

FRANCE – SWITZERLAND

**Scientific impact of the program GERMAINE DE STAEL
(2005-2020)**

MESRI-DAEI / MEAE

2021

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

GENERAL PRESENTATION OF THE PROGRAM

Creation : 2003

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

Total budget (France + Switzerland) : around 138 000 € / year

>> French budget : around 2 400 € / project (=48 000€) / year (for 20 projects)

>> Swiss budget : around 4 500 € / project / year (= 90 000€ / year for 20 projects)

Average budget per project (France + Switzerland) : 6900 € / year

Average number of new funded projects per year : 10

From 2005 to 2020 :

559 applications submitted

204 projects funded

DATA SOURCES

Campus France (2005-2020)

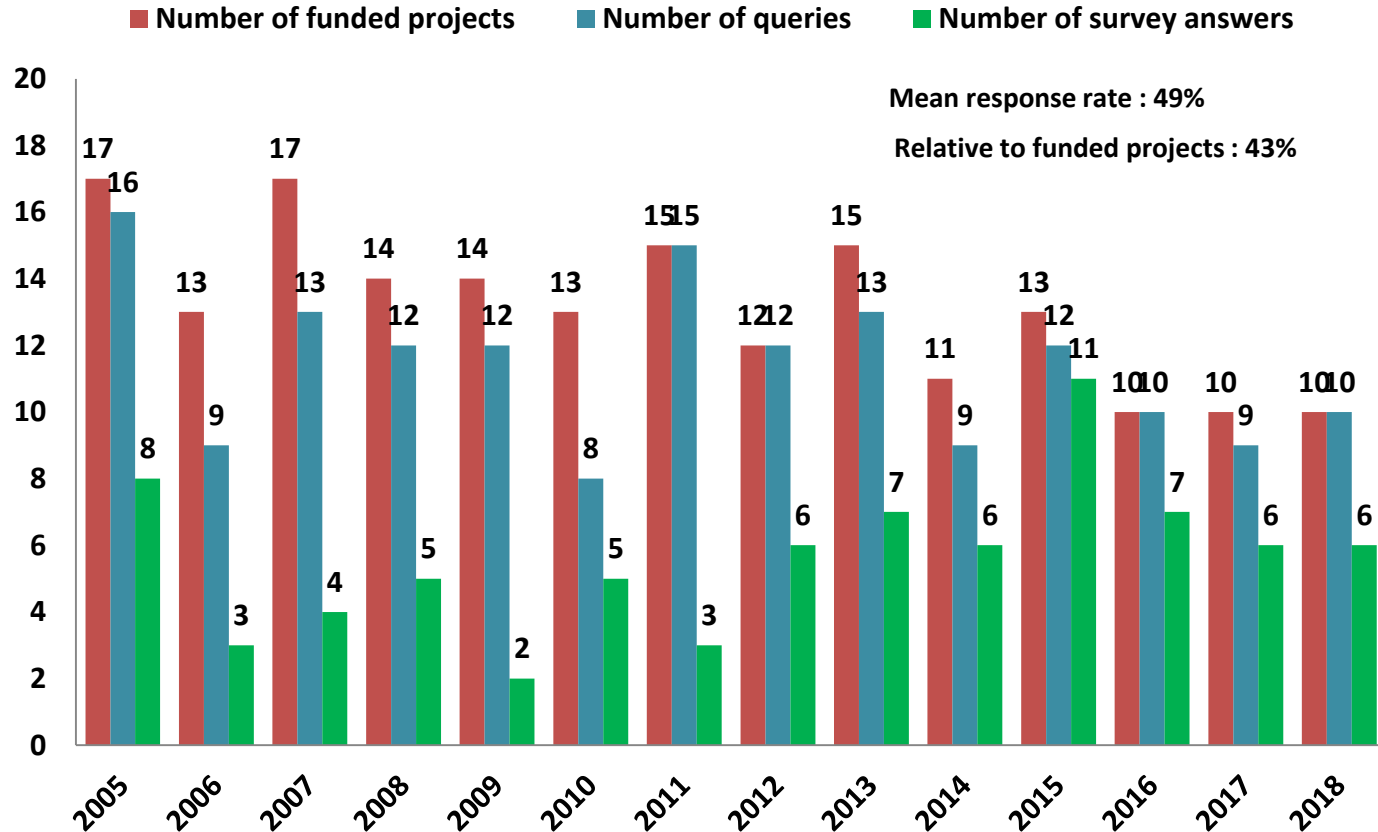
- Information about the PHC Germaine de Staël applications
- List of mobilities (from France to Switzerland)

Survey (2005-2018)

- Target : French Principal Investigators of selected projects between 2005 and 2018
- Survey duration : 6 weeks between November and December 2020
- **49%** response ratio (79 respondents for 160 queries)

ANSWERS TO THE SURVEY

Average response rate to the survey : **49 % (79 answers)**

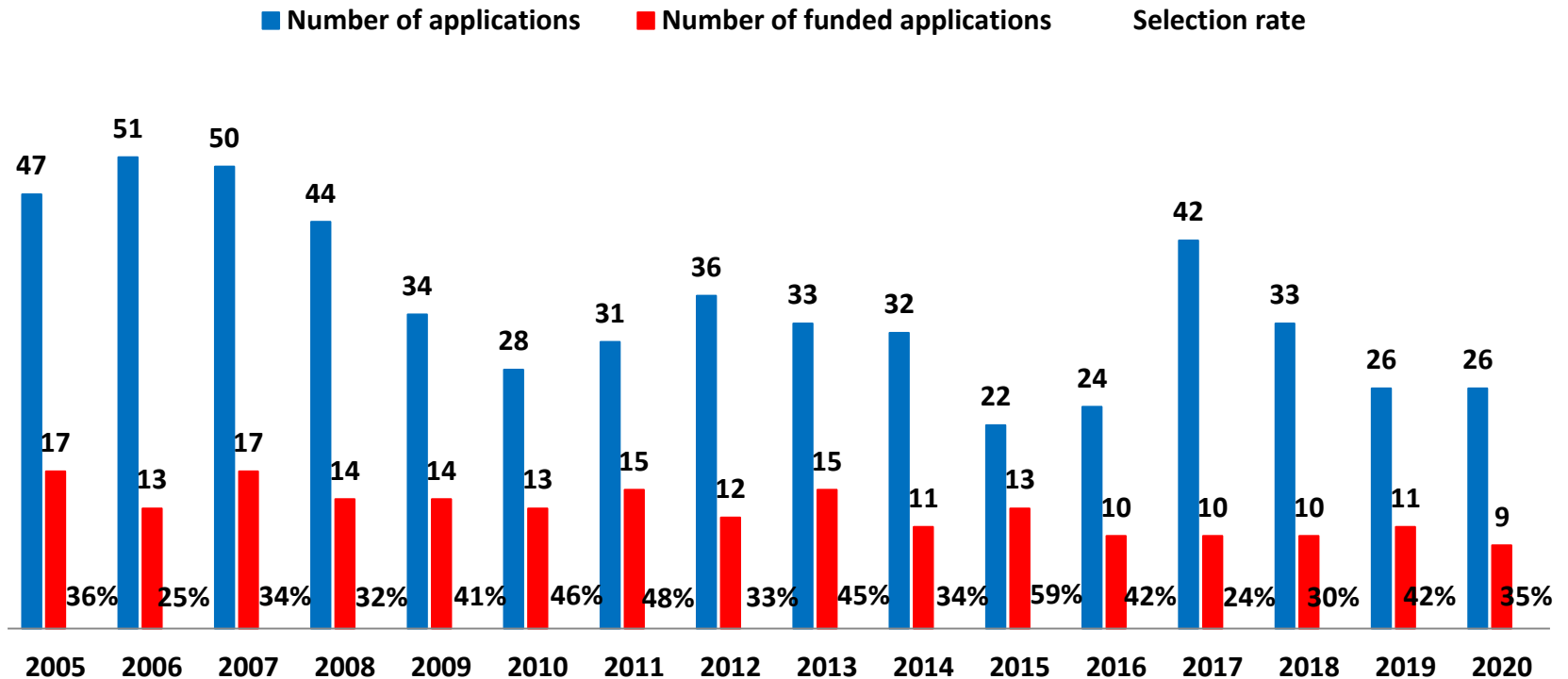


184 funded projects between 2005 and 2018, 160 valid email addresses

2005-2020 Key Points

NUMBER OF APPLICATIONS AND SELECTION RATE

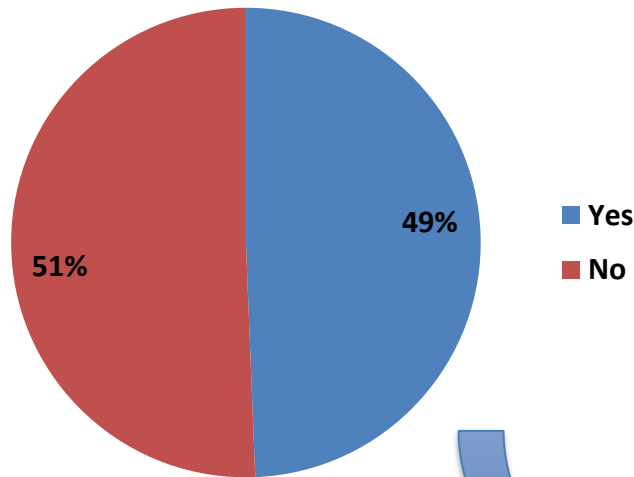
Average selection rate from 2005-2020: **36%**



