grant (BGF)	14%
French National Research Agency (ANR)	6%
7th PCRD	4%
Egyptian Institutions co-funding	4%
Private sector funding	4%
Others	27%
Total number of occurrences : 51	100%

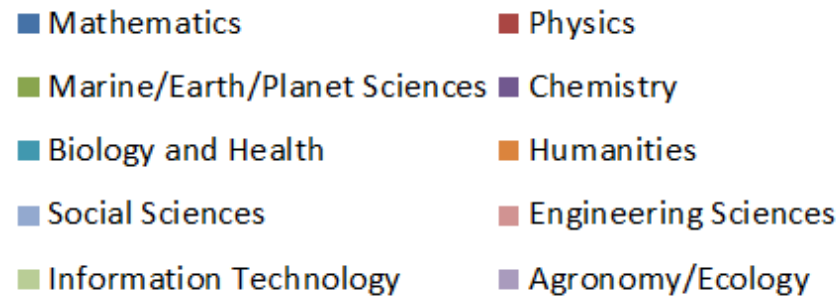
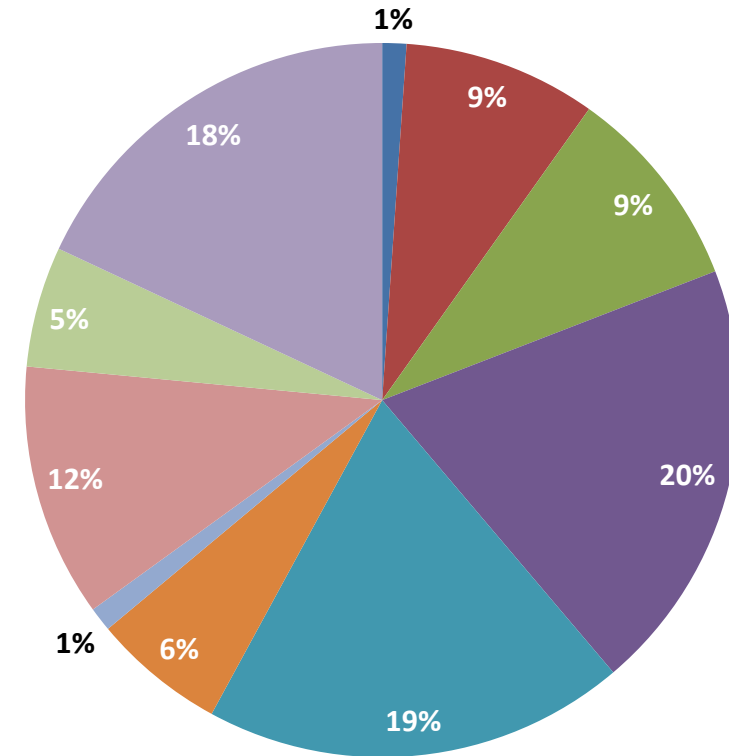
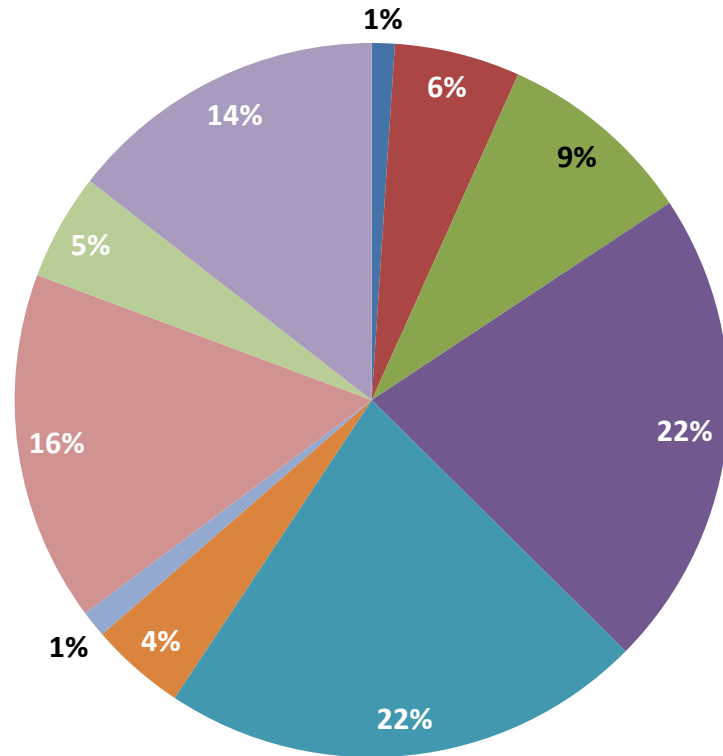
Data from 35 responses

Plus 40 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

SCIENTIFIC DOMAINS OF PROJECTS (2009-2024)

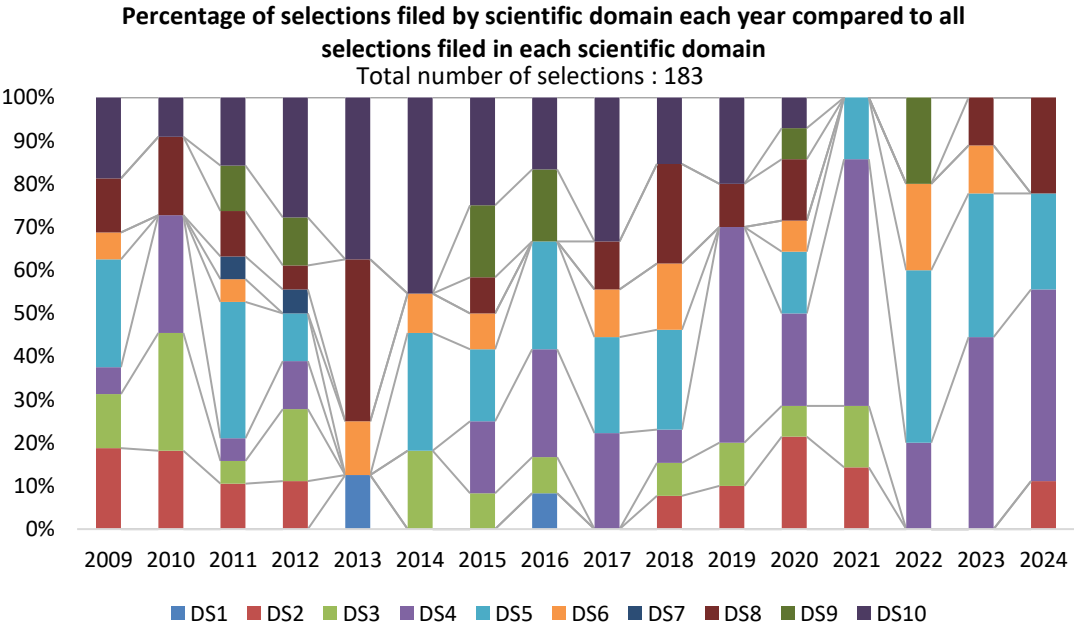
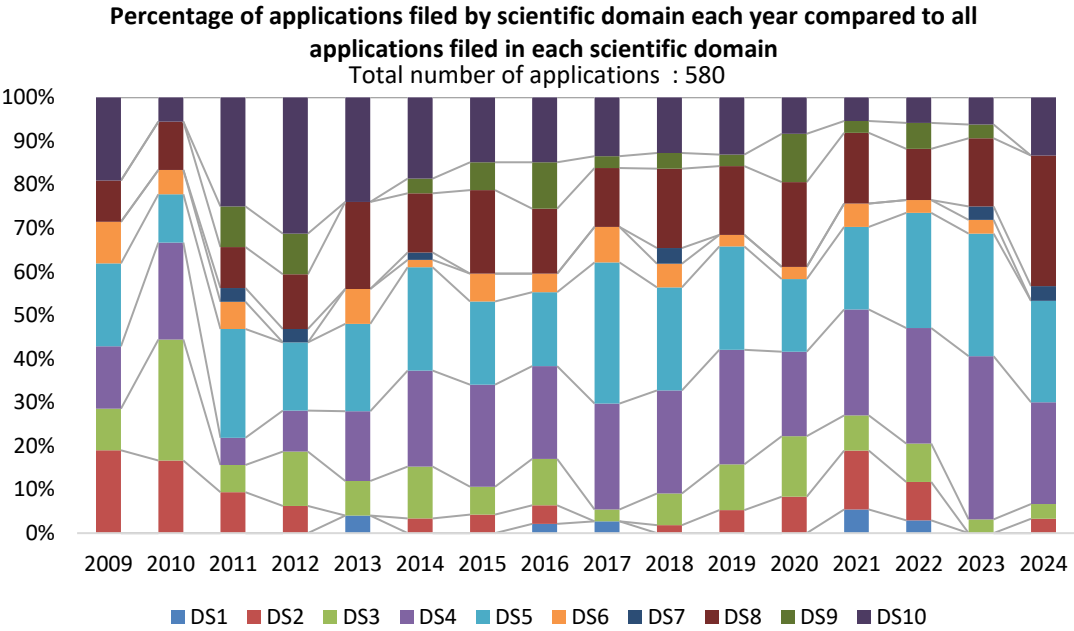
Number of applications : **580**

Number of funded projects : **183**



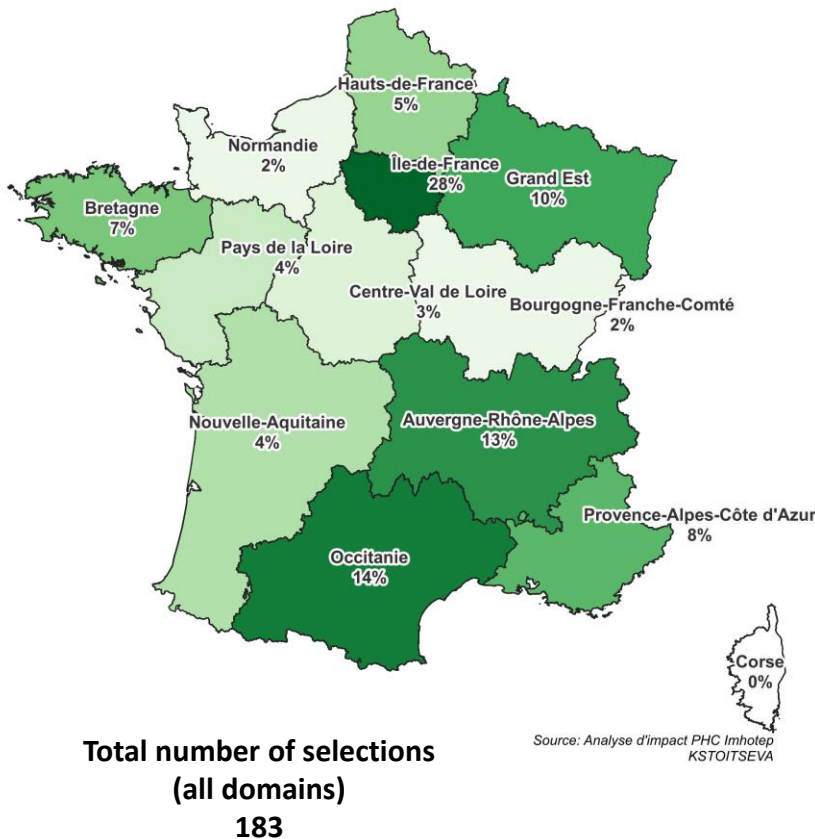
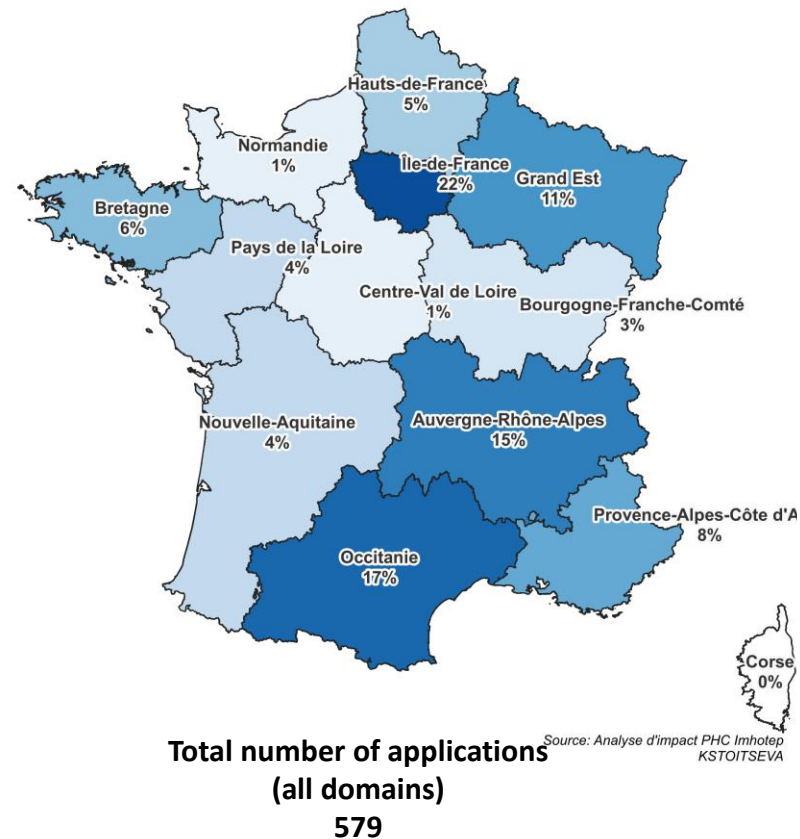
SCIENTIFIC DOMAINS : EVOLUTION 2009-2024

- DS1 : Mathematics
- DS2 : Physics
- DS3 : Marine, Earth, Planet sciences
- DS4 : Chemistry
- DS5 : Biology and Health
- DS6 : Humanities
- DS7 : Social sciences
- DS8 : Engineering sciences
- DS9 : Information technology
- DS10 : Agronomy/Ecology



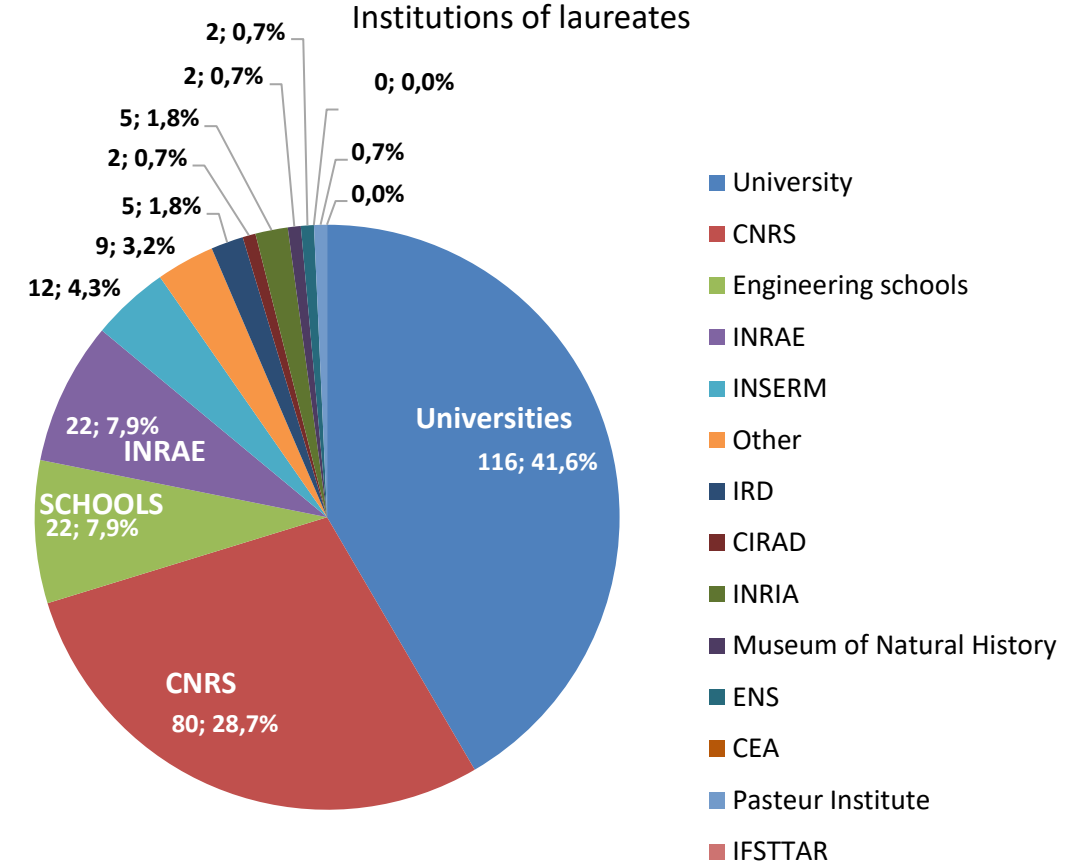
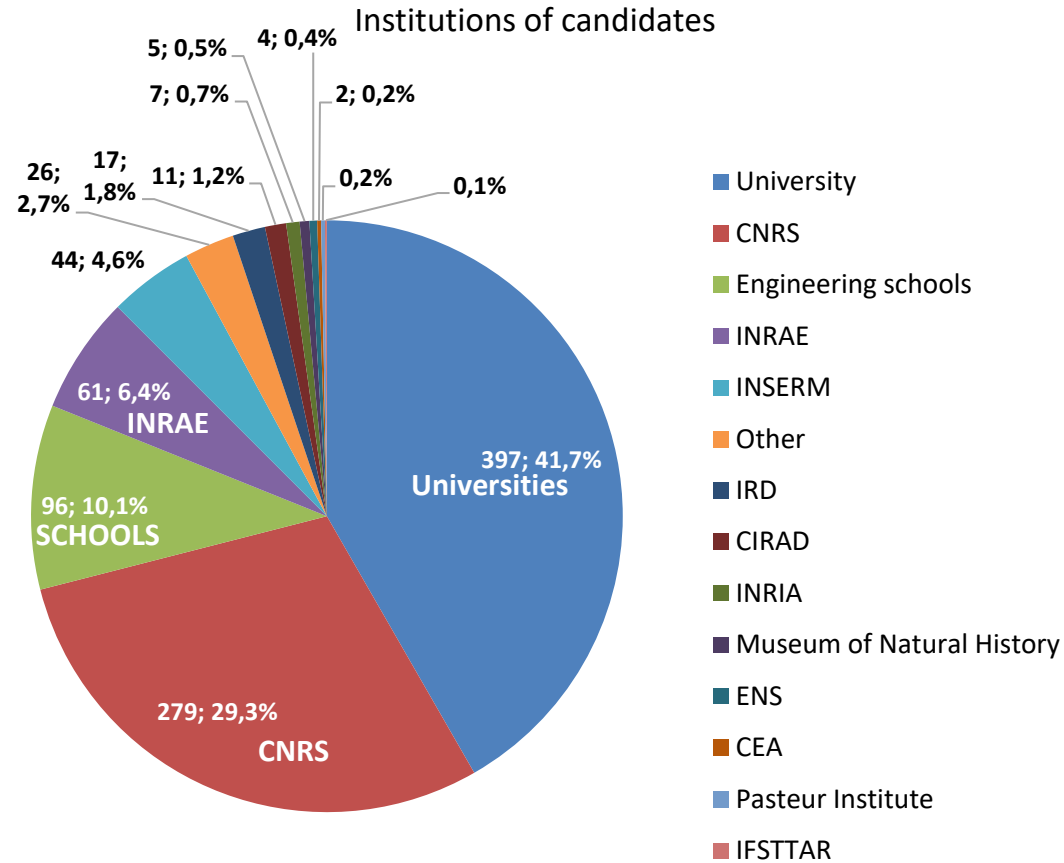
REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP Regional percentages of applications and selections 2009-2024

