

FRANCE – Stanford

**Scientific impact of the program
(2008-2018)**

MESR-DAEI / MEAE

2021

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

GENERAL PRESENTATION OF THE PROGRAM

Creation : 2002

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

Total budget (France + Stanford) : around 68 000 € / year

>> including budget from the French part : around 53 000 € / year

>> including budget from the US part : around 77 000 € / year

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

Number of new funded projects per year : around 9

From 2008-2018 :

244 applications submitted

91 projects funded

DATA SOURCES

Data base (2008-2018)

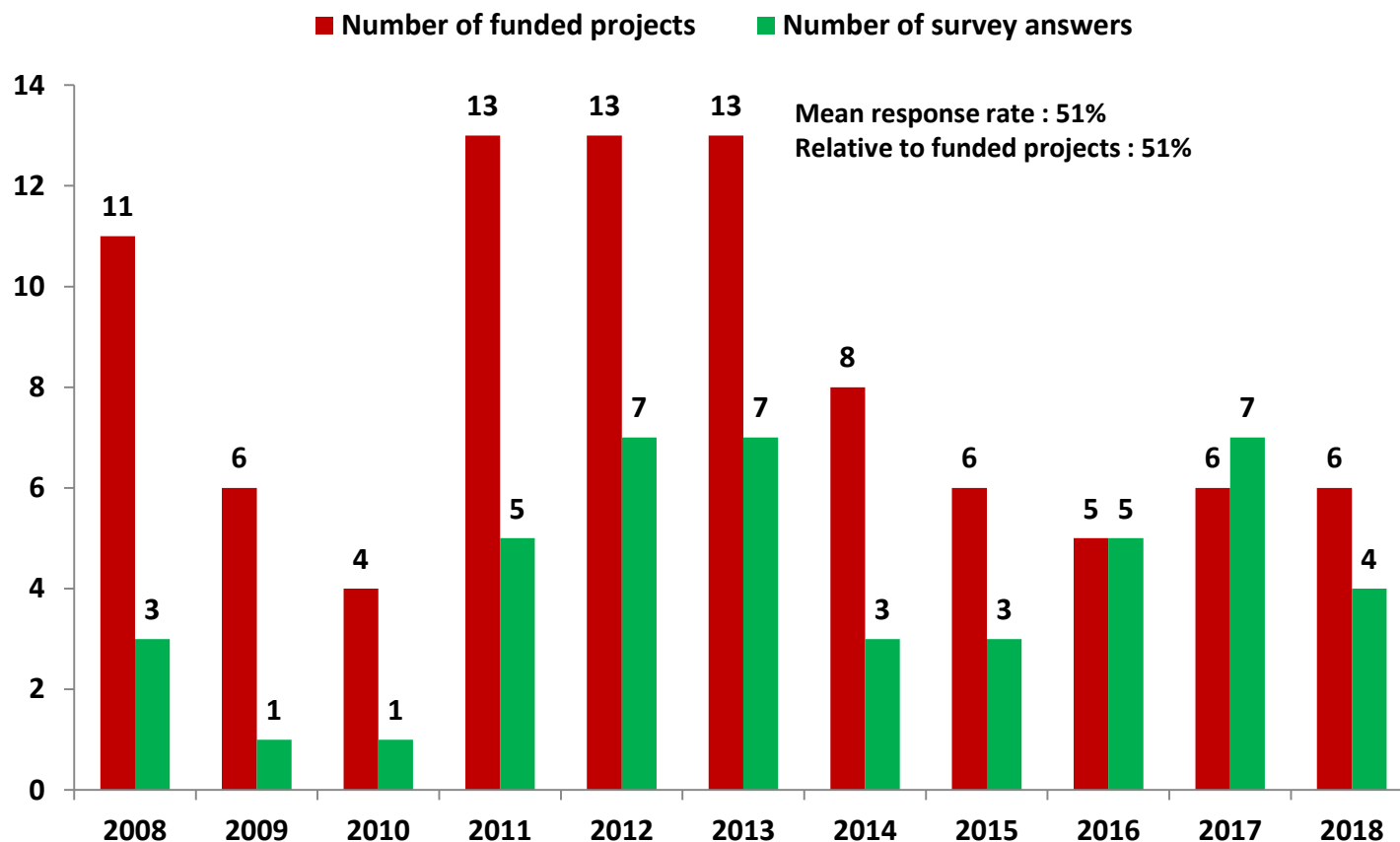
- Fonds France-Stanford statistics
- Number of projects received/funded per year, in total and per categories

Survey (2008-2018)

- Target : **French** Principal Investigators of the 91 funded projects between 2008 and 2018
- Survey duration : from February 11 to May 16, 2020
- **51%** *response rate* (46 respondents for 91 queries)

SURVEY RESPONSES

Average response rate to the survey : **51 % (46 answers)**



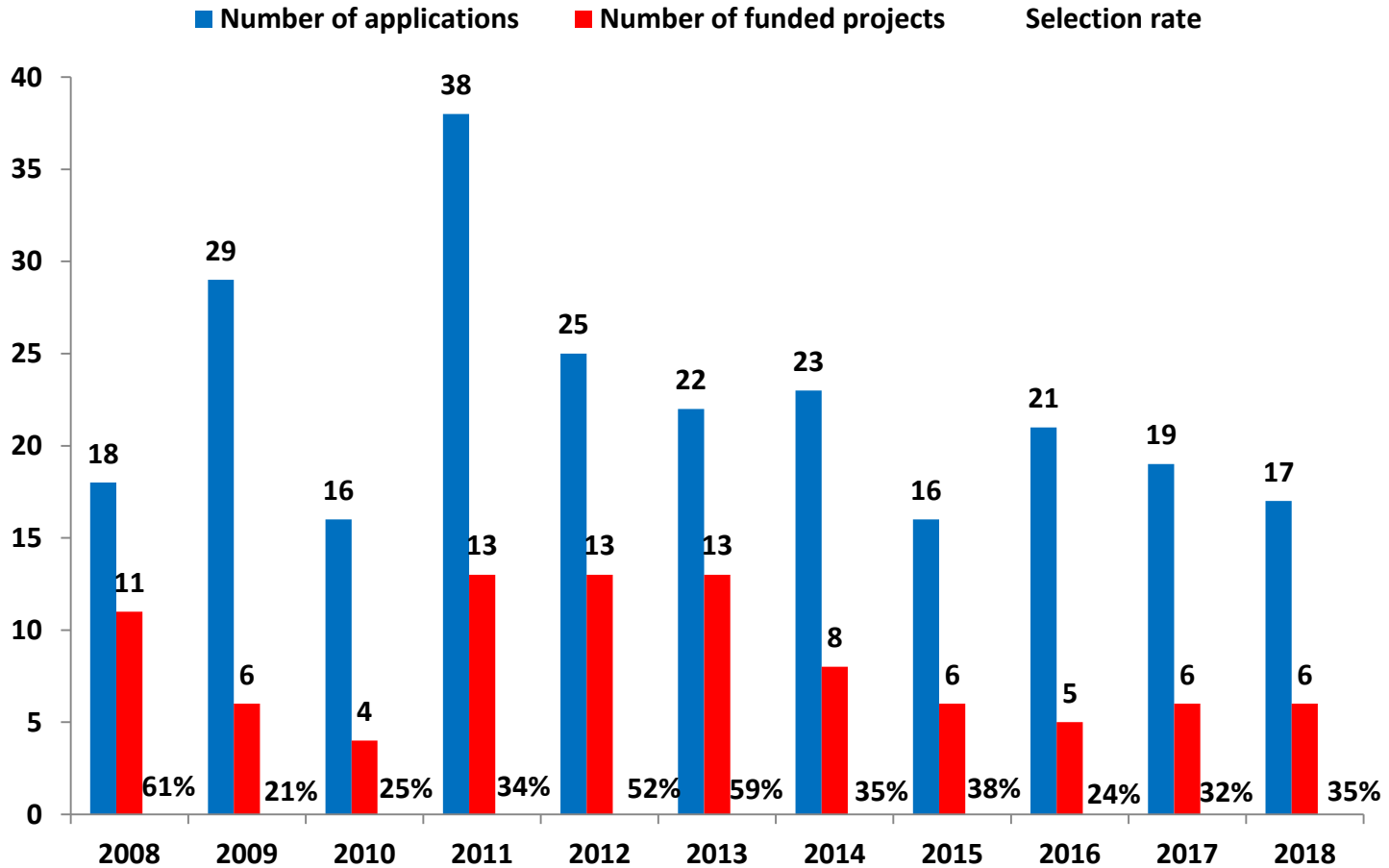
91 funded projects between 2008 and 2018

2008-2018

Key Points

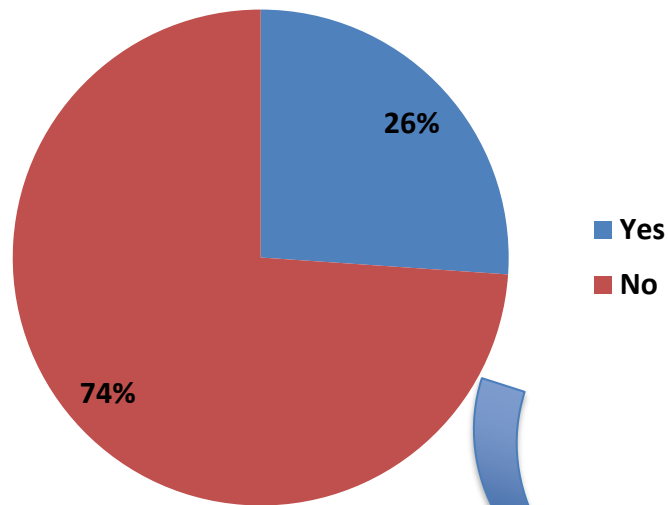
NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2008-2018: **37%**



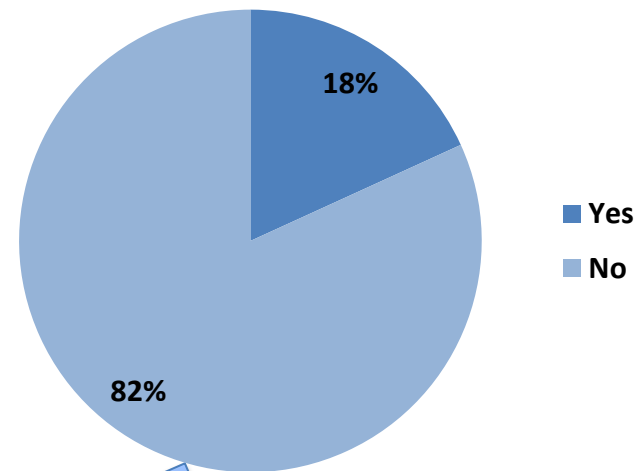
BEFORE JOINING THE FRANCE STANFORD PROJECT (1/2)

Did you already cooperate with USA in the past ?



