

FRANCE – CHICAGO (FACCTS)

Scientific impact of the program (2008-2018)

MESR-DAEI / MEAE

2021

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

GENERAL PRESENTATION OF THE PROGRAM

Creation : 2008 (by the France Chicago Center)

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

Total budget (France + Chicago) : around 233 000 € / year

>> including budget from the French part : around 105 000 € / year

>> including budget from the US part : around 130 000 € / year

Average budget per project (France + Chicago) : around 15 000 € / year

Number of new funded projects per year : around 12

From 2008-2018 :

251 applications submitted

122 projects funded

DATA SOURCES

Data base (2008-2018)

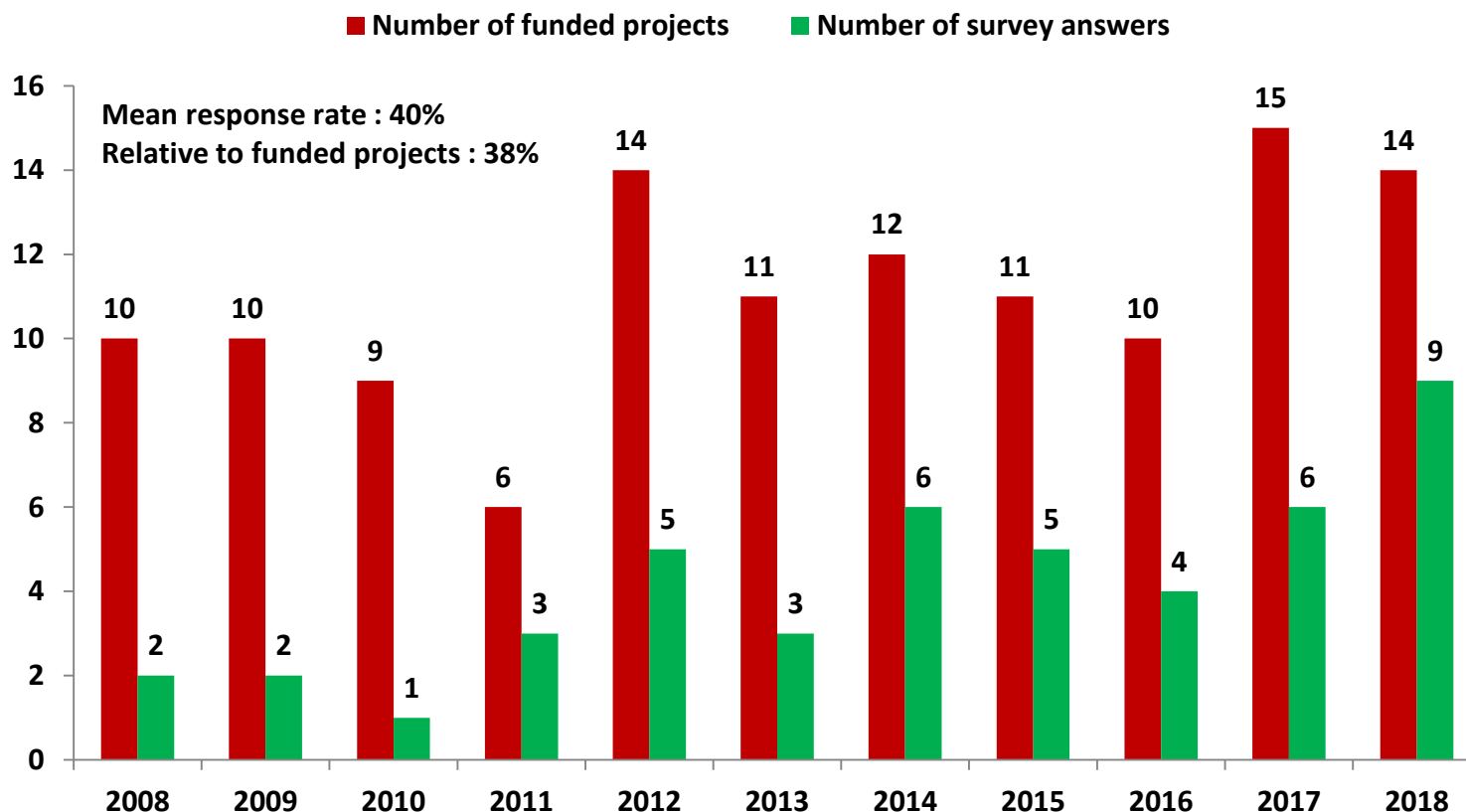
- FACCTS Statistics
 - Number of projects received/funded per year, in total and per categories
 - Budget: France Chicago Center annual report

Survey (2008-2018)

- Target : **French** Principal Investigators of the 122 selected projects between 2008 and 2018
- Survey duration : from May 15 to June 30, 2020
- **40%** response rate (46 respondents for 116 queries)

SURVEY RESPONSES

Average response rate to the survey : **40 % (46 answers)**



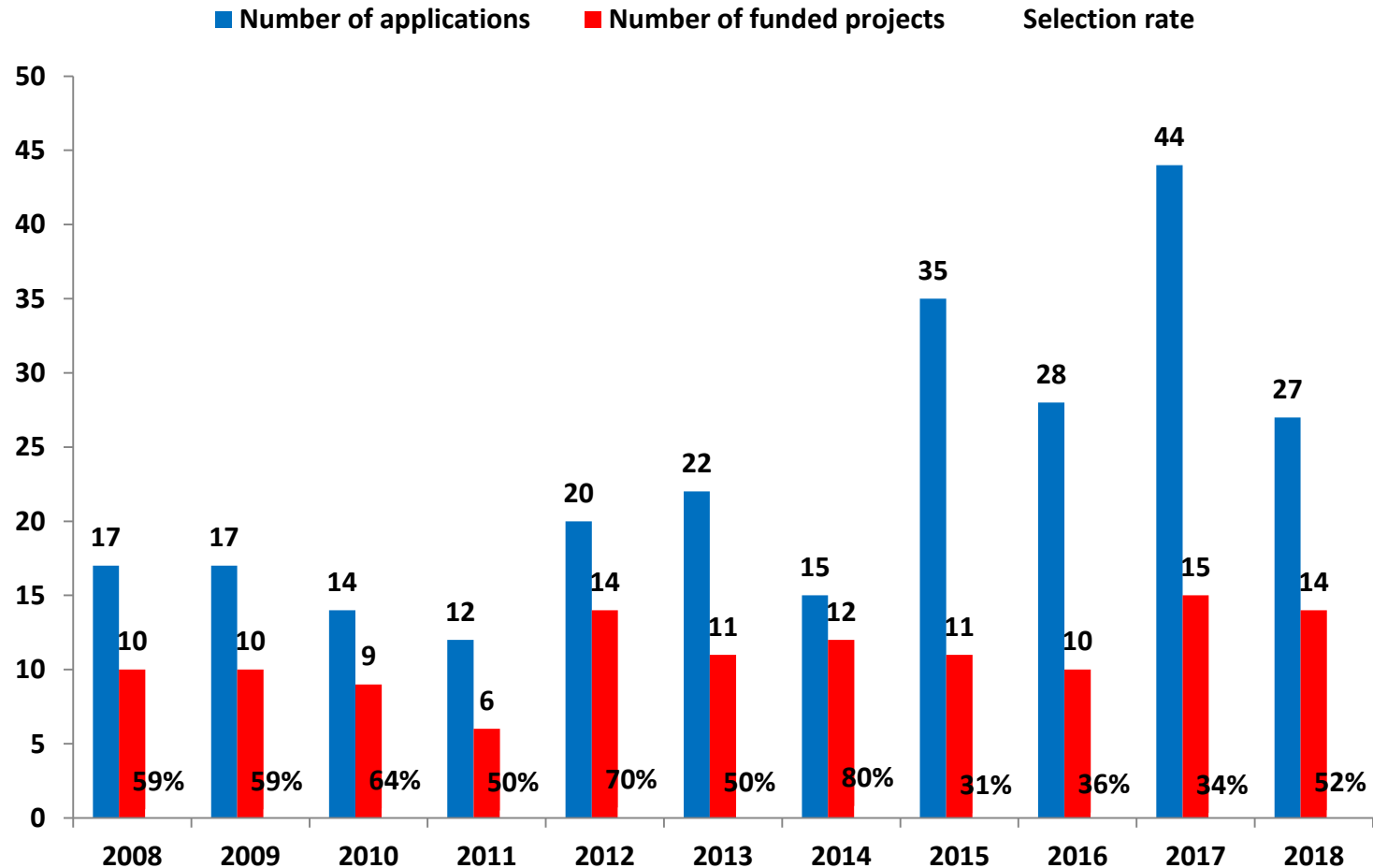
122 funded projects between 2008 and 2018, 115 valid email addresses