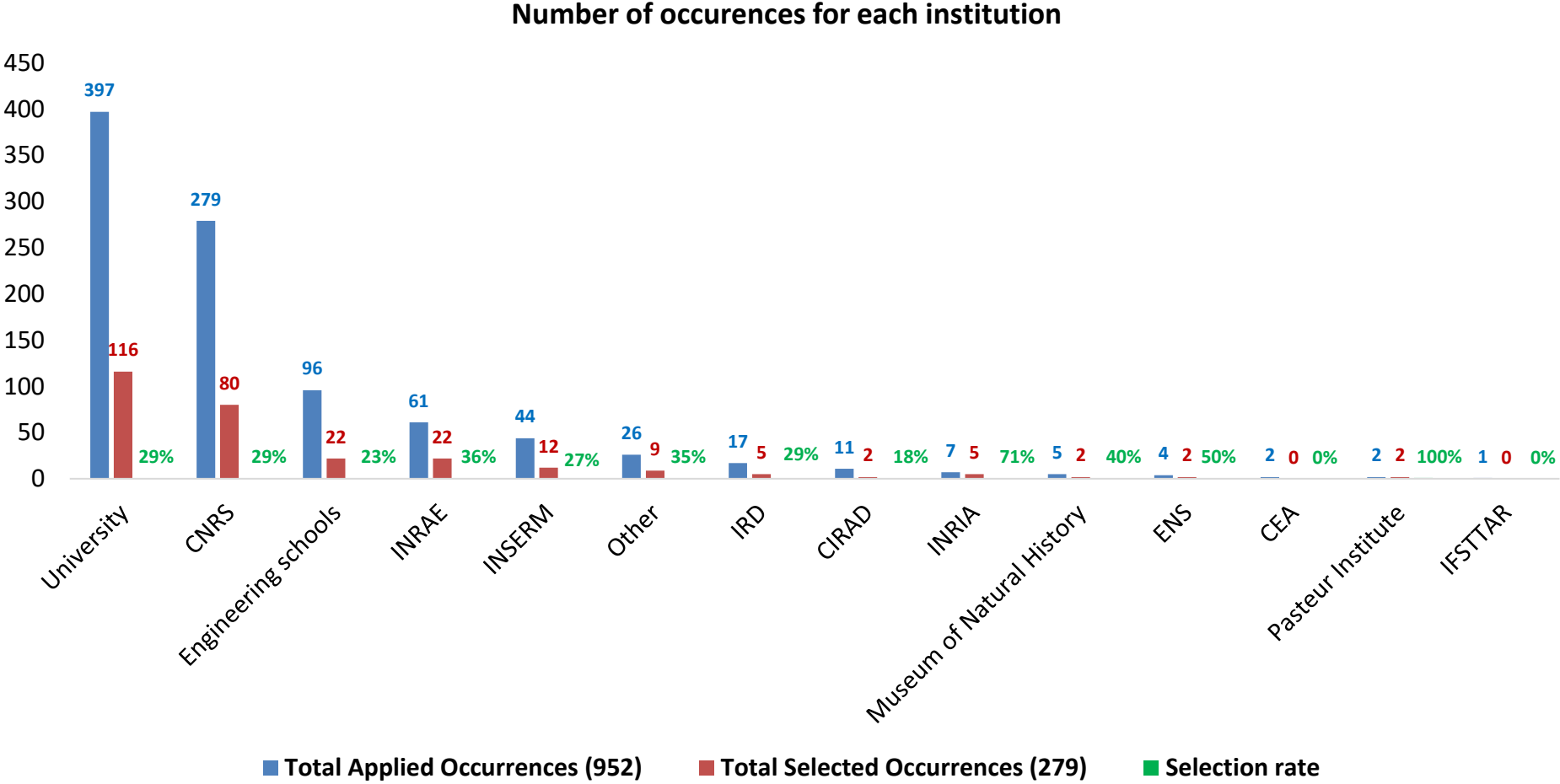


The region Ile-de-France is the main contributor both for applications and selections. La Réunion has three applications and one selection

FRENCH PARTICIPATING INSTITUTIONS (2009-2024)



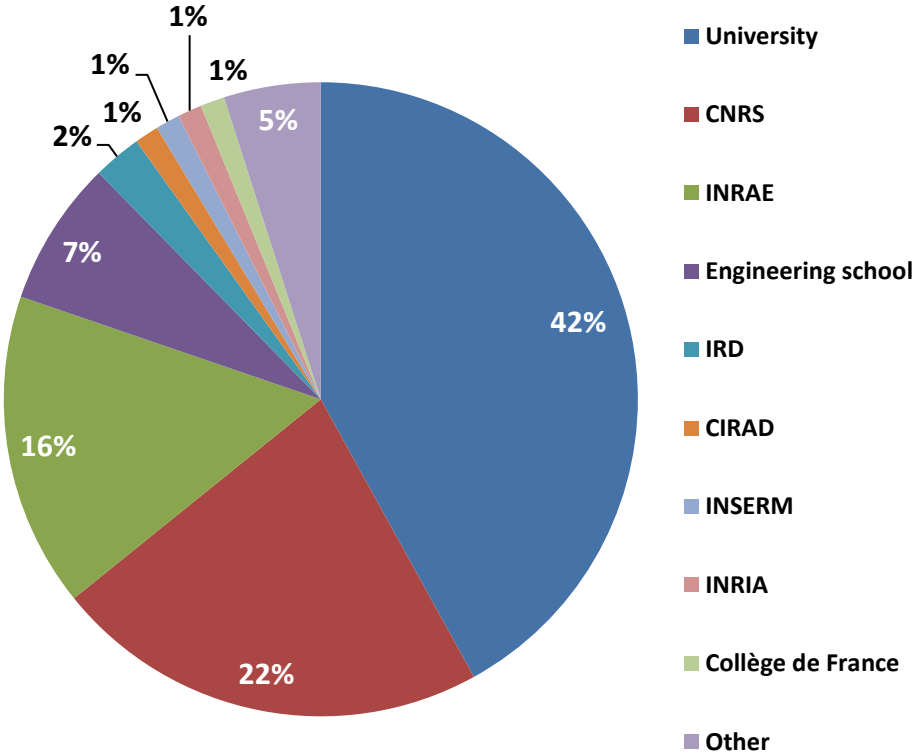
FRENCH PARTICIPATING INSTITUTIONS (2009-2024)



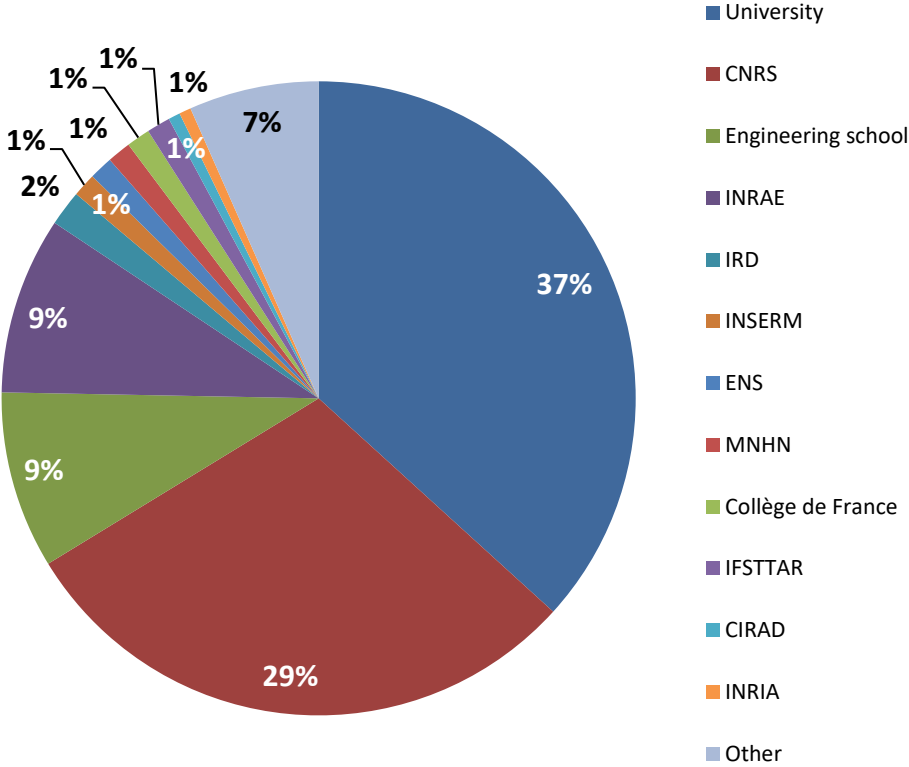
FRENCH PARTICIPATING INSTITUTIONS 2009-2022

(DATA FROM THE SURVEYS)

PI's employers



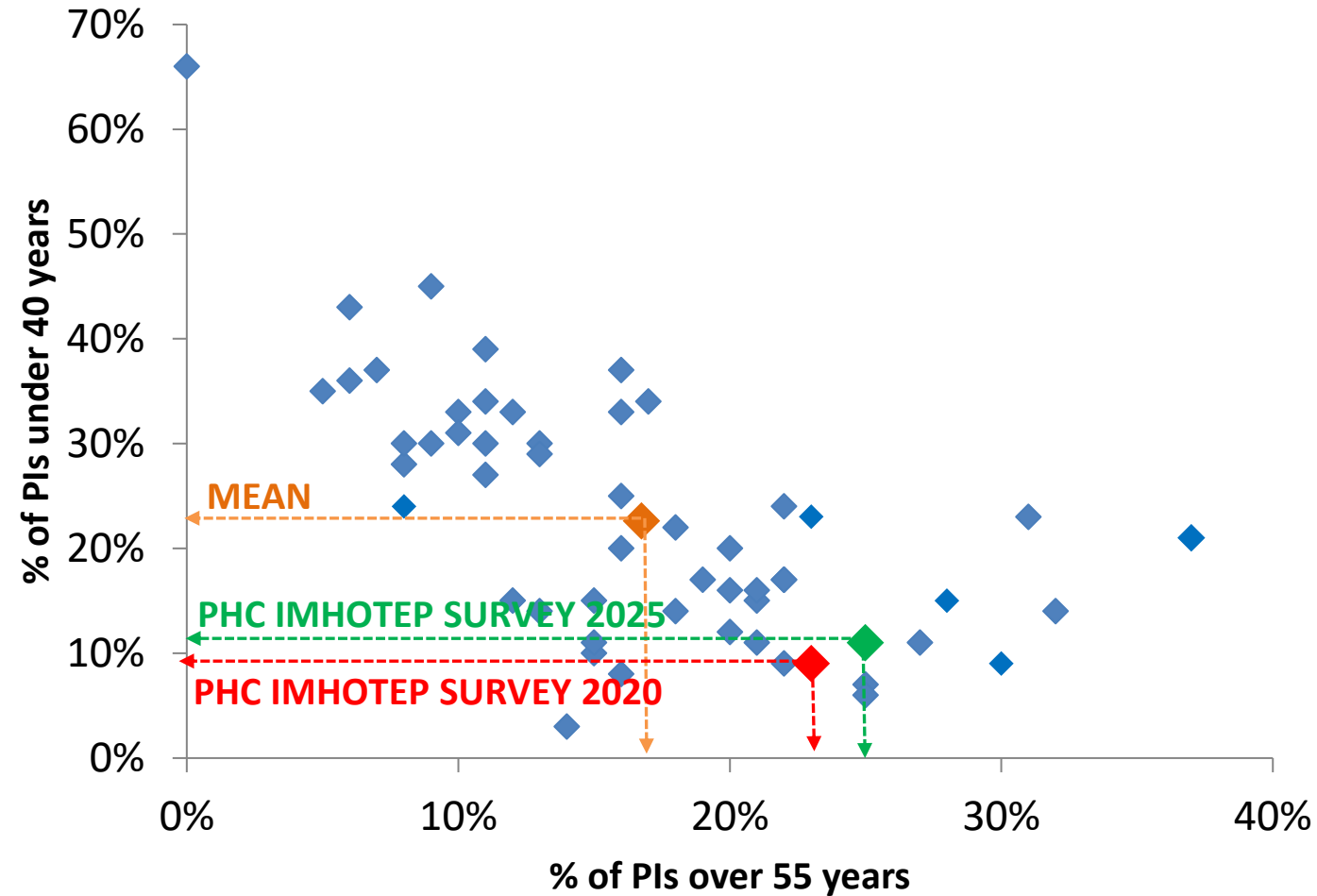
Laboratories authorities



Data from 81 responses

AGE OF FRENCH PRINCIPAL INVESTIGATORS 2009-2022

(DATA FROM THE SURVEYS)

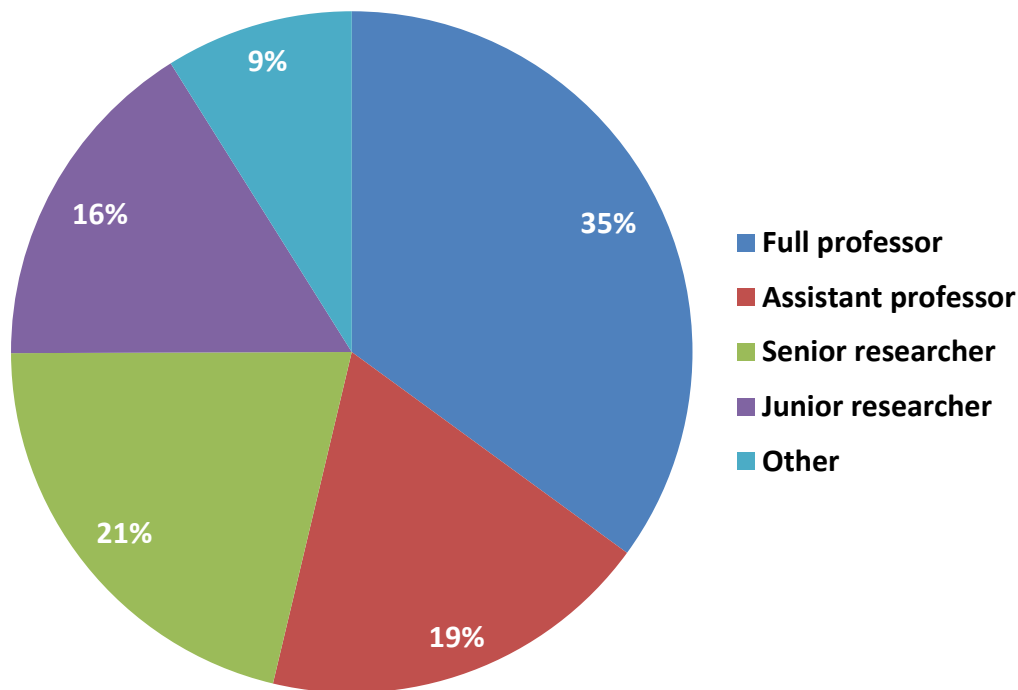


Survey 2020 : 43 programs

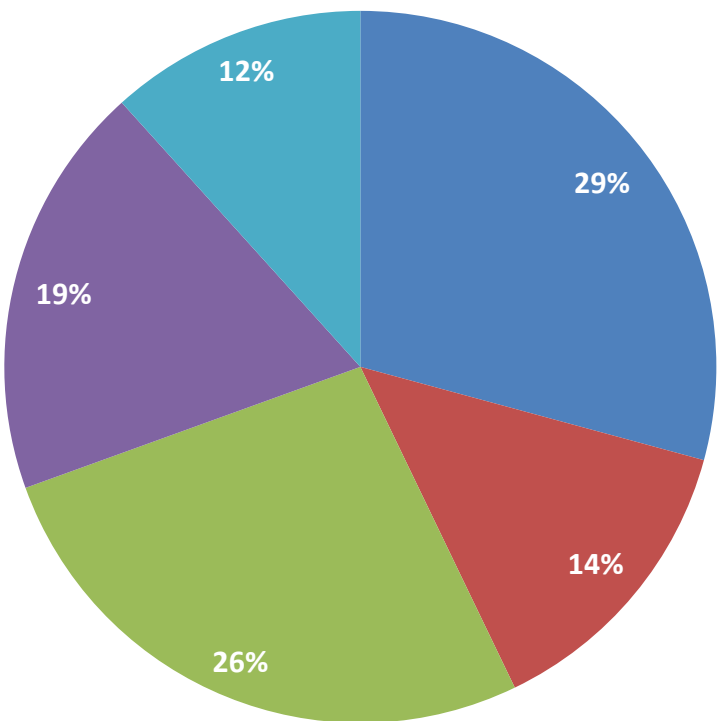
Survey 2025 : 55 programs

FRENCH PRINCIPAL INVESTIGATORS : STATUS (2009-2024)

Applicants professional status



Laureates professional status

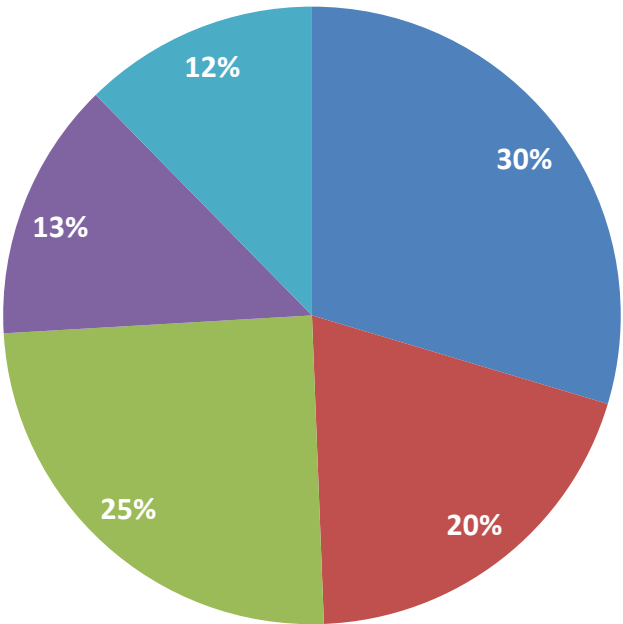


Data from 471 french applicants and 154 french laureates

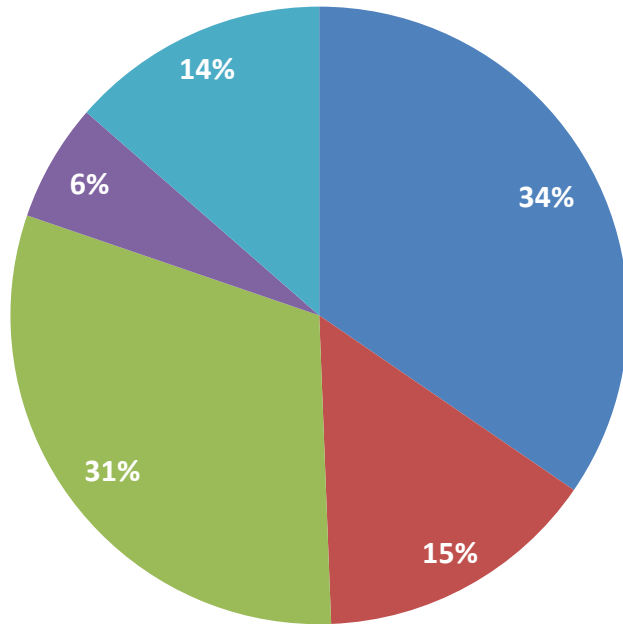
FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS (2009-2022)

(DATA FROM THE SURVEYS)