Data from 46 responses

If yes, was it with the same partner?



Data from 11 responses

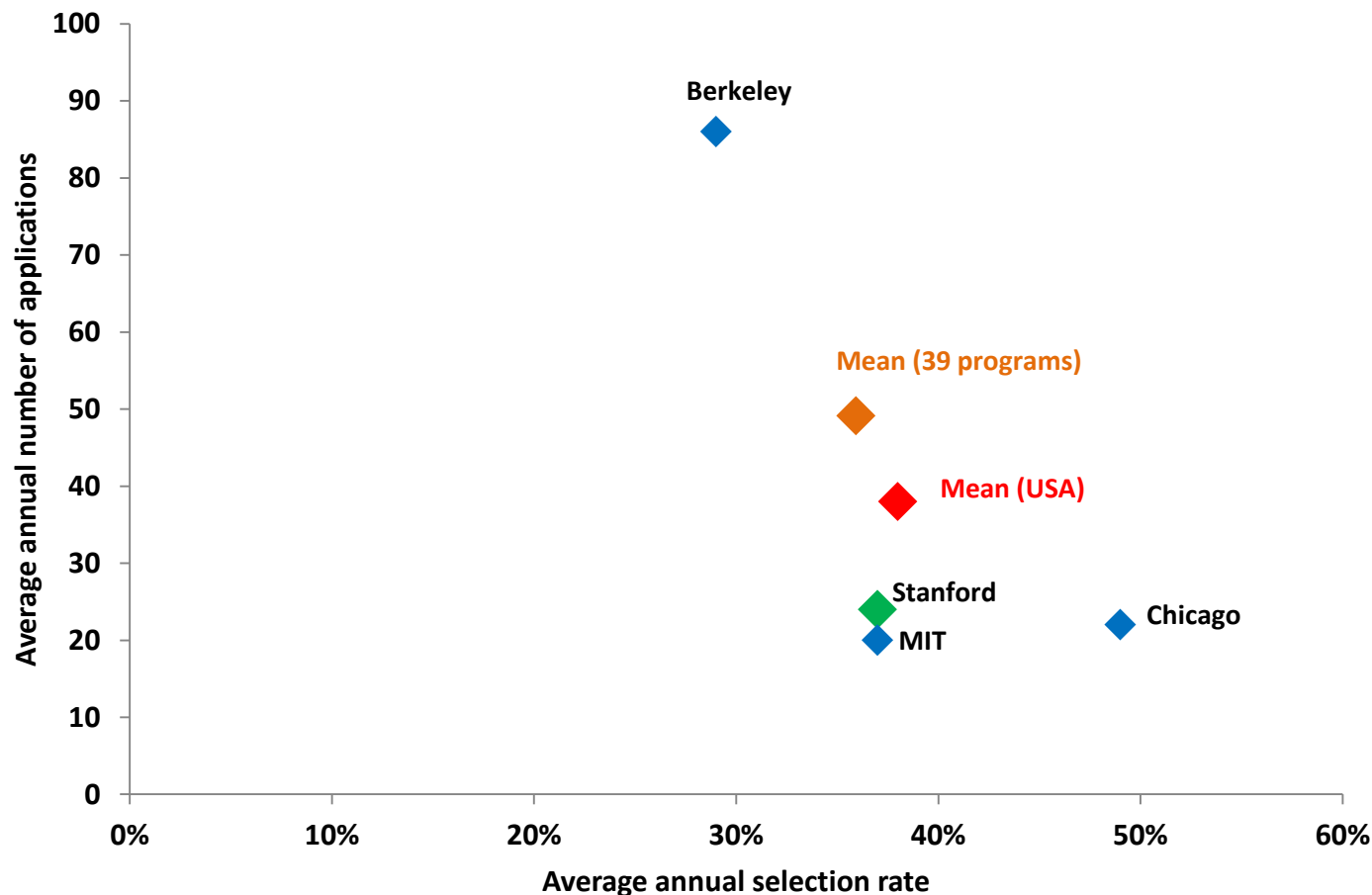
BEFORE JOINING THE FRANCE STANFORD PROJECT (2/2)

| With which of scientific collaboration program ? | |
|--|-----|
| Fulbright | 23% |
| NSF | 23% |
| France - Berkeley Funds | 15% |
| France – Chicago Funds (FACCTS) | 8% |
| France - MIT | 8% |
| Other | 23% |

Others : PUF, NIH, BAEF (Belgian American fund)

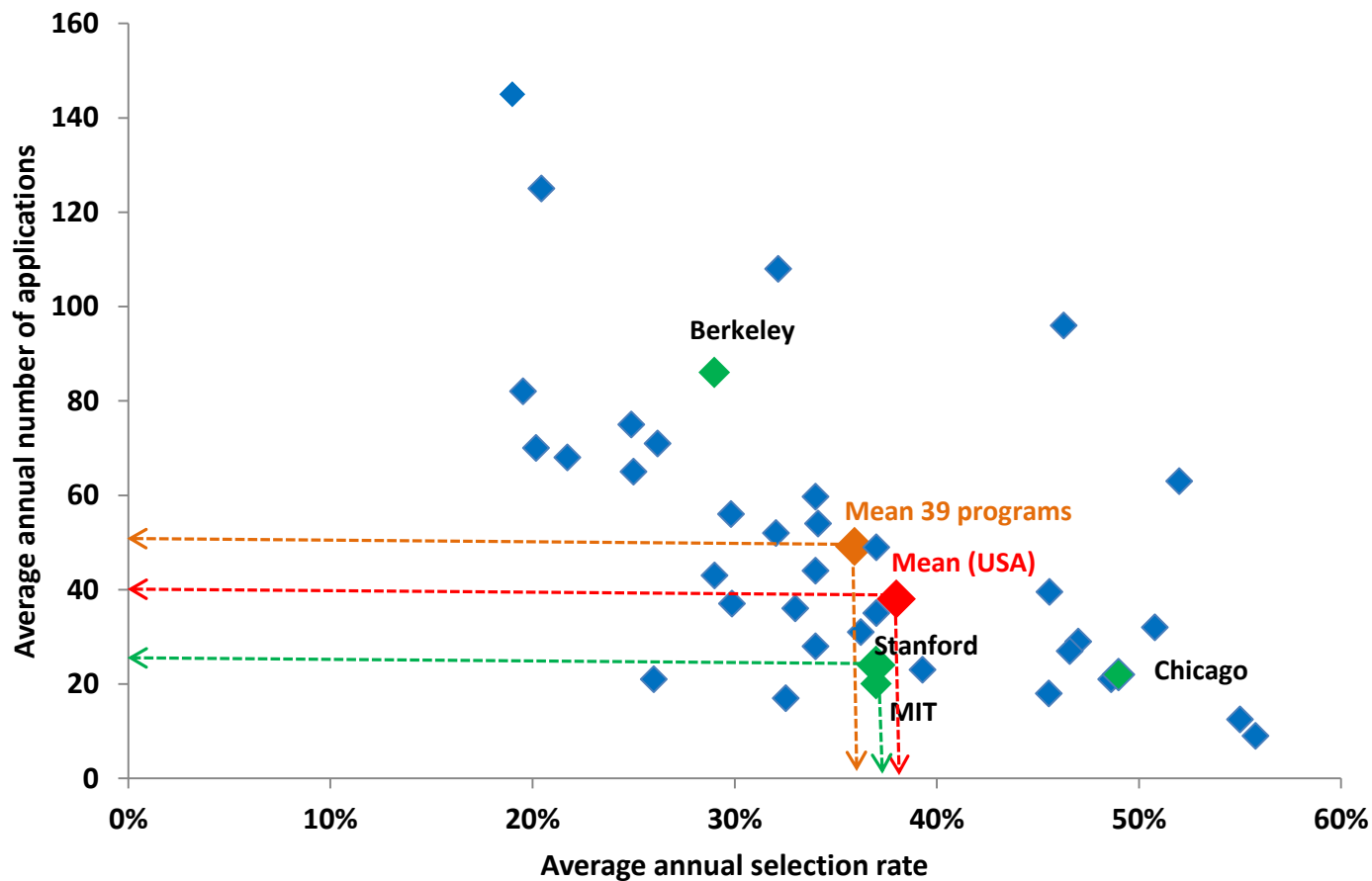
Data from 12 responses

NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



Average selection rate for 2008-2018 : 37% vs 38% mean USA and 36% general mean
Average number of applications 2008-2018 : 24 vs 38 mean USA and 49 general mean

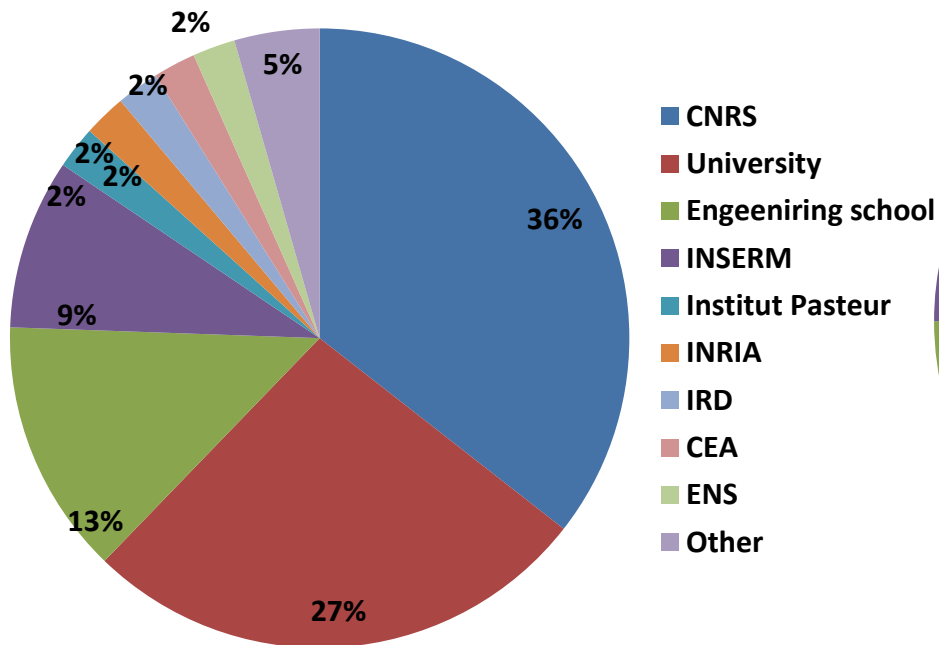
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