After a stable period between 2009 and 2016,
clear decrease in the number of applications since 2017

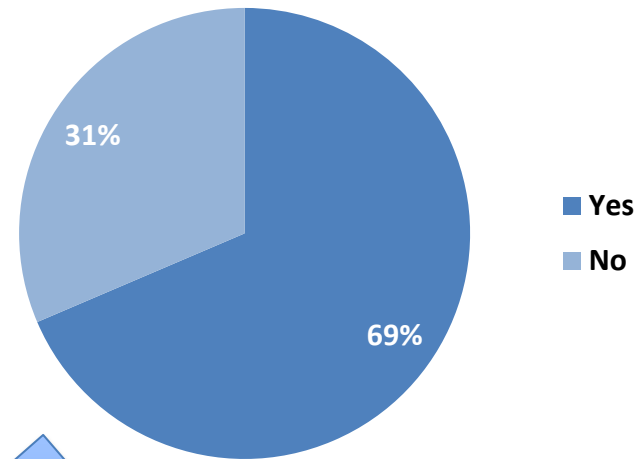
BEFORE THE DE STAEL PROJECT (1/2)

Did you already cooperate with Switzerland in the past ?



Data from 79 responses

If yes, was it with the same partner?



Data from 35 responses

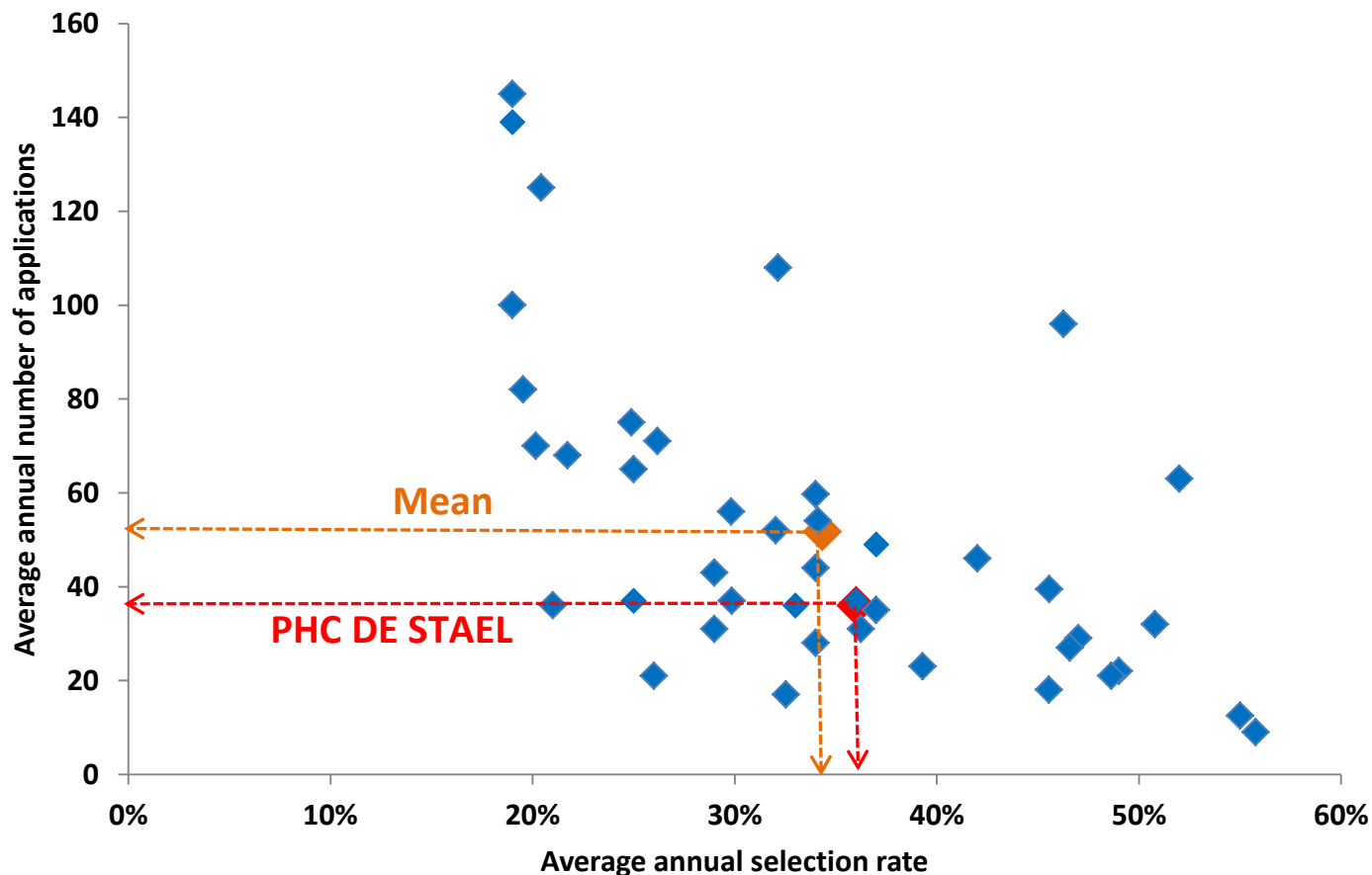
BEFORE THE DE STAEL PROJECT (2/2)

With which scientific collaboration program ?	
PHC Germaine de Staël	50%
European 7th PCRD	17%
CNRS Joint Research program (PRC)	3%
Private sector funding	3%
Other	28%

Plus 71 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 34 responses

NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)

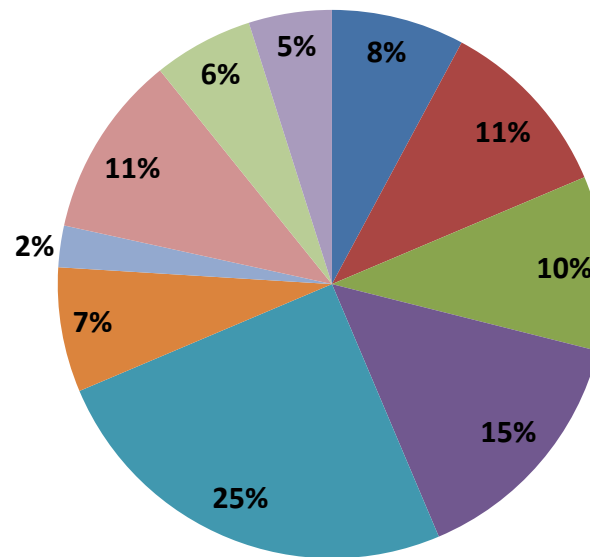
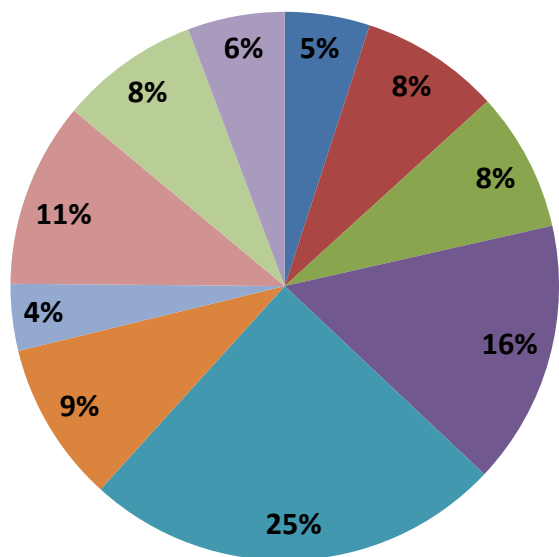


Average selection rate for 2005-2020 : 36% vs 34% mean
Average annual number of applications 2005-2020 : 36 vs 52 mean