2008-2018

Key Points

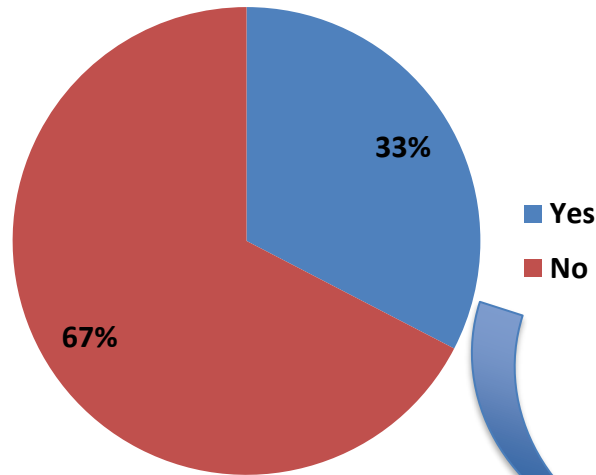
NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2008-2018: **53%**



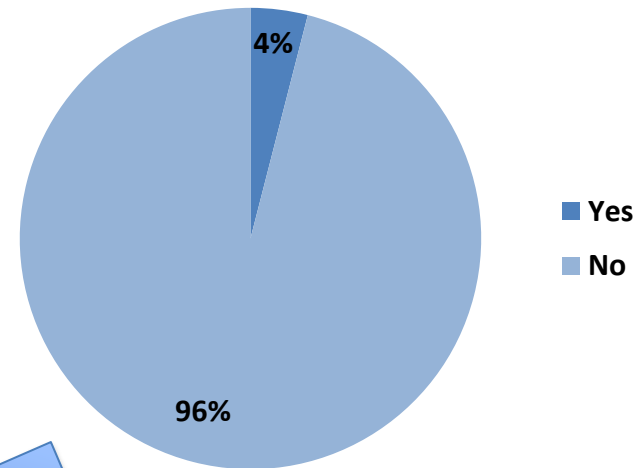
BEFORE JOINING THE FRANCE CHICAGO PROJECT (1/2)

Did you already cooperate with USA in the past ?



Data from 46 responses

If yes, was it with the same partner?



Data from 25 responses

BEFORE JOINING THE FRANCE CHICAGO PROJECT (2/2)

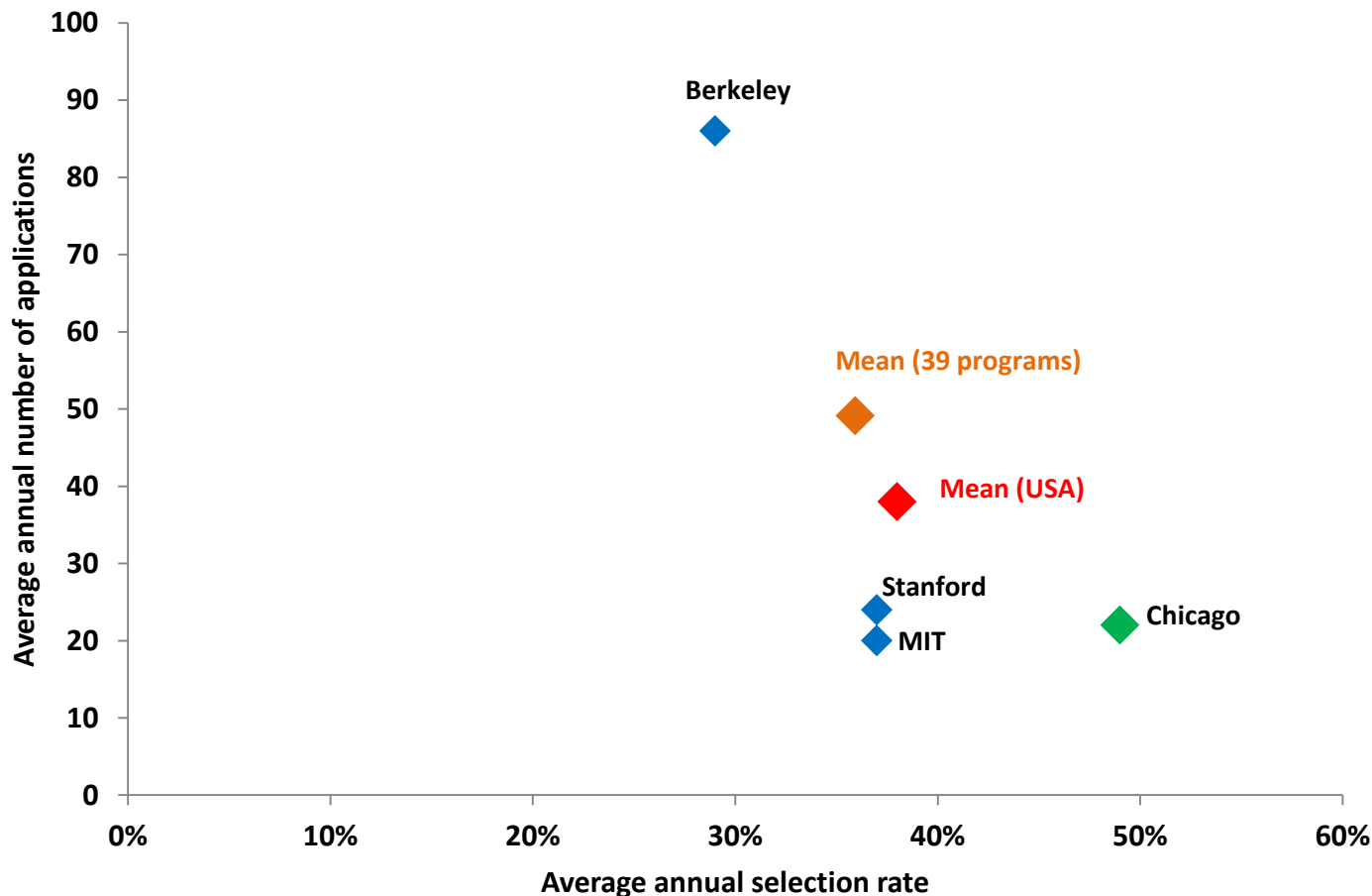
With which of scientific collaboration program ?

Chateaubriand	27%
France - MIT Funds	13%
France - Berkeley Funds	7%
France - Stanford Funds	7%
NSF	7%
Others	40%

Others : CNRS PICS, Lavoisier fellowship, Marie Curie fellowship, France-MIT fund...