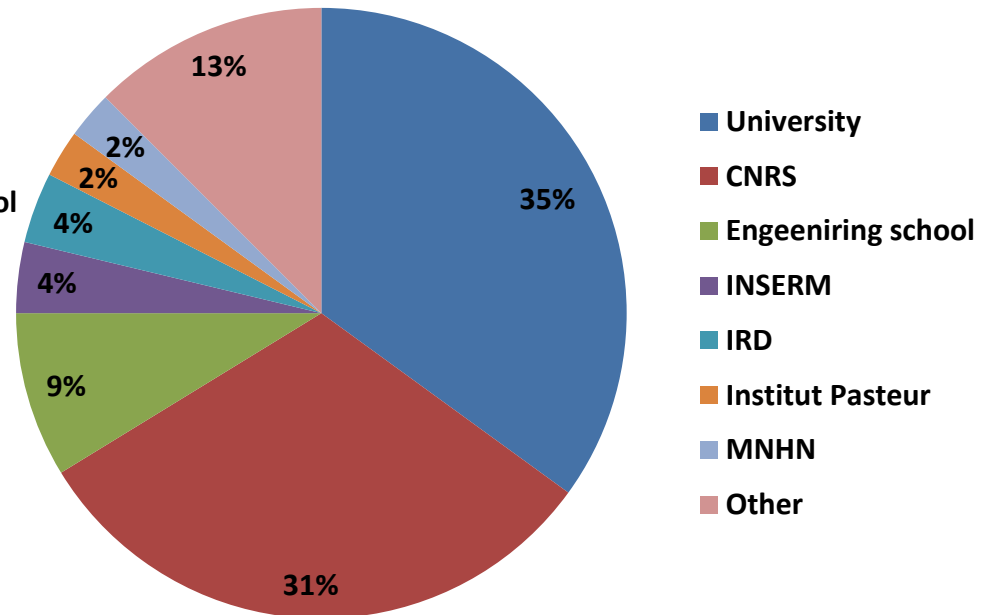
Average selection rate for 2008-2018 : 37% vs 38% mean USA and 36% general mean
Average number of applications 2008-2018 : 20 vs 38 mean USA and 49 general mean

FRENCH PARTICIPATING INSTITUTIONS

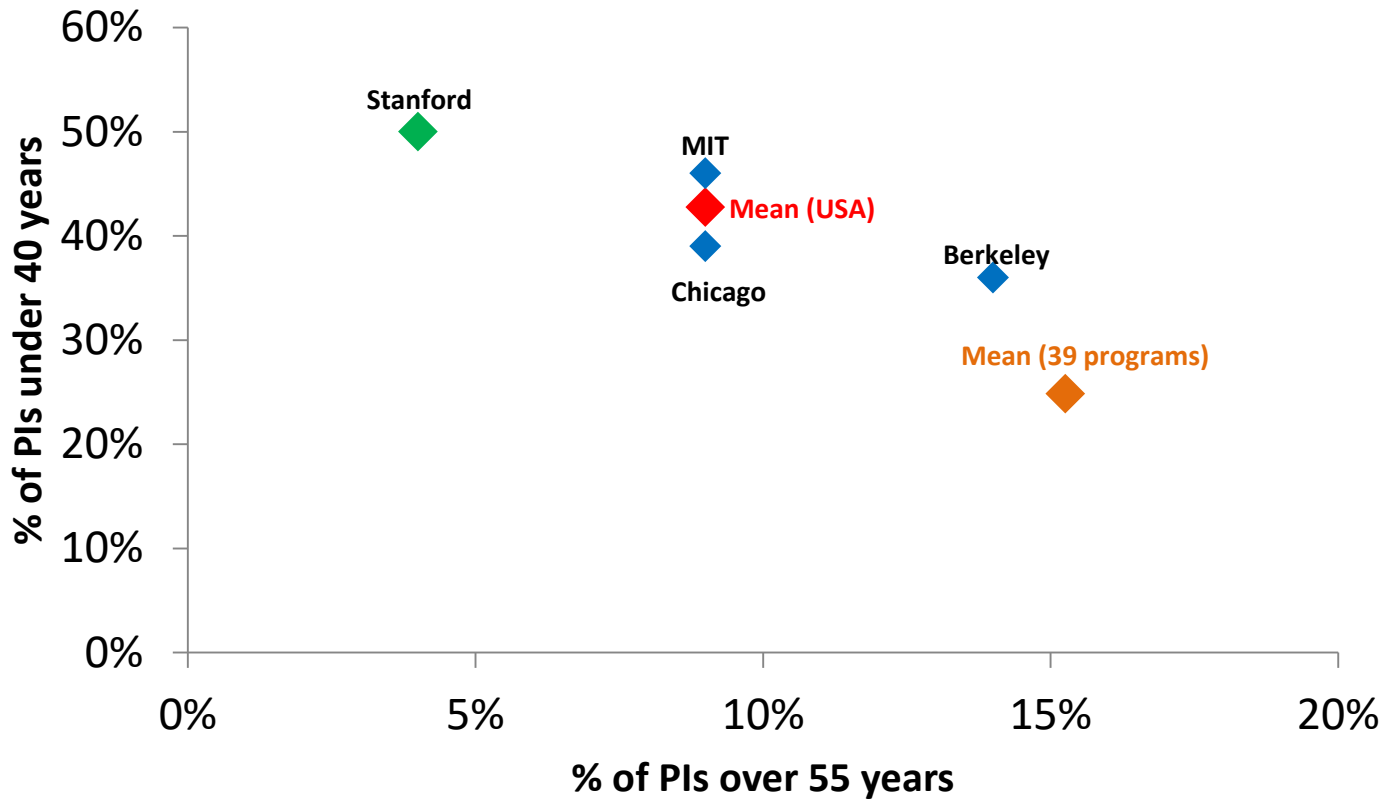
PI's employers



Laboratory authorities

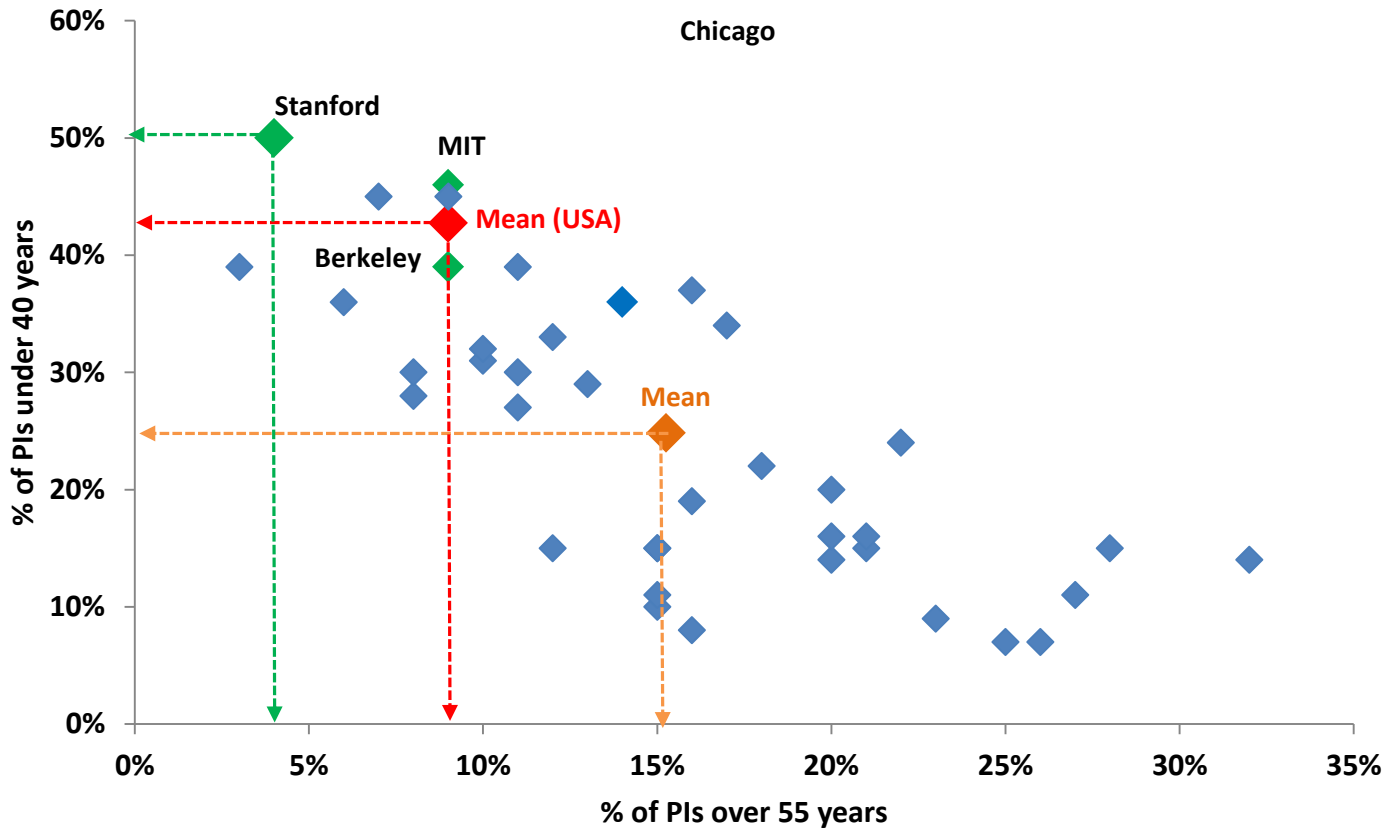


AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



PIs under 40 years old : 50% vs 43% mean USA and 25% general mean
PIs over 55 years old: 4% vs 9% mean USA and 15% general mean
46% of the PIs are between 40 and 55 years old