SCIENTIFIC DOMAINS OF PROJECTS 2005-2020

Number of applications : 559

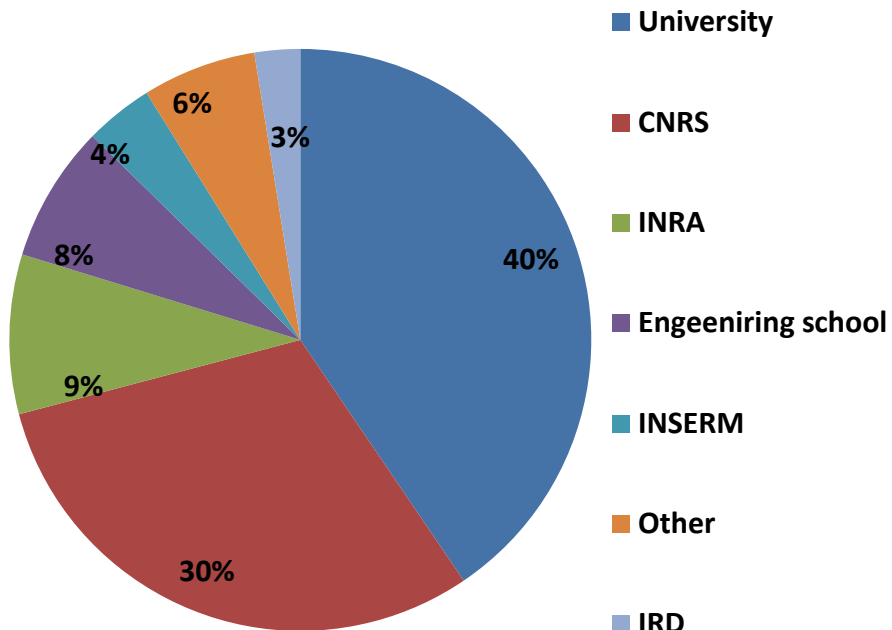
Number of funded projects : 204



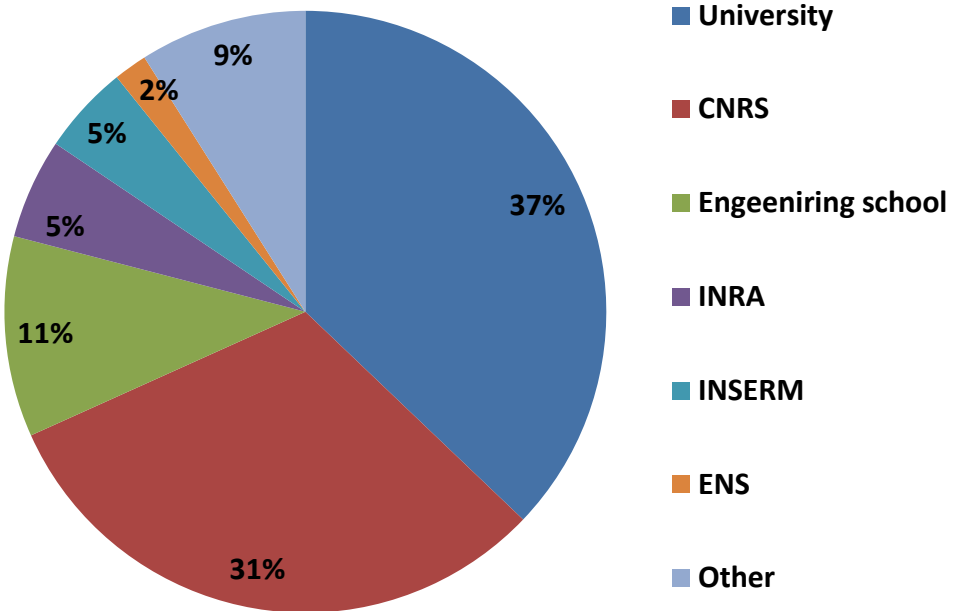
- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

FRENCH PARTICIPATING INSTITUTIONS 2005-2018

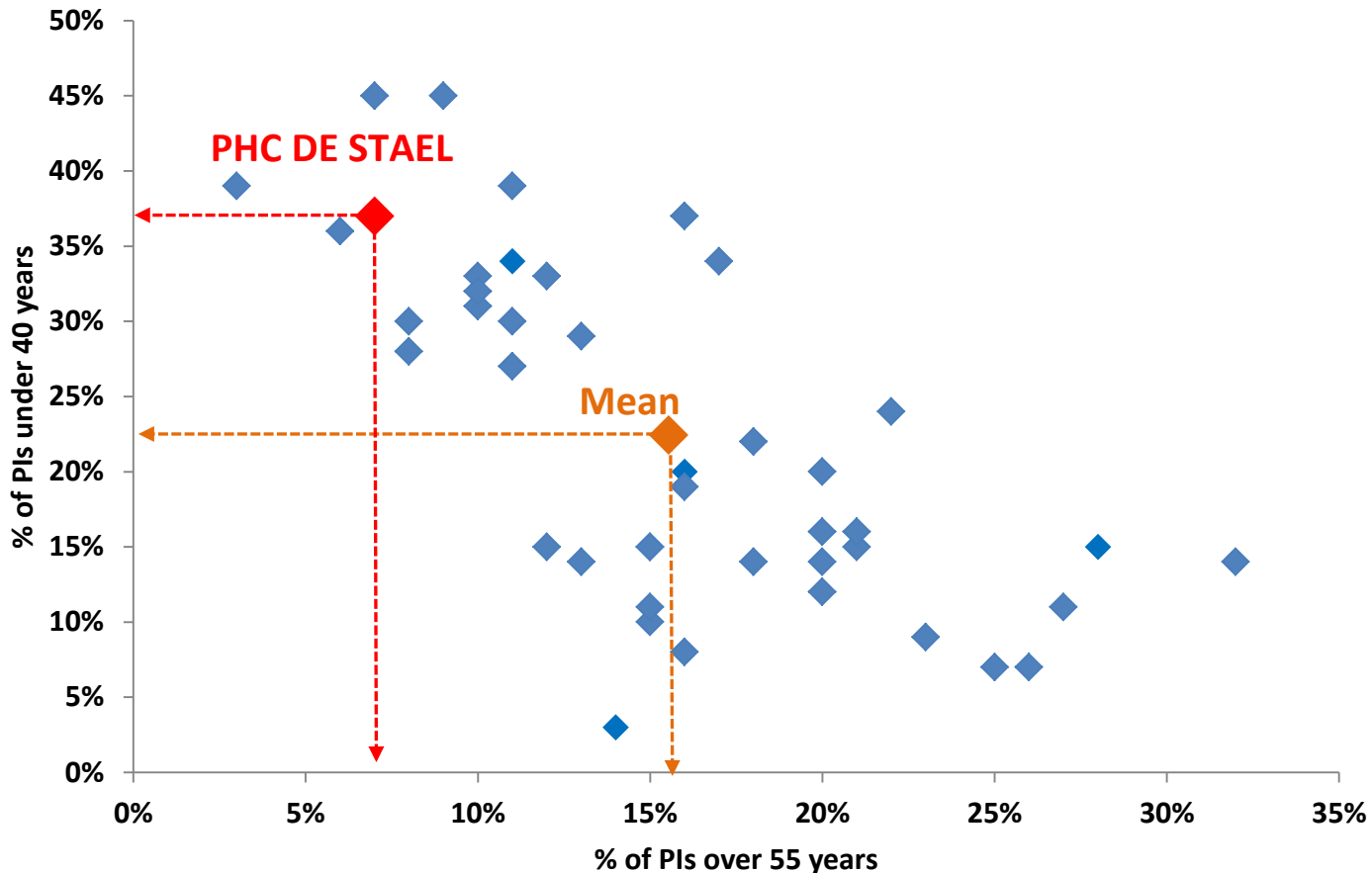
PI's employers



Laboratories authorities



AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



PIs under 40 years : **37% vs 22% mean**

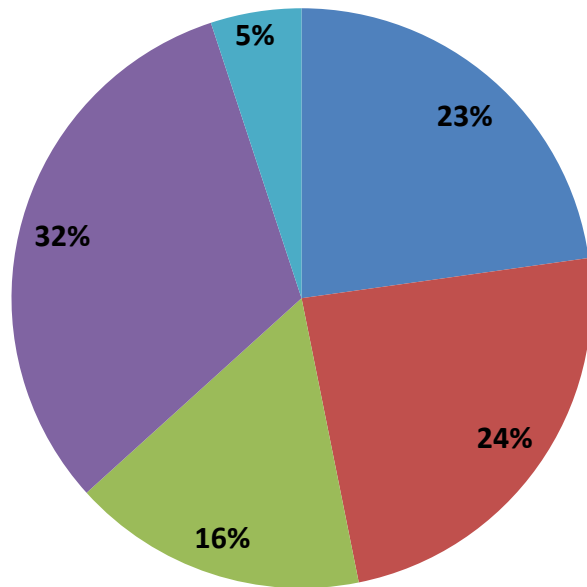
PIs over 55 years : **7% vs 16% mean**

56% of the PIs are between 40 and 55 years

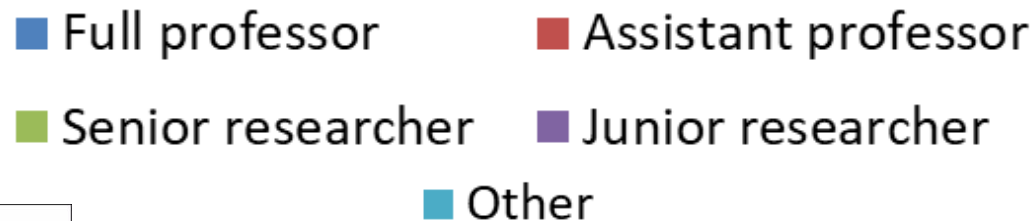
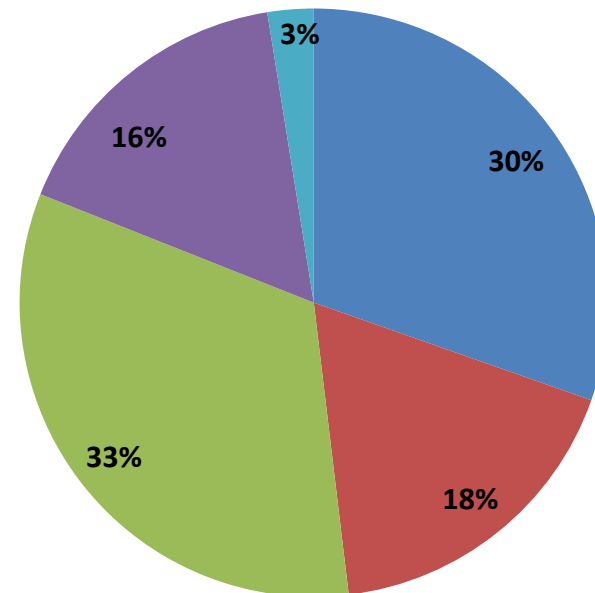
Data from 79 responses