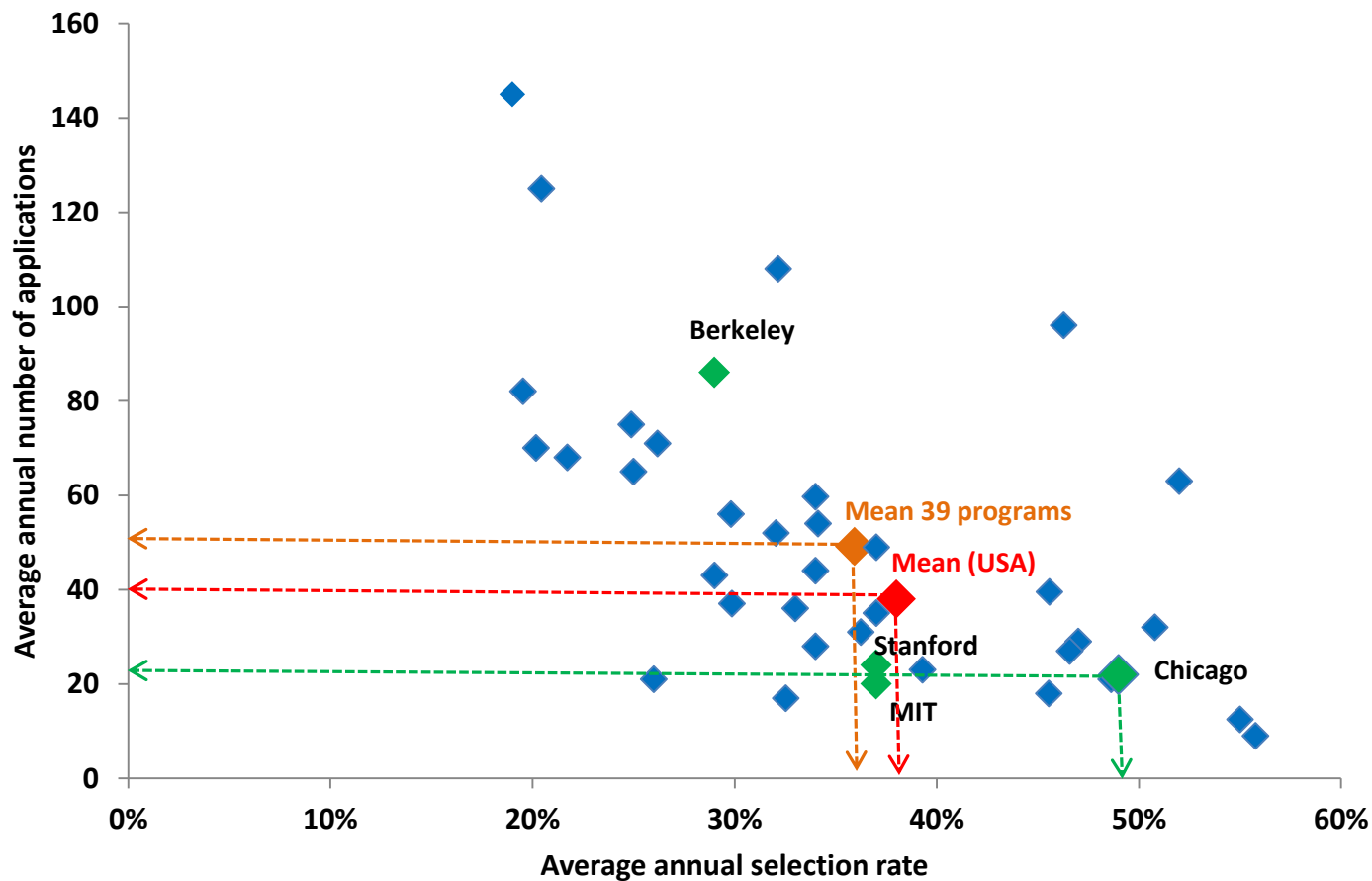
Data from 16 responses

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



Average selection rate for 2008-2018 : 49% vs 38% mean USA and 36% general mean
Average number of applications 2008-2018 : 22 vs 38 mean USA and 49 general mean

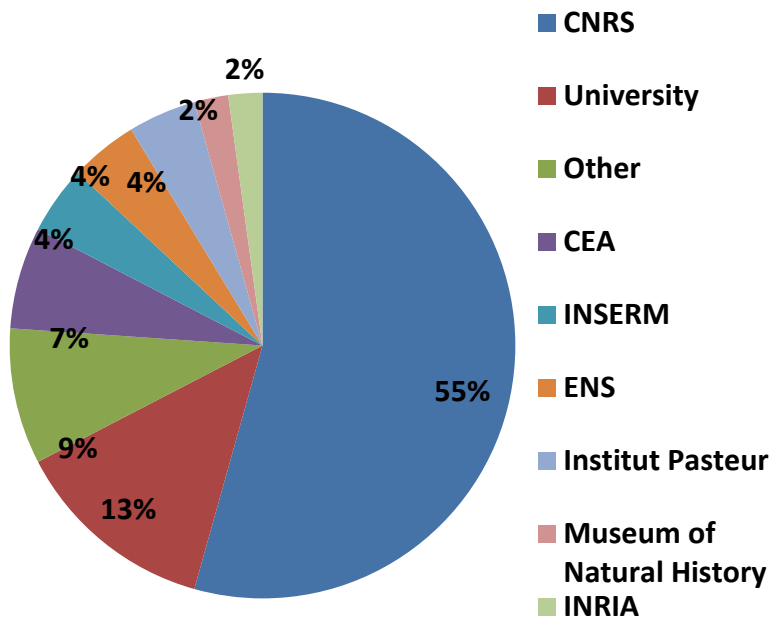
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



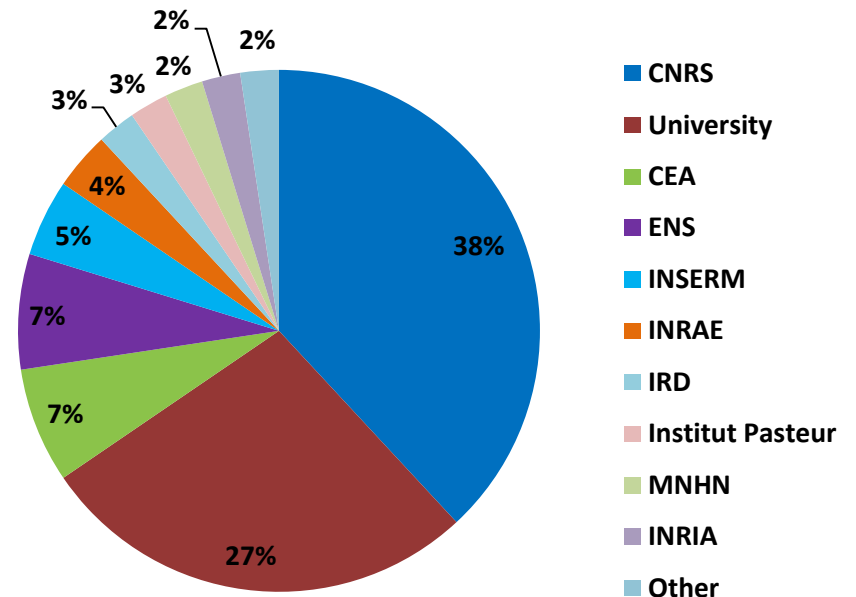
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FRENCH PARTICIPATING INSTITUTIONS