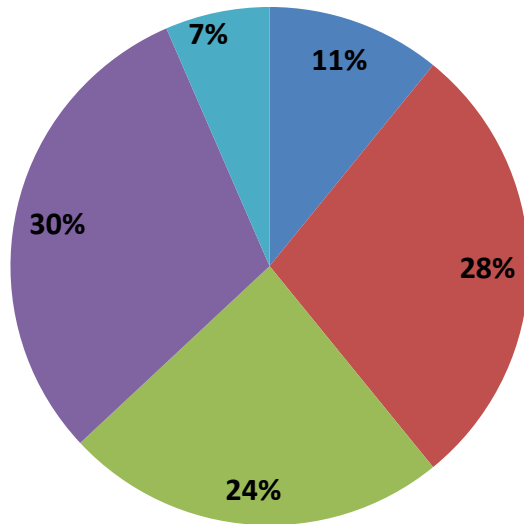
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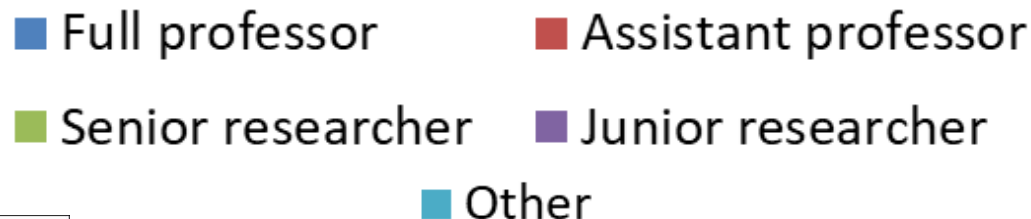
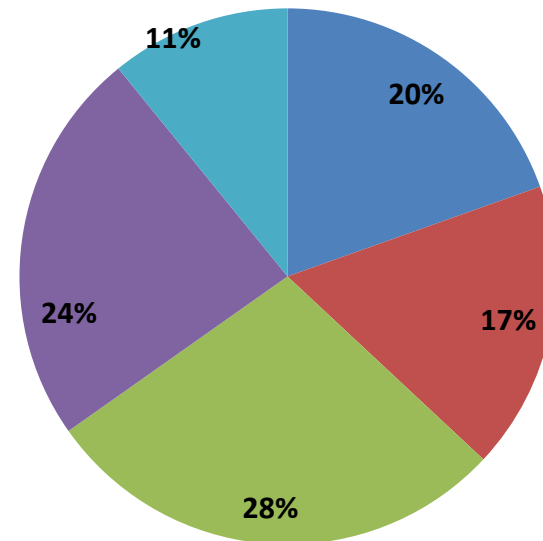
PIs under 40 years old : 50% vs 43% mean USA and 25% general mean
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PROFESSIONAL FUNCTION OF FRENCH PRINCIPAL INVESTIGATORS

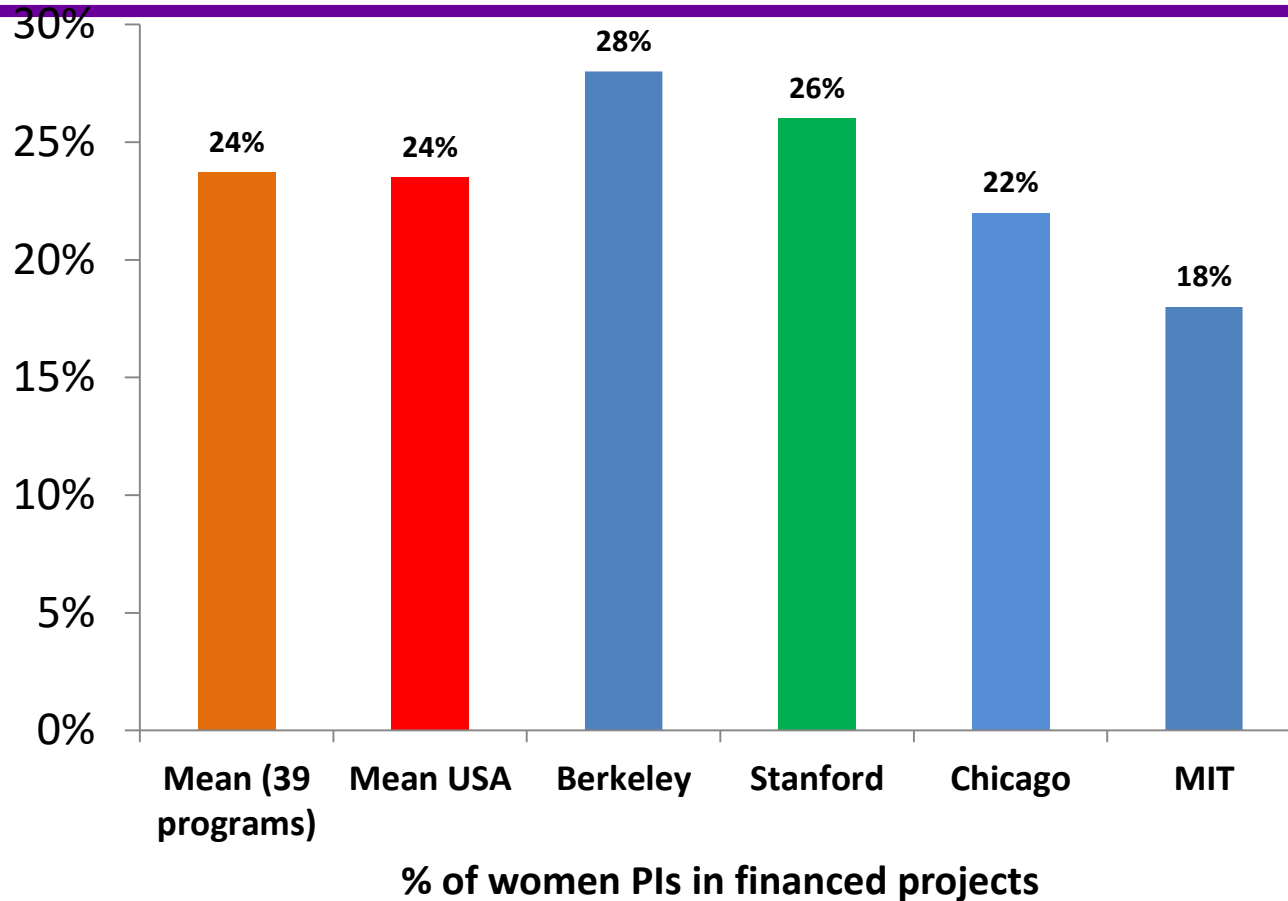
Previous professional status
(at the beginning of the project)



Current professional status



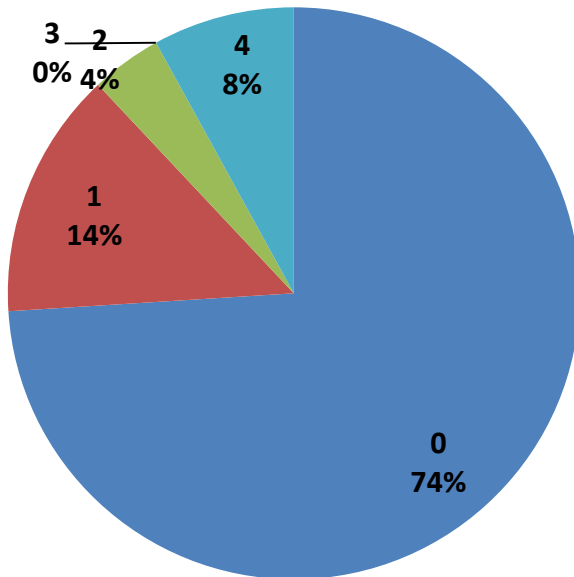
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : NOT AVAILABLE
% of women PIs in the selected projects : 28% vs 24% mean USA and general mean

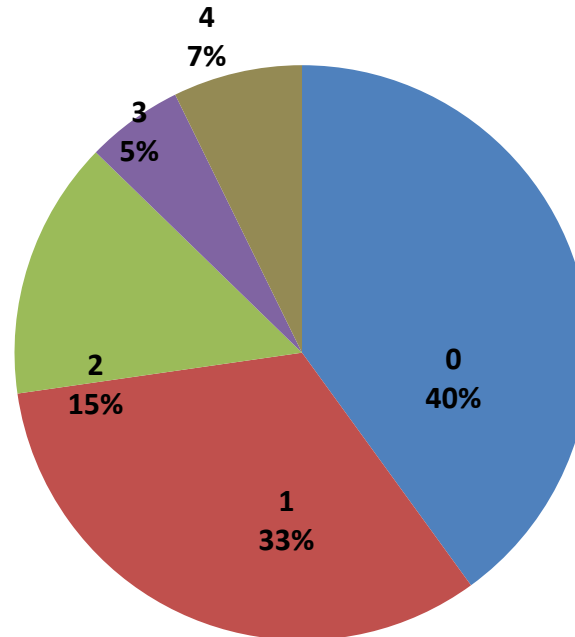
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of Masters



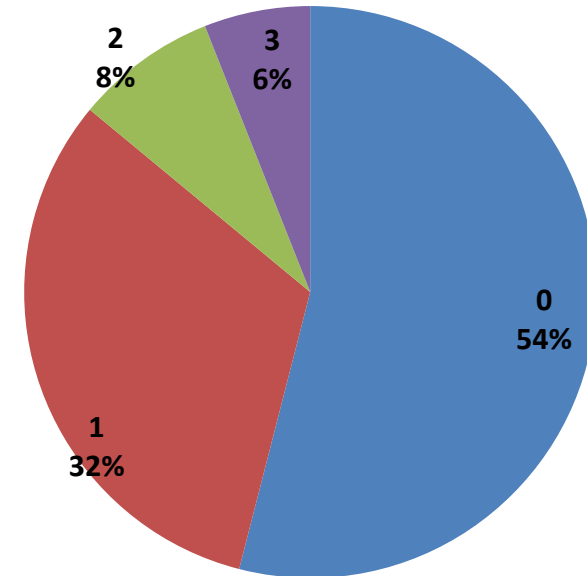
20% of projects involve at least one Master student

