

Liberté Égalité Fraternité

FRANCE – SOUTH AFRICA

Scientific impact of the PROTEA program (2006-2022)

MESRI-DAEI / MEAE

2024

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

1

DGRI-DGESIP/DAEI B3

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberé Liberé Liberé

Creation: 1997

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

Total budget 2011 2022 (France + South Africa) : around 240 000 €/year >> including budget from the French part : around 120 000 € / year >> including budget from the South African part : around 120 000 € / year Maximum budget per project (France + South Africa) : 15 000 € / year Number of new projects submitted per year : around 64 Number of new projects funded per year : around 14

> From 2011-2022 : 446 applications submitted 98 projects funded

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberti Liberti Liberti Liberti Liberti Liberti

DATA SOURCES

Campus France (2011-2022)

- Information about the PHC Protea applications
- List of outgoing and incoming mobilities
- Survey 1 : 2011-2015 ; Survey 2 : 2011-2022
- Call for offer every 2 years until 2021

Survey (2006-2022)

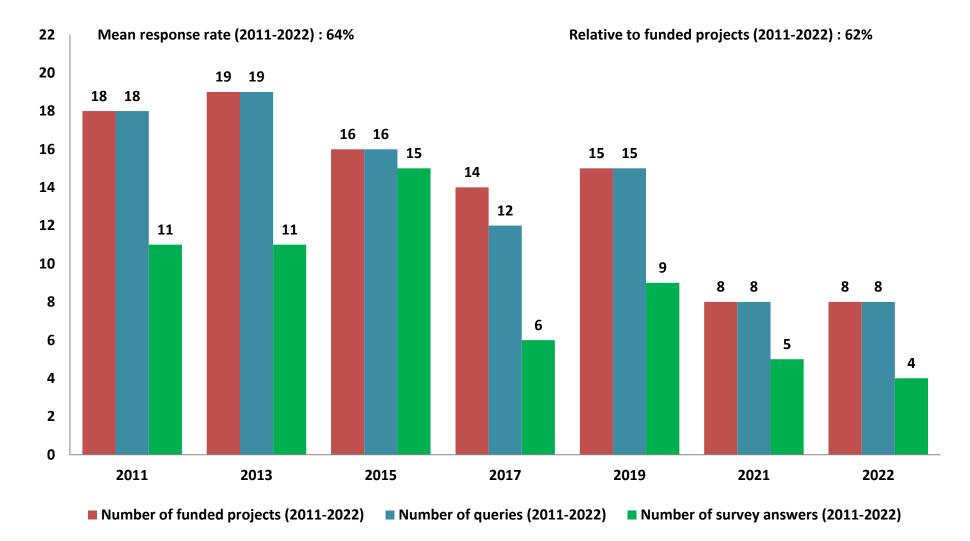
- Target : French Principal Investigators of selected projects between 2006 and 2022
- Survey 1 (2006-2016) duration : from July to September 2017
 41% response ratio (37 respondents for 90 funded projects)
- Survey 2 (2017-2022) duration : from November 2023 to January 2024

54% response ratio (29 respondents for 54 funded projects)

Égalité Fraternité

ANSWERS TO THE SURVEYS (2011-2022)

Average response rate to the surveys : 64 % (62 answers)



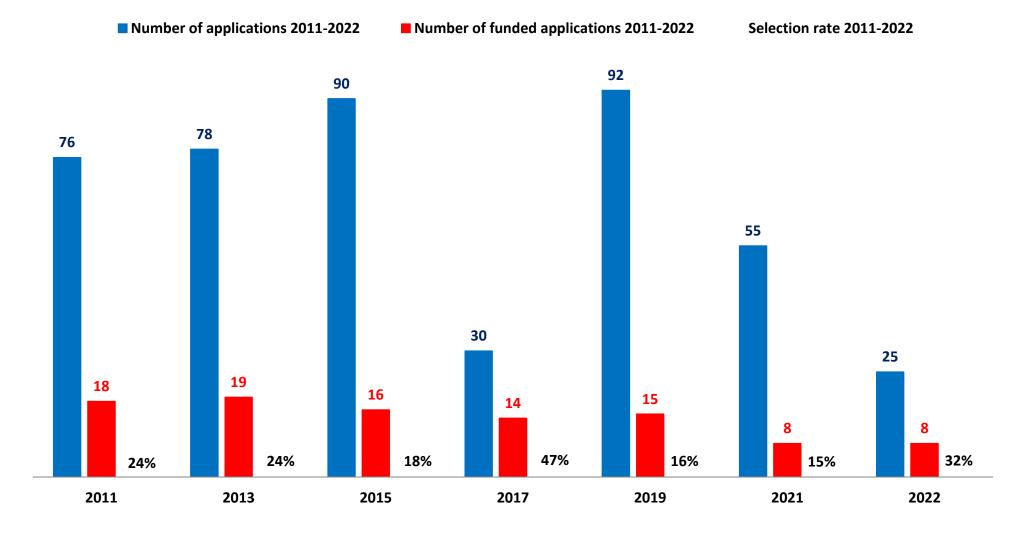
Complete statistics data before 2011 not available

Liberté Égalité Fraternité

KEY POINTS DATA CAMPUS FRANCE : 2011-2022 DATA SURVEY 1 : 2006-2016 DATA SURVEY 2 : 2017-2022 DATA SURVEYS 1+2 : 2006-2022

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Libert Aggitut Fotomit

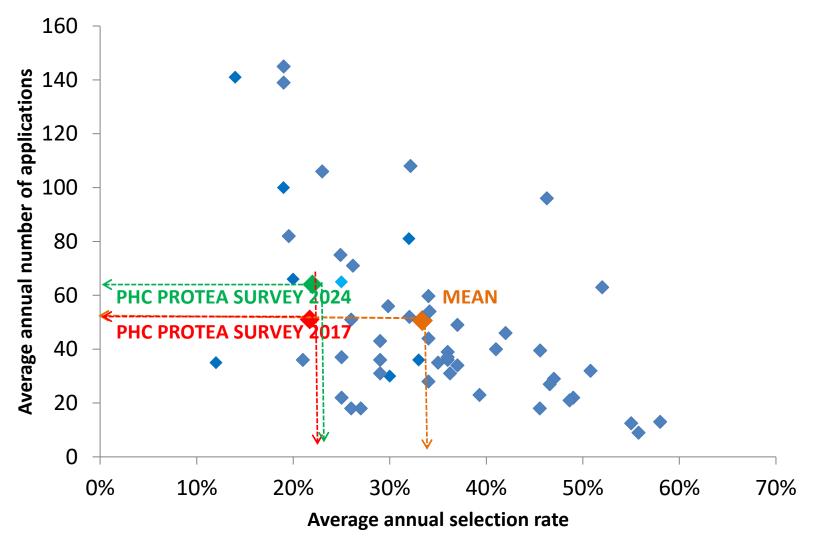
NUMBER OF APPLICATIONS AND SELECTION RATE Average selection rate from 2011-2022: 22%



Complete statistics data before 2011 not available

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberé Aguité Fotemité

NUMBER OF APPLICATIONS VS SELECTION RATE (2011-2022)



Survey 2017 : 26 programs Survey 2024 : 53 programs



BEFORE THE PROTEA PROJECT

66% of the laureates have already previously cooperated with South Africa (data from 62 responses) (mean of all programs : 56%)

This previous cooperation was with the same partner for 92% of the laureates (data from 40 responses) (mean of all programs : 46%)

This previous cooperation was financed by the PHC PROTEA for 21% of the laureates (data from 29 responses) (mean of all programs : 21%) MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberé liberé fattemid

BEFORE THE PROTEA PROJECT

With which scientific collaboration program ?	% of occurencies
PHC Protea	21%
CNRS International funding	21%
South African institutions cofunding	15%
European Framework program	3%
European funding	3%
INRIA International funding	3%
Others (National Research Fondation, Program Desmond Tutu)	35%

Data from 29 responses

Plus 21 previous cooperations based on other exchanges (scientific coproduction, meetings, students supervision...)