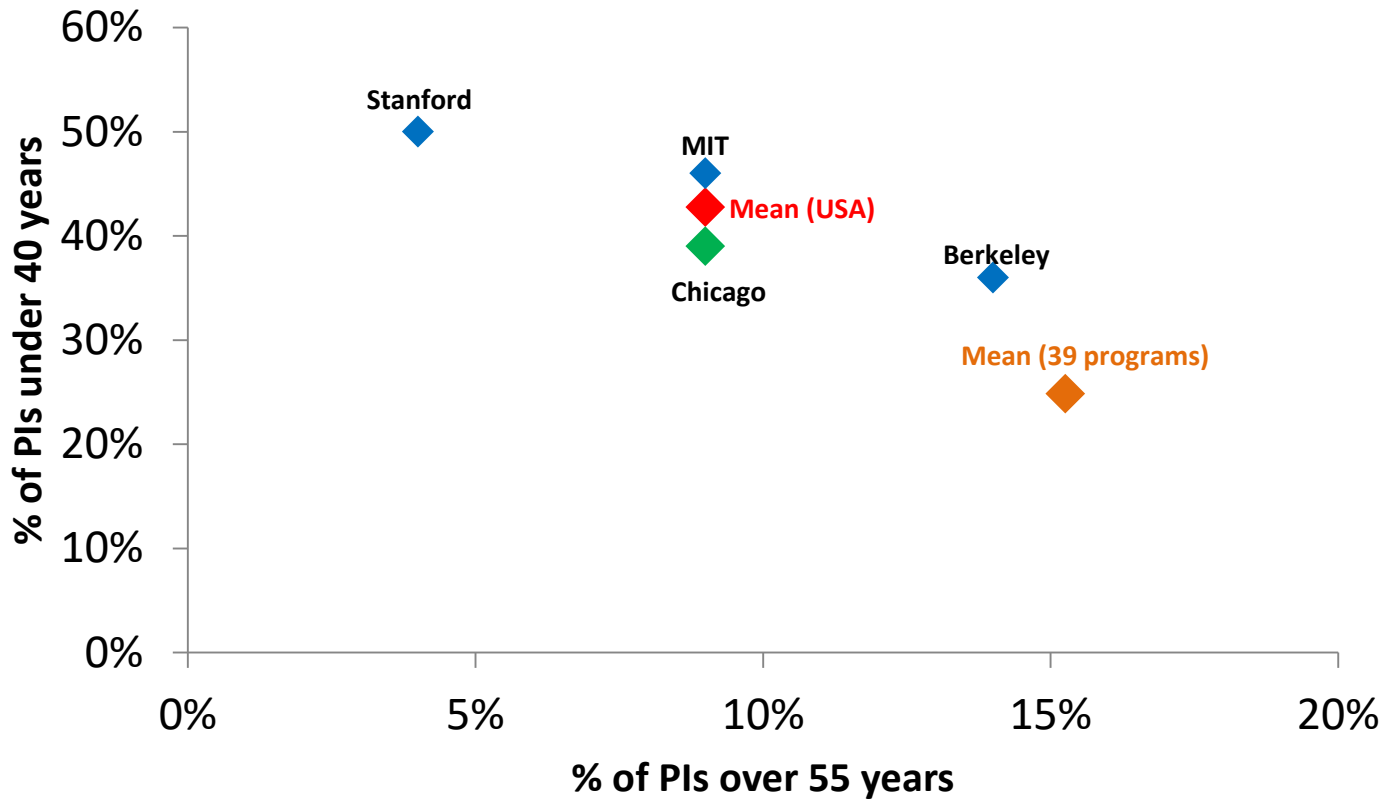
PI's employers



Laboratory authorities



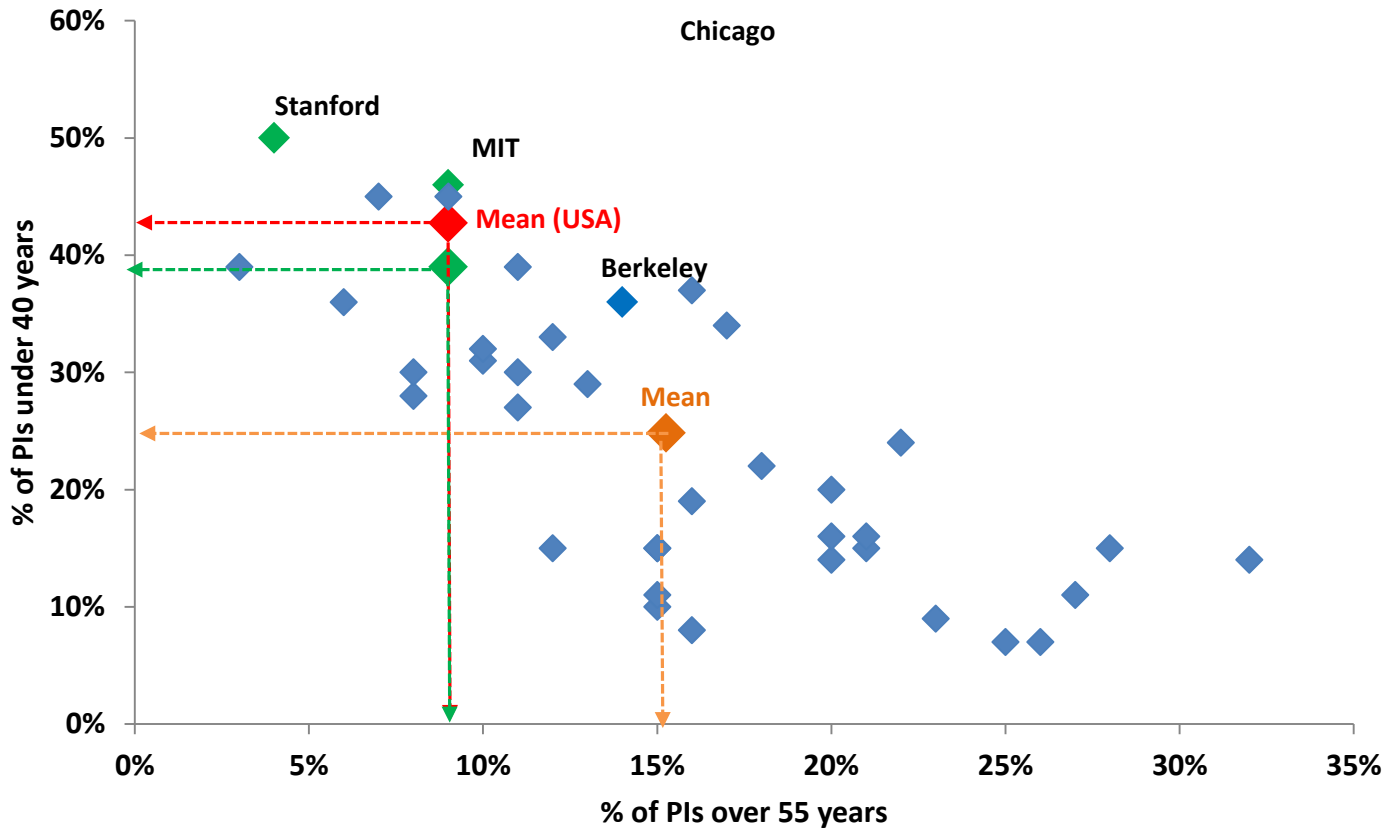
AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



PIs under 40 years old : 39% vs 43% mean USA and 25% general mean
PIs over 55 years old: 9% vs 9% mean USA and 15% general mean
52% of the PIs are between 40 and 55 years old

AGE OF PRINCIPAL INVESTIGATORS (PI)

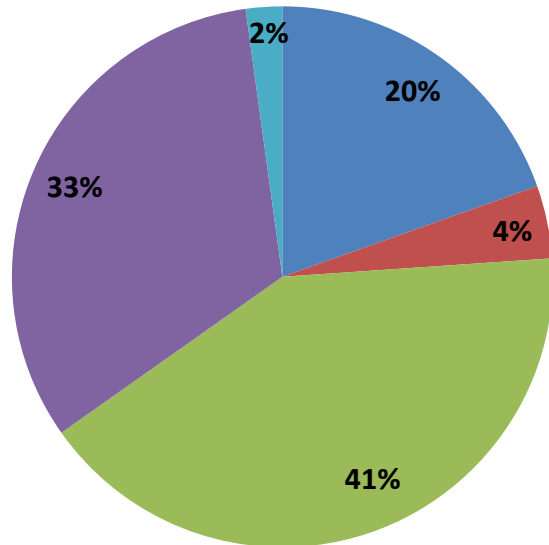
(COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



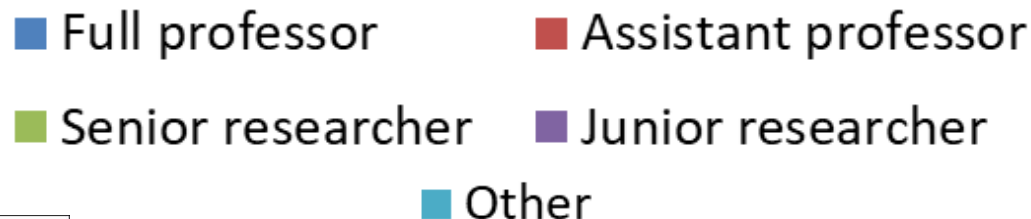
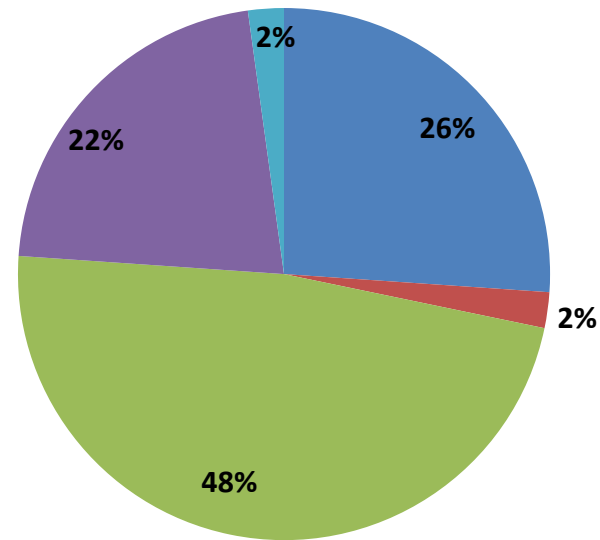
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PROFESSIONAL FUNCTION OF FRENCH PRINCIPAL INVESTIGATORS