Number of PhDs



52% of projects involve at least one PhD student

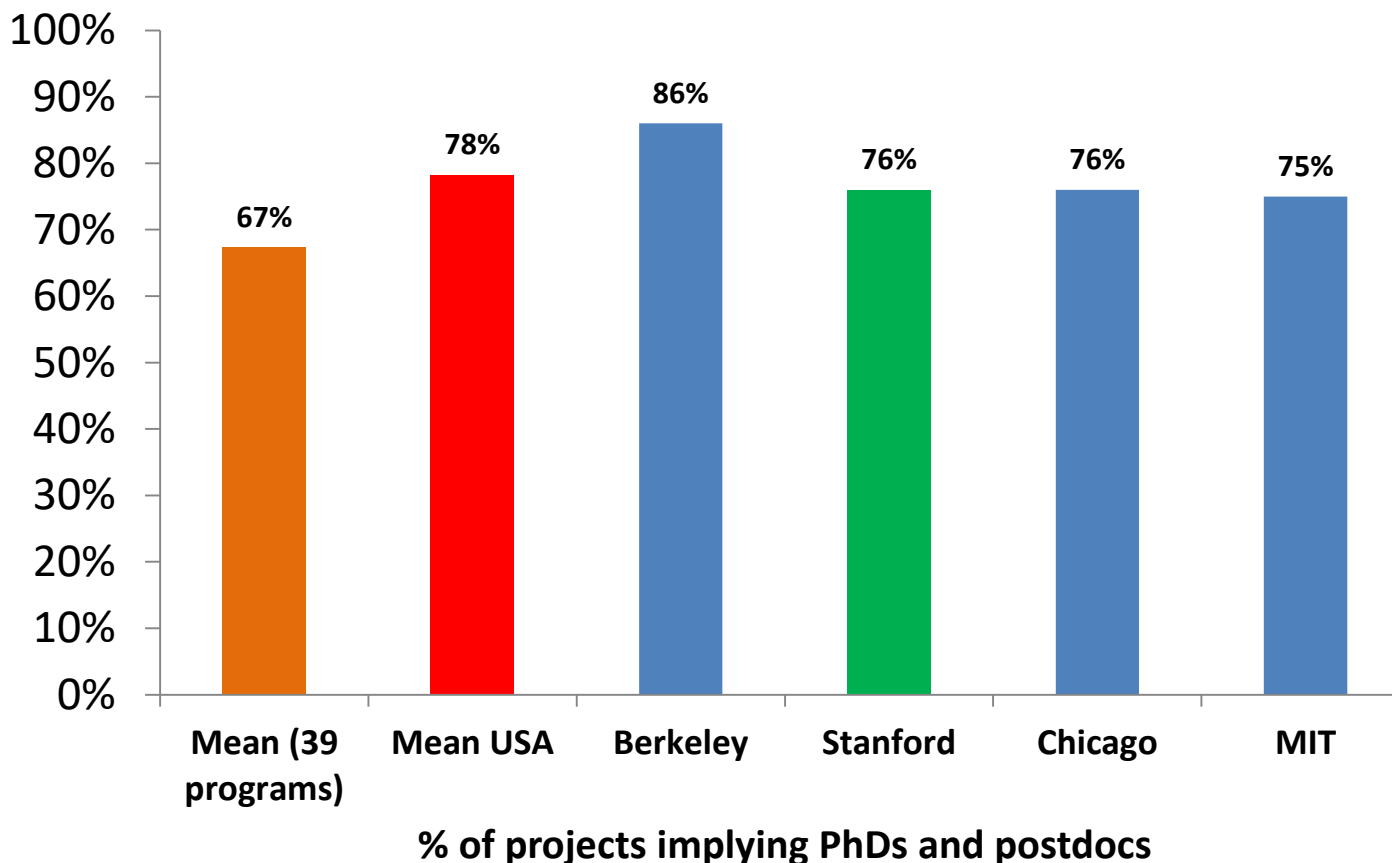
Number of post-doctoral researchers



41% of projects involve at least one post-doctoral researcher

Data from 46 responses

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



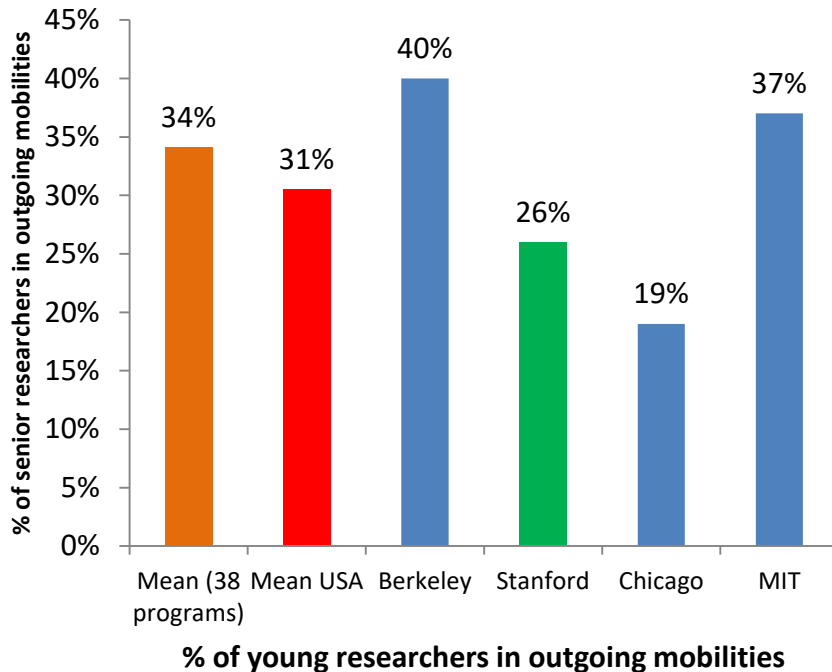
% of projects implying young researchers : 76% vs 78% mean USA and 67% general mean
% of PhD or postdoc implicated in the copublications : NOT AVAILABLE



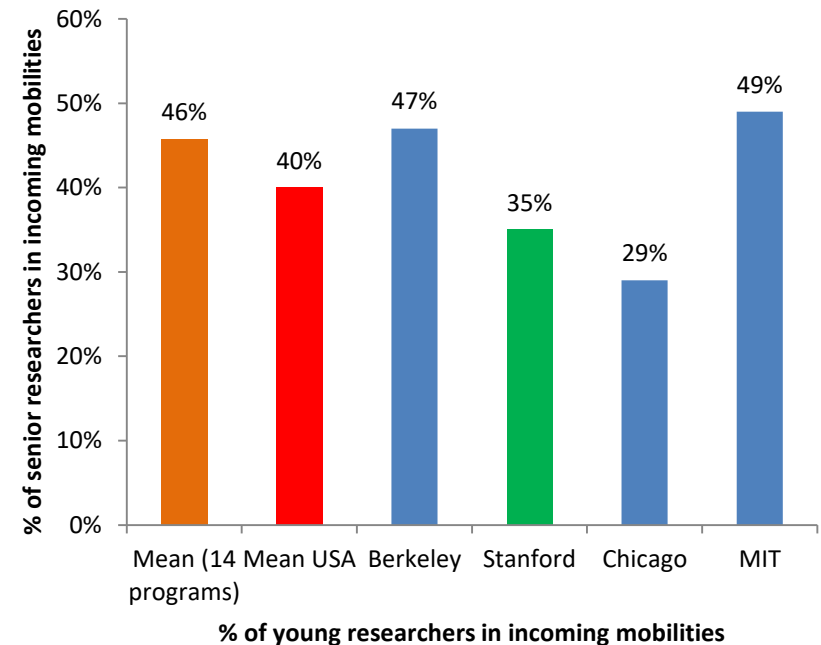
MOBILITY

YOUNG RESEARCHERS MOBILITY 2017-2019

France → USA
Comparison between 38 bilateral programs



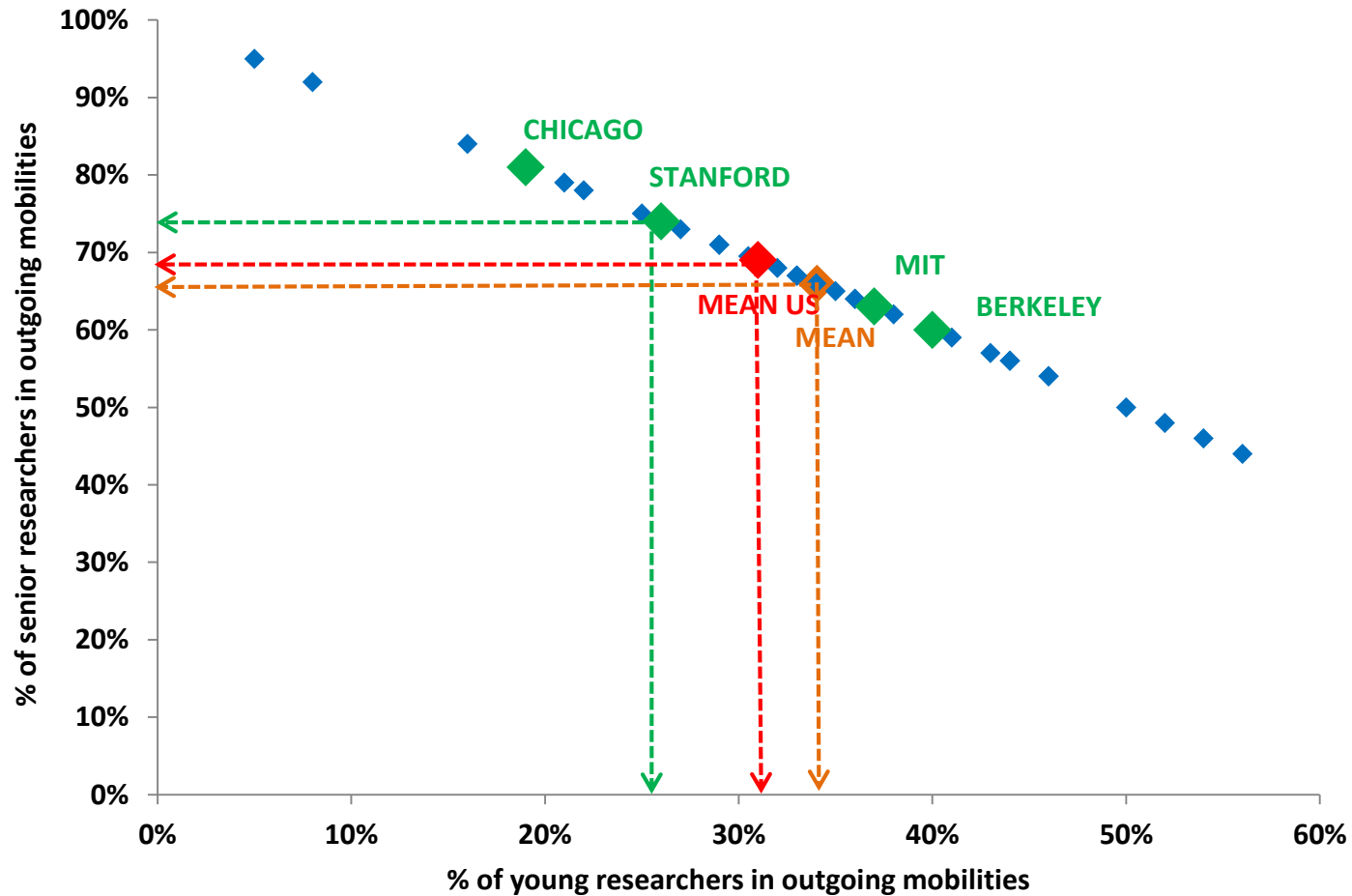
USA → France
Comparison between 14 bilateral programs