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

Previous professional status (at the beginning of the project)

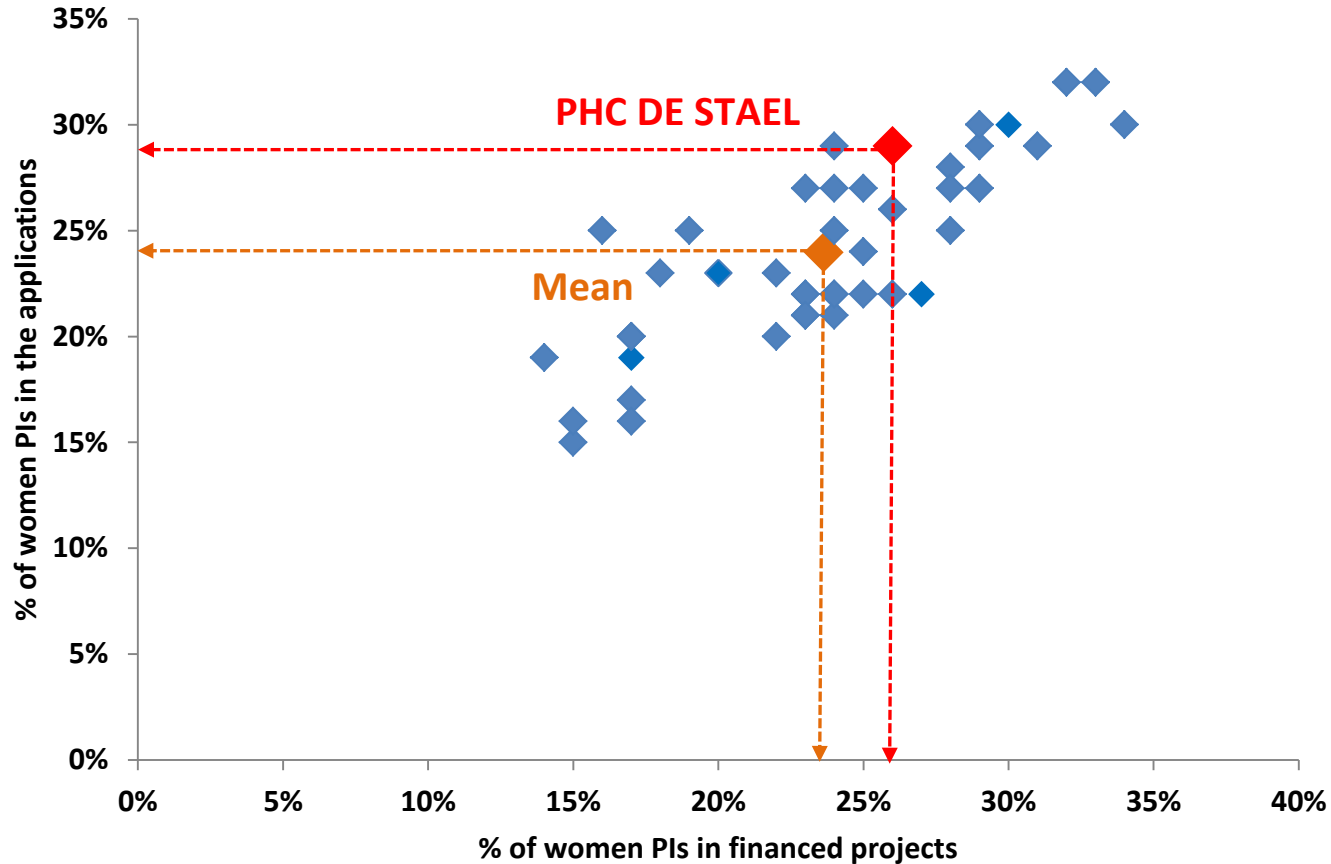


Current professional status



IMPLICATION OF WOMEN (FRANCE)

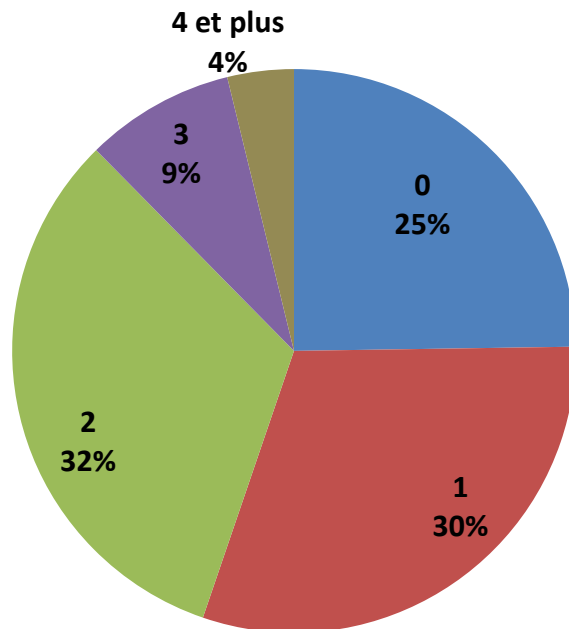
(COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : 29% vs 24% mean
% of women PIs in the selected projects : 26% vs 24% mean

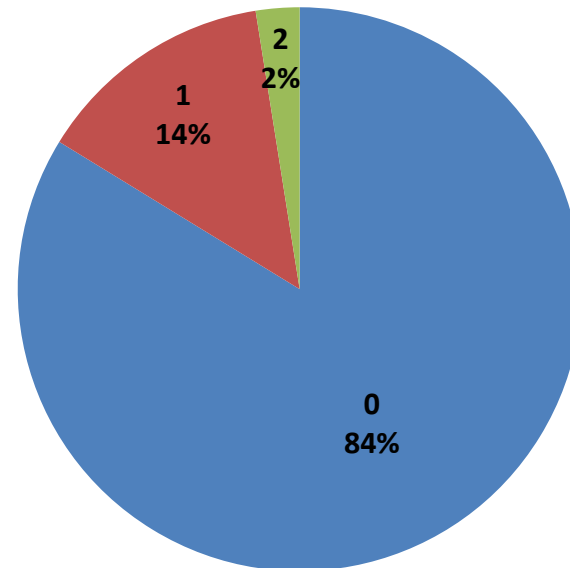
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of French PhD students



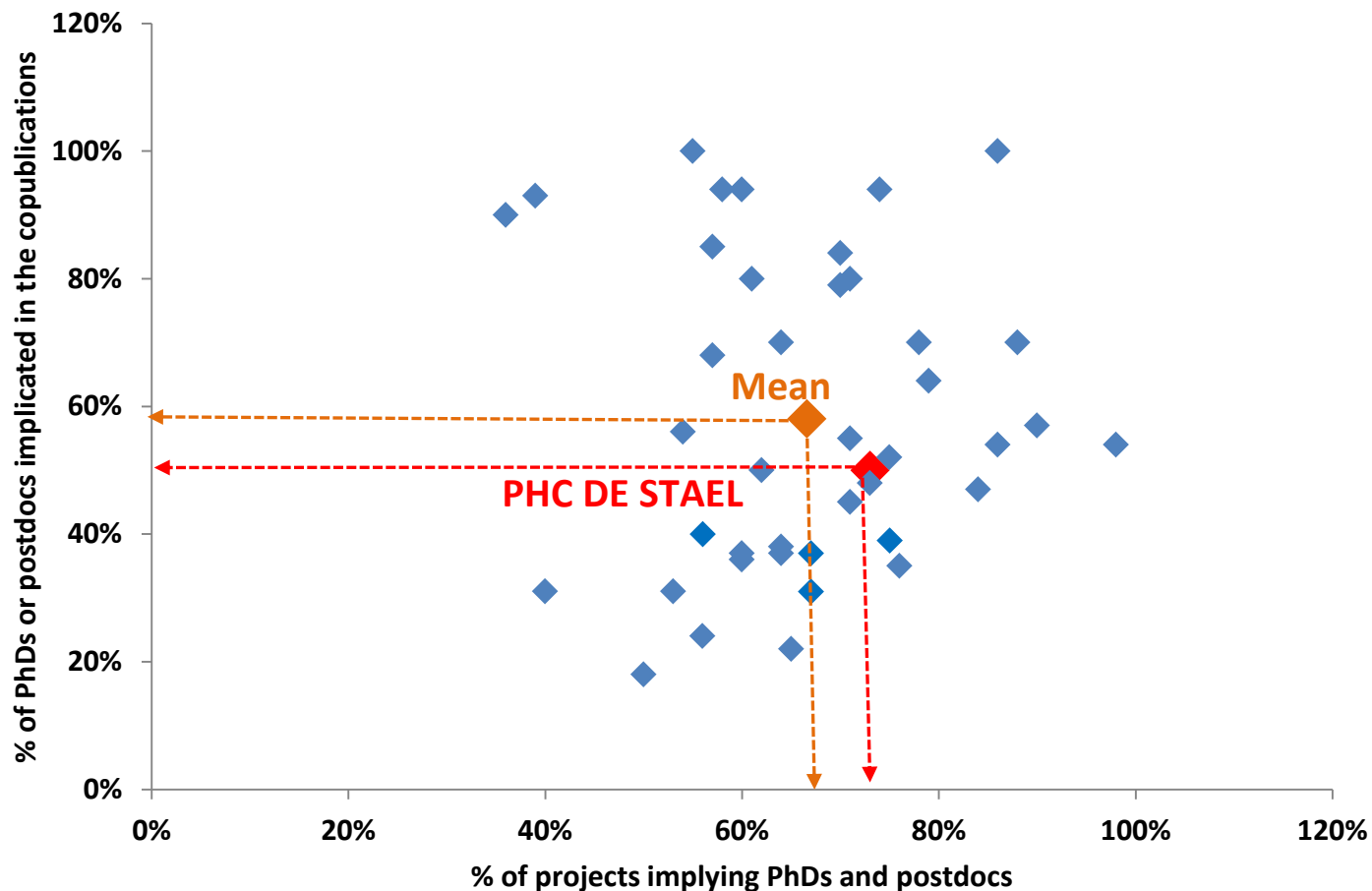
67% of projects involve at least one French PhD student