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberé Igditié Fateraité

SCIENTIFIC DOMAINS OF PROJECTS (2011-2022)

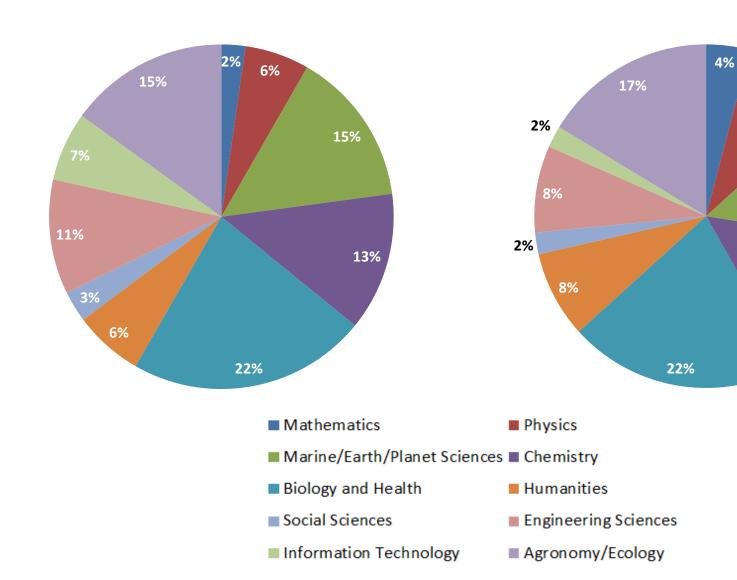
Number of applications : 446

Number of funded projects : 98

9%

14%

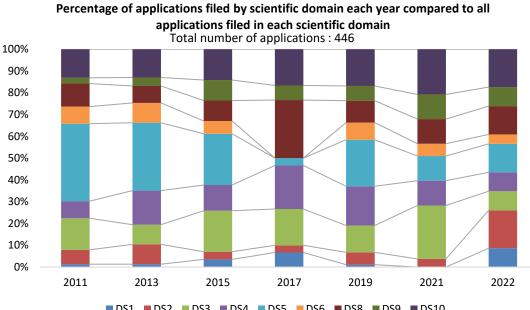
14%



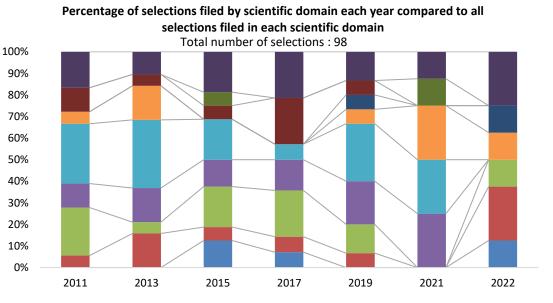
Liberté Égalité Fraternité

- **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

SCIENTIFIC DOMAINS : EVOLUTION 2011-2022



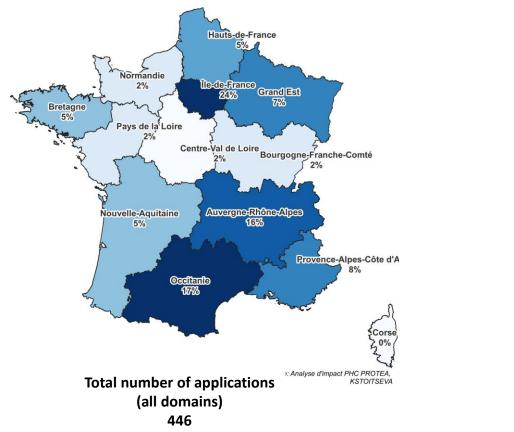
■ DS1 ■ DS2 ■ DS3 ■ DS4 ■ DS5 ■ DS6 ■ DS8 ■ DS9 ■ DS10



DS1 DS2 DS3 DS4 DS5 DS6 DS7 DS8 DS9 DS10

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2011-2022) DE L'ENSEIGNEMENT

PHC PROTEA **Regional percentages of applications and selections** 2011-2022



Tiherté Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

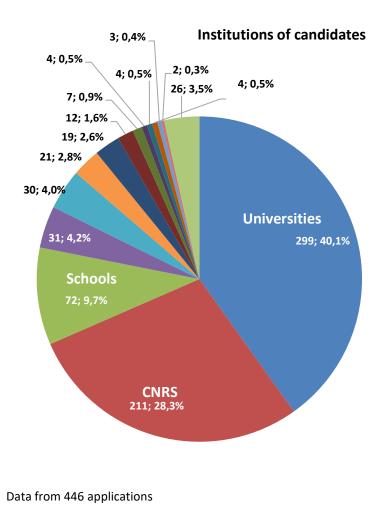
ET DE LA RECHERCHE

Hauts-de-France 3% Normandie llerde-France Grand Est 2% 10% Bretagne 6% Pays de la Loire Centre-Val de Loire Bourgogne-Franche-Comté Auvergne-Rhône-Alpes 1498 Nouvelle-Aquitaine 4% Provence-Alpes-Côte d'Azur Occitanie 14% Corse > 0% Source: Analyse d'impact PHC PROTEA **Total number of selections** KSTOITSEVA (all domains) 98

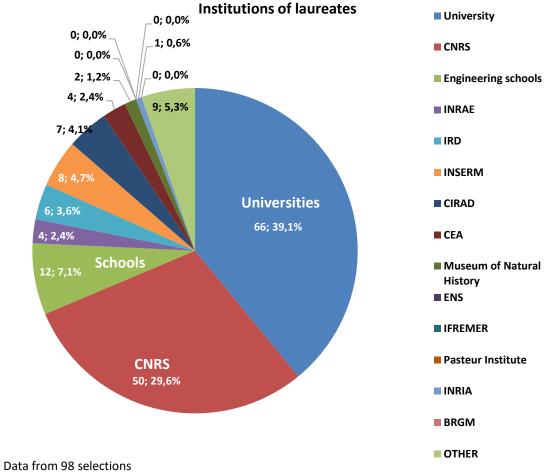
The region Ile de France is the main contributor both for applications and selections followed by Occitanie for applications and Occitanie and Auvergne-Rhône-Alpes for selections. La Réunion, Guyane and Polynésie française represent 4,9% of applications. La Réunion represents 9% of selections

Liberté Égalité Fraternité

FRENCH PARTICIPATING INSTITUTIONS (2011-2022)



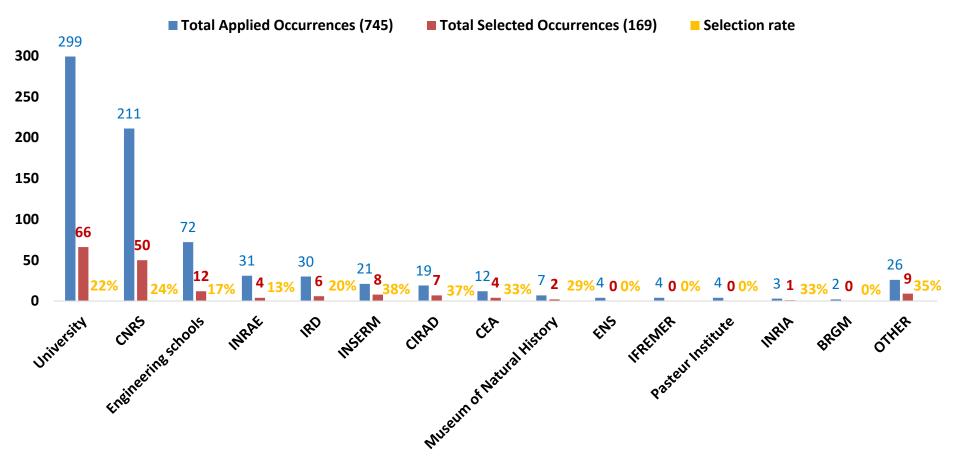




MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Egalité Fraternité

FRENCH PARTICIPATING INSTITUTIONS (2011-2022)



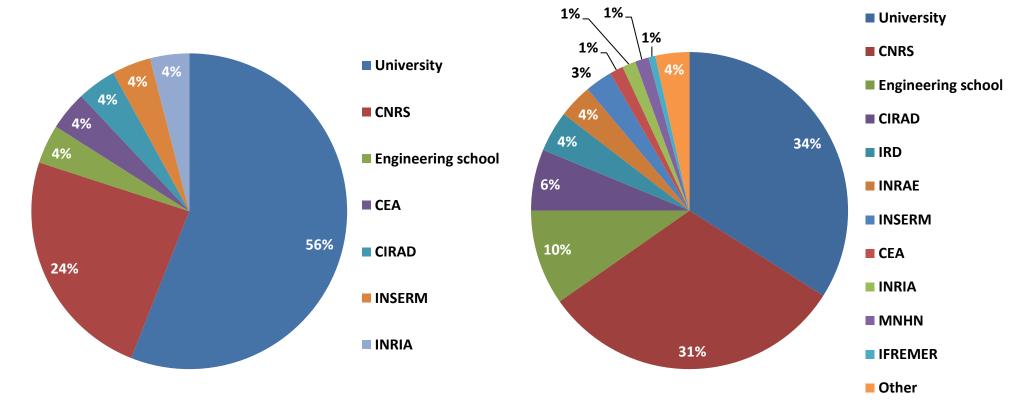


MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Ligerté Ligerté Ligerté Ligerté Ligerté Ligerté