% of french young researchers in outgoing mobilities : 26% vs 31% mean USA and 34% general mean
% of american young researchers in incoming mobilities : 35% vs 40% mean USA and 46% general mean

FRENCH YOUNG RESEARCHERS MOBILITY 2017-2019

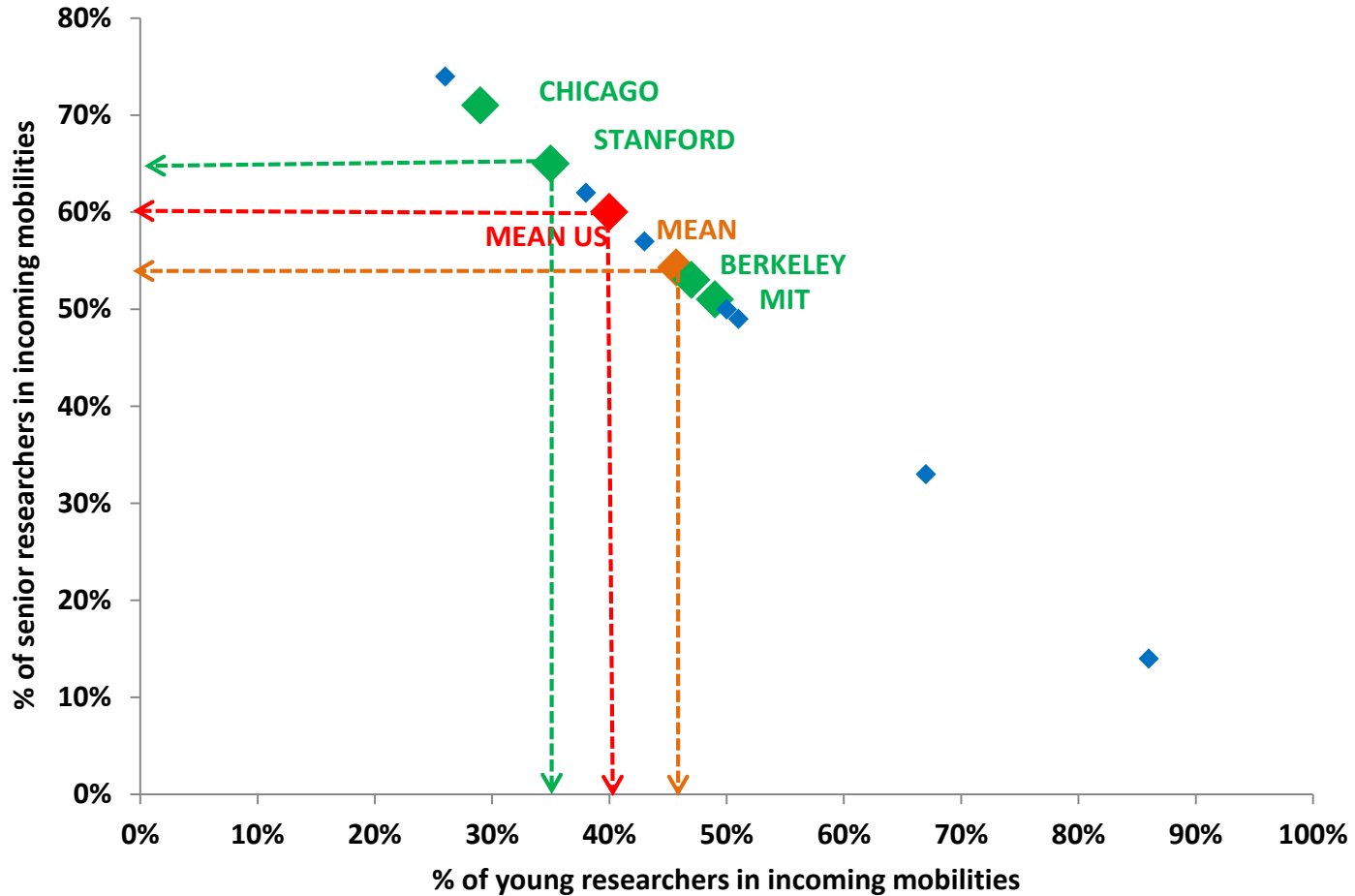
France → USA
Comparison between 38 bilateral programs



% of french young researchers in outgoing mobilities : 26% vs 31% mean USA and 34% general mean

AMERICAN YOUNG RESEARCHERS MOBILITY 2017-2019

USA → France
Comparison between 14 bilateral programs

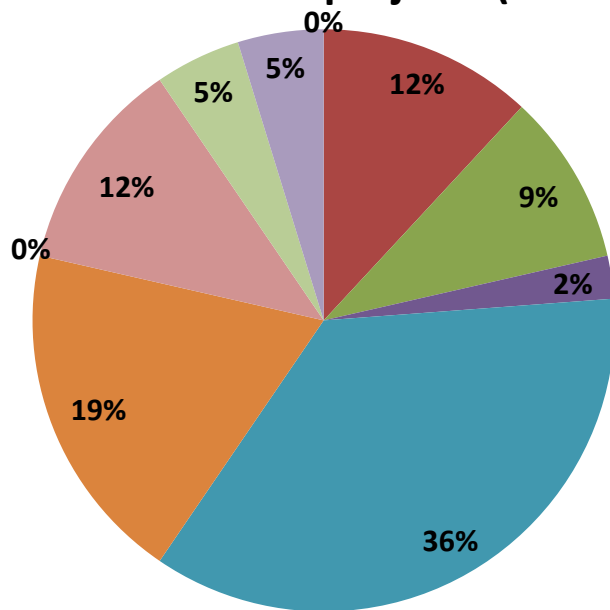


% of american young researchers in incoming mobilities : 35% vs 40% mean USA and 46% general mean

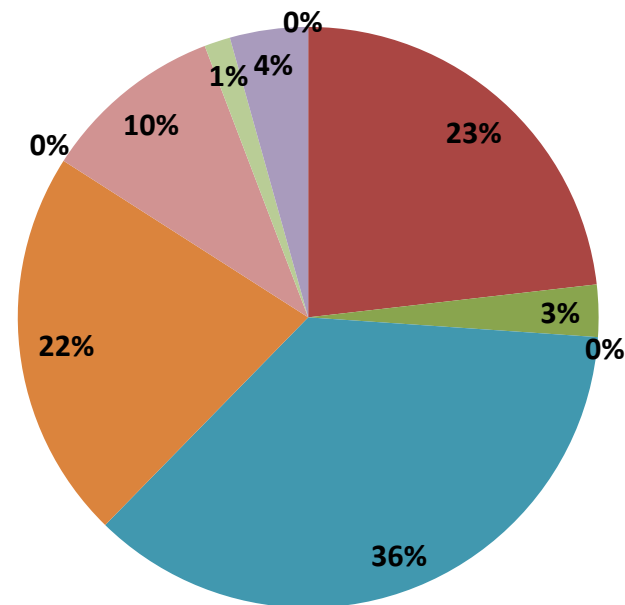
SCIENTIFIC PRODUCTION (2008-2017)

SCIENTIFIC OUTPUT (1/2)

Number of funded projects (survey): **46**



Percentage of co-publications



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

SCIENTIFIC OUTPUT (2/2)

Data from 42 funded projects

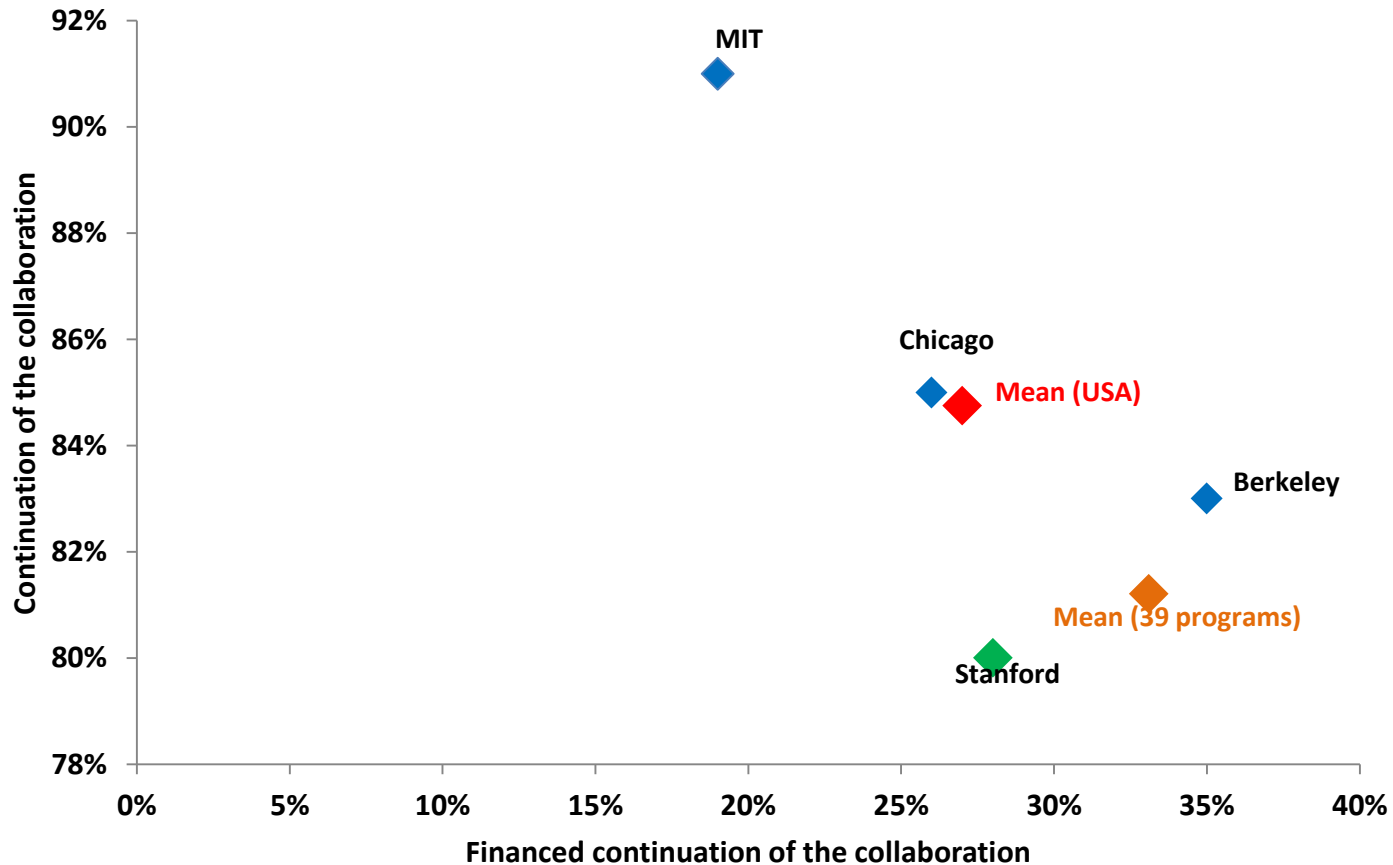
| | Number of financed projects in the survey | Average number of co-publications per project |
|------------------------------|---|---|
| Mathematics | 0 | - |
| Physics | 5 | 3,2 |
| Marine/Earth/Planet Sciences | 4 | 0,5 |
| Chemistry | 1 | 0,0 |
| Biology and Health | 15 | 1,7 |
| Humanities | 8 | 1,9 |
| Social Sciences | 0 | - |
| Engineering Sciences | 5 | 1,4 |
| Information Technology | 2 | 0,5 |
| Agronomy / Ecology | 2 | 1,5 |
| TOTAL | 42 | 1,3 |