Number of French post-doctoral researchers



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

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



% of projects implying young researchers : 73% vs 67% mean

% of PhD or postdoc implicated in the copublications : 50% vs 58% mean



MINISTÈRE
DE L'ENSEIGNEMENT SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'INNOVATION

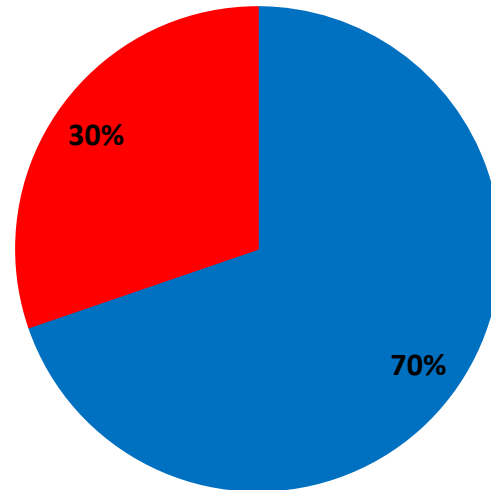
Data from 78 responses



MOBILITY 2005-2019

MOBILITY : GENDER DISTRIBUTION

France → Switzerland



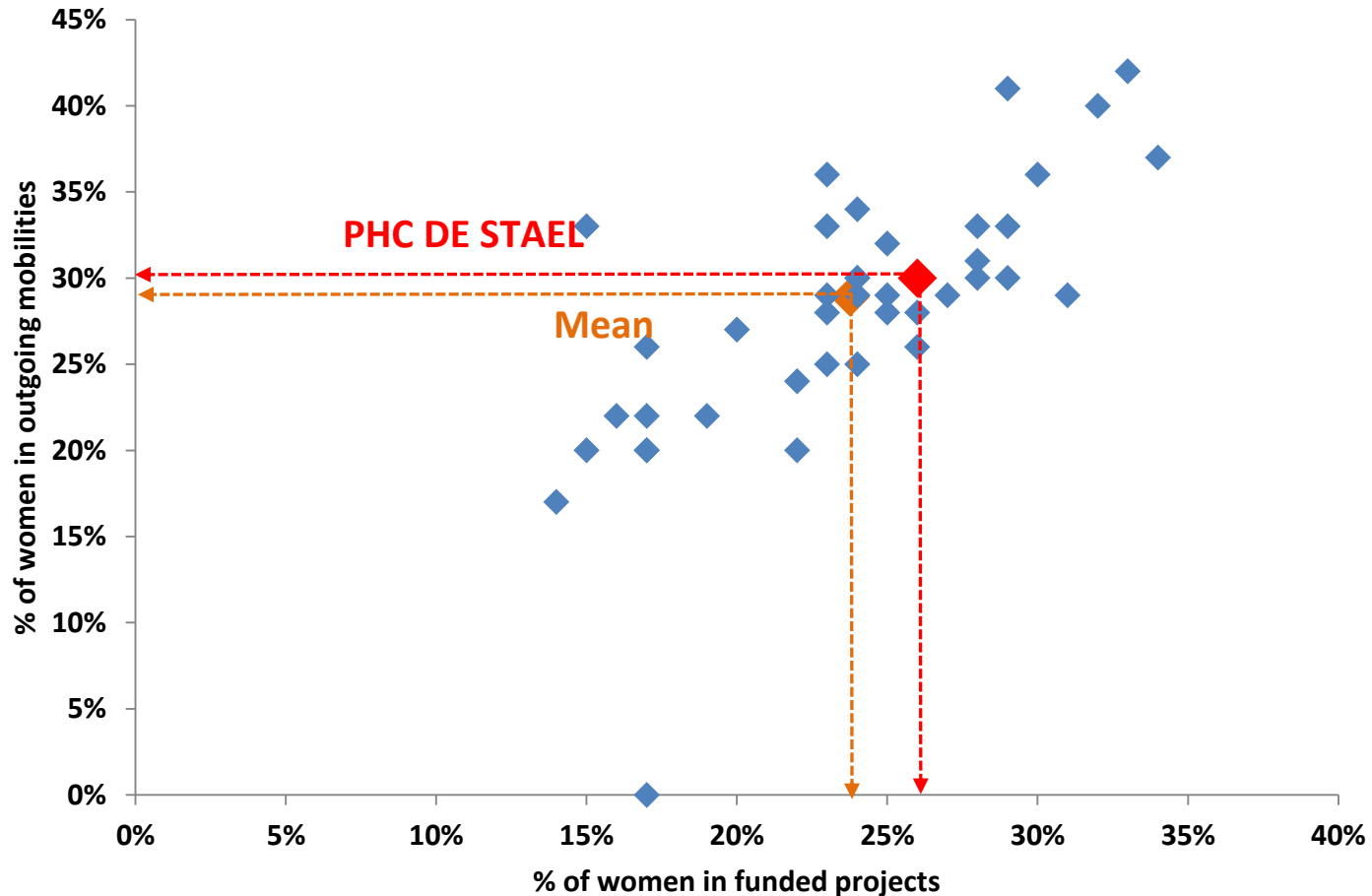
■ Men ■ Women

Data from 195 funded projects

WOMEN MOBILITY

FRANCE – SWITZERLAND

(COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



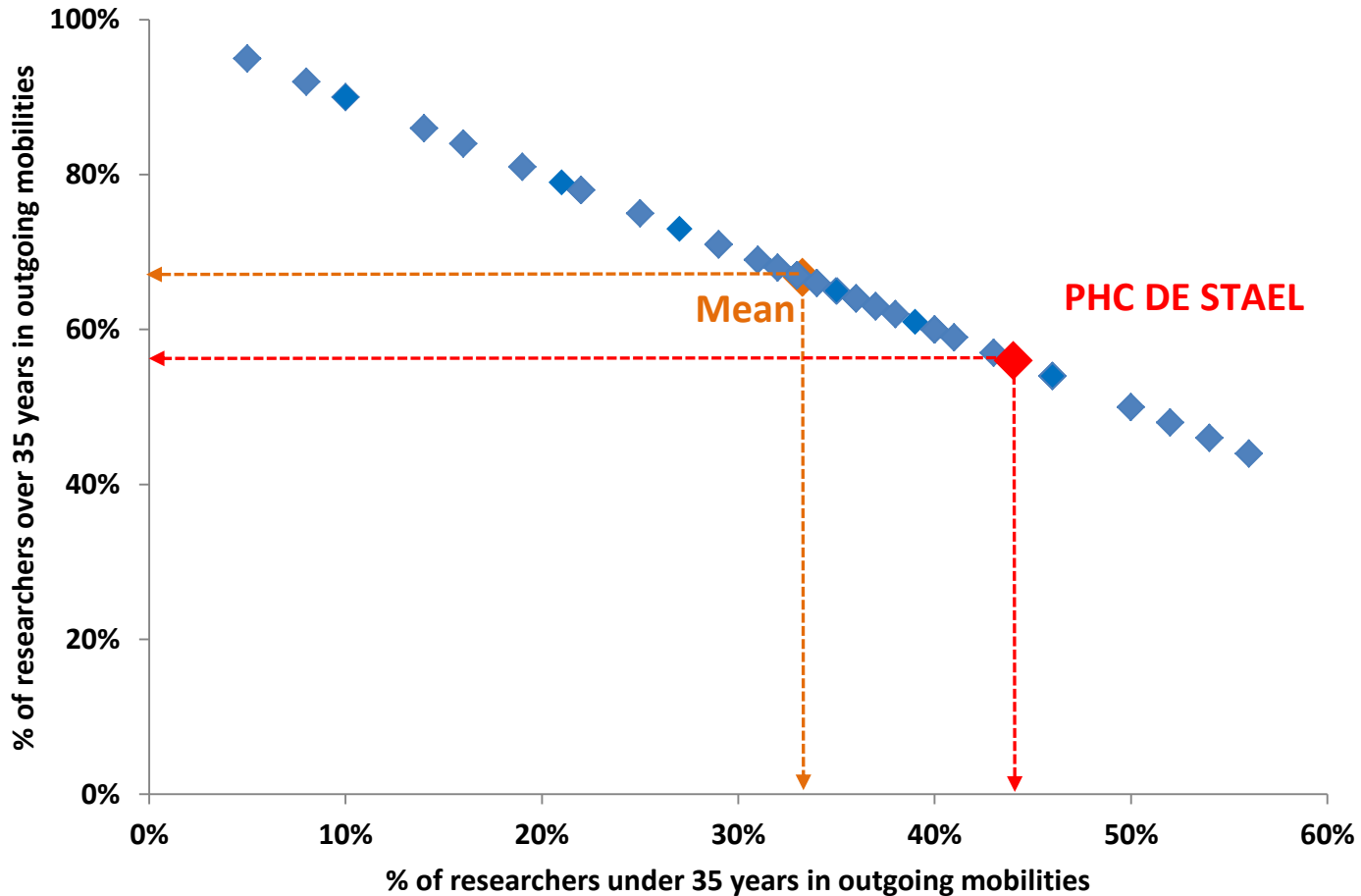
% of women researchers in the selected projects : 26% vs 24% mean