FRENCH PARTICIPATING INSTITUTIONS (2006-2022)

PI's employers (2017-2022)

Laboratories authorities (2006-2022)

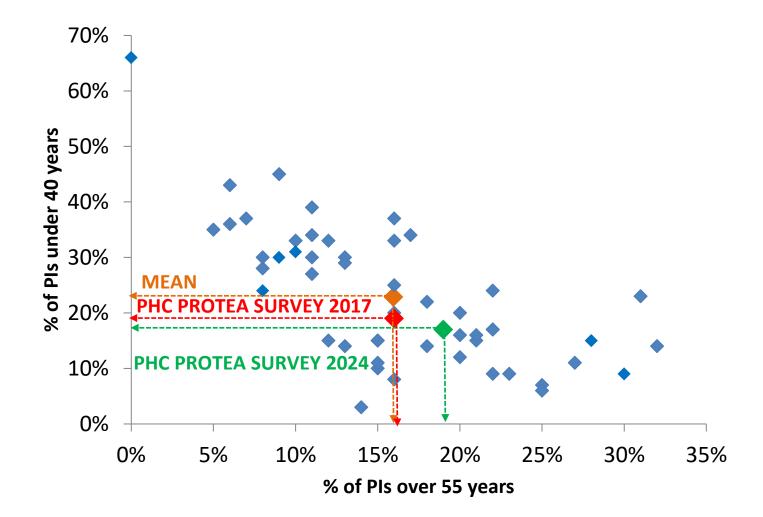


Data from 25 responses

Data from 62 responses

Liberté Égalité Fraternité

AGE OF FRENCH PRINCIPAL INVESTIGATORS (2006-2022)



Survey 2017 : 26 programs Survey 2024 : 53 programs

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Égalité Praternité

FRENCH PRINCIPAL INVESTIGATORS : STATUS (2011-2022) (DATA FROM CAMPUS FRANCE)

Laureates professional status

Applicants professional status

7% 28% 5% 9 Full professor 25% 9 Full professor 3 Senior researcher 3 unior researcher 3 Unior researcher 0 ther 18% 22%

Data from 446 french applicants and 98 french laureates



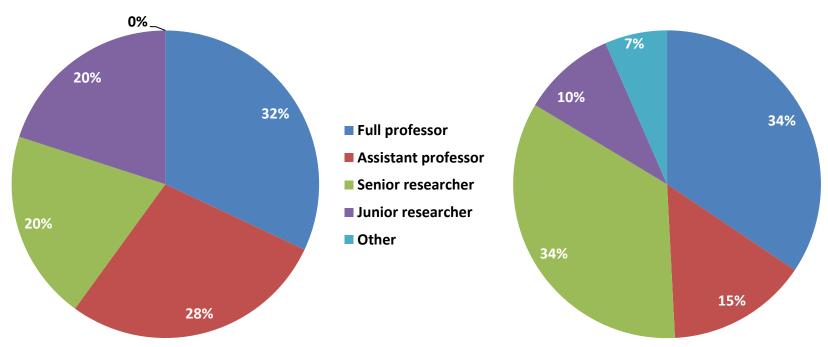
Previous professional status 2017-2022 (at the beginning of the project)

MINISTÈRE

SUPÉRIEUR

Égalité Fraternite

> **Current professional status** 2006-2022

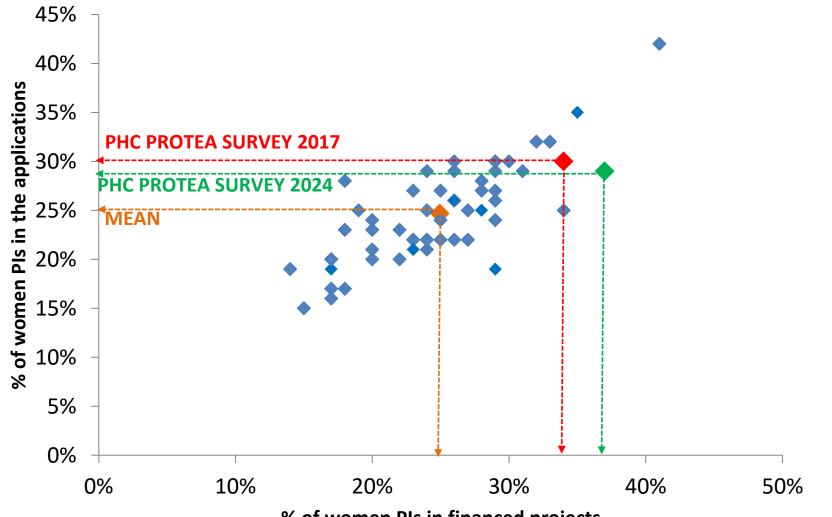


Data from 25 responses

Data from 62 responses

Liberté Égalité Fraternité

IMPLICATION OF WOMEN (FRANCE) (2006-2022)

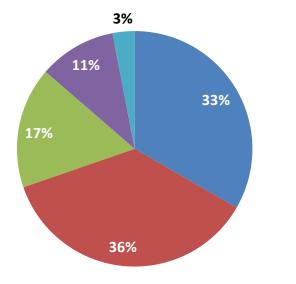


% of women PIs in financed projects

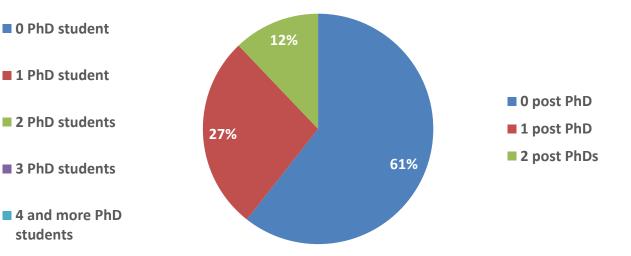
Survey 2017 : 26 programs Survey 2024 : 53 programs

Liberté Égalité Fraternité

Number of French PhD students



Number of French postdoctoral researchers

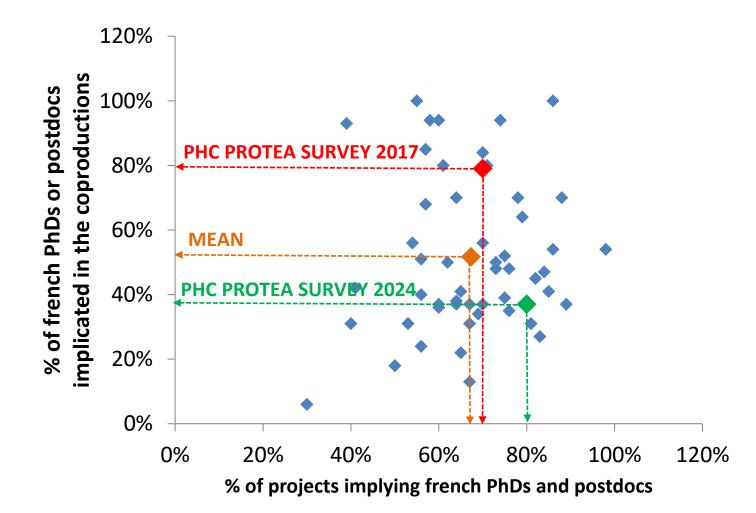


67% of projects involve at a 39% of projects involve at least one French PhD one French post-doctoral student
 Overall, 80% of projects involve at least one French young researcher

Data from 66 responses

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Libert Libert Systemie

IMPLICATION OF FRENCH YOUNG RESEARCHERS IN THE PUBLICATIONS (2006-2022)



Survey 2017 : 26 programs Survey 2024 : 53 programs



PARTICIPATION OF SOUTH AFRICAN YOUNG RESEARCHERS (2017-2022)

Between 2017 and 2022, 21 South African PhDs have been involved in the projects

52% of projects involve at least one South African PhD student

Between 2017 and 2022, 11 South African postdocs have been involved in the projects

34% of projects involve at least one South African postdoctoral researcher

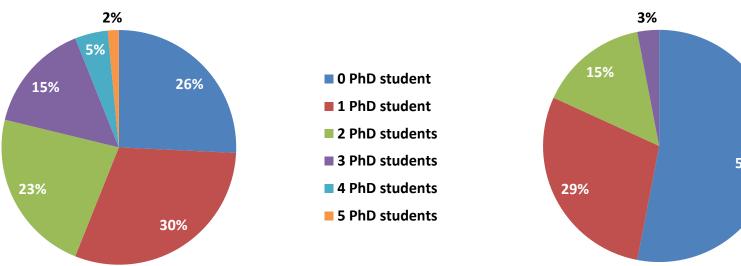
Overall, 76% of projects involve at least one South African young researcher