Overall average **annual** number of co-publication per project : **1,30 vs 0,90 general mean**

56% of funded projects led to one co-publication at least

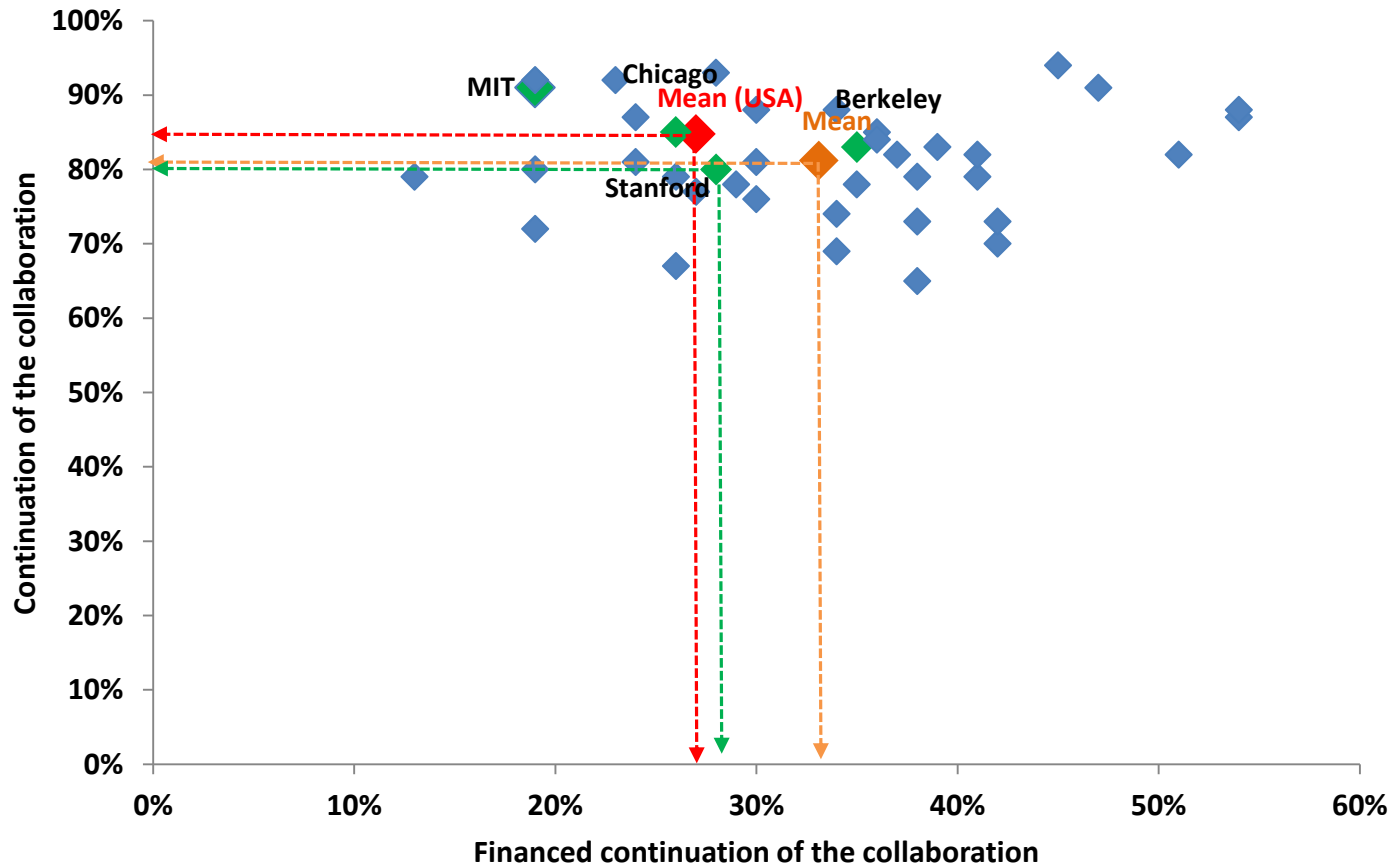
WHAT HAPPENS AFTER JOINING THE FRANCE-STANFORD PROGRAM?

CONTINUATION OF THE COLLABORATION (1/6) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 80% vs 85% mean USA and 81% general mean
Continuation of the collaboration with other grants: 28% vs 27% mean USA and 33% general mean

CONTINUATION OF THE COLLABORATION (2/6) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 80% vs 85% mean USA and 81% general mean
Continuation of the collaboration with other grants: 28% vs 27% mean USA and 33% general mean

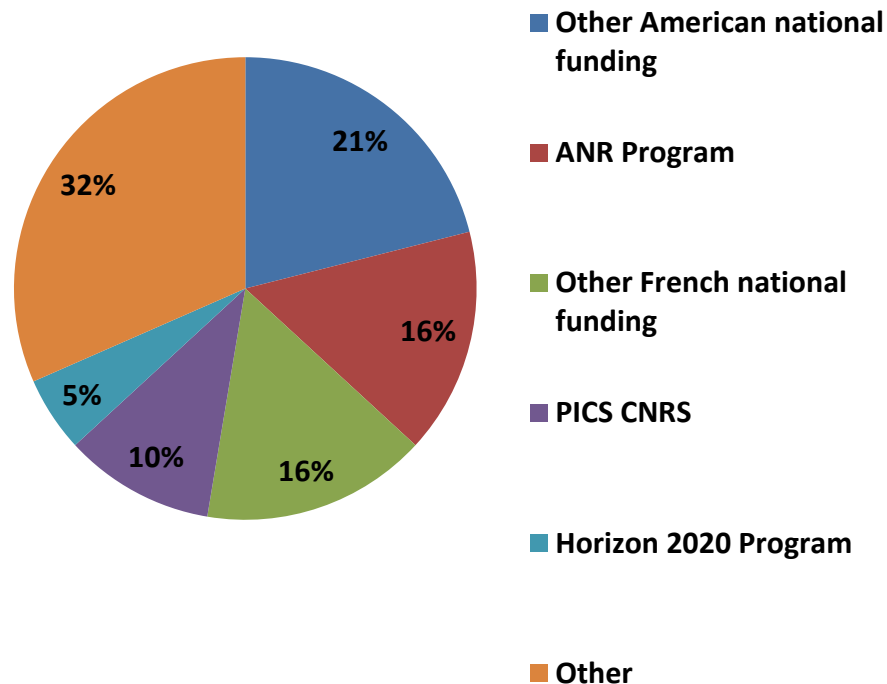
CONTINUATION OF THE COLLABORATION (3/6)

80% of the collaborations continued after the France-Stanford project

| Which activities? | |
|--|-----|
| Collaborative research | 78% |
| Co-publications | 43% |
| Mobility of researchers | 38% |
| Joint participation in symposia or conferences | 32% |
| Co-organisation of scientific events | 30% |
| Mobility of PhD students | 22% |
| Mobility of Master's students | 3% |
| Co-directed PhDs | 3% |
| Other | 3% |

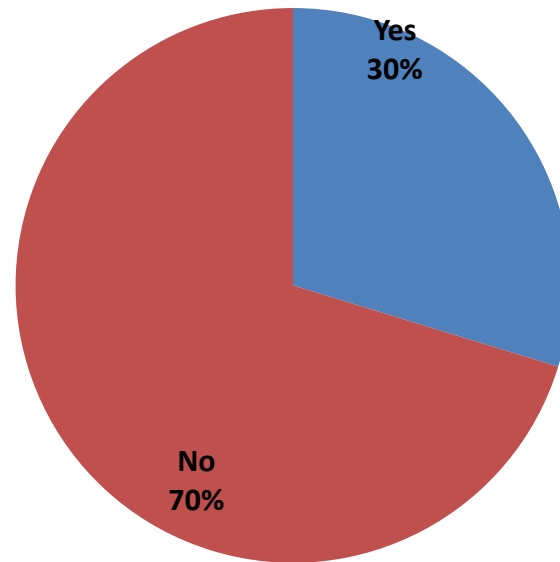
CONTINUATION OF THE COLLABORATION (4/6)

What kind of funded collaborations after the France-Stanford project ?



CONTINUATION OF THE COLLABORATION (6/6)

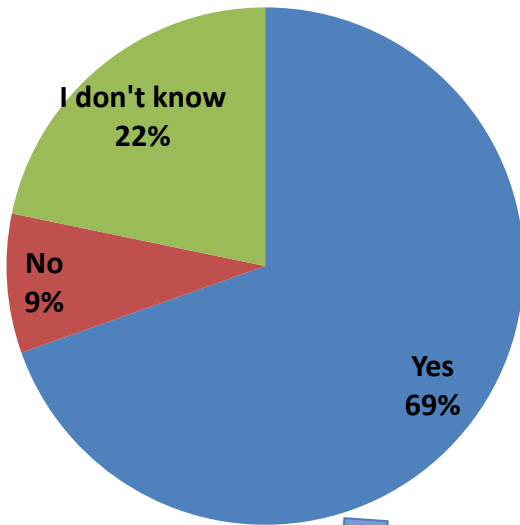
Has the French-US collaboration involved new partners?