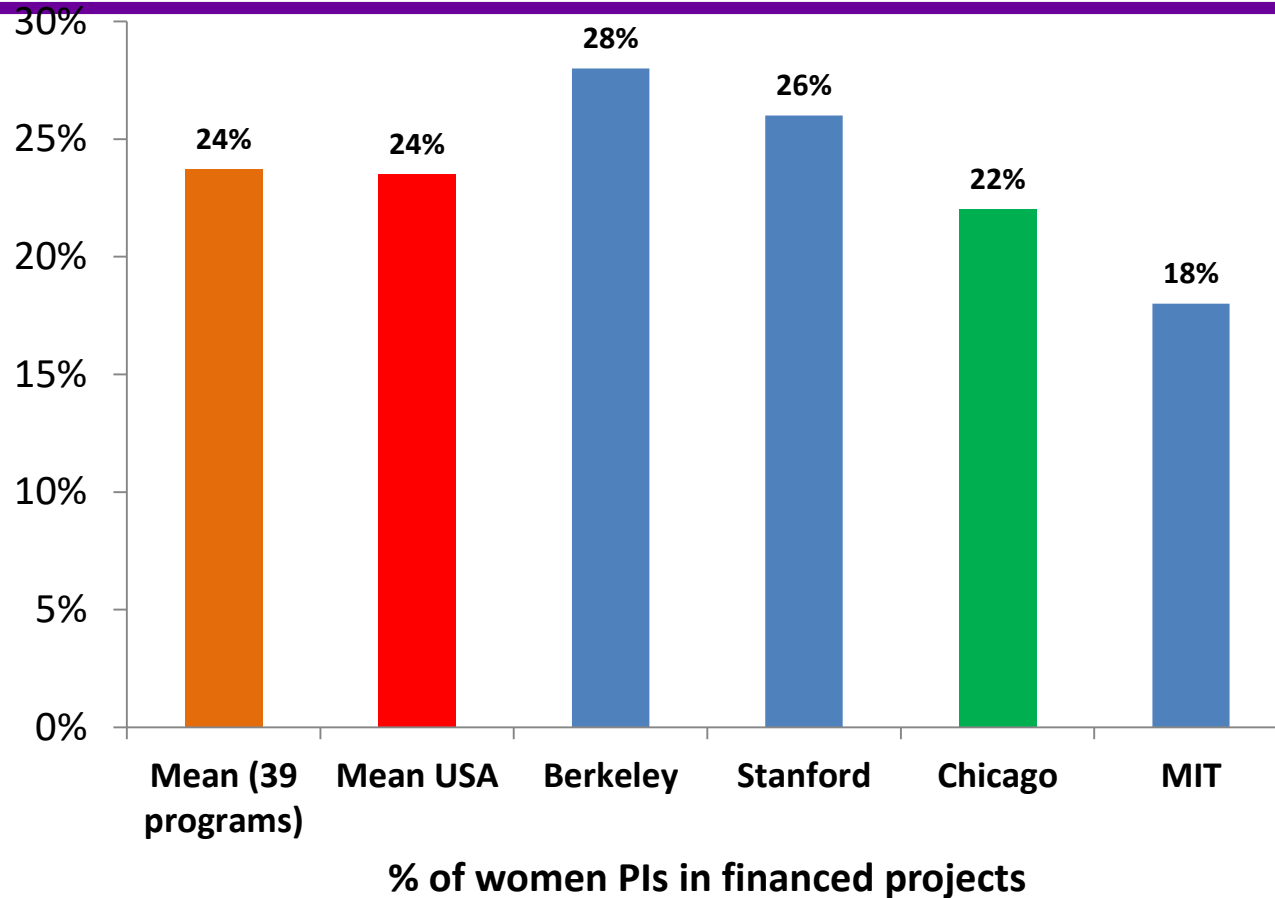
**Previous professional status
(at the beginning of the project)**



Current professional status



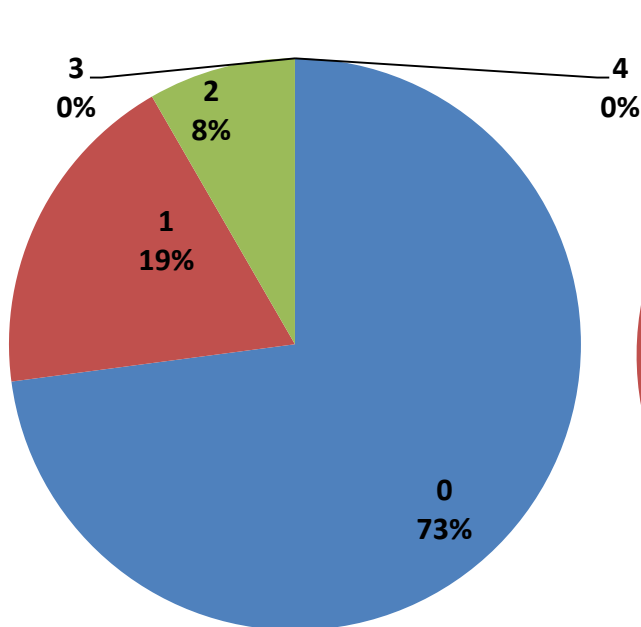
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : NOT AVAILABLE
% of women PIs in the selected projects : 22% vs 24% mean USA and general mean

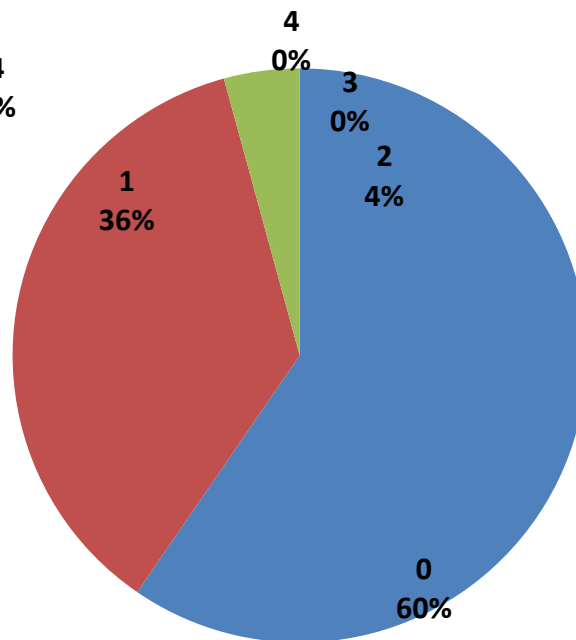
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of Masters



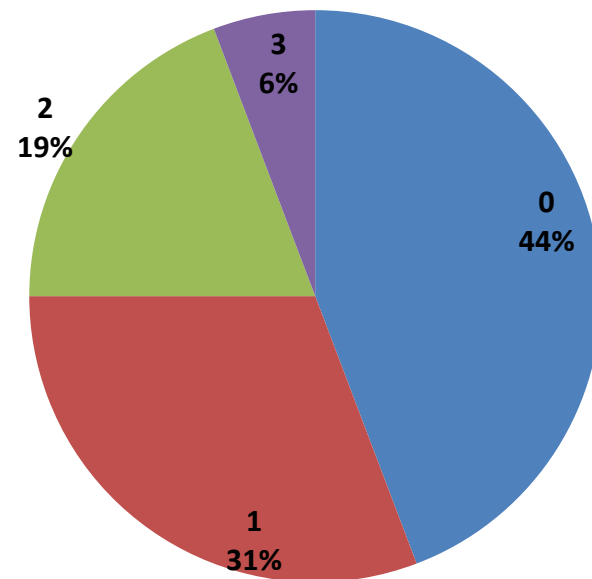
24% of projects involve at least one Master student