Data from the survey 2024 (29 responses)

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Igalité Praternité

PARTICIPATION OF BOTH FRENCH AND SOUTH AFRICAN YOUNG RESEARCHERS

Number of post-doctoral researchers



0 post PhD
1 post PhD
2 post PhDs
3 post PhDs

74% of projects involve at least one PhD student

Number of PhD students

47% of projects involve at least one post-doctoral researcher

Overall, 88% of projects involve at least one French or South African young researcher

Data from 37 responses (Survey 2017) and 29 responses (Survey 2024)

Liberté Égalité Fraternité

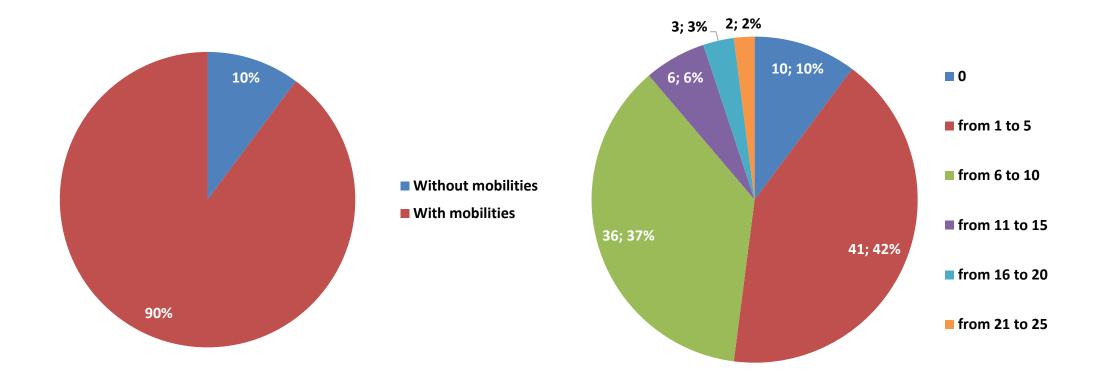
MOBILITY (2011-2022)

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Igalité Iraternité

MOBILITIES (2011-2022)

Projects with/without mobilities

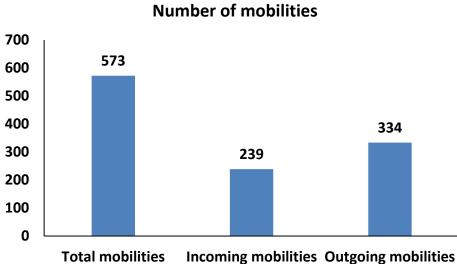
Number of mobilities per project



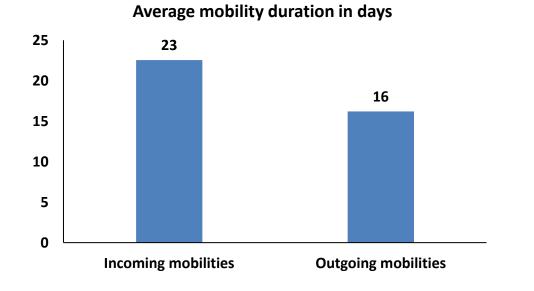
Data from 98 funded projects

Liberté Égalité Fraternité

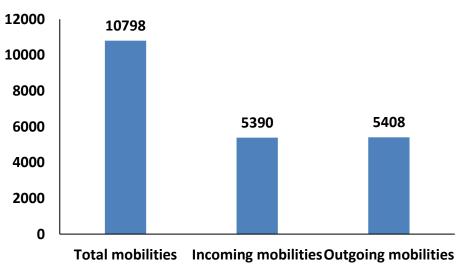
MOBILITIES (2011-2022)



Total mobilities Incoming mobilities Outgoing mobi

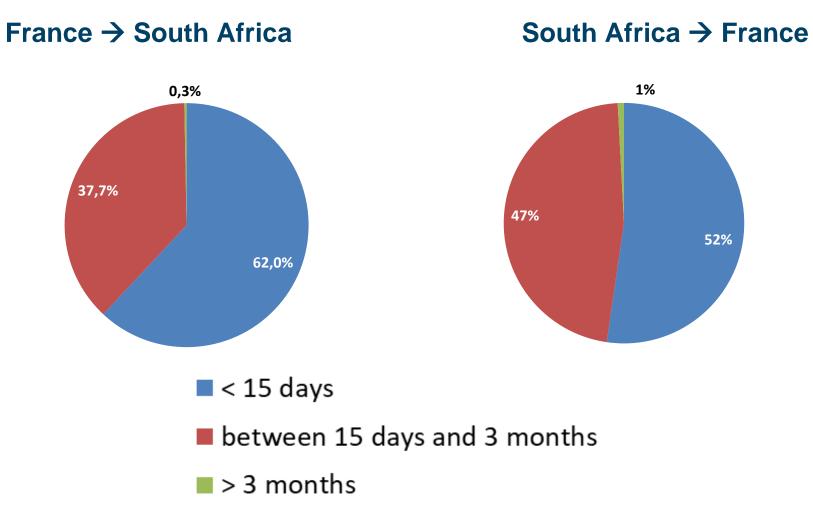






MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Ligalité Fraternité

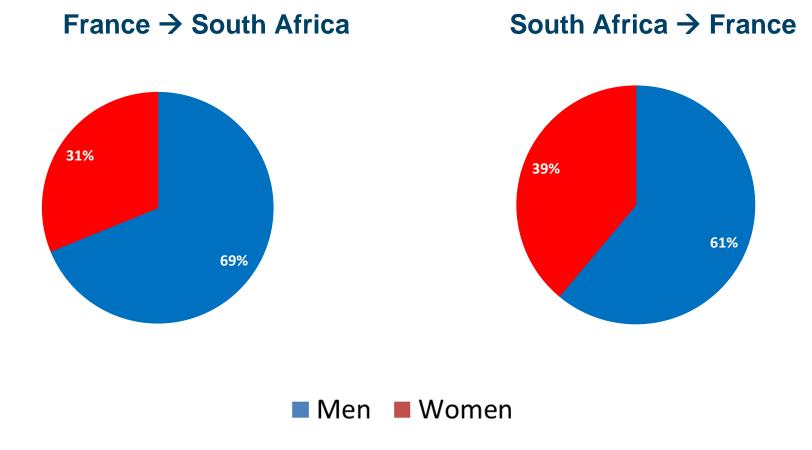
MOBILITY : DURATION (2011-2022)



Data from 334 outgoing mobilities and 239 incoming mobilities

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Egalité Fratemint

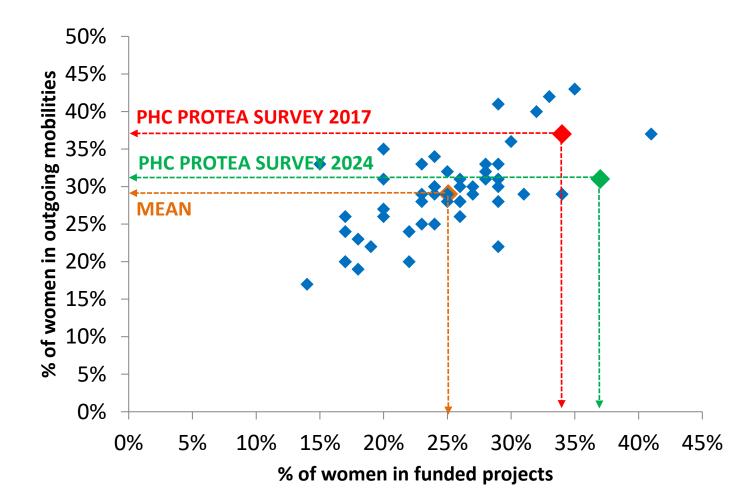
MOBILITY : GENDER DISTRIBUTION (2011-2022)



Data from 334 outgoing mobilities and 239 incoming mobilities

Liberté Égalité Fraternité

WOMEN MOBILITY FRANCE – SOUTH AFRICA (2011-2022)