% of women researchers in outgoing mobilities : 30% vs 29% mean

YOUNG RESEARCHERS' MOBILITY

FRANCE - SWITZERLAND

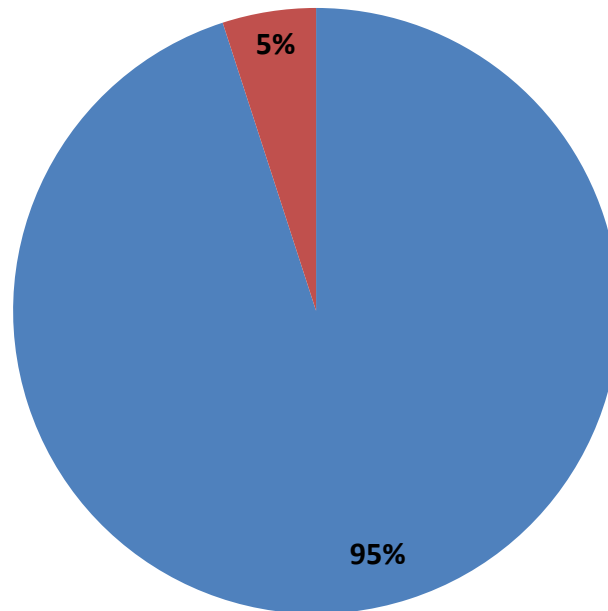
(COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



% of French young researchers in outgoing mobilities : 46% vs 33% mean

MOBILITY : DURATION

France → Switzerland



■ < 15 days

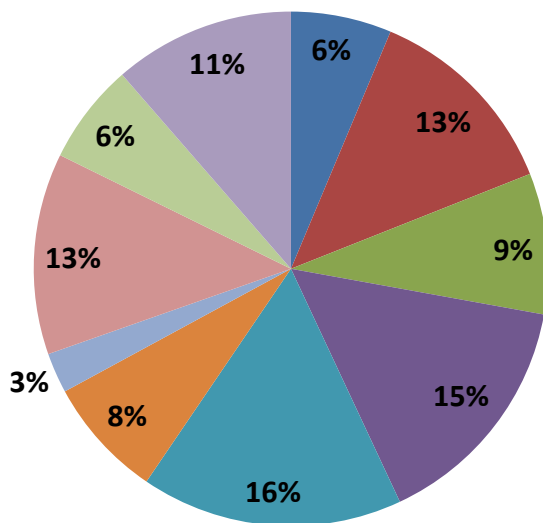
■ between 15 days and 3 months



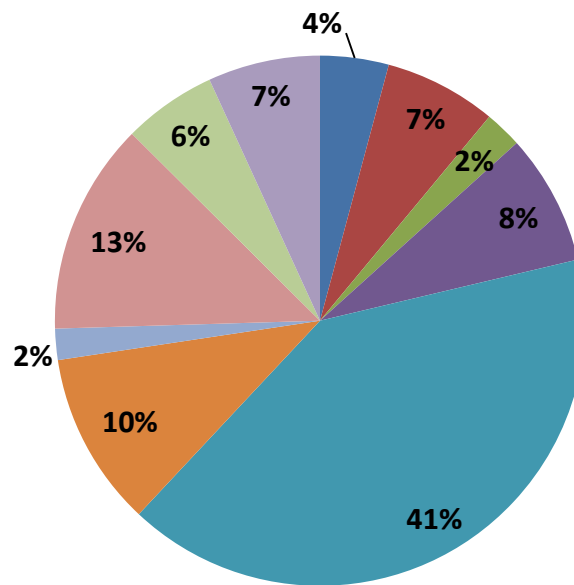
SCIENTIFIC PRODUCTION 2005-2017

SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (79)



Percentage of copublications



- Mathematics
- Physics
- Marine/Earth/Planet Sciences
- Chemistry
- Biology and Health
- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy/Ecology

SCIENTIFIC OUTPUT (2/2)

Data from 79 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	5	2,20
Physics	10	1,80
Marine/Earth/Planet Sciences	7	0,86
Chemistry	12	1,75
Biology and Health	13	8,23
Humanities	6	4,67
Social Sciences	2	2,50
Engineering Sciences	10	3,40
Information Technology	5	3,00
Agronomy / Ecology	9	2,00
TOTAL	79	3,33

Overall average **annual** number of copublications per project : **1,66 vs 0,93 mean**

76% of funded projects led to one co-publication at least

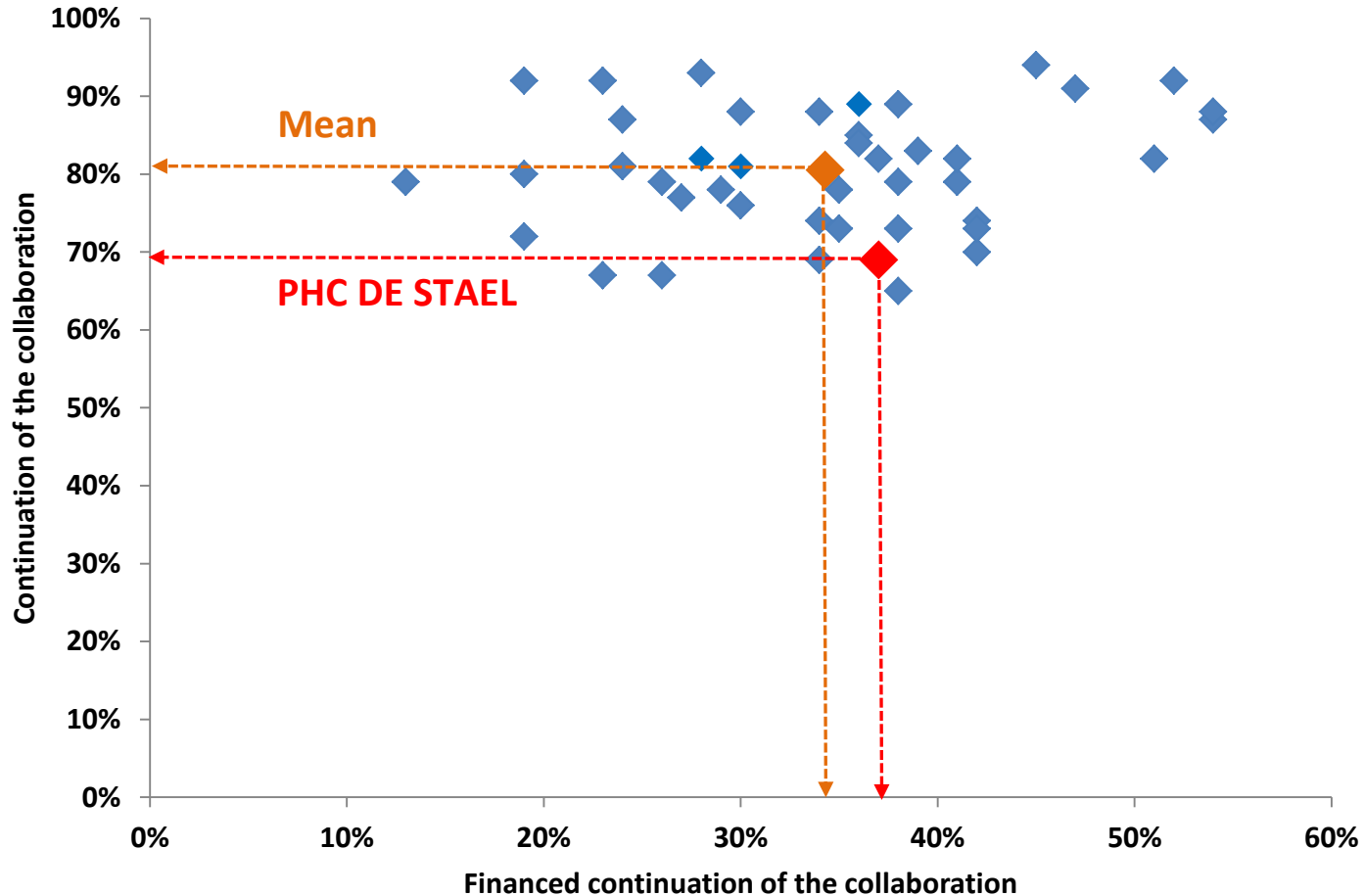
40% of copublications include at least 1 PhD or PostDoc