**Previous professional status
(at the beginning of the project)**

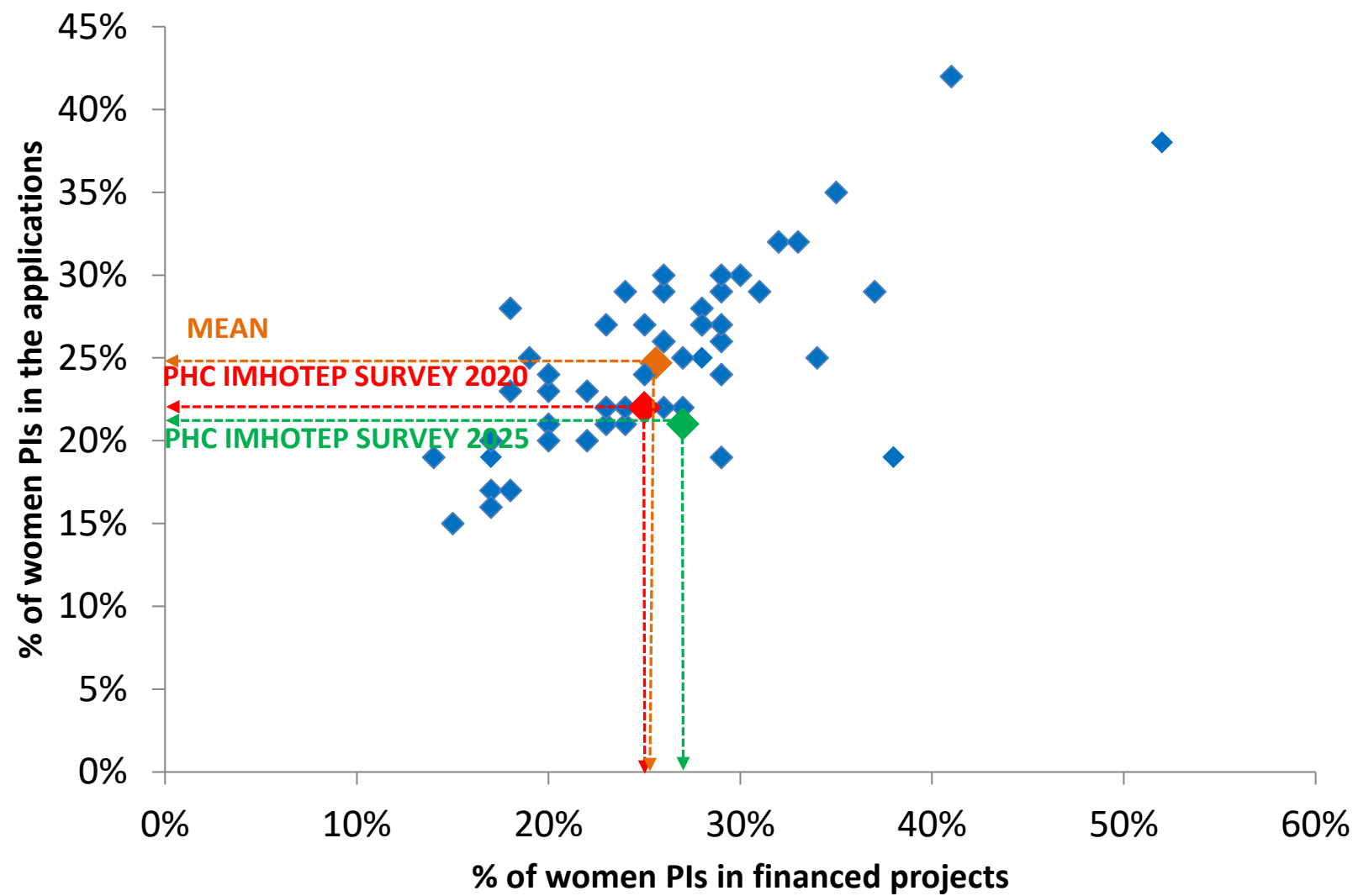


Current professional status



Data from 81 responses

IMPLICATION OF WOMEN (FRANCE) (2009-2024)



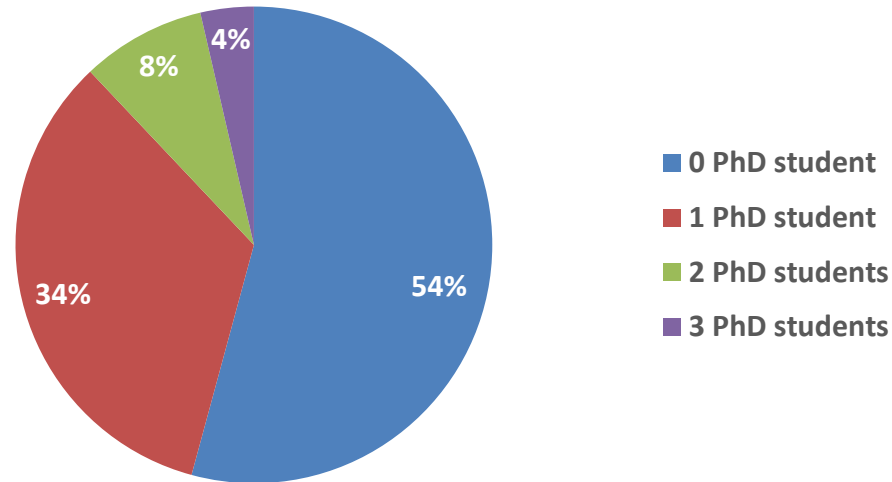
Survey 2020 : 43 programs

Survey 2025 : 55 programs

PARTICIPATION OF FRENCH YOUNG RESEARCHERS 2009-2022

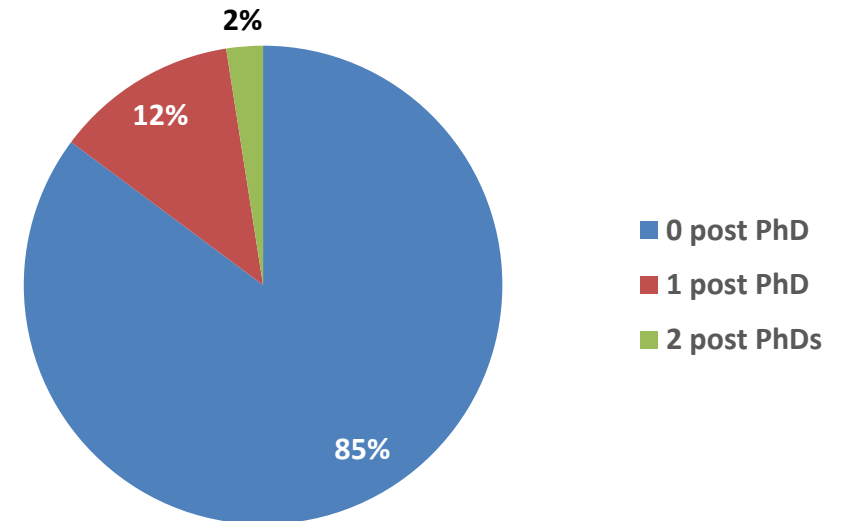
(DATA FROM THE SURVEYS)

Number of French PhD students



47% of projects involve at least one French PhD student

Number of French post-doctoral researchers

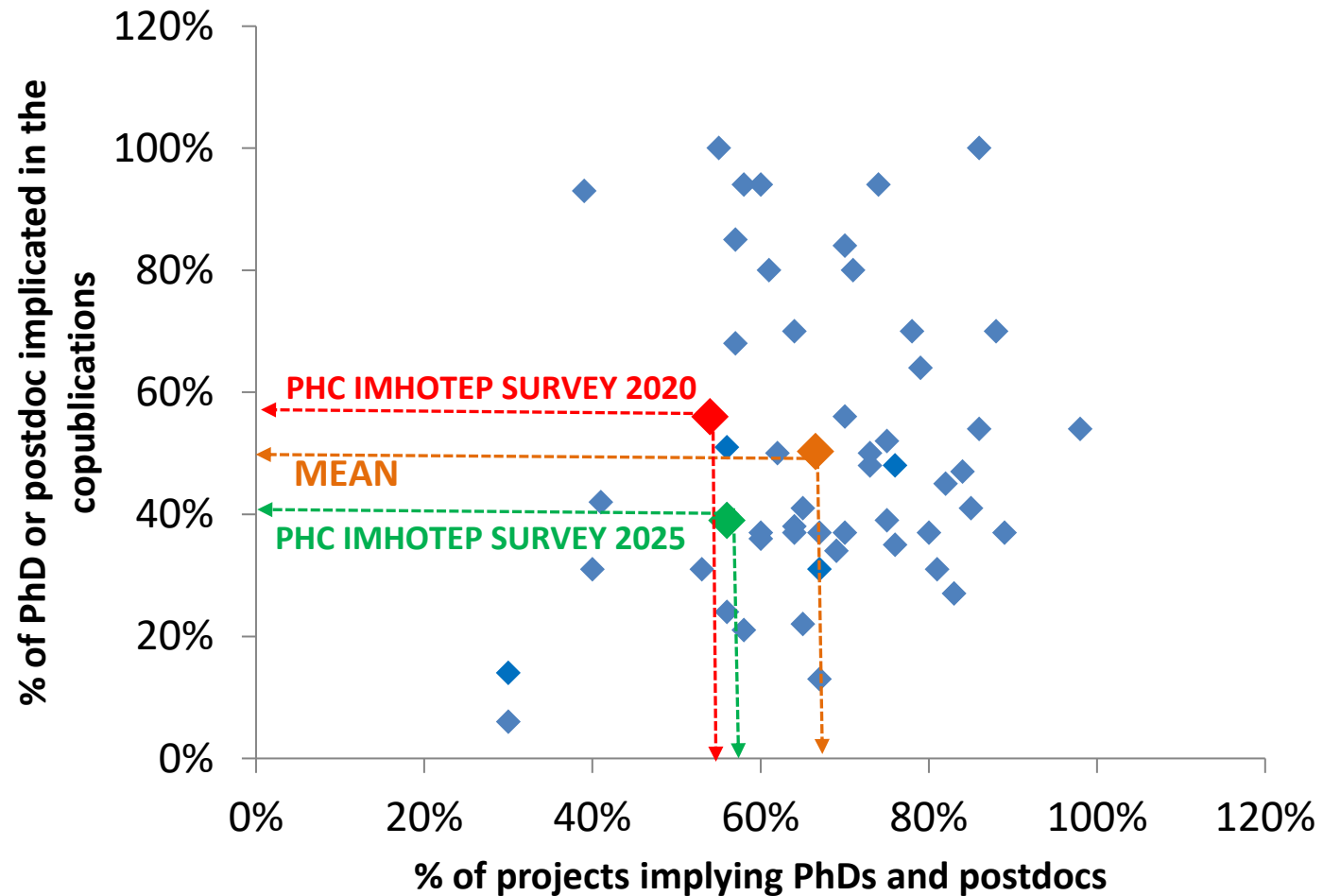


15% of projects involve at least one French post-doctoral researcher

Overall, **56%** of projects involve at least one French young researcher

Data from 81 responses

IMPLICATION OF FRENCH YOUNG RESEARCHERS IN THE PUBLICATIONS (2009-2022)



Survey 2020 : 43 programs

Survey 2025 : 55 programs

PARTICIPATION OF EGYPTIAN YOUNG RESEARCHERS (2019-2022)

Between 2019 and 2022, 4 Egyptian PhDs have been involved in the projects

27% of projects involve at least one Egyptian PhD student

Between 2019 and 2022, 3 Egyptian postdocs have been involved in the projects

18% of projects involve at least one Egyptian post-doctoral researcher

Overall, **36%** of projects involve at least one Egyptian young researcher

Data from the survey 2025 (11 responses)



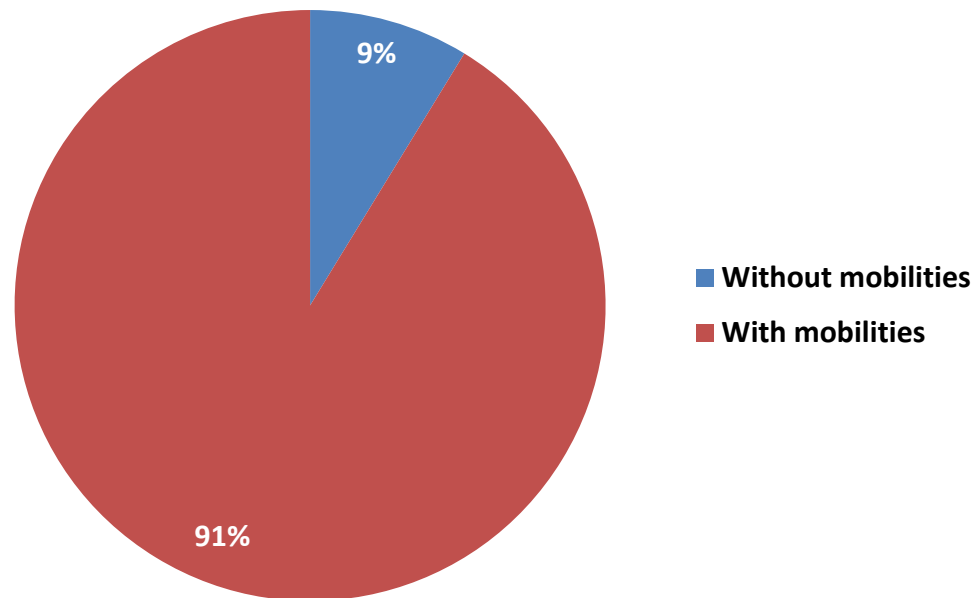
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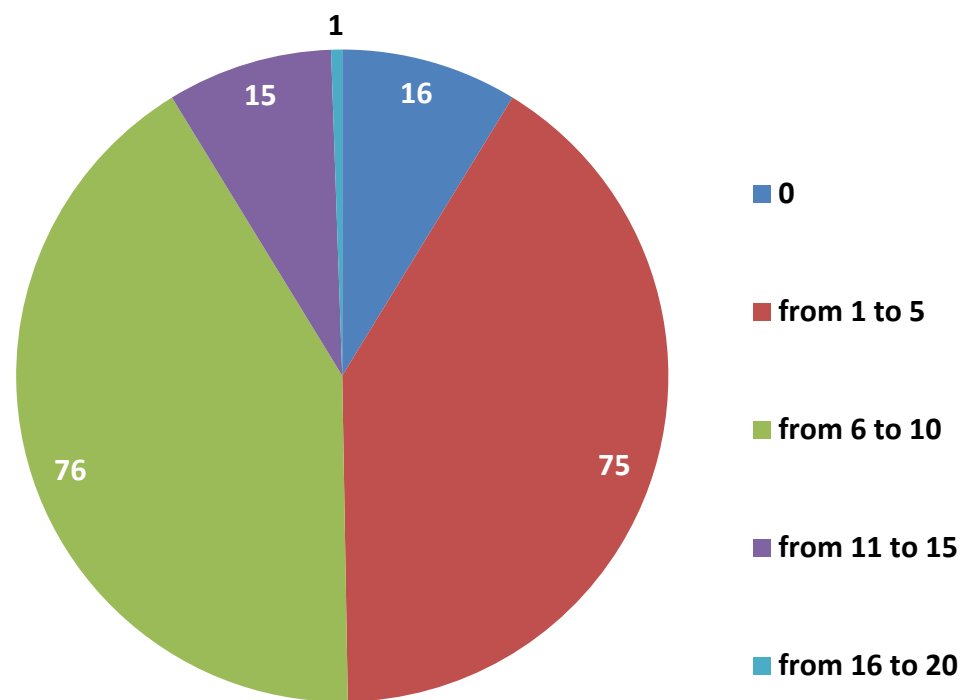
MOBILITY

MOBILITIES (2009-2024)

Projects with/without mobilities



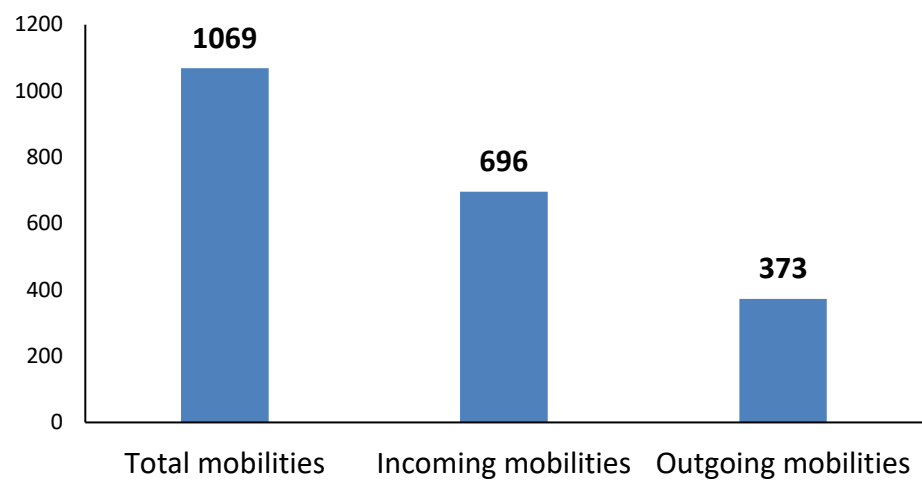
Number of mobilities per project



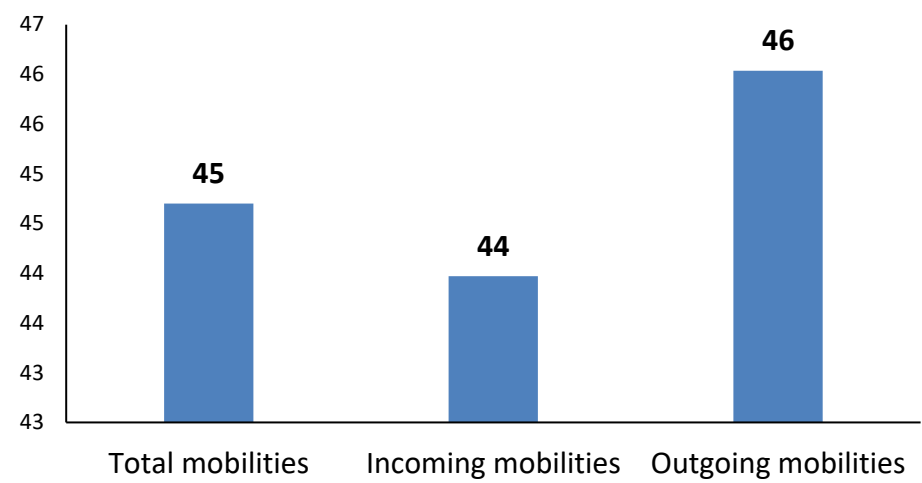
Data from 183 funded projects

MOBILITIES (2009-2024)