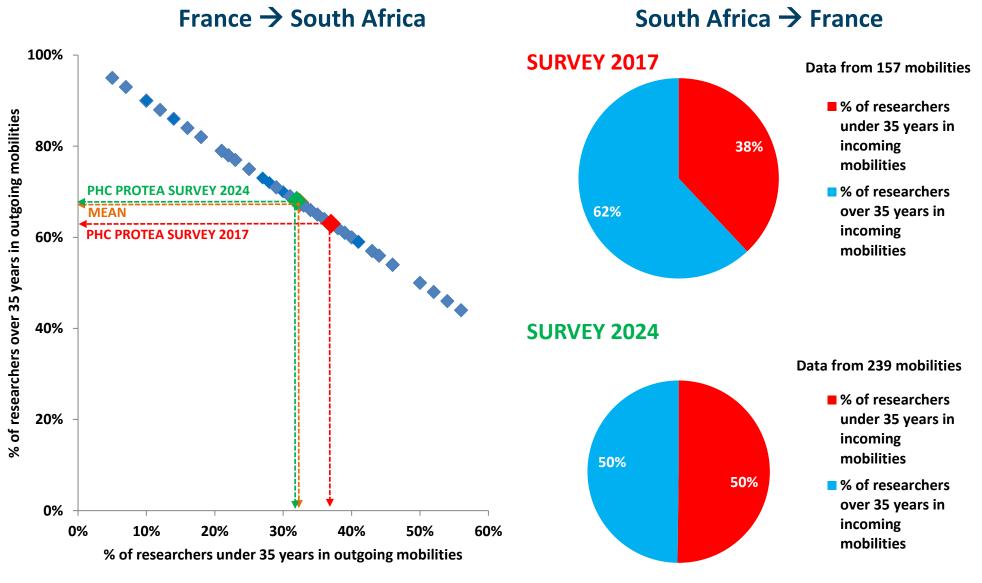
Data from 98 funded projects and 239 mobilities

Survey 2017 : 26 programs Survey 2024 : 53 programs

Liberté Égalité

Fraternité

YOUNG RESEARCHERS MOBILITY (2011-2022)



Survey 2017 : 26 programs Survey 2024 : 53 programs

Liberté Égalité Fraternité

> SCIENTIFIC PRODUCTION (2006-2022)

SCIENTIFIC COPRODUCTION 2006-2022

Égalité Fraternité



Mathematics

Marine / Earth /

Planet Sciences

Biology and Health

Physics

Chemistry

Humanities

Social sciences

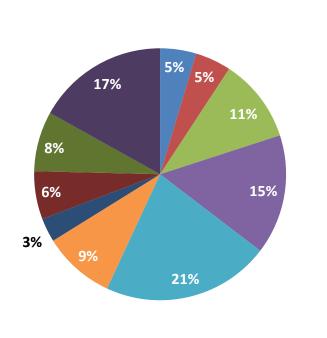
Information

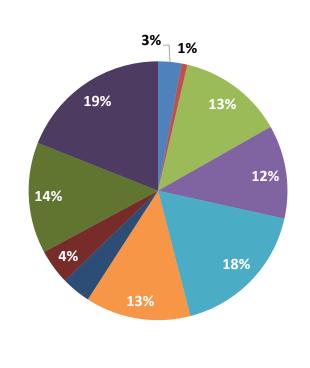
Technology

Engineering Sciences

Agronomy / Ecology

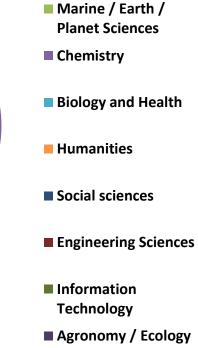
Coproductions 2006-2022





Physics

Mathematics



MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberé Judité Patemidé

SCIENTIFIC PRODUCTION (2006-2022) ENQUETES 2017+2024

	Number of funded projects 2017 survey	Number of funded projects 2017+2024 surveys	Average annual number of scientific coproductions per project 2017 survey	Average annual number of scientific coproductions per project 2017+2024 surveys
Mathematics	1	3	0,0	0,7
Physics	2	3	0,0	0,2
Marine/Earth/Planet Sciences	5	7	0,9	1,3
Chemistry	4	10	1,2	0,8
Biology and Health	8	14	1,7	0,9
Humanities	3	6	1,2	1,5
Social Sciences	0	2	0,0	1,3
Engineering Sciences	3	4	1,5	0,8
Information Technology	2	5	0,0	1,9
Agronomy / Ecology	9	11	0,5	1,2
TOTAL/MOYENNE	37	65	1,0	1,1

Overall average annual number of scientific coproductions per project 2017 : 1,0 vs 0,96 mean Overall average annual number of scientific coproductions per project 2017+2024 : 1,1

Enquêtes 2017+2024

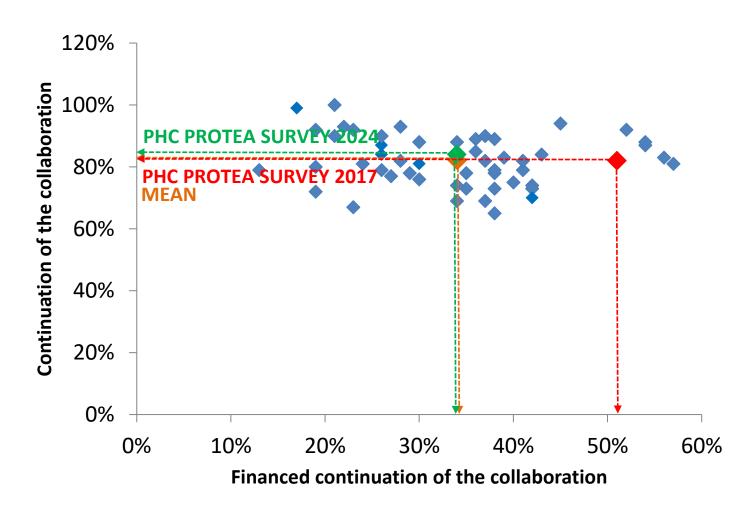
66% of funded projects led to at least 1 scientific coproduction (vs 70% survey 2017) 78% of scientific coproductions involve at least 1 young researcher (vs 58% survey 2017) The average annual rate of publication of young researchers implicated in the projects is 0,38 (not available survey 2017) The average annual rate of young researchers implicated in the scientific coproductions is 0,91 (not available survey 2017)

Liberté Égalité Fraternité

WHAT HAPPENS AFTER A PROTEA PROJECT ?

Égalité Fraternité

CONTINUATION OF THE COOPERATION (2006-2022)



Data from 58 responses (continuation) and 53 responses (financing)

Survey 2017 : 26 programs Survey 2024 : 53 programs



CONTINUATION OF THE COOPERATION

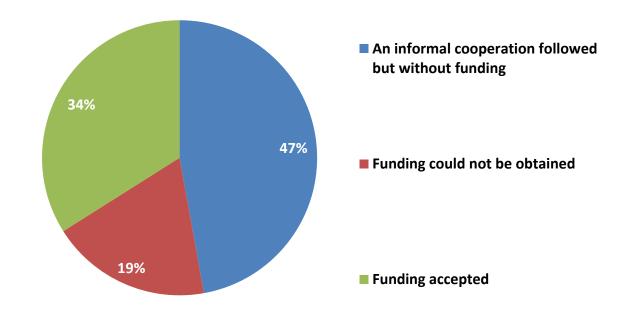
84% of the cooperations continued after the PROTEA project

Which activities?	
Cooperative research	76%
Scientific co-productions	68%
Researchers mobilities	58%
PhD mobilities	44%
Joint participation to conferences	36%
Co-organisation of scientific events	34%
Joint participation to PhD thesis	20%
Other	16%

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Ératernité

CONTINUATION OF THE COOPERATION

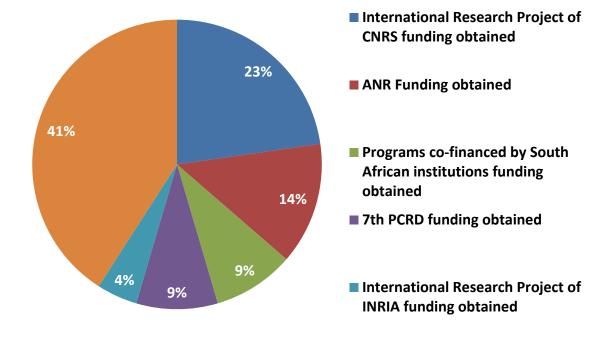
34% of cooperations have been funded following the project





CONTINUATION OF THE COOPERATION

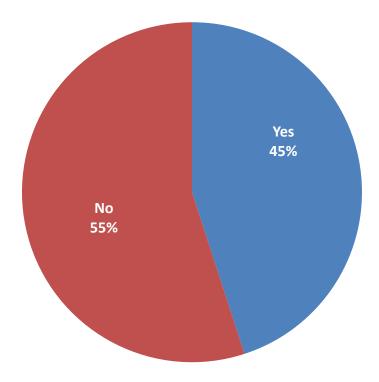
What kind of funded collaborations after the PHC PROTEA project ?





CONTINUATION OF THE COOPERATION

Has the French-South-African cooperation involved new partners?