The average annual rate of publication for young researchers involved in the projects is **0,64**

The average annual rate of publication for young researchers involved in the publications is **1,14**

WHAT HAPPENS AFTER A DE STAEL PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 43 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 69% vs 81% mean

Continuation of the collaboration with other sources of subvention : 37% vs 34% mean

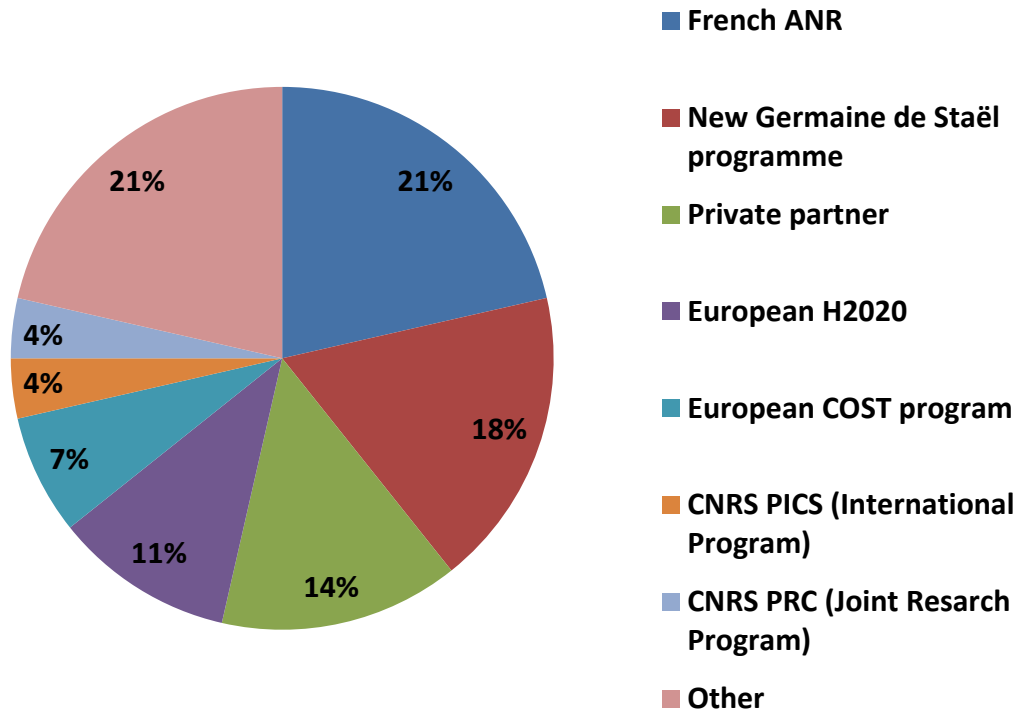
CONTINUATION OF THE COLLABORATION (2/5)

69% of the collaborations continued after the de Staël project

Which activities?	
Collaborative research	78%
Co-publications	67%
Researchers' mobility	48%
Joint participation to conferences	48%
PhD mobility	33%
Co-organisation of scientific events	28%
Joint participation to PhD thesis	7%
Joint diplomas	2%
Other	17%

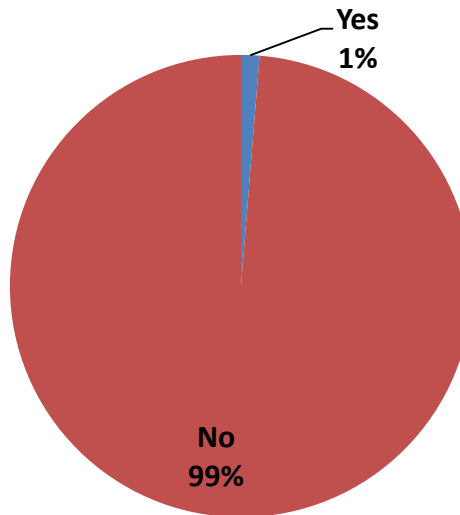
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the de Staël project ?



CONTINUATION OF THE COLLABORATION (4/5)

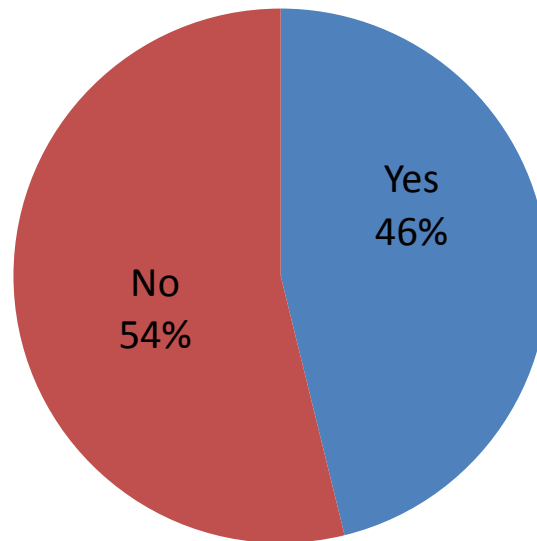
Has the de Staël project led to the set-up of joint structures?



1 INRIA/EPFL joint laboratory

CONTINUATION OF THE COLLABORATION (5/5)

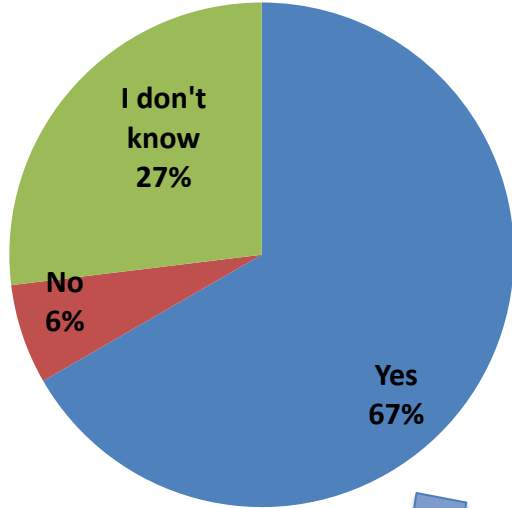
Has the French-Swiss collaboration involved new partners?



For a total of 35 new partners from 17 different countries

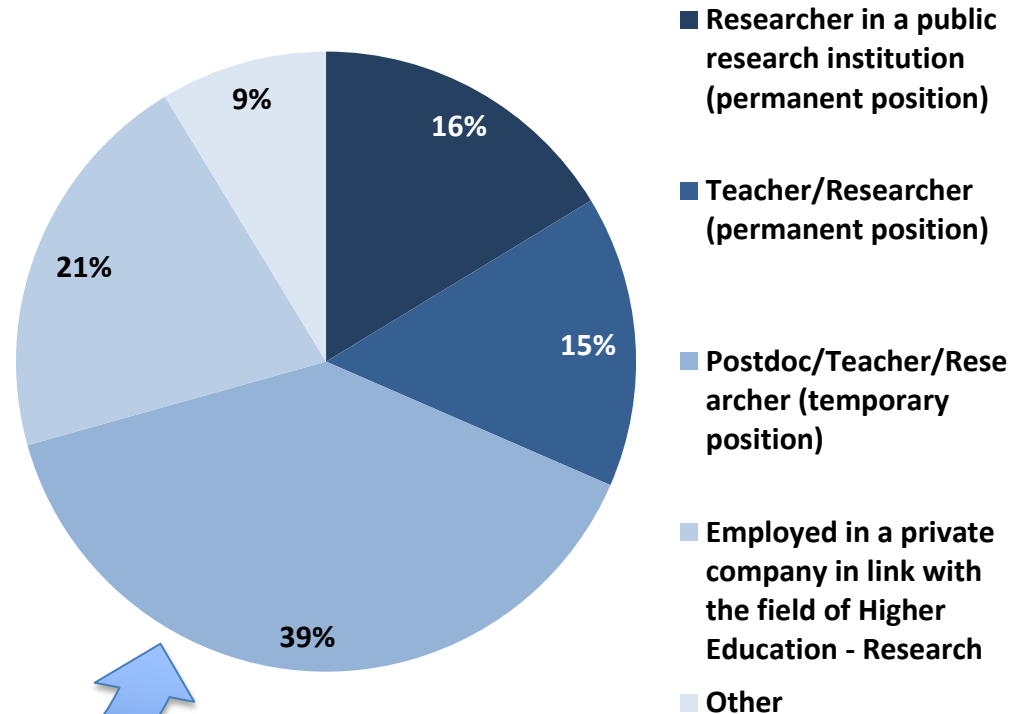
IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (1/2)

Was french young researchers' career impacted by the de Staël program ?