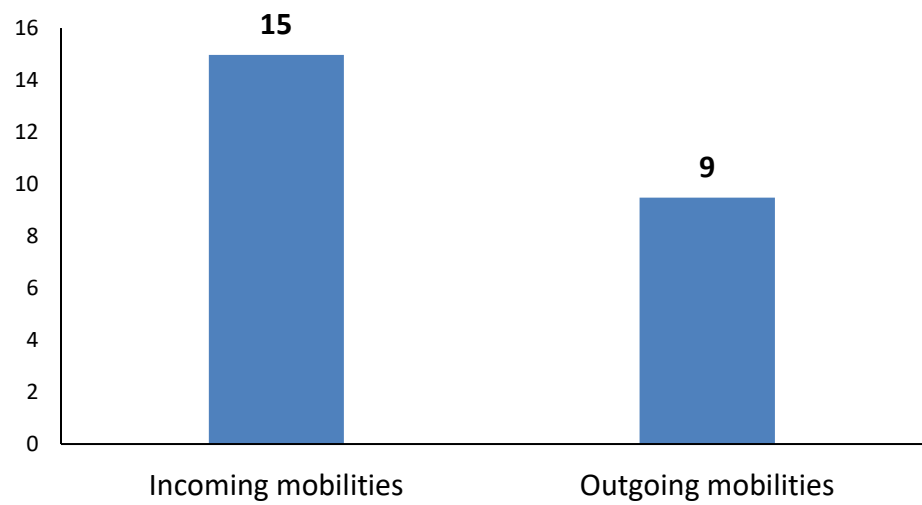
Number of mobilities



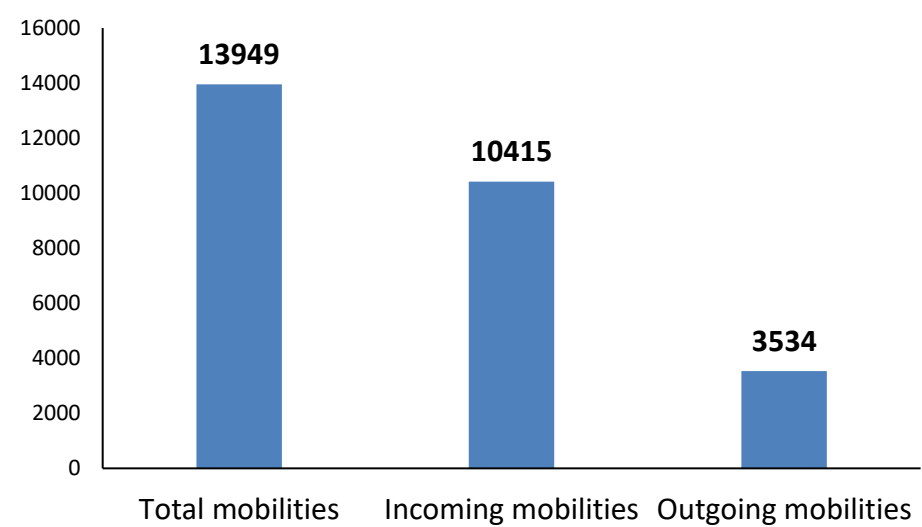
Average age for people in mobility



Average mobility duration in days

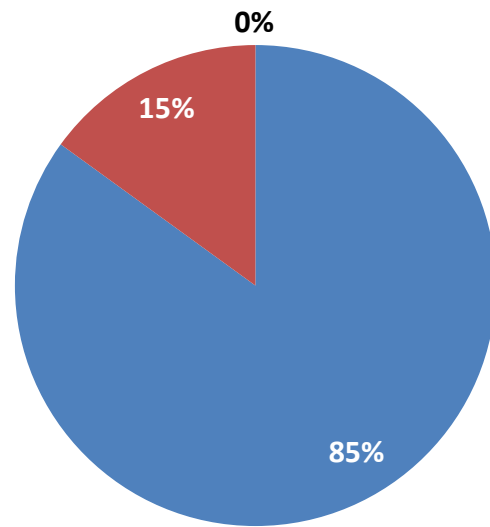


Total duration of mobilities in days

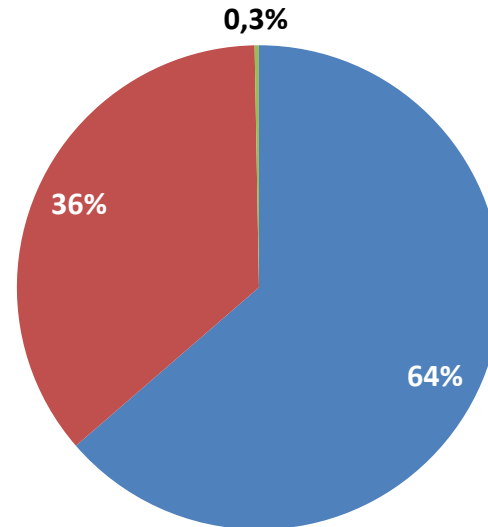


MOBILITY : DURATION (2009-2024)

France → Egypt



Egypt → France

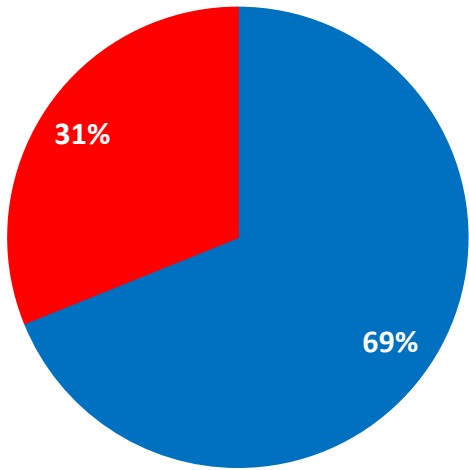


- < 15 days
- between 15 days and 3 months
- > 3 months

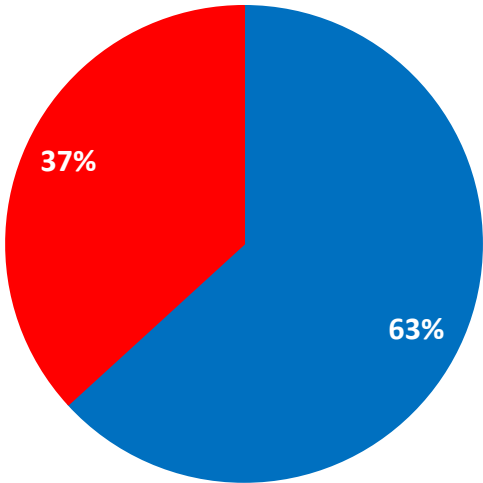
Data from 373 outgoing mobilities and 696 incoming mobilities

MOBILITY : GENDER DISTRIBUTION (2009-2024)

France → Egypt



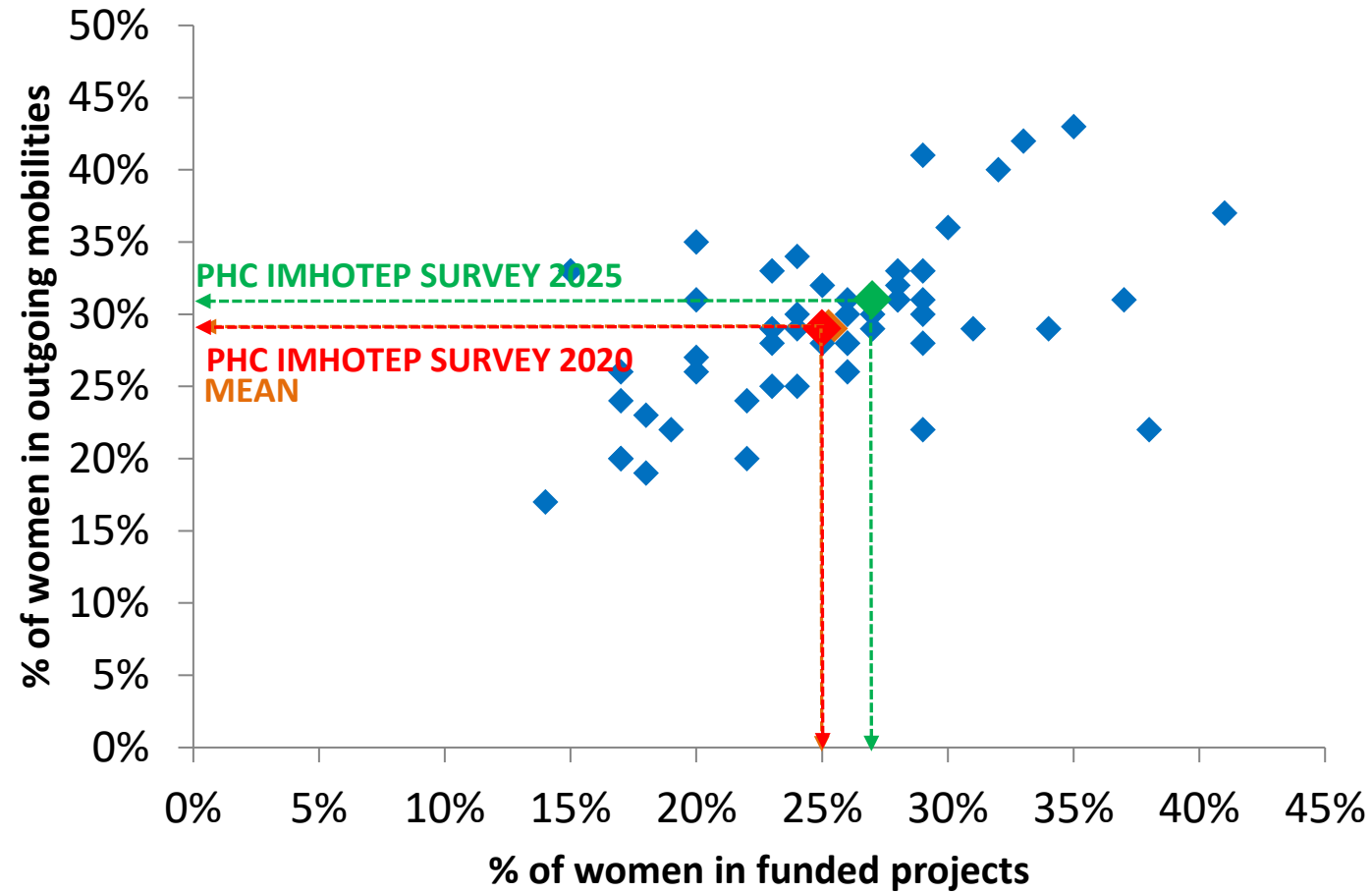
Egypt → France



■ Men ■ Women

Data from 373 outgoing mobilities and 696 incoming mobilities

WOMEN MOBILITY FRANCE – EGYPT (2009-2024)



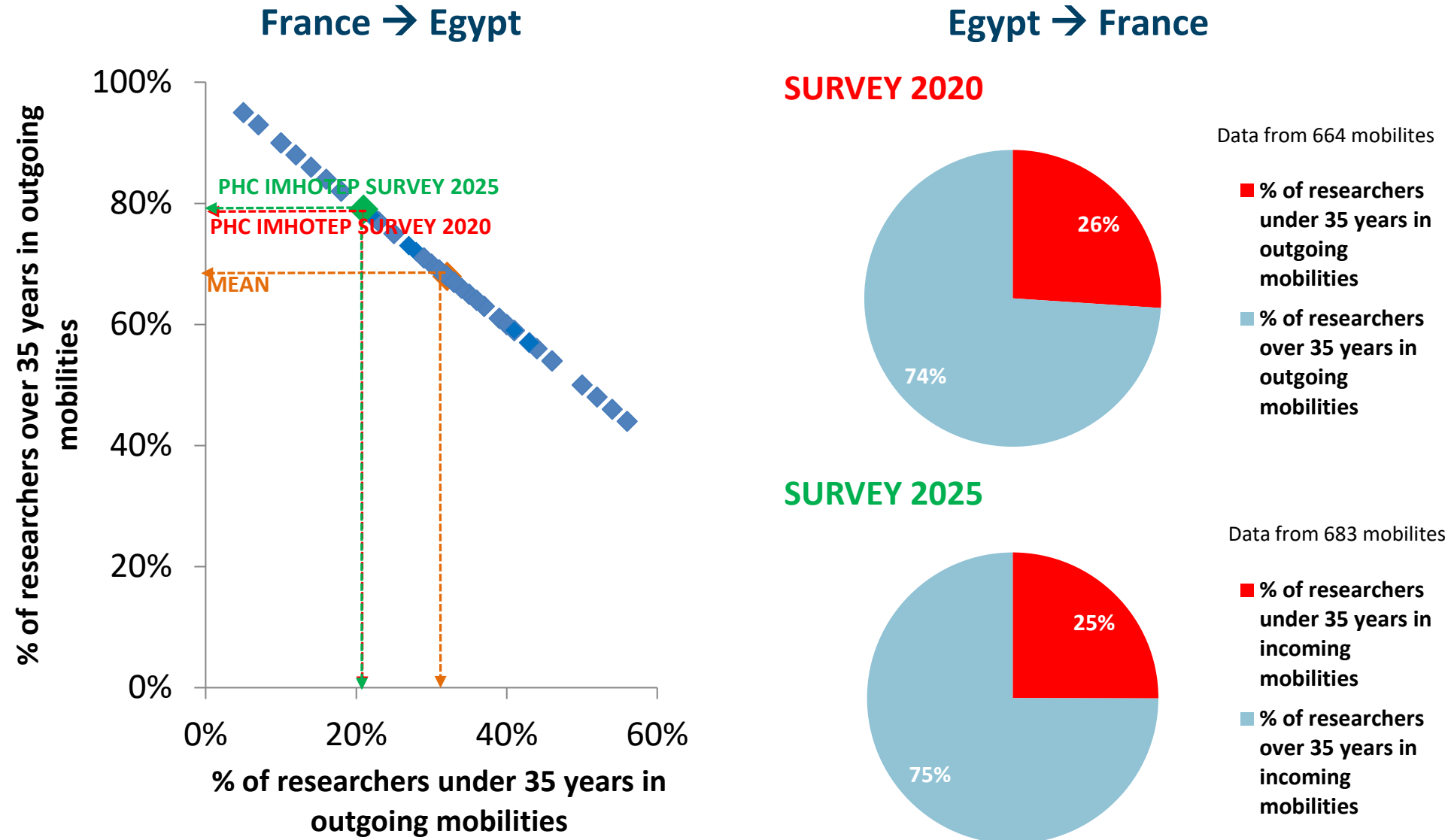
Survey 2020 : Data from 153 funded projects

Survey 2025 : Data from 183 funded projects

Survey 2020 : 43 programs

Survey 2025 : 55 programs

YOUNG RESEARCHERS MOBILITY (2009-2024)



Survey 2020 : 43 programs
 Survey 2025 : 55 programs



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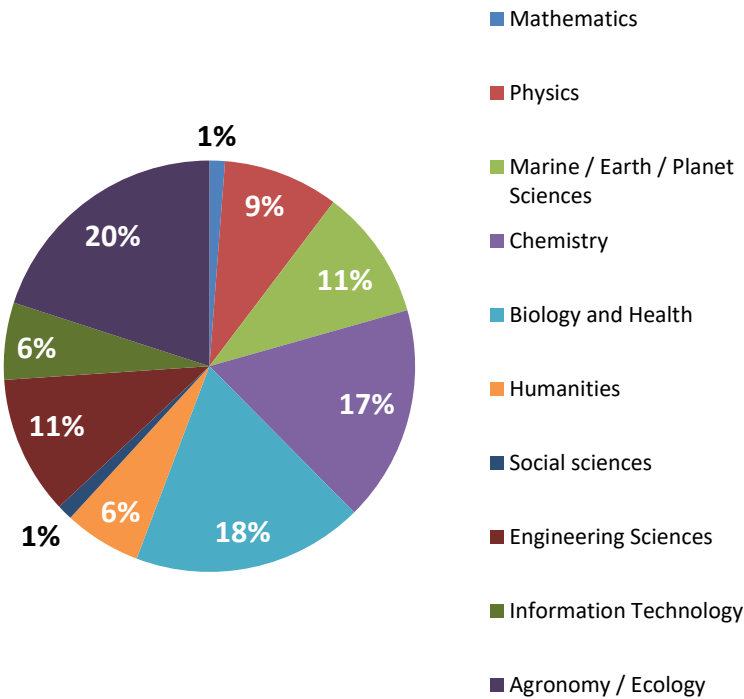
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SCIENTIFIC PRODUCTION (PROJECTS 2009-2022)

SCIENTIFIC PRODUCTION 2009-2022

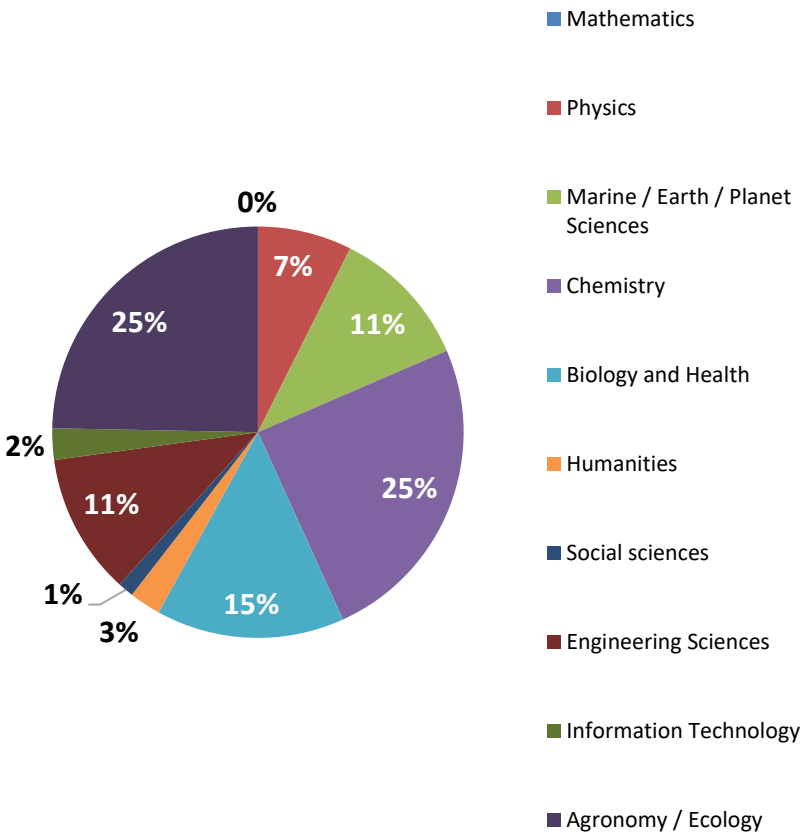
(DATA FROM CAMPUS FRANCE AND THE SURVEYS)

Funded projects 2009-2022



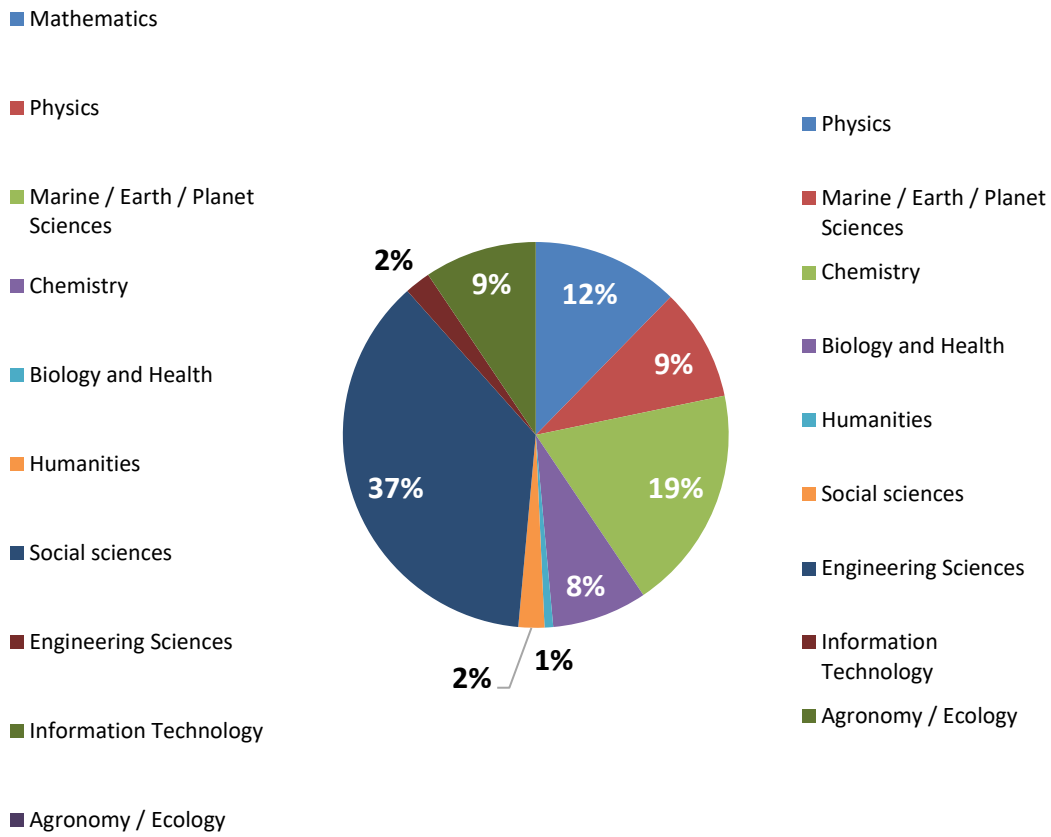
165 funded projects

Responses to the survey 2009-2022



81 responses

Coproductions 2009-2022



No response for DS1 (Mathematics)

Analysis of 138 coproductions

SCIENTIFIC PRODUCTION (2009-2022)