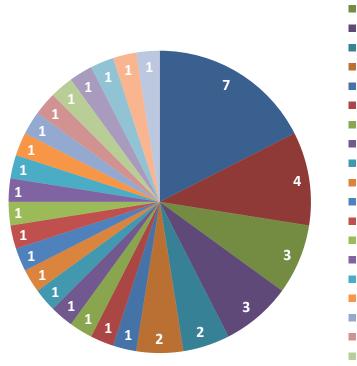


MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Ligalité

Fraternité

CONTINUATION OF THE COOPERATION

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



France South Africa Germany United Kingdom Italy Australia Morocco Senegal 🔳 Kenya Ouganda Netherlands United States Argentina Turkey Ukraine Russia Brazil New-Zealand Czech Republic Belgium Nigeria Japan Namibia Botswana

Zimbabwe

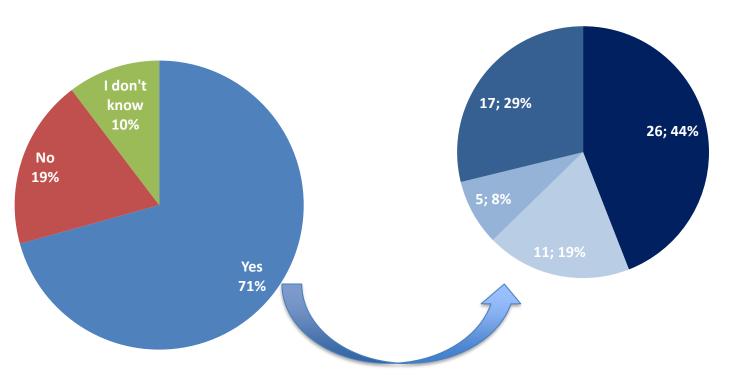
Data from 17 responses

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté Ligatité Tratemité

IMPACT ON YOUNG RESEARCHERS' CAREER

Type of impacts

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



- Postdoc/Teacher/Res earcher (temporary position)
- Teacher/Researcher (permanent position)
- Researcher in a public research institution (permanent position)
- Employed in a private company in link with the field of Higher Education - Research

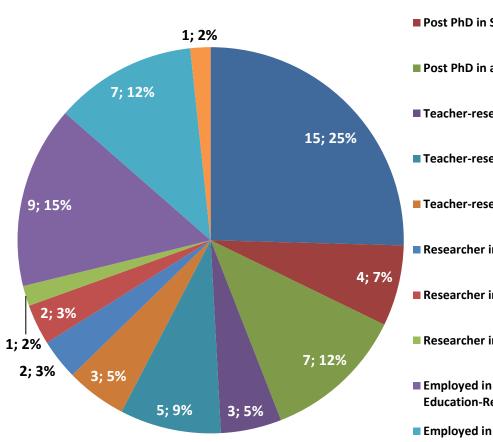
Data from 58 responses

Data from 34 positive responses for a total of 59 young researchers

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

Liberté Égalité Fraternité

IMPACT ON YOUNG RESEARCHERS' CAREER



Post PhD in France

Post PhD in South Africa

Post PhD in another country

Teacher-researcher in France

Teacher-researcher in South Africa

Teacher-researcher in another country

Researcher in an public research institution in France

Researcher in an public research institution in South Africa

Researcher in an public research institution in another country

Employed in a private company in link with the field of Higher **Education-Research in France**

Employed in a private company in link with the field of Higher **Education-Research in South Africa**

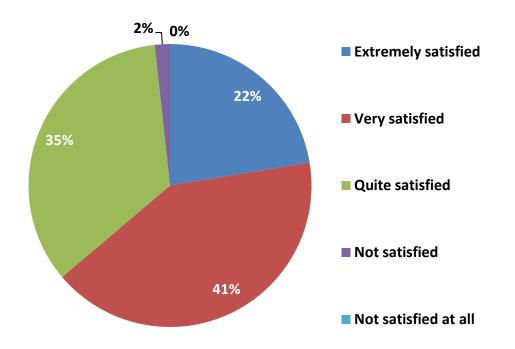
Employed in a private company in link with the field of Higher **Education-Research in another country**

Data from 34 positive responses for a total of 59 young researchers



GENERAL OPINION OF FRENCH PRINCIPAL INVESTIGATORS ON THE PROGRAM

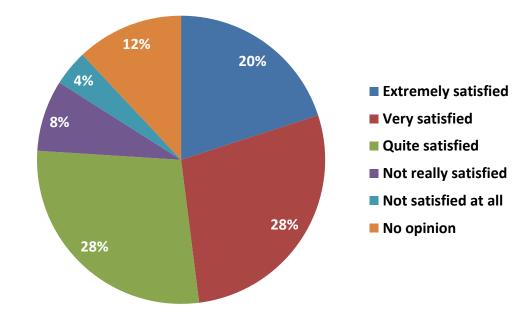
98% of French principal investigators are satisfied



MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté

Égalité Fraternité

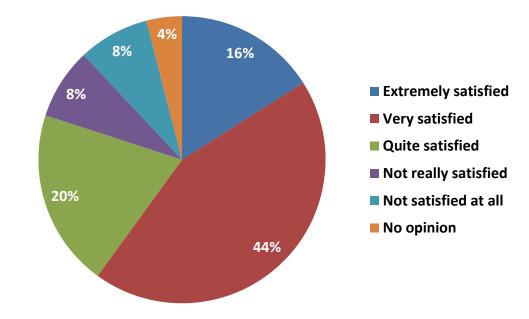
OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT FRENCH EMBASSY HELP



MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE Liberté

Liberté Égalité Fraternité

OPINION OF FRENCH PRINCIPAL INVESTIGATORS ABOUT ADMINISTRATIVE MANAGEMENT



MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

ET DE Liberté Égalité Fraternité

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM POSITIVE COMMENTS



Strengths of this program	Number of occurencies (out of 204)	% of funded projects
Fostering an international research cooperation	31	50%
Fostering researchers' mobility	30	48%
Fostering the training of young researchers	29	47%
Simplicity of the project application process	22	35%
Easy implementation (administrative flexibility)	16	26%
Fostering exchanges enabling scientific production	15	24%
Sufficient financial means for the mobility costs	14	23%
Helping to know the partner country	11	18%
Financial autonomy towards your institution	8	13%
Sufficient amount of mobility time given to collaborate	7	11%
Helpful to initiate other fundraising	6	10%
Sufficiently long duration of the projects	5	8%
Good scientific-added value on financial investment	4	6%
Timetable for implementation	3	5%
Flexibility of the program for actions co-financed with the South African partner	2	3%
Transparency of the selection process	1	2%
Total number of occurencies	204	

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

Égalité Fraternité

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM NEGATIVE COMMENTS



Weaknesses of this program	Number of occurencies (out of 123)	% of funded projects
Insufficient financial means to cover a project	30	48%
Financial means insufficient for the expenditure of mobility (per diem)	14	23%
Financial means insufficient for the expenditure of mobility (transport)	13	21%
Length of support too short	13	21%
Administrative heaviness of the missions management	13	21%
Difficult to continue the cooperation	8	13%
Heaviness of the process of applications	7	11%
Lack of transparency in the selection process	7	11%
Insufficient communication on the evaluation's results	6	10%
Too short duration of mobilities	5	8%
Timetable for implementation	4	6%
Too low number of mobilities	1	2%
Flexibility of the programme for actions co-financed with the partner	1	2%
Financial autonomy towards your institution	1	2%
Too long duration of mobilities	0	0%
Total number of occurencies	123	



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 (29%) better than the general mean (25%)

88% of funded projects with the participation of at least one french or south african young researcher

Average annual scientific coproductions per project better than the average of the other

- programs (1,1 vs 0,96)
- 78% of scientific coproductions involve at least 1 young researcher
- Rather good rate of average annual publications for young researchers involved in the scientific coproductions (0,91)

Continuation of the cooperation (84%) close to the general mean (82%) (and 34% with new fundings identical to the general mean)

The ongoing cooperation is financed by a new PROTEA funding for 21% of the Pis (identical to the mean of all programs : 21%)

Only 34% of new cooperations (mean of all programs : 44%)

92% of the cooperations with the same previous south african partner (mean of all programs : 46%)



34% of the projects with no scientific coproduction

Implication of young researchers laureates (17%) lower than the general mean (23%)

42% of french and south african young researchers involved in the scientific coproductions (mean of all programs : 52%)

Rather low implication of young researchers in the mobilities

Rather low rate of average annual publications for young researchers involved in the projects

(0,38)



COMPARISON SURVEY 2017 (2006-2016) - SURVEY 2024 (2006-2022)

- Response rate : 2006-2016 : 41% (37 responses), 2017-2022 : 54% (25 responses)
- Small increase in the average annual number of applications (survey 1 : 51, survey 2 : 57)
- Stability in the number of selected projects carried by young researchers (19% vs 17%)
- Stability in the number of women applicants (30% vs 29%) and laureates (34% vs 37%)
- Better participation of young french researchers to the projects (+10%) but decrease for their involvement in the scientific coproductions (-42%)
- Small decrease in the outgoing mobilities of french young researchers (-6%) but increase in the incoming mobilities of south african young researchers (+12%)
- Stability in the outgoing mobilities for women researchers (30%)
- Stability in the average annual number of scientific coproductions per project (1,1 vs 1,0)
- Small increase of the continuation of cooperations (+2%)
- Decrease in the continuation of cooperations with financing (-17%)

PRELIMINARY RECOMMANDATIONS

- Encourage new cooperations (only 34% of new cooperations of which 92% with the same partner)
- Enhance scientific coproductions (from the surveys : 34% of projects with no scientific coproduction)
- Promote young researchers applications and selections
- Increase the participation of young researchers to the scientific coproductions (only 42% of young researchers are implicated in the scientific coproductions)
- Promote mobilities of young researchers



Liberté Égalité Fraternité

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.