Data from 78 responses

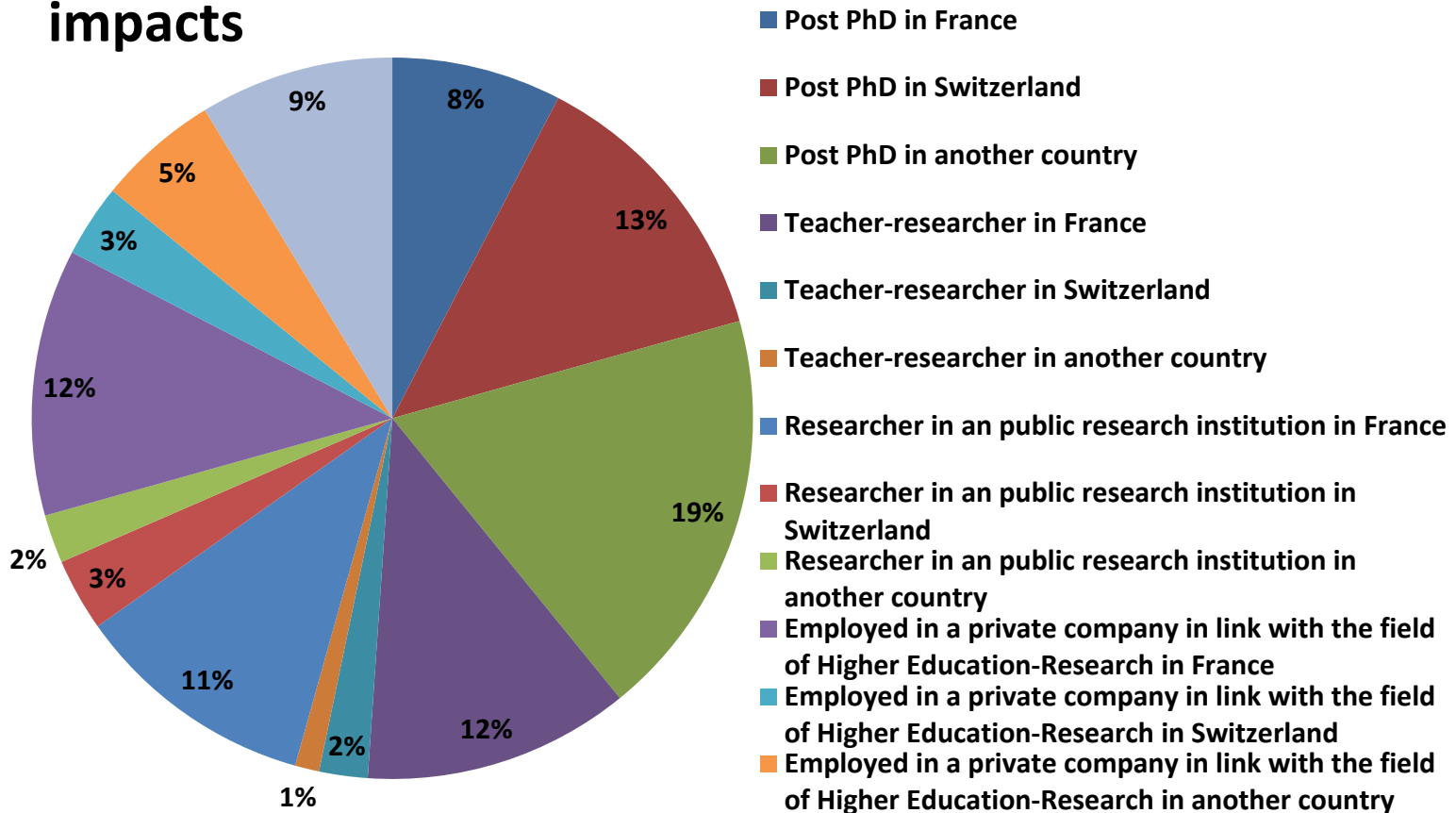
Type of impacts



Data from 52 positive responses for a total of 92 french young researchers

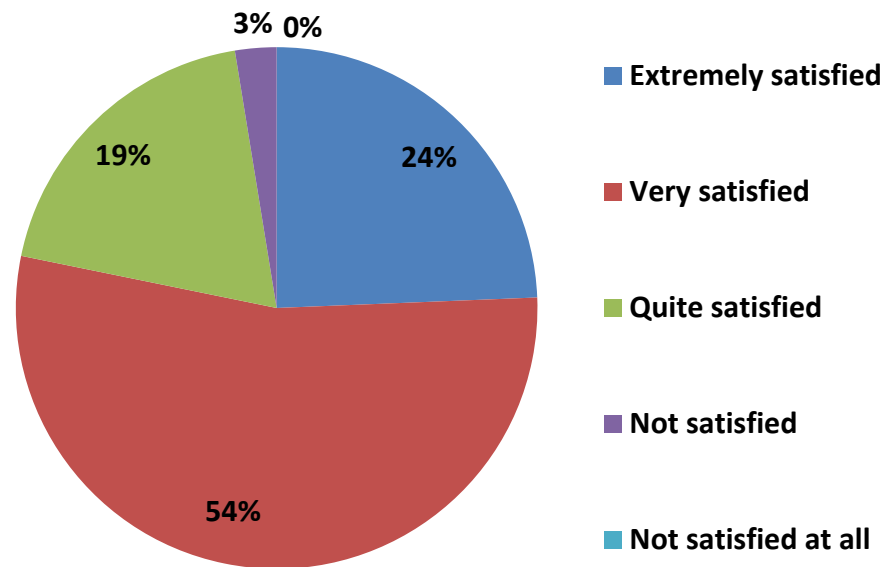
IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

97% of French principal investigators are satisfied



Data from 78 responses

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (2/3) POSITIVE COMMENTS

SURVEY OF 78 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 483)	% (out of 78)
Fostering researchers' mobility	64	81%
Fostering an international research collaboration	64	81%
Simplicity of the project application process	57	72%
Fostering the training of young researchers	52	66%
Fostering exchanges enabling scientific production	46	58%
Easy implementation (administrative flexibility)	38	48%
Good scientific-added value on financial investment	29	37%
Financial autonomy towards your institution	24	30%
Sufficient financial means for the mobility costs	23	29%
Helpful to initiate other fundraising	23	29%
Helping to know the partner country	15	19%
Sufficiently long duration of the projects	14	18%
Sufficient amount of mobility time given to collaborate	14	18%
Transparency of the selection process	11	14%
Timetable for implementation	8	10%
No strenght point	1	1%
Other	0	0%
Total number of occurrences	483	

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (3/3) NEGATIVE COMMENTS

SURVEY OF 78 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 191)	% (out of 78)
Insufficient financial means to cover a project	40	51%
Financial means insufficient for the expenditure of mobility (per diem)	23	29%
Length of support too short	22	28%
Difficult to continue the collaboration	21	27%
Too low number of mobilities	15	19%
Financial means insufficient for the expenditure of mobility (transport)	14	18%
Too short duration of the projects	13	16%
No weakness	8	10%
Lack of transparency in the selection process	8	10%
Heaviness of the process of applications	6	8%
Administrative heaviness of the missions management	6	8%
Insufficient communication on the evaluation's results	5	6%
Timetable for implementation	4	5%
Flexibility of the program for actions co-financed with the partner	2	3%
Financial autonomy towards your institution	1	1%
Too long duration of mobilities	0	0%
Other	3	4%
Number of occurrences	191	

PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation, despite the relatively low financial support, which is to be considered as “seed money”.

37% of the applicants are under 40 years, a score better than the general mean (22%)

Implication of women PIs in the applications (29%) and the selection (26%) better than the general mean (24%)

Implication of French young researchers in 73% of the projects better than the general mean (67%)

Implication of French young researchers in the mobilities (46%) better than the general mean (33%)

Scientific coproduction better than the general mean

Beware of the recent decrease in the number of applications

49% of the PIs have already collaborated with Switzerland and 50% of them have already benefited from a Germaine de Staël program

24% of funded projects with no eligible co-publications

Only 40% of co-publications involve a french young researcher

Only 50% of the young researchers involved in the projects are also involved in the co-publications

Only 69% of the projects led to a continued collaboration

PRELIMINARY RECOMMENDATIONS

- **Try to make the call for offer more appealing (give examples of successful cooperation between FR and CH teams through interviews, simplify the application procedure)**
- **Promote newer cooperations between France and Switzerland (communicate the information to French universities International Relations, keep advertising towards a wider scientific and academic audience through new connections and social networks)**
- **Encourage French PIs to increase the implication of young researchers in the co-publications**
- **Increase the number of projects leading to co-publications (include the publication fees for articles or registrations fees for conferences in the eligible expenses ?)**
- **Consider a “Germaine de Staël +” program to help PIs at the end of their financing to continue the collaboration and to apply to international programs ?**

French national ministries (MESRI / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding and participants in this symposium.

CONTACTS

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Thank you for your attention