2020+2025 SURVEYS

	Number of funded projects 2020 survey	Number of funded projects 2020+2025 surveys	Average annual number of scientific coproductions per project 2020 survey	Average annual number of scientific coproductions per project 2020+2025 surveys
Mathematics	No data	No data		
Physics	6	6	1,4	1,4
Marine/Earth/Planet Sciences	8	9	0,8	0,7
Chemistry	14	20	0,7	0,7
Biology and Health	11	12	0,5	0,5
Humanities	2	2	0,3	0,3
Social Sciences	1	1	1,5	1,5
Engineering Sciences	7	9	3,5	2,8
Information Technology	2	2	0,8	0,8
Agronomy / Ecology	19	20	0,3	0,3
TOTAL/MOYENNE	70	81	0,93	0,85

Overall average annual number of scientific coproductions per project 2020 : 0,93 vs 0,96 mean
Overall average annual number of scientific coproductions per project 2020+2025 : 0,85

Enquêtes 2020+2025

62% of funded projects led to at least 1 scientific coproduction (vs 64% survey 2020)

21% of scientific coproductions involve at least 1 french young researcher (vs 26% survey 2020)

The average annual rate of publication of young researchers implicated in the projects is **0,23** (not available survey 2020)

The average annual rate of young researchers implicated in the scientific coproductions is **0,58** (not available survey 2020)

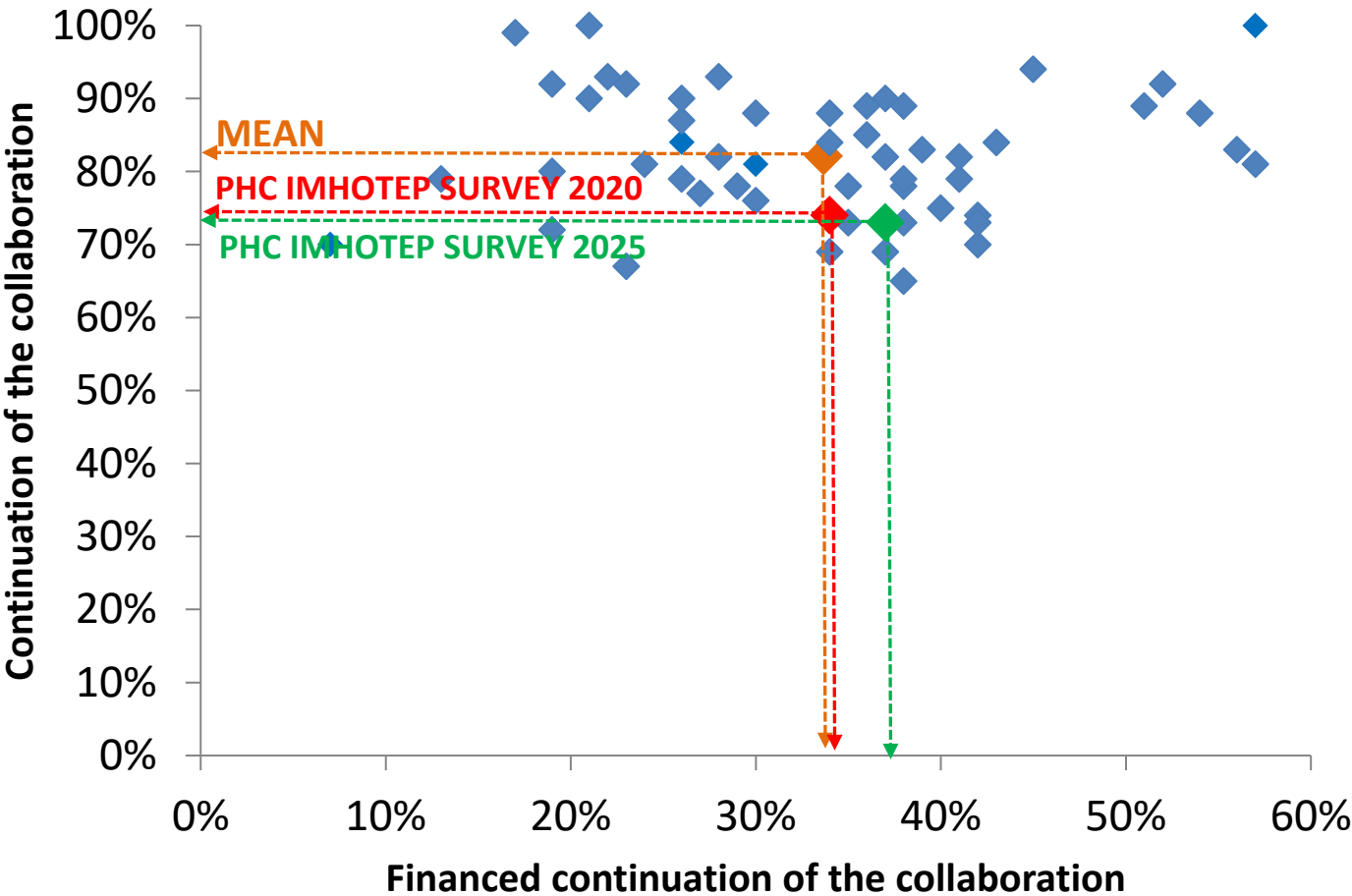


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WHAT HAPPENS AFTER A IMHOTEP PROJECT ?

CONTINUATION OF THE COOPERATION



Data from 79 responses (continuation) and 52 responses (financing)

Survey 2020 : 43 programs
Survey 2025 : 55 programs

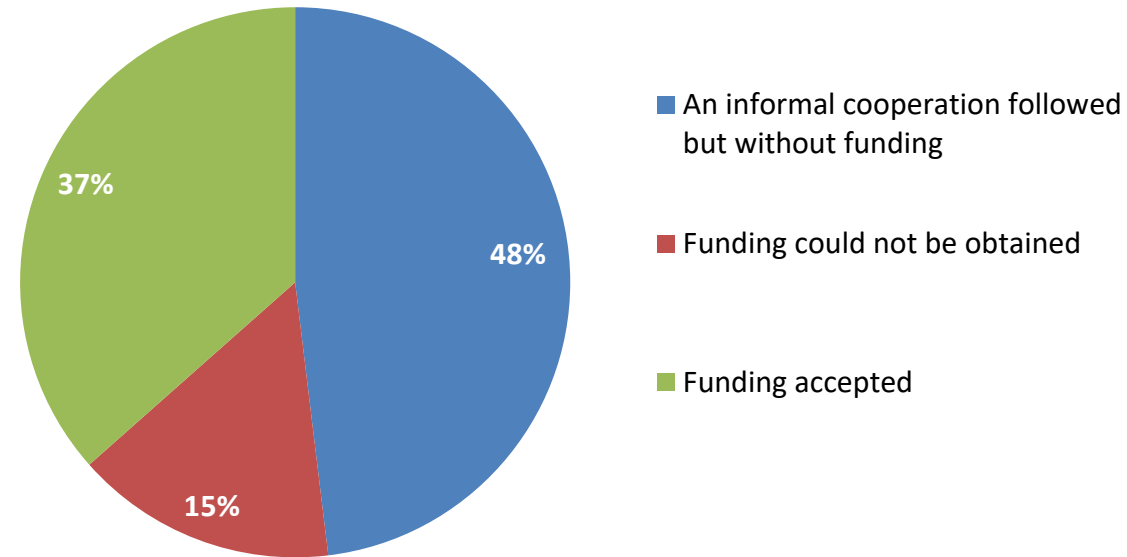
CONTINUATION OF THE COOPERATION

73% of the cooperations continued after the IMHOTEP project

Which activities?	% of projects
Scientific co-productions	69%
Cooperative research	59%
Researchers mobilities	45%
Joint participation to conferences	33%
PhD mobilities	17%
Co-organisation of scientific events	17%
Joint participation to PhD thesis	12%
Joint diplomas (Master, PhD...)	0%
Other	12%

CONTINUATION OF THE COOPERATION

37% of cooperations have been funded following the project

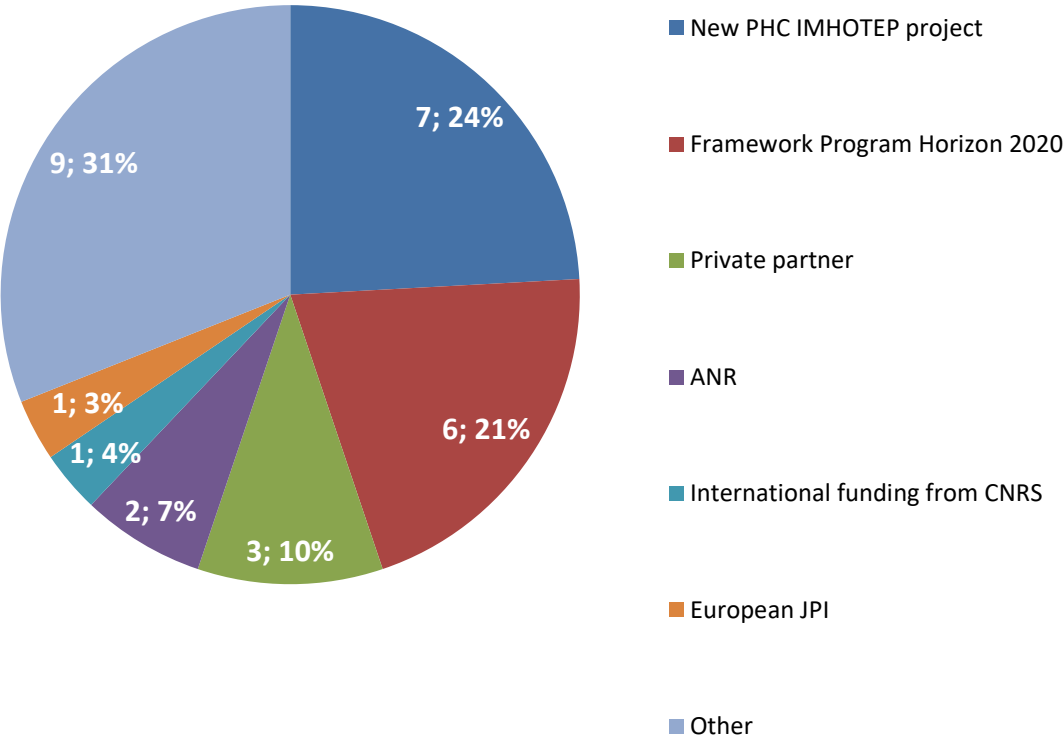


Data from 52 responses

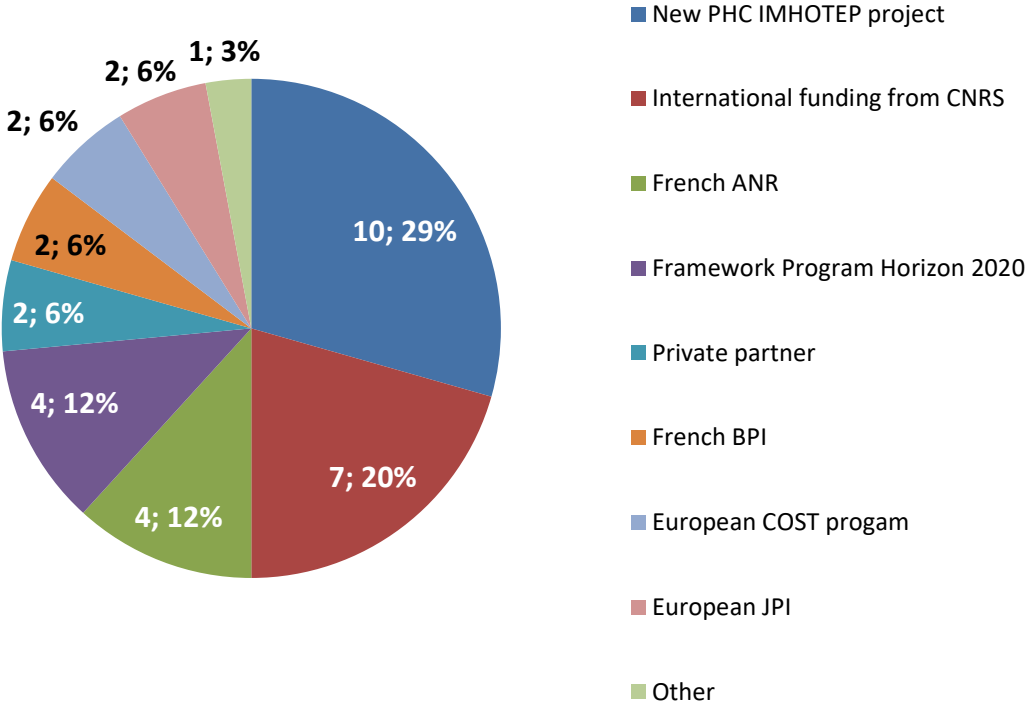
CONTINUATION OF THE COOPERATION

What kind of funded collaborations after the PHC IMHOTEP project ?

ACCEPTED FUNDINGS AFTER THE IMHOTEP PROJECT

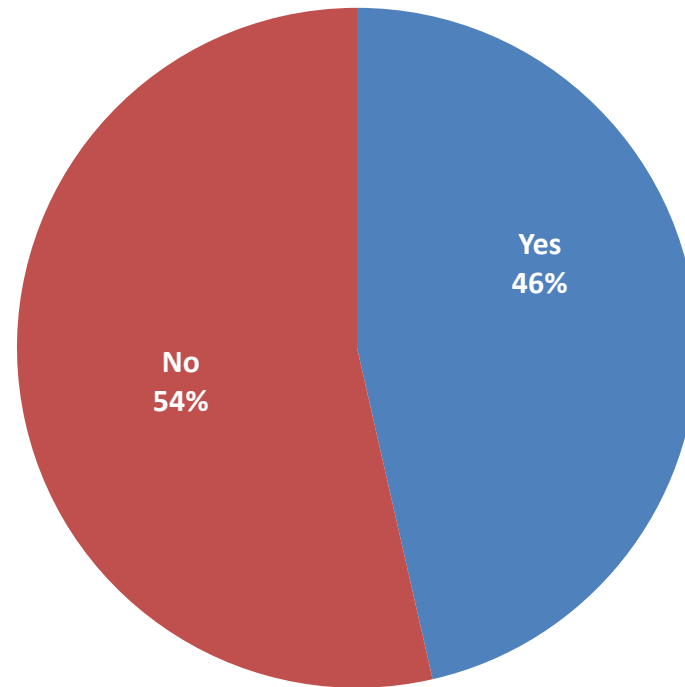


REJECTED FUNDINGS AFTER THE IMHOTEP PROJECT



CONTINUATION OF THE COOPERATION

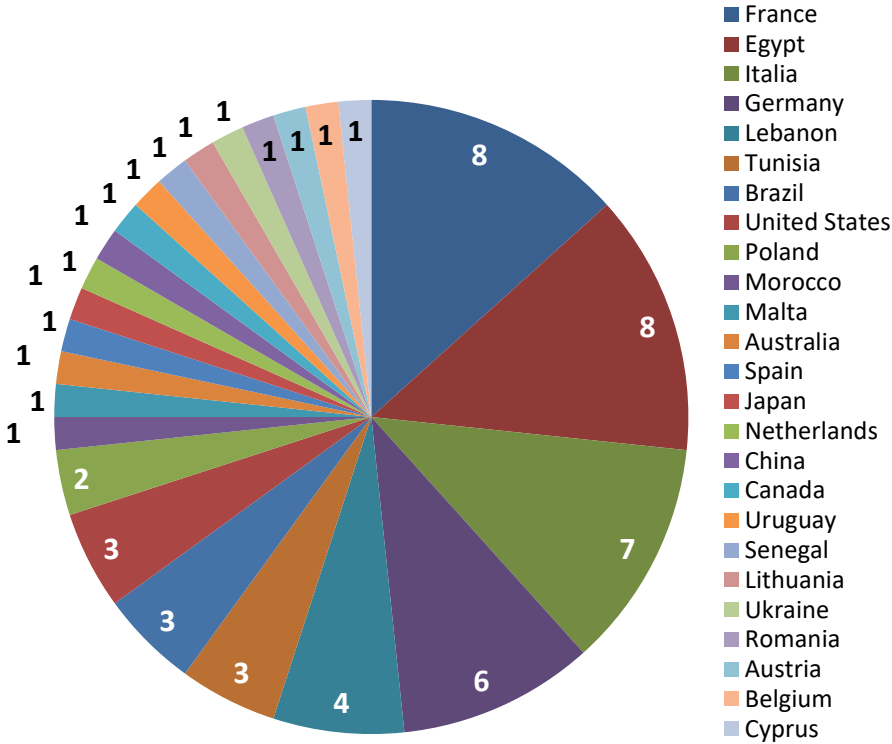
Has the French-Egyptian cooperation involved new partners?



Data from 56 responses

CONTINUATION OF THE COOPERATION

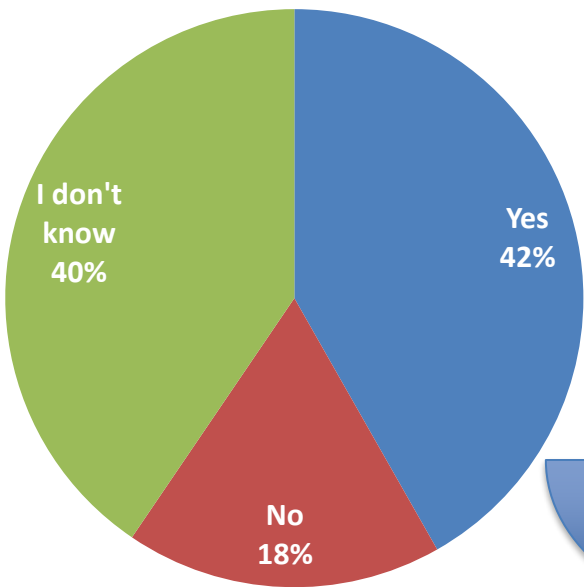
If the French-Egyptian cooperation involves new partners, list with which countries



Data from 25 responses

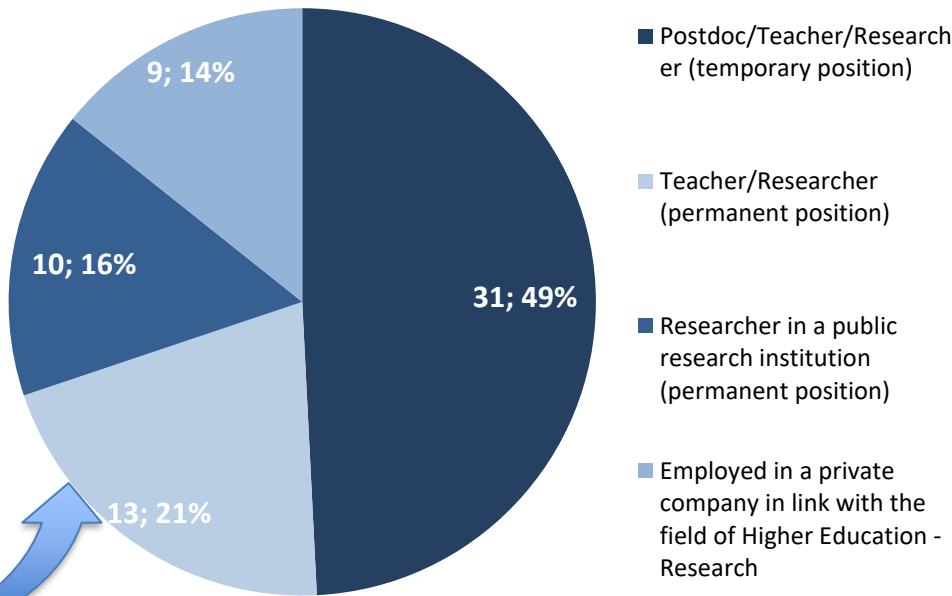
IMPACT ON YOUNG RESEARCHERS' CAREER

Was young researchers' career impacted by the PHC IMHOTEP program ?