CONTACTS

<u>christophe.delacourt@recherche.gouv.fr</u> <u>robert.gardette@recherche.gouv.fr</u> <u>leila.chabane@recherche.gouv.fr</u> <u>nathalie.nilsson-thiello@recherche.gouv.fr</u> <u>antoine.weexsteen@recherche.gouv.fr</u>

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

Liberté Égalité Fraternité

ANNEX REGIONALISATION AND SCIENTIFIC DOMAINS (CARTOGRAPHIES)

PHC PROTEA **Regional percentages of applications and selections** Mathematics 2011-2022

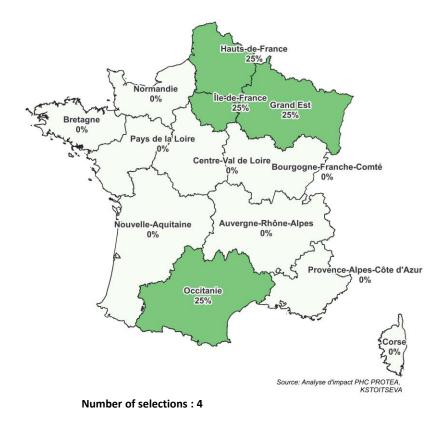


Égalité Fraternite

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE

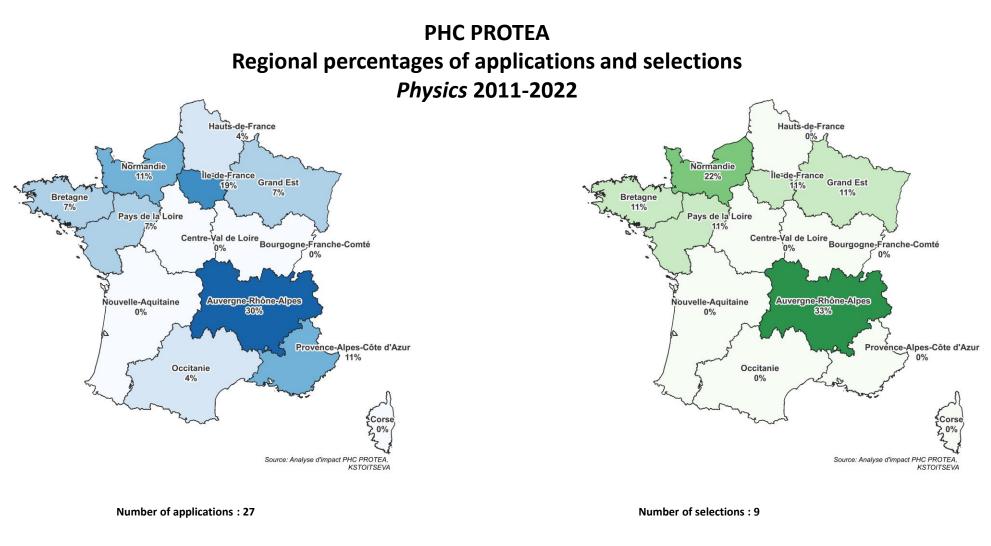


Six regions are concerned for applications with Grand Est ahead. Only 4 regions benefit selections.

ET DE LA RECHERCHE Égalité Fraternite

MINISTÈRE

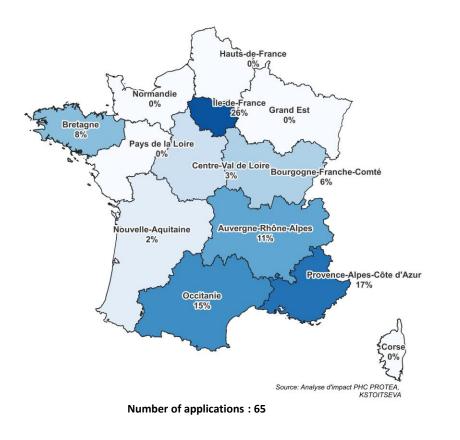
SUPÉRIEUR



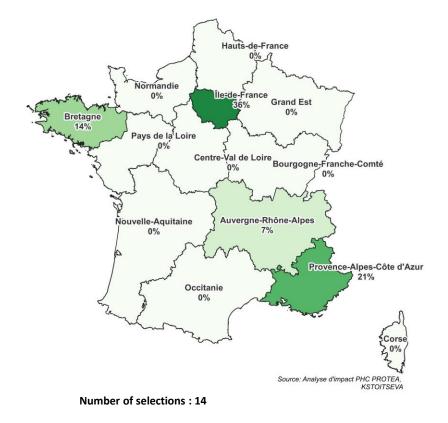
Nine regions are concerned for applications with Auvergne-Rhône-Alpes ahead but only six benefit selections (with Auvergne6Rhône-Alpes still ahead)

REGIONAL DISTRIBUTION OF SELECTED PROJECTS (2011-2022) MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR **ET DE LA RECHERCHE**

PHC PROTEA **Regional percentages of applications and selections** Marine, Earth, Planet Sciences 2011-2022

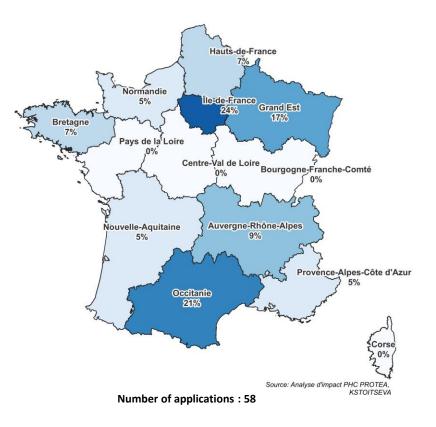


Égalité Fraternité



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

PHC PROTEA **Regional percentages of applications and selections** Chemistry 2011-2022

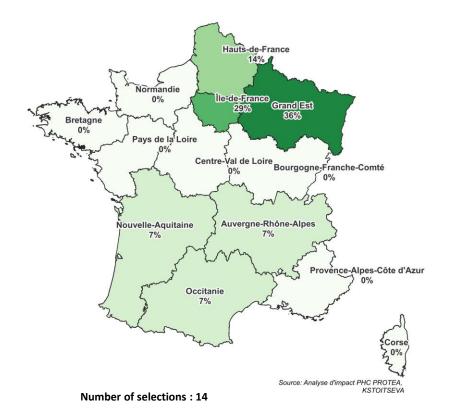


Tiherté Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE



Nine regions are concerned for applications. Six regions benefit selections with Grand Est ahead

152

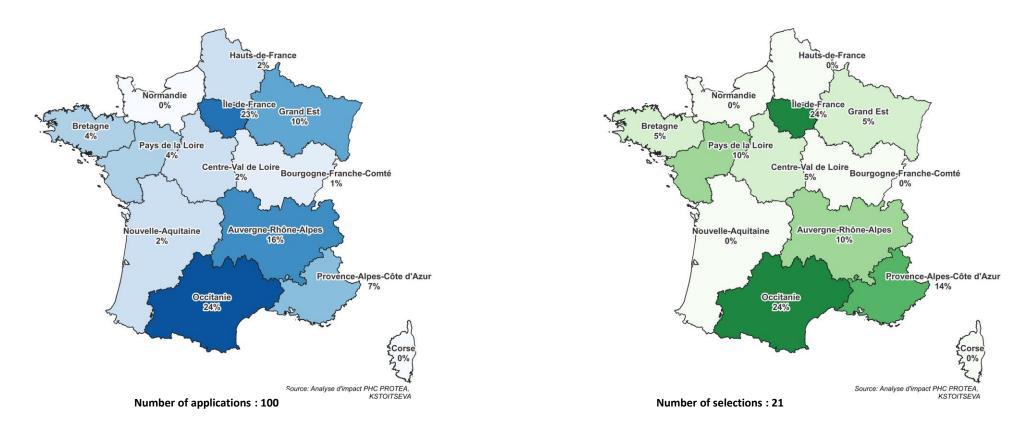
Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