Number of PhDs



39% of projects involve at least one PhD student

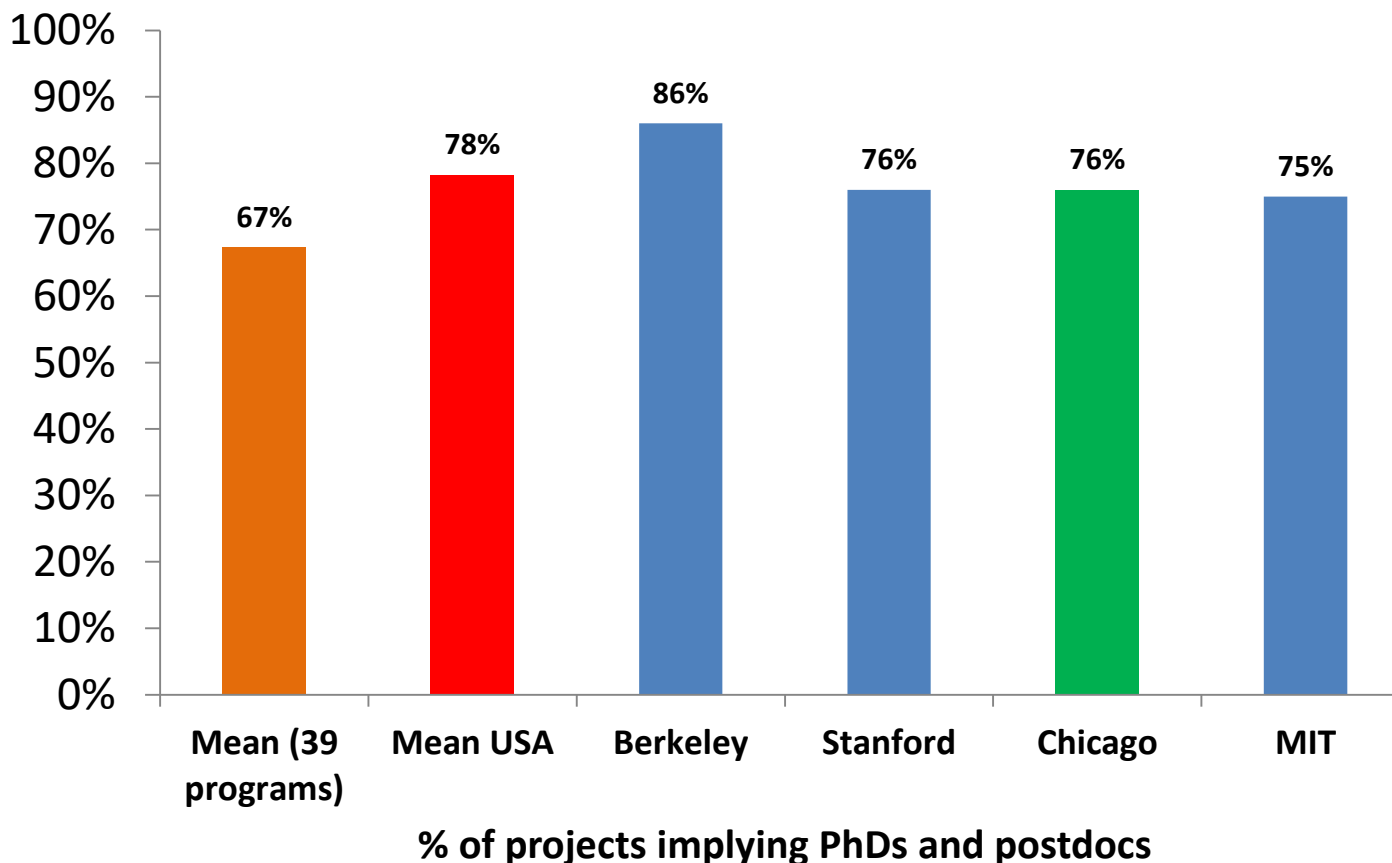
Number of post-doctoral researchers



50% of projects involve at least one post-doctoral researcher

Data from 46 responses

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



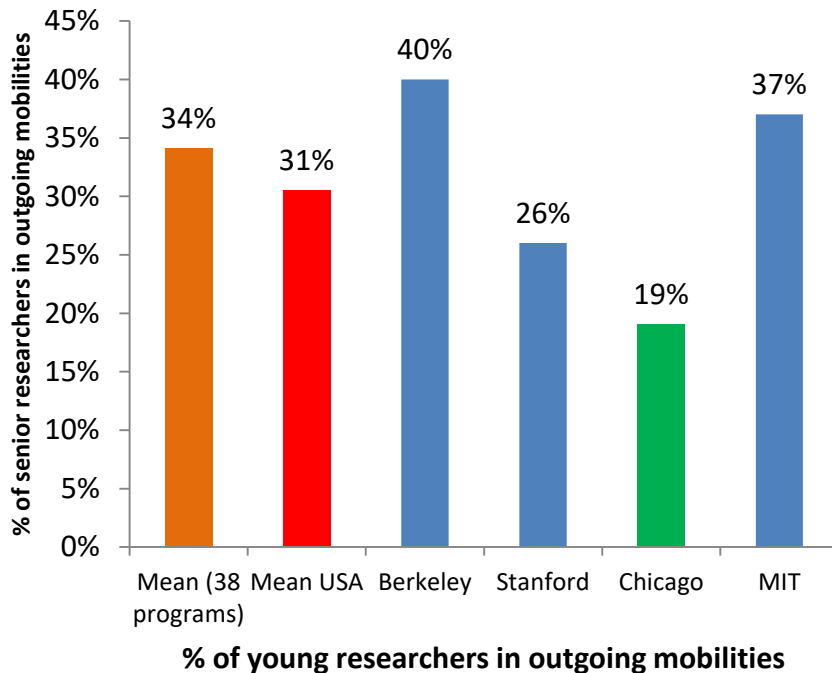
% of projects implying young researchers : 76% vs 78% mean USA and 67% general mean
% of PhD or postdoc implicated in the copublications : NOT AVAILABLE



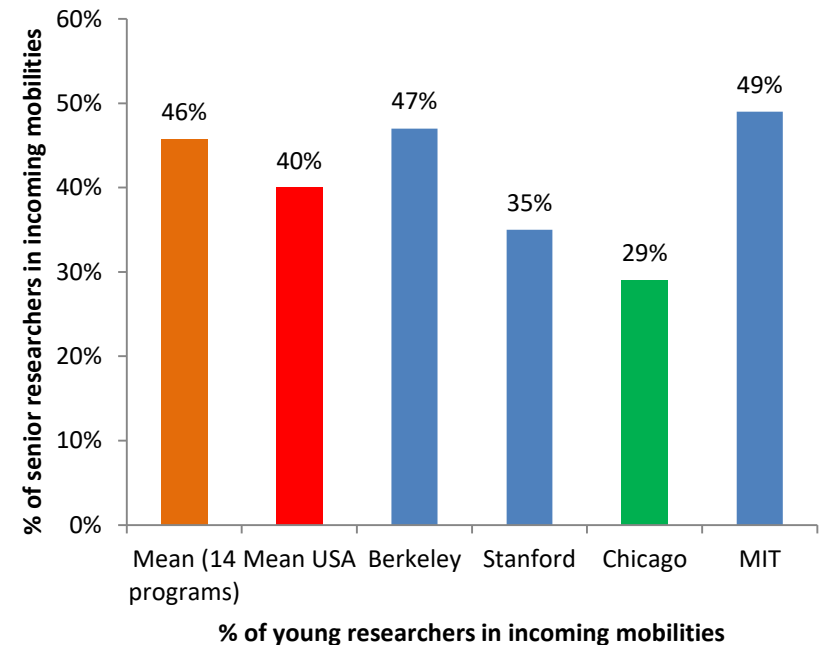
MOBILITY

YOUNG RESEARCHERS MOBILITY 2017-2019

France → USA
Comparison between 38 bilateral programs



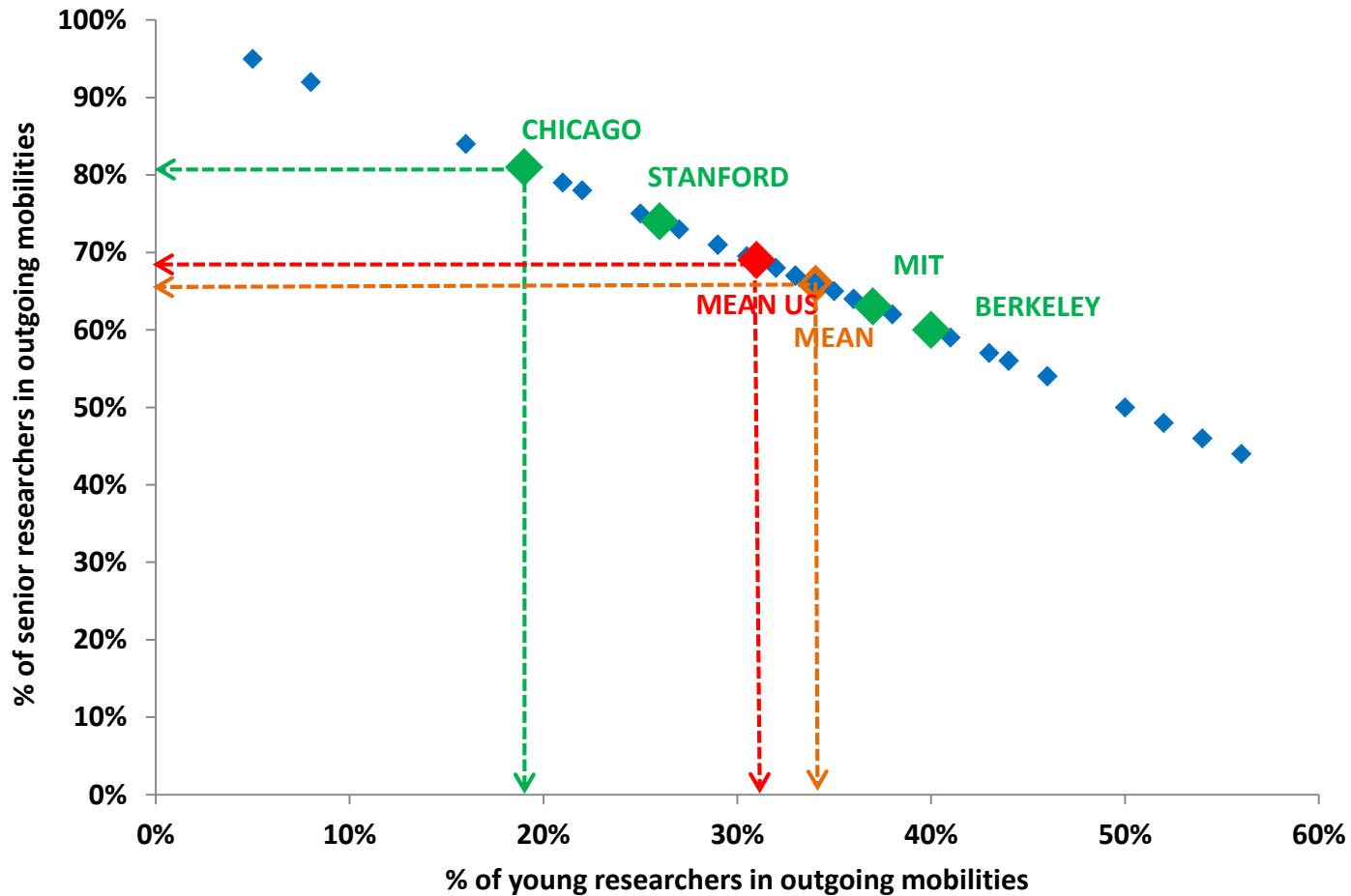
USA → France
Comparison between 14 bilateral programs