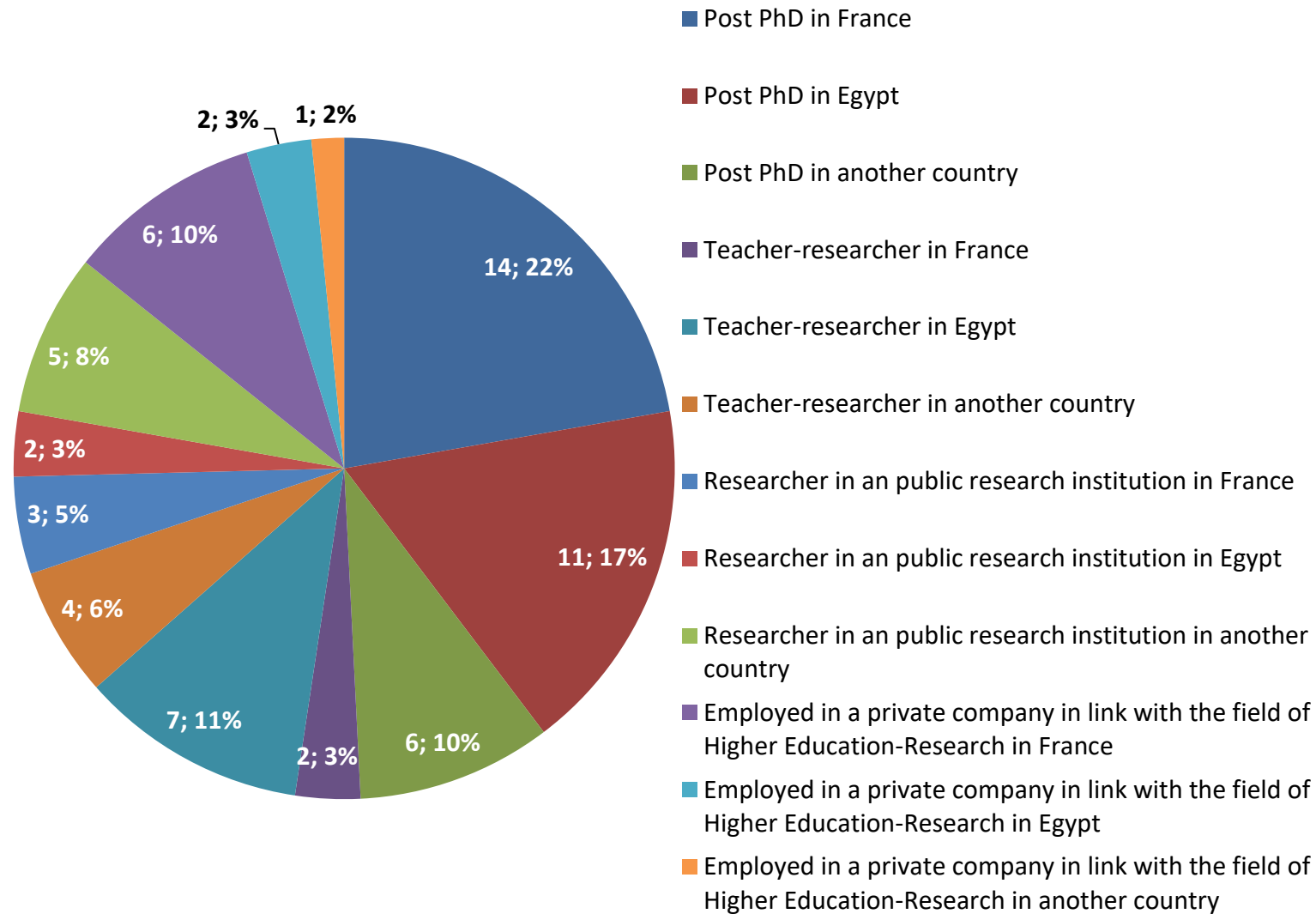
Data from 79 responses

Type of impacts



Data from 35 positive responses for a total of 63 young researchers

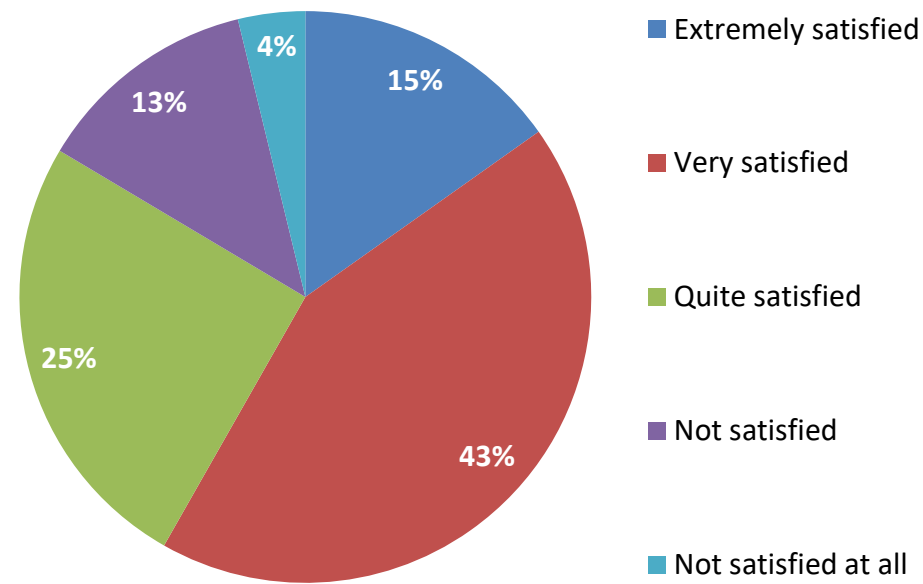
IMPACT ON YOUNG RESEARCHERS' CAREER



Data from 35 positive responses for a total of 63 young researchers

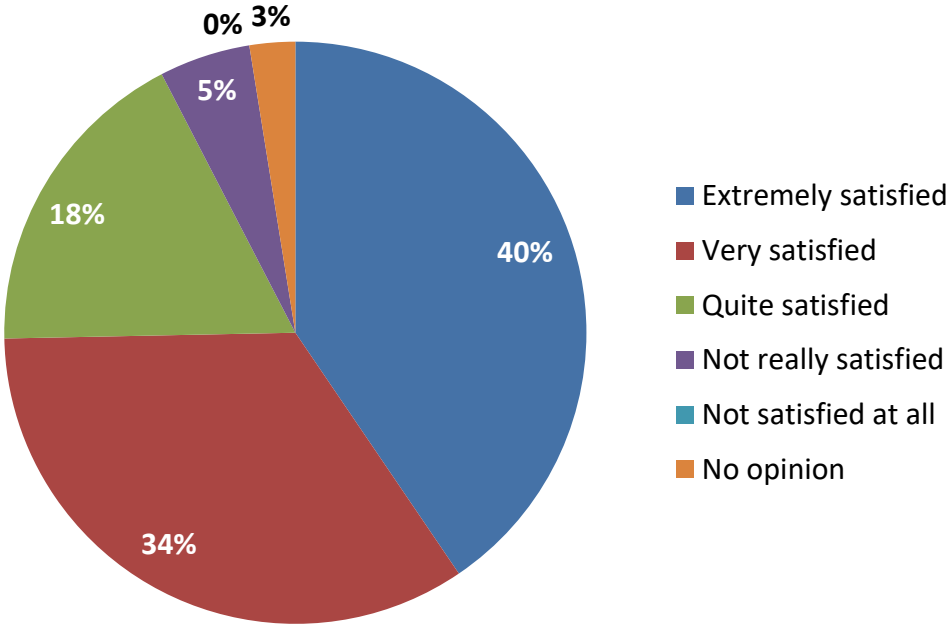
GENERAL OPINION OF FRENCH PRINCIPAL INVESTIGATORS ON THE PROGRAM

83% of French principal investigators are satisfied



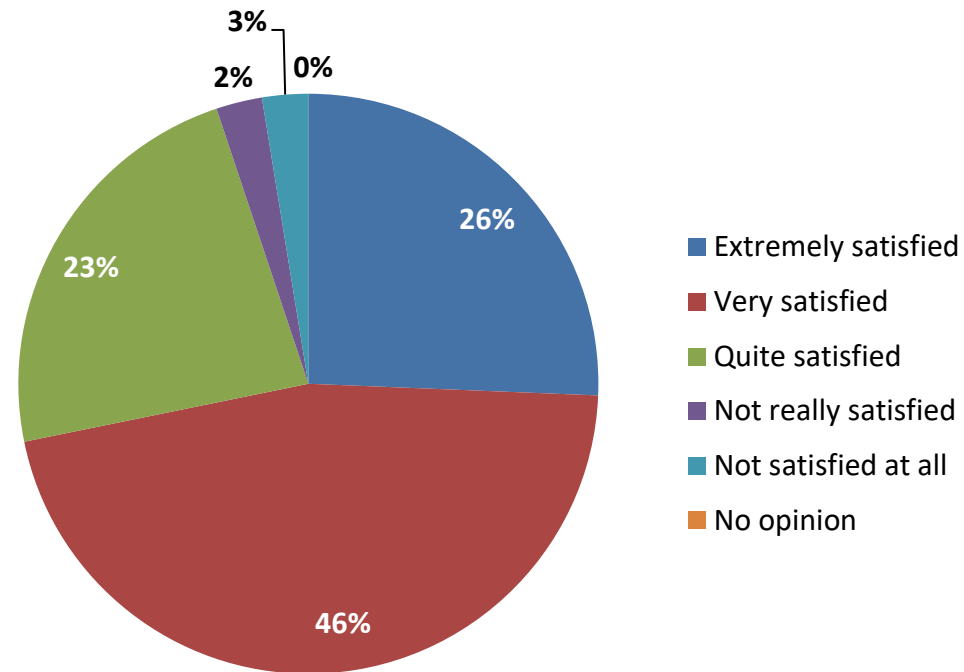
Data from 79 responses

OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT FRENCH EMBASSY HELP



Data from 79 responses

OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT CAMPUS FRANCE ADMINISTRATIVE MANAGEMENT

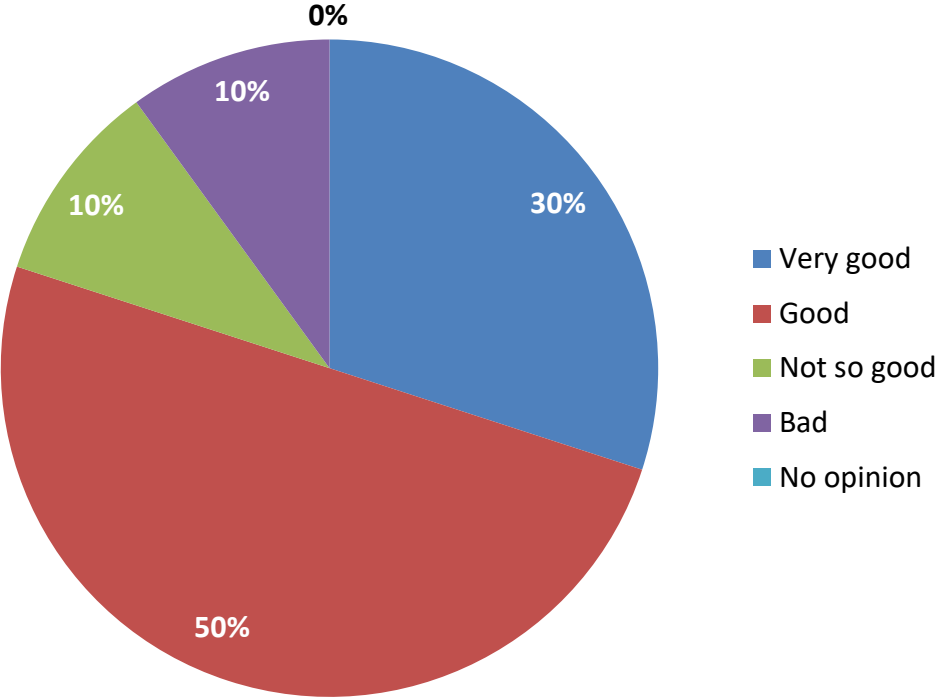


Data from 78 responses

OPINION OF FRENCH PIS

ABOUT UNDERSTANDING THE ROLE OF THE DIFFERENT FRENCH ACTORS IN THE PROGRAM 2019-2022

(DATA FROM SURVEY 2)



Data from 10 responses

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

POSITIVE COMMENTS



Strengths of this program	Number of occurrences (out of 415)	% of funded projects
Fostering researchers' mobility	65	80%
Fostering an international research cooperation	63	78%
Simplicity of the project application process	51	63%
Helping to know the partner country	47	58%
Fostering exchanges enabling scientific production	44	54%
Fostering the training of young researchers	43	53%
Sufficient financial means for the mobility costs	21	26%
Helpful to initiate other fundraising	19	23%
Easy implementation (administrative flexibility)	17	21%
Good scientific-added value on financial investment	15	19%
Sufficient amount of mobility time given to collaborate	10	12%
Transparency of the selection process	9	11%
Sufficiently long duration of the projects	7	9%
Financial autonomy towards your institution (survey 2025)	2	18%
Flexibility of the programme for actions co-financed with the Egyptian partner (survey 2025)	1	9%
Timetable for implementation (survey 2025)	0	0%
Other	1	1%
<i>Total number of occurrences</i>	415	

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

NEGATIVE COMMENTS



Weaknesses of this program	Number of occurrences (out of 219)	% of funded projects
Insufficient financial means to cover a project	55	68%
Difficult to continue the cooperation	23	28%
Length of support too short	23	28%
Too short duration of mobilities	19	23%
Financial means insufficient for the expenditure of mobility (per diem)	18	22%
Lack of transparency in the selection process	17	21%
Too low number of mobilities	14	17%
Insufficient communication on the evaluation's results	13	16%
Financial means insufficient for the expenditure of mobility (transport)	13	16%
Administrative heaviness of the missions management	12	15%
Heaviness of the process of applications	8	10%
Timetable for implementation (survey 2025)	2	18%
Flexibility of the program for actions co-financed with the partner (survey 2025)	0	0%
Financial autonomy towards your institution (survey 2025)	0	0%
Too long duration of mobilities	0	0%
Other	2	2%
<i>Total number of occurrences</i>	219	

PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation.

Implication of women laureates (27%) close to the general mean (26%)

Average annual scientific coproductions per project close to the average of the other programs (0,85 vs 0,96)

Correct rate of average annual publications for young researchers involved in the scientific coproductions (0,58)

51% of the projects with new fundings after the Imhotep program versus 34% for the general mean

The ongoing cooperation is financed by a new Imhotep funding for only 24% of the Pis

Only 44% of new cooperations (mean of all programs : 54%)

Implication of young researchers laureates (11%) below the general mean (23%)

77% of the cooperations with the same previous egyptian partner (mean of all programs : 45%)

38% of the projects with no scientific coproduction

Only 56% of funded projects with the participation of at least one french young researcher

Only 39% of french young researchers involved in the scientific coproductions (mean of all programs : 50%)

Rather low implication of young researchers in the mobilities (21%) compared to the mean of all programs (32%)

Low rate of average annual publications for young researchers involved in the projects (0,23)

COMPARISON SURVEY 2020 (2009-2018) – SURVEY 2025 (2019-2022)

- Response rate : 2020 : 54%, 70 responses, 2025 : 51%, 11 responses (total number of responses for 2009-2022 : 81)
- Stability in the average annual number of applications (35 vs 38)
- Small increase in the number of selected projects carried by young researchers (11% vs 9%)
- Stable number of women applicants (21% vs 22%) and laureates (27% vs 25%)
- Better participation of young french researchers to the projects (+4%) but decreased involvement in the scientific coproductions (-17%%)
- No change for outgoing mobilities of french young researchers (21%) and incoming mobilities of egyptian young researchers (25% vs 26%)
- Small increase in the outgoing mobilities for women researchers (+2%)
- Small decrease in the average annual number of scientific coproductions per project (0,85 vs 0,93)
- Stability of the continuation of cooperations (-1%)
- Small increase in the continuation of cooperations with financing (+3%)

PRELIMINARY RECOMMANDATIONS

- Encourage new cooperations
- Encourage young researchers applications
- Enhance scientific coproductions (from the surveys : 38% of projects with no scientific coproduction)
- Increase the participation of young researchers to the projects and the scientific coproductions
- Promote both outgoing and incoming mobilities of young researchers

French national ministries (MESR / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding who participated in this survey.

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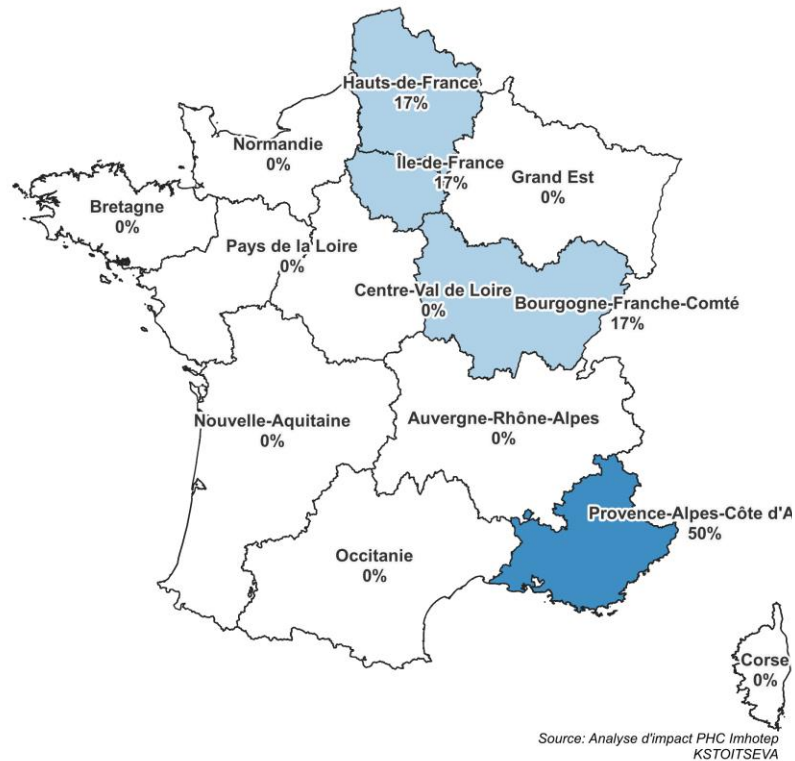
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*Liberté
Égalité
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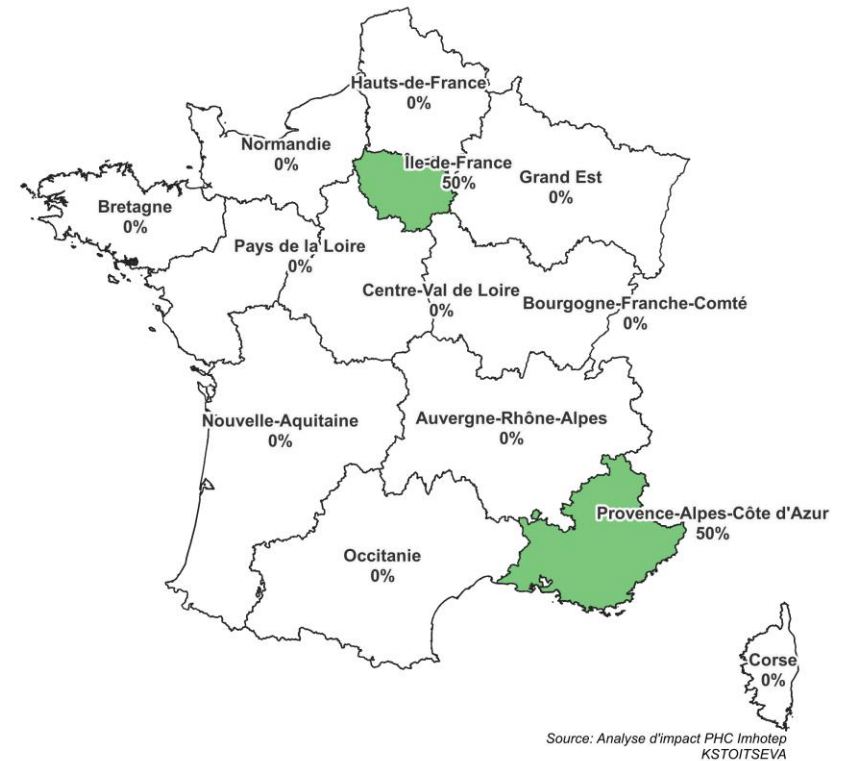
ANNEX REGIONALISATION AND SCIENTIFIC DOMAINS (CARTOGRAPHIES)

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP Regional percentages of applications and selections *Mathematics 2009-2024*



Number of applications : 6



Number of selections : 2

Four regions are concerned for applications with Provence-Alpes-Côte d'Azur ahead. Only two regions are concerned for selections.