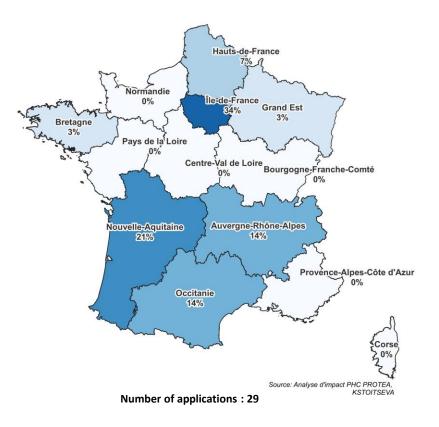
ET DE LA RECHERCHE

PHC PROTEA **Regional percentages of applications and selections** Biology and Health 2011-2022



Twelve regions are concerned for applications but only nine benefit selections (with Occitanie and Ile-de-France ahead for both)

PHC PROTEA **Regional percentages of applications and selections** *Humanities* 2011-2022



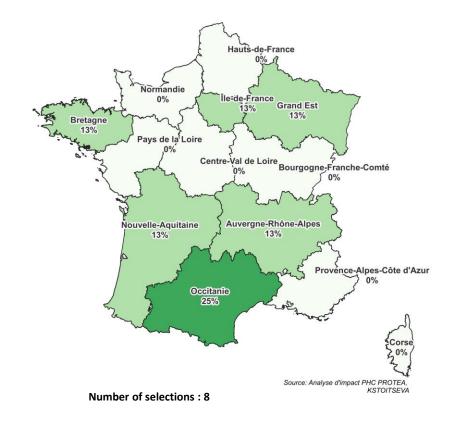
1

Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE



Eight regions are concerned for applications with Ile-de-France ahead and seven benefit selections (with Occitanie ahead)

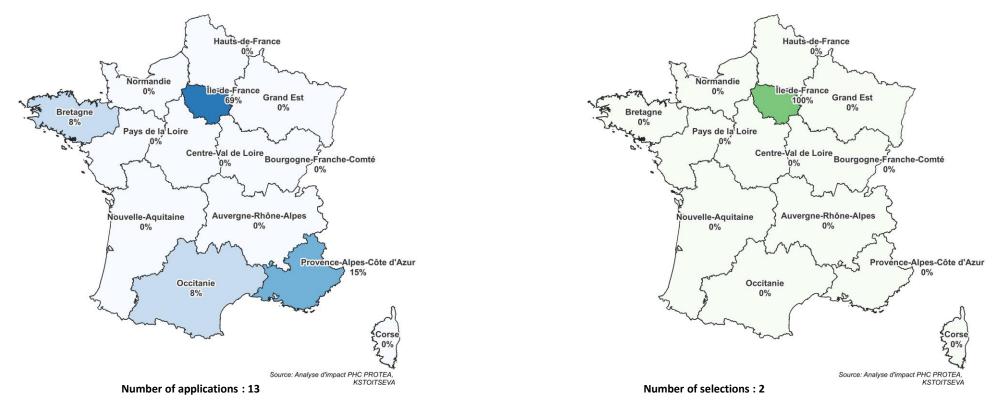
Égalité Fraternite

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE

PHC PROTEA **Regional percentages of applications and selections** Social Sciences 2011-2022



Four regions are concerned for applications but only one benefits selections (Ile-de-France)

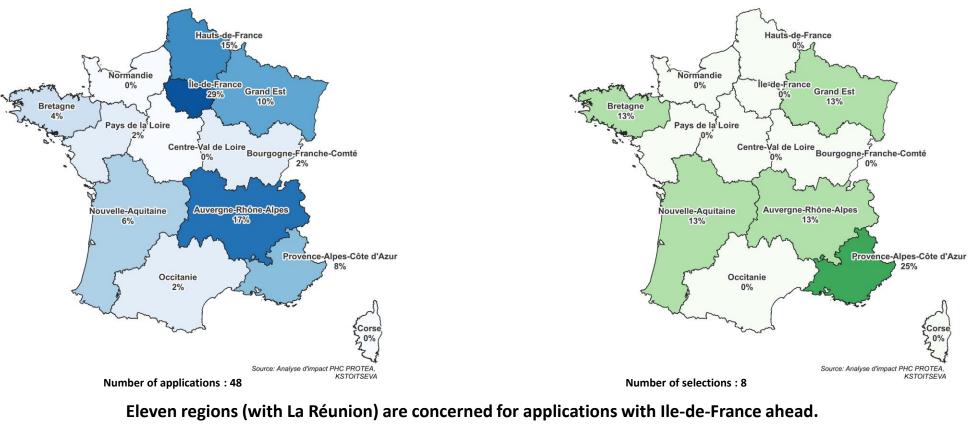
Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE

PHC PROTEA **Regional percentages of applications and selections Engineering Sciences 2011-2022**



Six regions benefit selections (with La Réunion and Provence-Alpes-Côte d'Azur ahead)

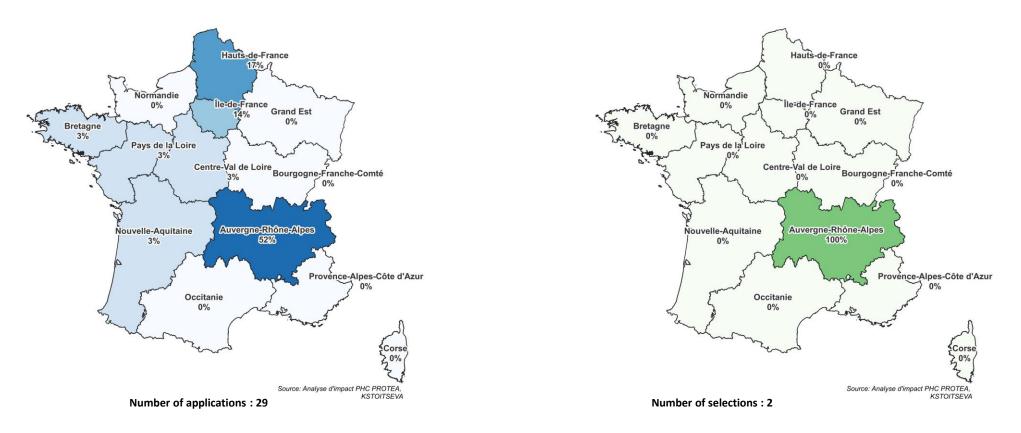
Égalité Fraternité

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE

PHC PROTEA **Regional percentages of applications and selections** Information technology 2011-2022



Eight regions are concerned for applications with Auvergne-Rhône-Alpes ahead. Only one benefits selections (Auvergne-Rhône-Alpes)

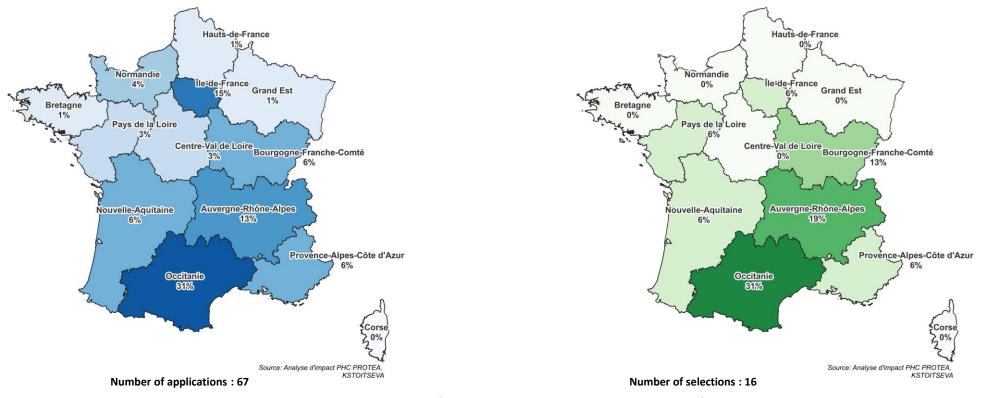
Égalité Fraternite

MINISTÈRE

SUPÉRIEUR

ET DE LA RECHERCHE

PHC PROTEA **Regional percentages of applications and selections** Agronomy/Ecology 2011-2022



Fourteen regions are concerned for selections (including la Guyane et la Réunion) with Occitanie ahead. Only eight benefit selections (with Occitanie still ahead and including la Réunion)