% of french young researchers in outgoing mobilities : 19% vs 31% mean USA and 34% general mean
% of american young researchers in incoming mobilities : 29% vs 40% mean USA and 46% general mean

FRENCH YOUNG RESEARCHERS MOBILITY 2017-2019

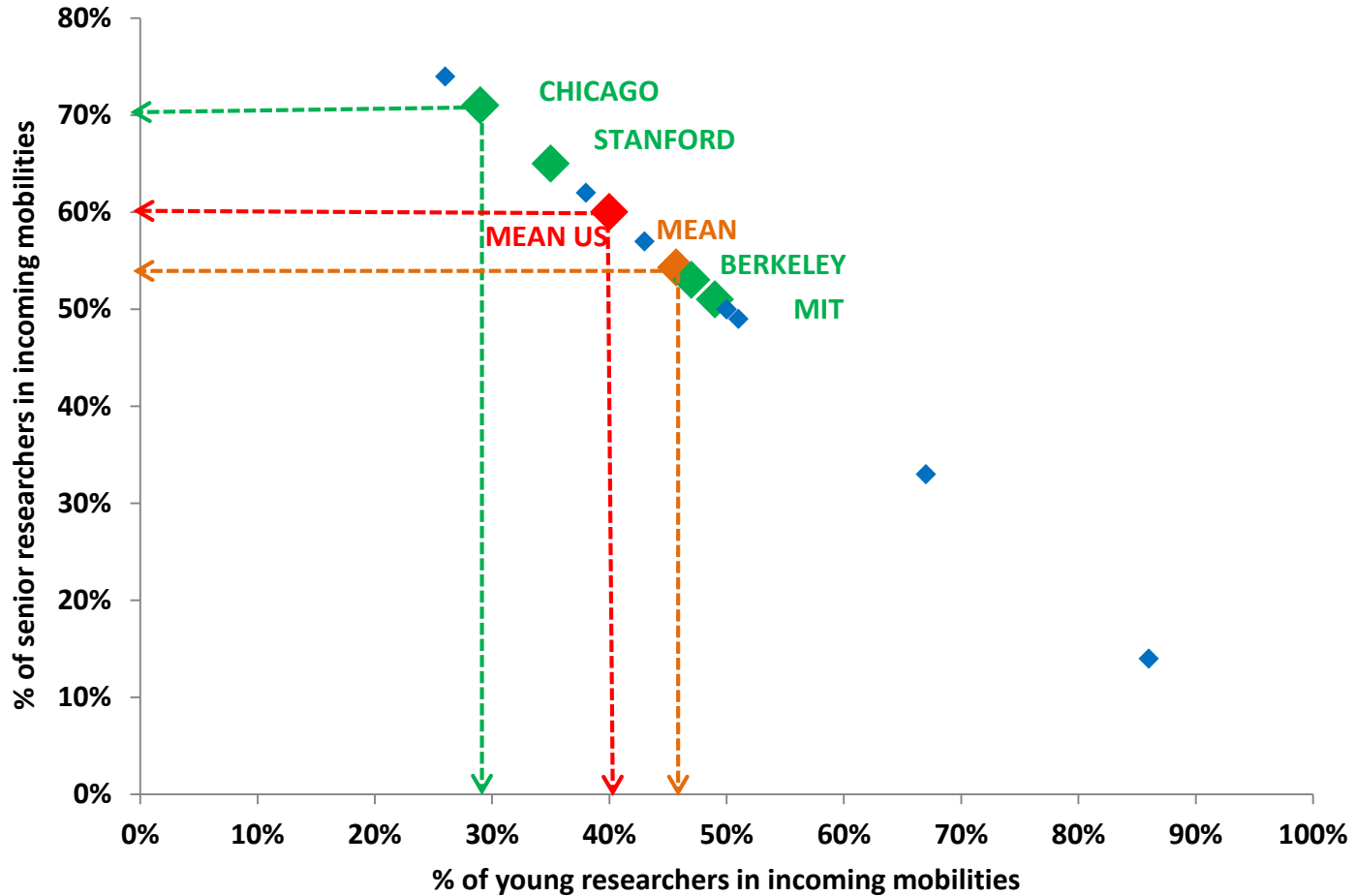
France → USA
Comparison between 38 bilateral programs



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AMERICAN YOUNG RESEARCHERS MOBILITY 2017-2019

USA → France
Comparison between 14 bilateral programs



% of american young researchers in incoming mobilities : 29% vs 40% mean USA and 46% general mean

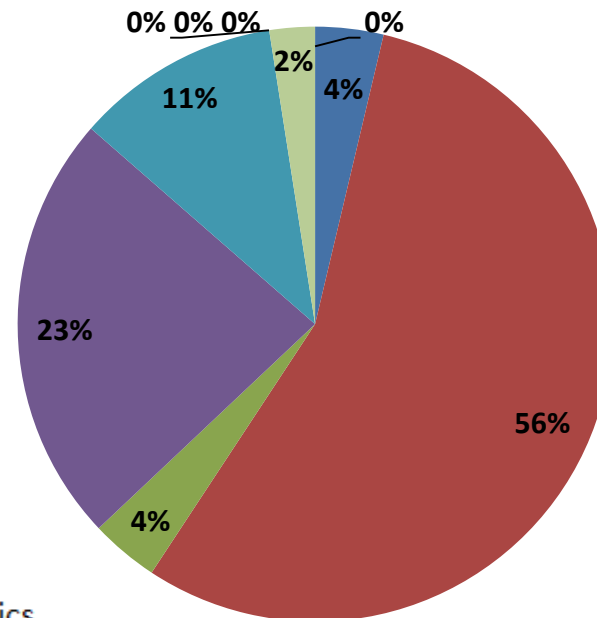
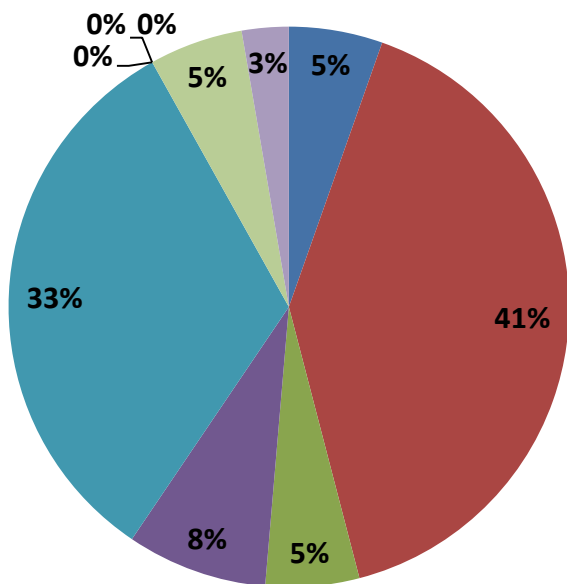


SCIENTIFIC PRODUCTION (2008-2017)

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 37 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	2	1,5
Physics	15	3,0
Marine/Earth/Planet Sciences	2	1,5
Chemistry	3	6,3
Biology and Health	12	0,8
Humanities	0	-
Social Sciences	0	-
Engineering Sciences	0	-
Information Technology	2	1,0
Agronomy / Ecology	1	0,0
TOTAL	37	2,0

Overall average **annual** number of co-publication per project : **1,01 vs 0,90 general mean**

58% of funded projects led to one co-publication at least

WHAT HAPPENS AFTER JOINING THE FRANCE-CHICAGO PROGRAM?