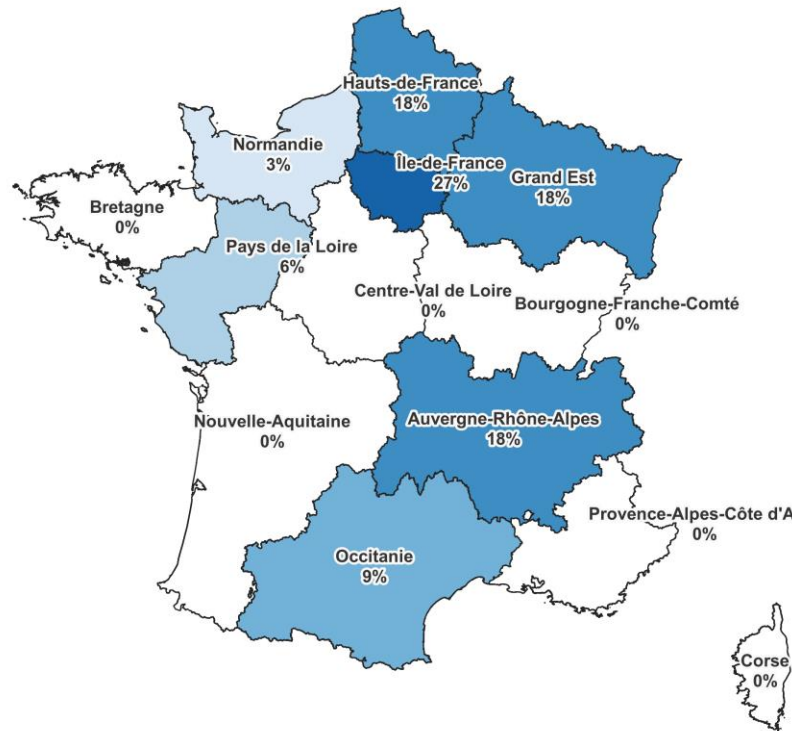
**% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
 THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN**

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

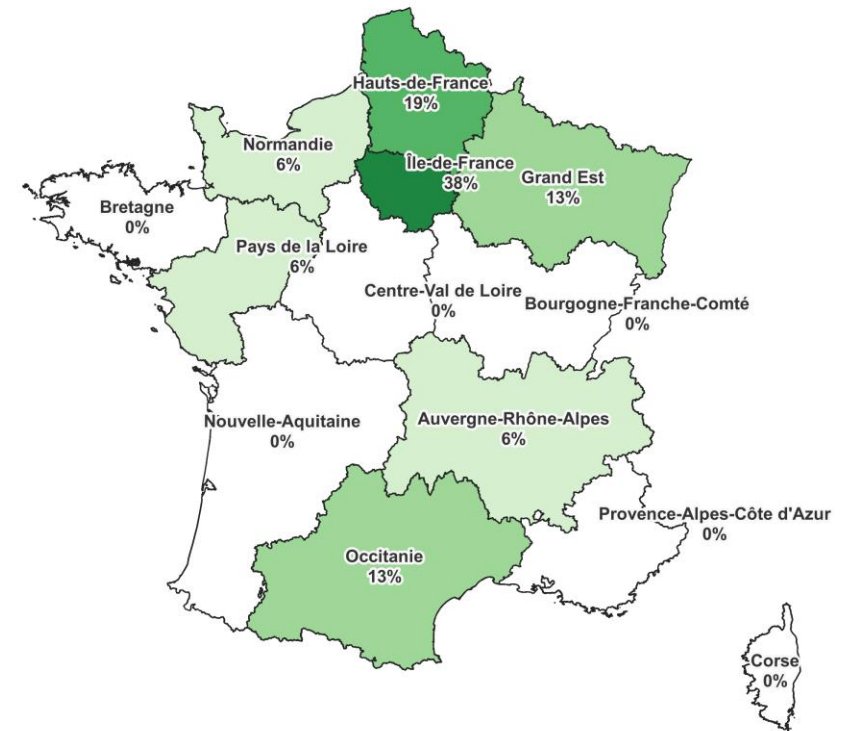
Regional percentages of applications and selections

Physics 2009-2024



Number of applications : 33

Source: Analyse d'impact PHC Imhotep
KSTOITSEVA



Number of selections : 16

Source: Analyse d'impact PHC Imhotep
KSTOITSEVA

Seven regions are concerned for applications with Ile-de-France ahead. All benefit selections (with Ile-de-France still ahead)

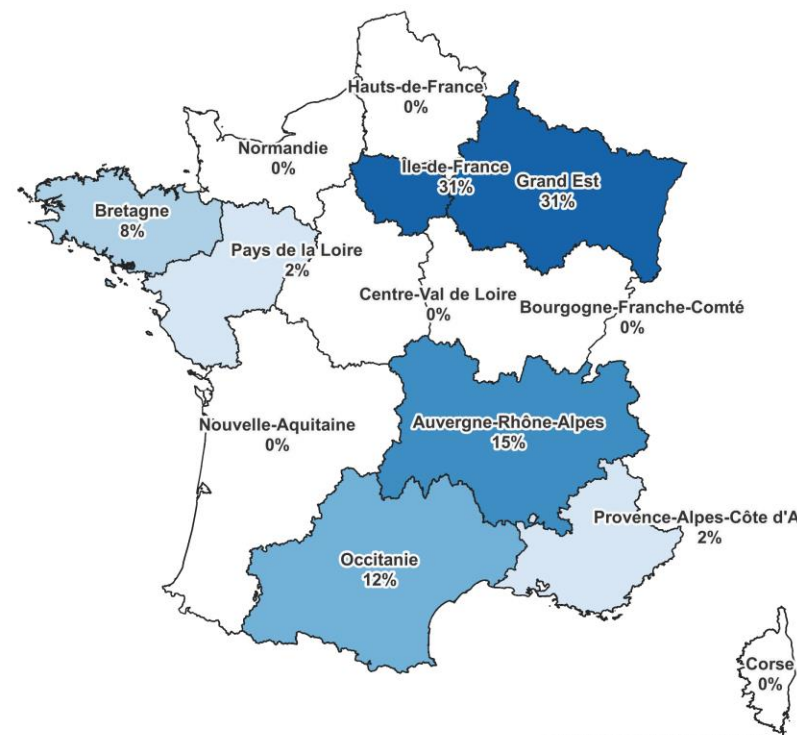
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REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

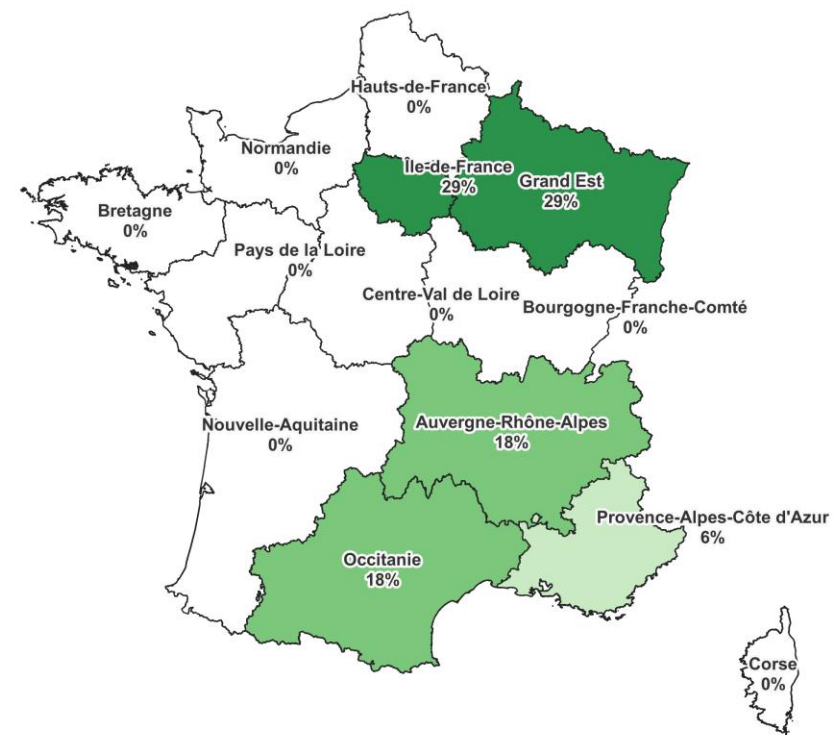
Regional percentages of applications and selections

Marine, Earth, Planet Sciences 2009-2024



Source: Analyse d'impact PHC Imhotep
KSTOITSEVA

Number of applications : 52



Source: Analyse d'impact PHC Imhotep
KSTOITSEVA

Number of selections : 17

Seven regions are concerned for applications but only five benefit selections (with Ile-de-France and Grand Est ahead for both)

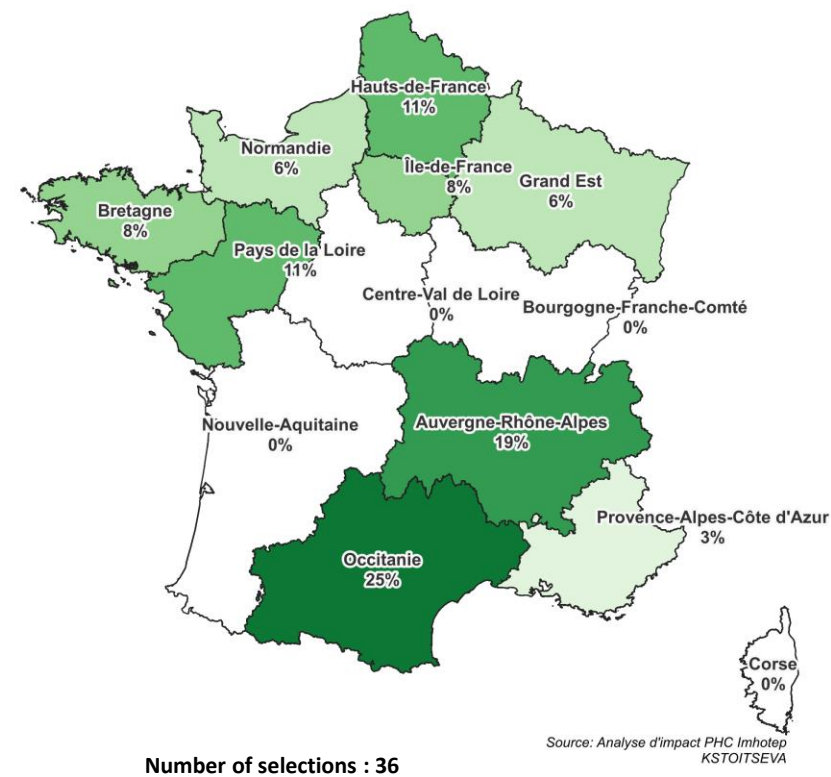
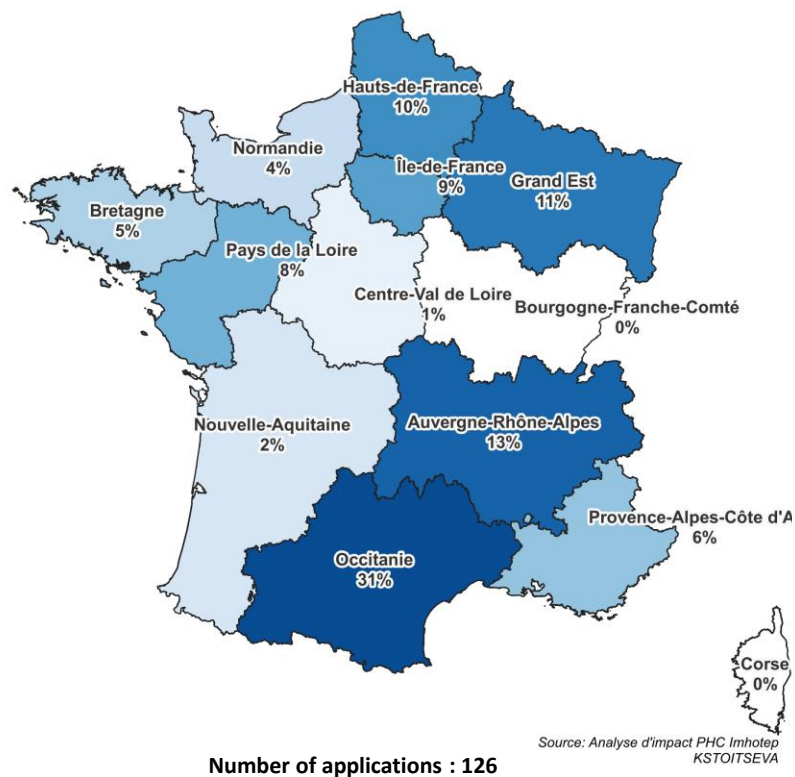
% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
 THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

Regional percentages of applications and selections

Chemistry 2009-2024



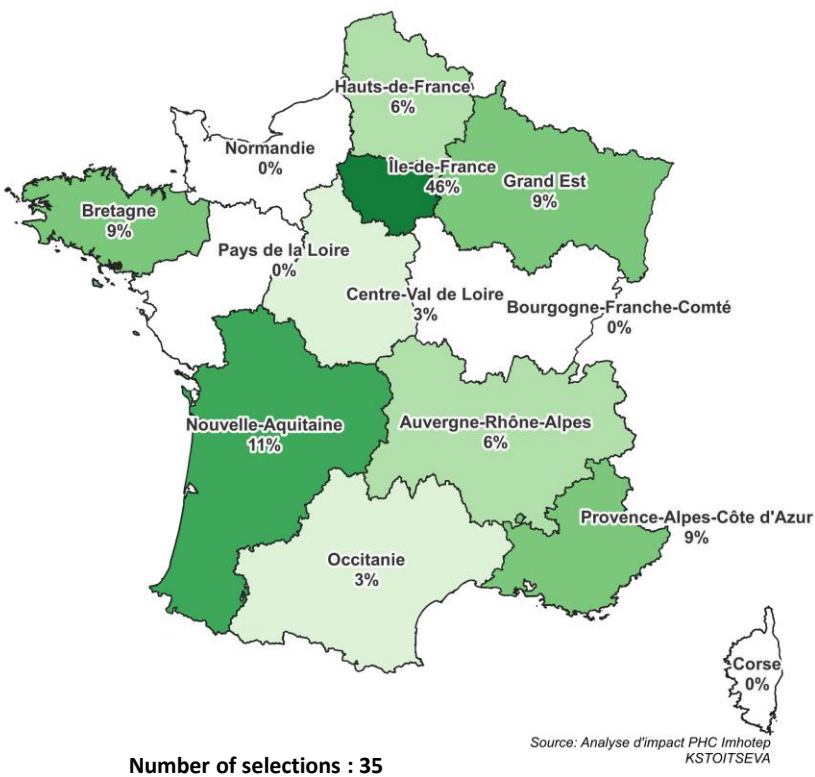
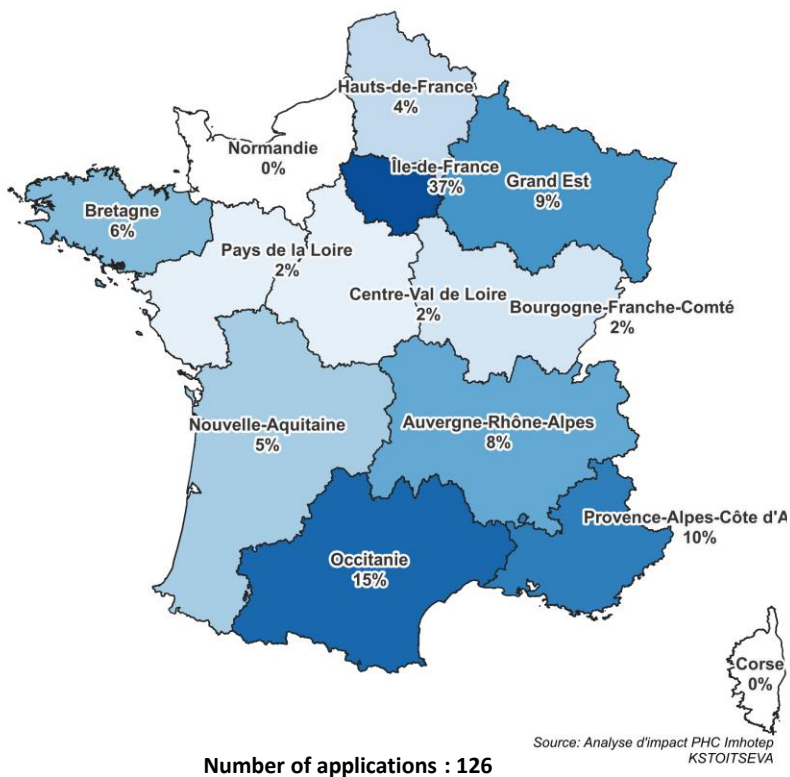
Twelve regions are concerned for applications (including La Réunion) with Occitanie ahead.

Ten regions are concerned by selections (including La Réunion) with Occitanie still ahead.

% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP Regional percentages of applications and selections *Biology and Health 2009-2024*

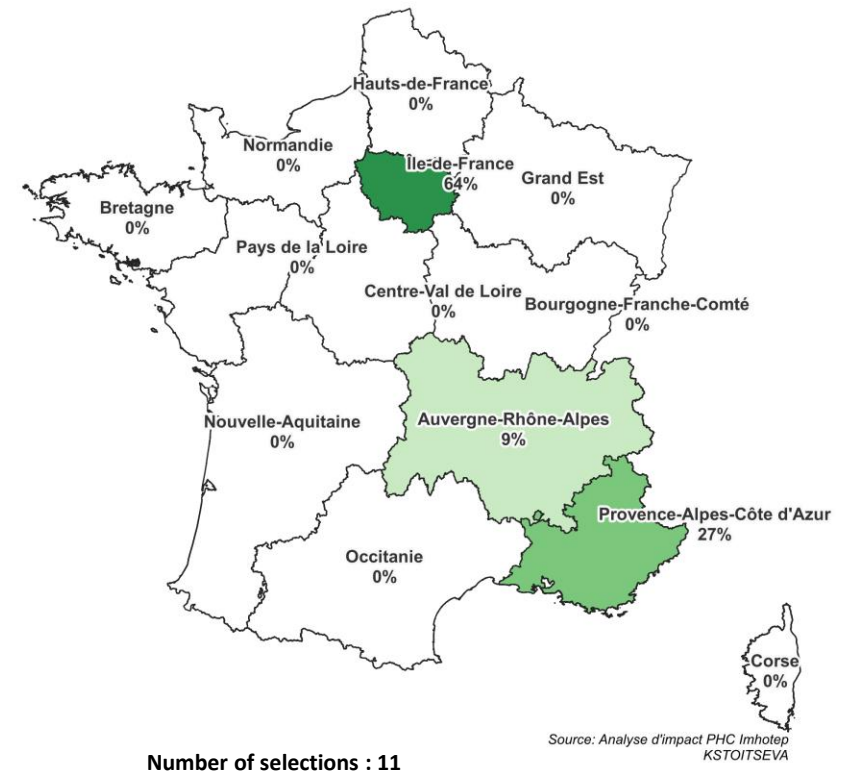
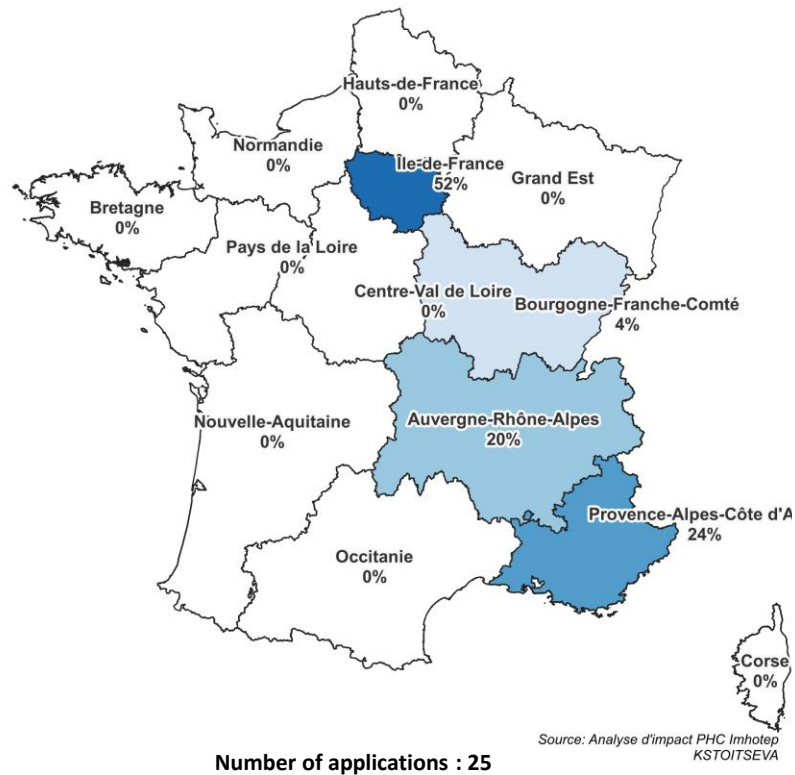


Twelve regions are concerned for applications (including La Réunion) with Ile-de-France ahead but only nine benefit selections (with Ile-de-France still ahead)

% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP Regional percentages of applications and selections *Humanities 2009-2024*



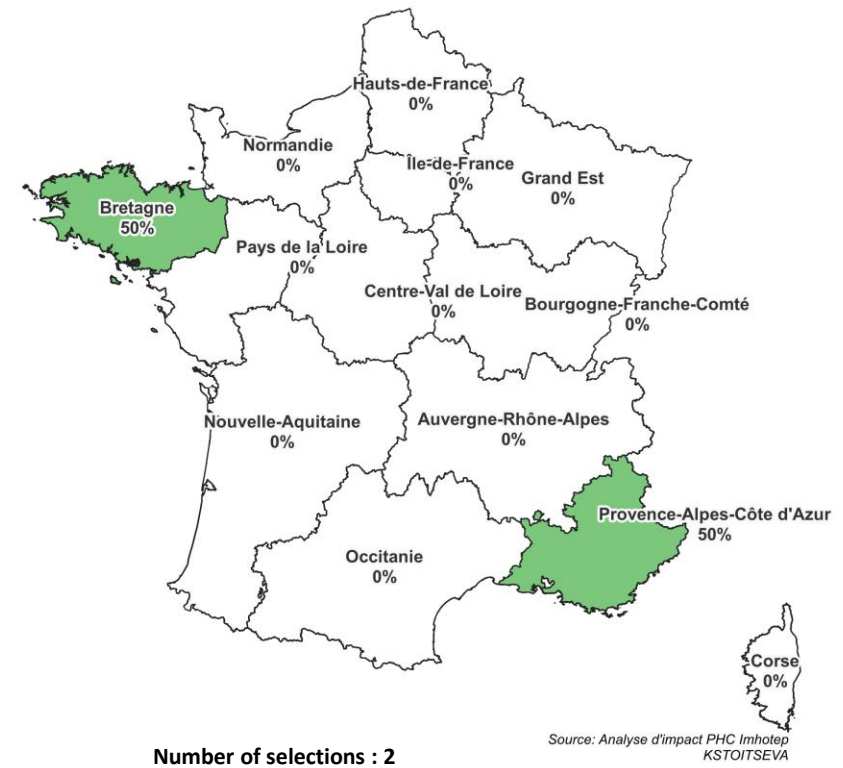
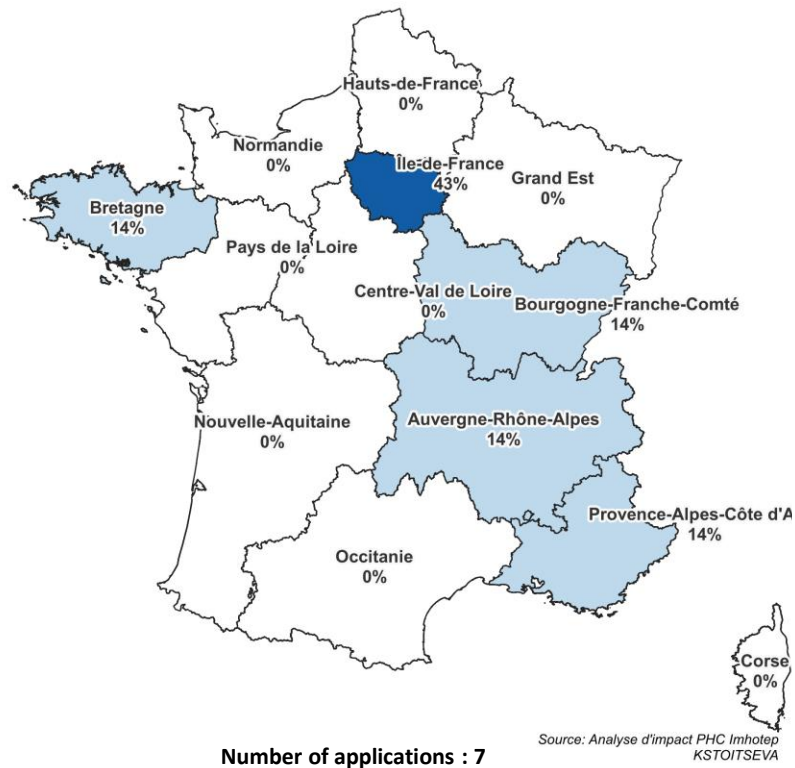
Four regions are concerned for applications with Ile-de-France largely ahead. Three benefit selections (with Ile-de-France still largely ahead)

**% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN**

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

Regional percentages of applications and selections *Social Sciences 2009-2024*



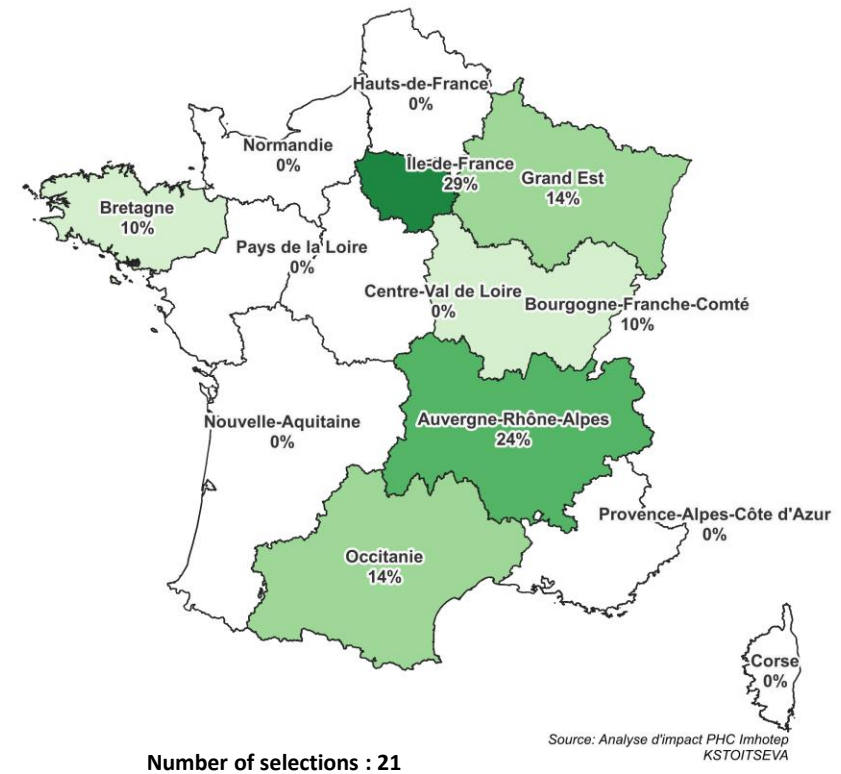
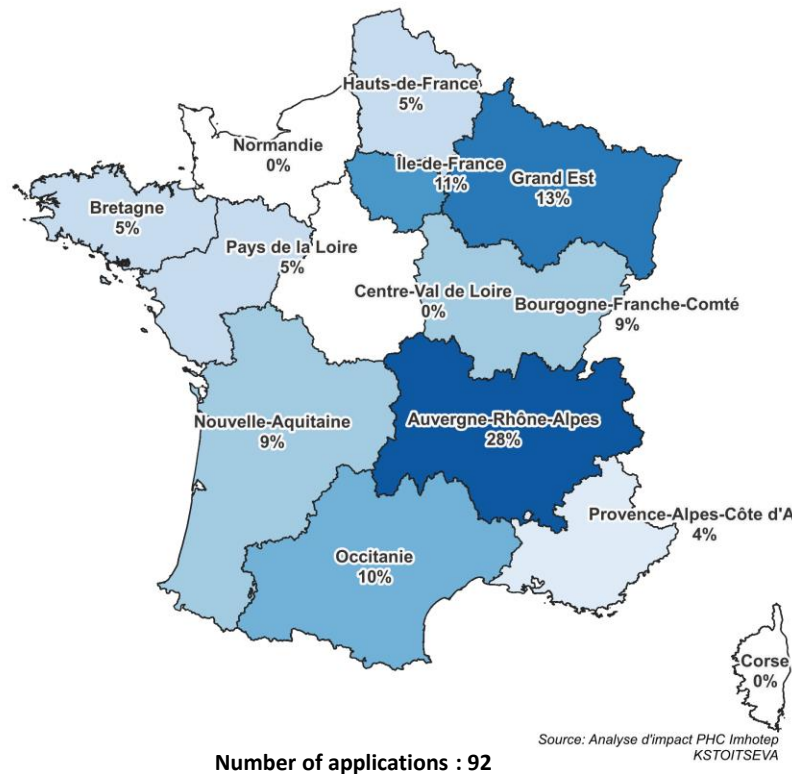
Five regions are concerned for applications with Ile-de-France largely ahead but only two benefit selections (Bretagne and Provence-Alpes-Côte d'Azur)

% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

Regional percentages of applications and selections *Engineering Sciences 2009-2024*



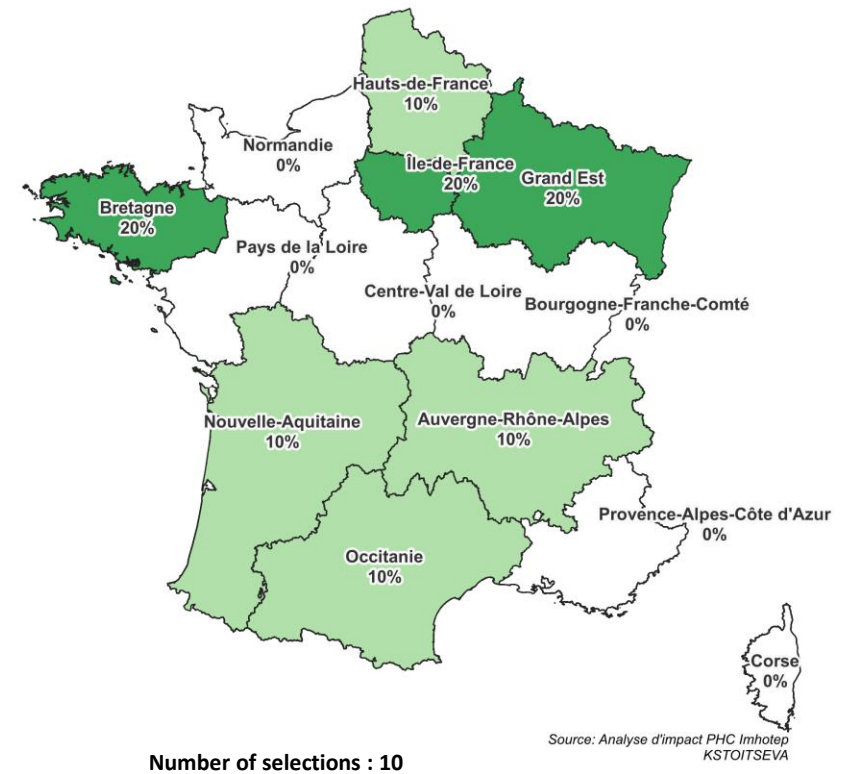
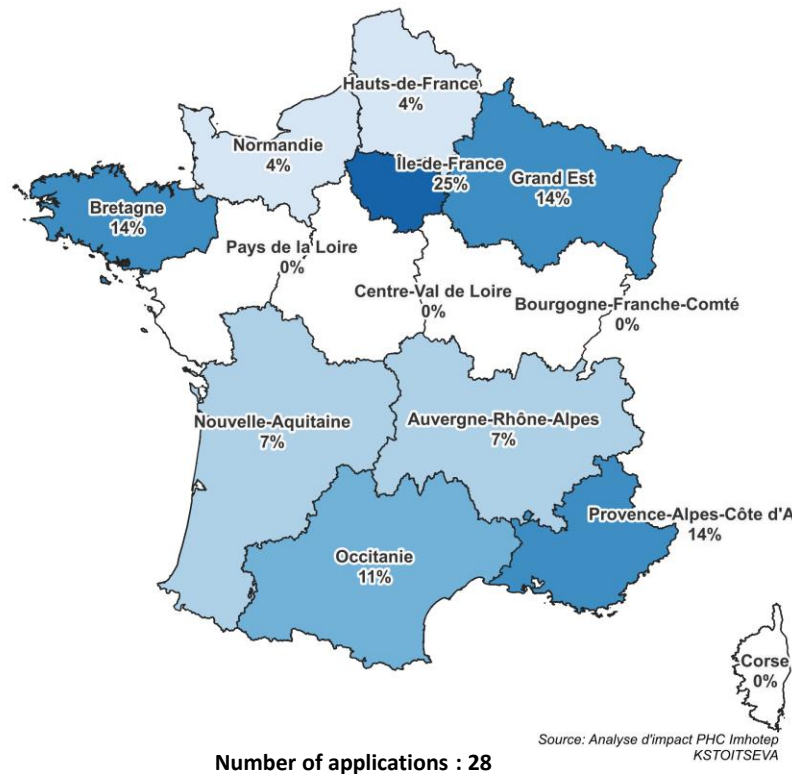
Ten regions are concerned for applications with Auvergne-Rhône-Alpes ahead. Only six regions benefit selections (with Ile-de-France ahead)

**% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN**

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

Regional percentages of applications and selections *Information technology 2009-2024*



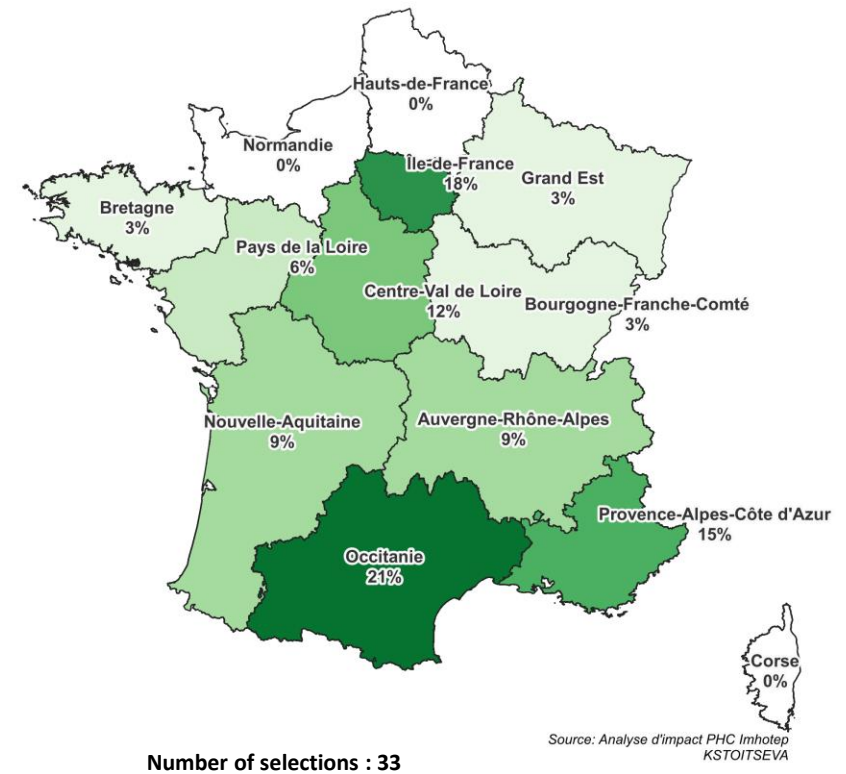
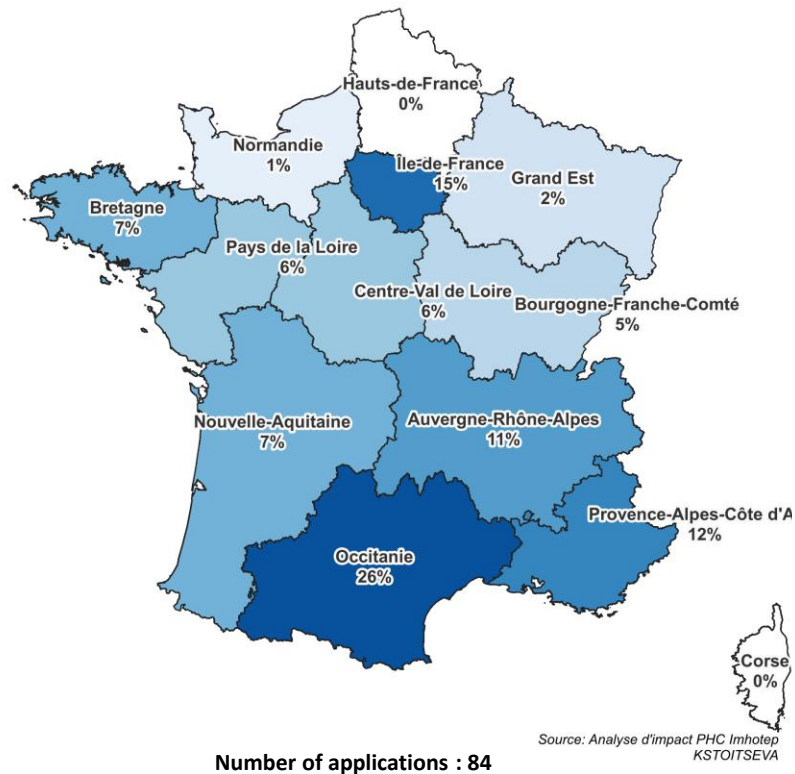
Nine regions are concerned for applications with Ile-de-France ahead. Seven regions benefit selections (with Ile-de-France, Bretagne and Grand Est ahead)

**% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN**

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2009-2024)

PHC IMHOTEP

Regional percentages of applications and selections *Agronomy/Ecology 2009-2024*



Almost all regions are concerned for applications (including La Réunion) with Occitanie ahead. Ten regions benefit selections (with Occitanie still ahead)

**% OF REGIONAL APPLICATIONS/SELECTIONS FOR EACH SCIENTIFIC DOMAIN AS COMPARED TO
THE TOTAL NUMBER OF APPLICATIONS/SELECTIONS IN THE SCIENTIFIC DOMAIN**