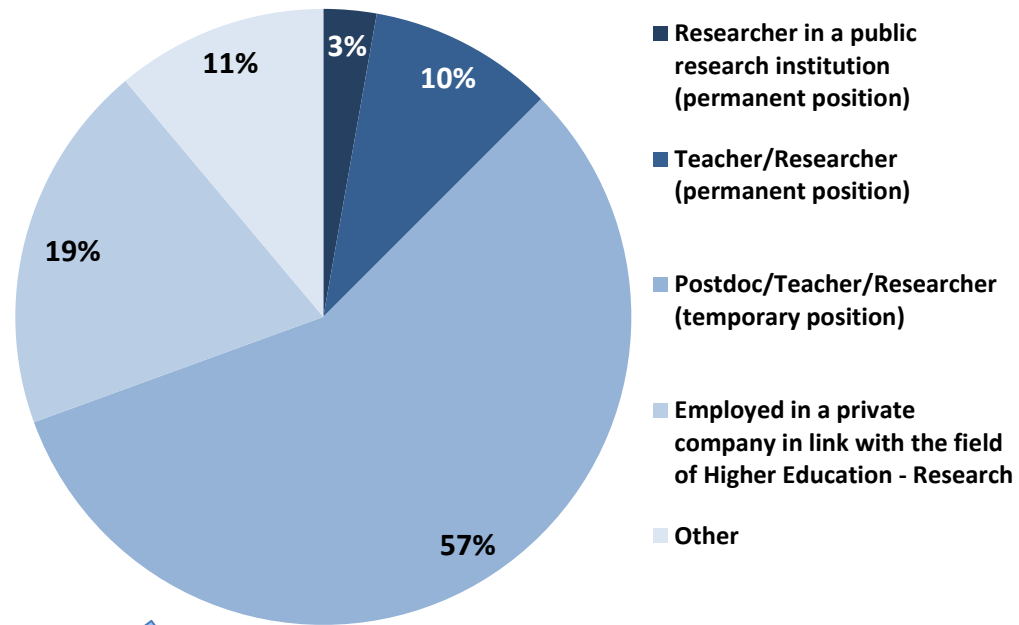
For a total of 12 new partners from 5 different countries

IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

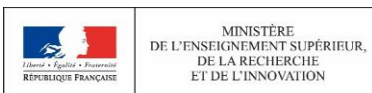
Was young researchers' career impacted by the France-Stanford program ?



Type of impacts



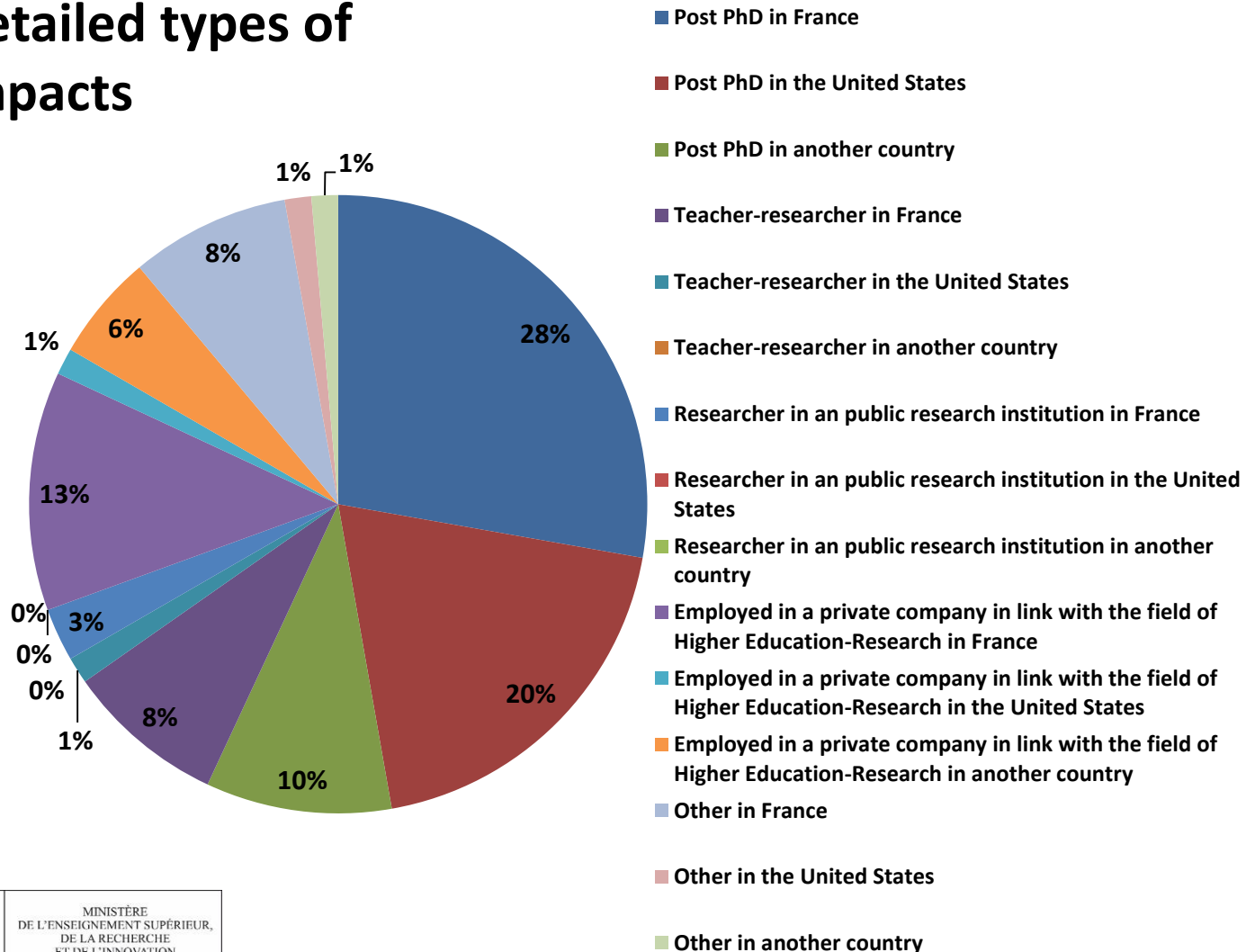
Data from 33 responses



Data from 32 positive responses for a total of 72 young researchers

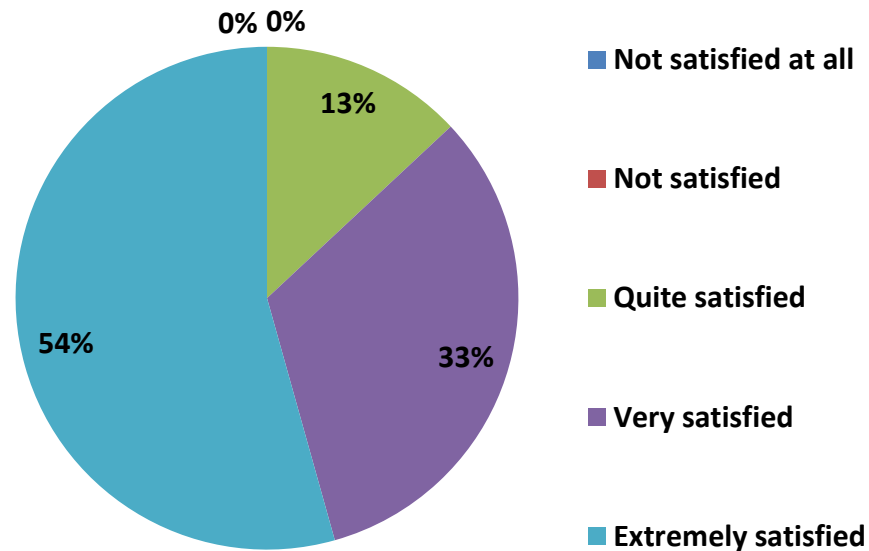
IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

100% of French principal investigators are satisfied



Data from 46 responses

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

SURVEY OF 46 FUNDED PROJECTS



| Strengths of this program | Number of occurrences (out of 211) | % (out of 46) |
|---|------------------------------------|---------------|
| Simplicity of the project application process | 40 | 78% |
| Fostering an international research collaboration | 31 | 67% |
| Fostering researchers' mobility | 28 | 61% |
| Easy implementation (administrative flexibility) | 27 | 59% |
| Fostering the training of the young researchers | 23 | 50% |
| Fostering exchanges enabling scientific production | 17 | 37% |
| Sufficient financial means for the mobility costs | 10 | 22% |
| Good scientific-added value on financial investment | 10 | 22% |
| Helpful to initiate other fundraising | 10 | 22% |
| Helping to know the partner country | 7 | 15% |
| Sufficient amount of mobility time given to collaborate | 5 | 11% |
| Transparency of the selection process | 3 | 7% |
| Sufficiently long duration of the projects | 0 | 0% |
| Other | 0 | 0% |
| <i>Total number of occurrences</i> | <i>211</i> | |

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

SURVEY OF 46 FUNDED PROJECTS



| Weaknesses of this program | Number of occurrences (out of 64) | % (out of 46) |
|--|-----------------------------------|---------------|
| Insufficient financial means to cover a project | 23 | 51% |
| Too short duration of the projects | 21 | 46% |
| Difficult to continue the collaboration | 10 | 22% |
| Lack of transparency in the selection process | 4 | 9% |
| Administrative heaviness of the missions management | 1 | 2% |
| Financial means insufficient for the expenditure of mobility (transport) | 0 | 0% |
| Financial means insufficient for the expenditure of mobility (per diem) | 0 | 0% |
| Too short duration of mobilities | 0 | 0% |
| Too low number of mobilities | 0 | 0% |
| Insufficient communication on the evaluation's results | 0 | 0% |
| Heaviness of the process of applications | 0 | 0% |
| Other | 5 | 11% |
| <i>Total number of occurrences</i> | <i>64</i> | |

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”.

France-Stanford program initiates 74% of new collaborations

Good percentage of young PIs in the selected projects (50%)

Correct implication of “young researchers” (Masters, PhDs, Postdoctorates) in the projects (76%)

Average scientific production better than the mean (1,30 vs 0,90)

Good percentage of continuation of the cooperation (80%)

Beware of the decrease in the number of applications

Low implication of PhDs in the projects (52% vs general mean : 67%)

Insufficient implication of young researchers in the mobilities (26% vs 34% general mean for outgoing mobilities and 35% vs 46% general mean for incoming mobilities)

38% of the funded projects producing no co-publications (data from the survey)

Capacity of involving new partners during continuation of the cooperation (only 30% of the projects)

PRELIMINARY RECOMMENDATIONS FOR FRENCH PIS

RECOMMENDATIONS

- Find means to increase the number of applications
- Increase the participation of PhD students in the projects
- Foster the participation of young researchers to the mobilities

French national ministries (MESR / 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