CONTINUATION OF THE COLLABORATION (1/6)

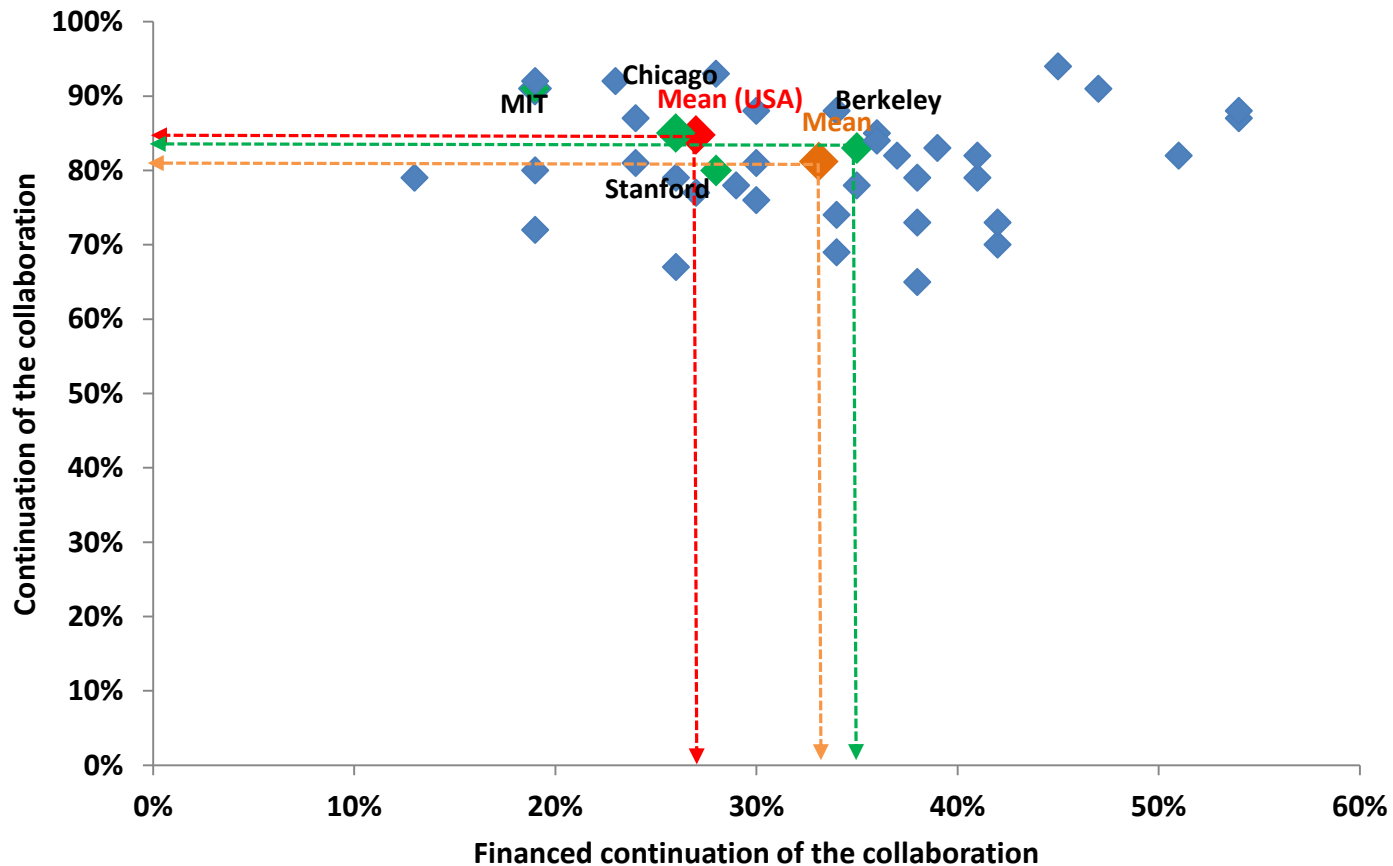
(COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 85% vs 85% mean USA and 81% general mean
Continuation of the collaboration with other grants: 26% vs 27% mean USA and 33% general mean

CONTINUATION OF THE COLLABORATION (2/6)

(COMPARISON BETWEEN 39 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 85% vs 85% mean USA and 81% general mean
Continuation of the collaboration with other grants: 26% vs 27% mean USA and 33% general mean

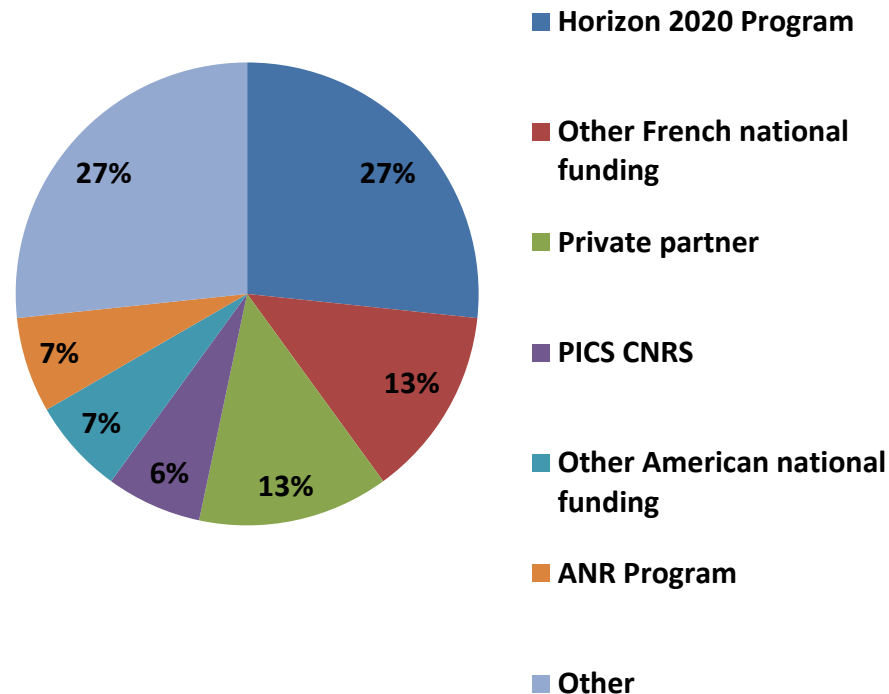
CONTINUATION OF THE COLLABORATION (3/6)

85% of the collaborations continued after the France-Chicago project

Which activities?	
Collaborative research	74%
Researchers mobility	36%
Co-publications	33%
Joint participation at conferences	31%
PhD mobility	28%
Co-organisation of scientific events	15%
Joint participation at PhD thesis	5%
Mobility of Master's students	3%
Other	13%

CONTINUATION OF THE COLLABORATION (4/6)

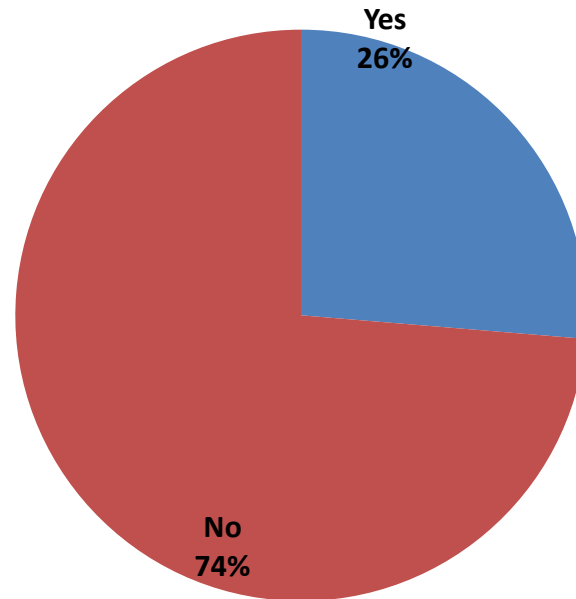
What kind of funded collaborations after the France-Chicago project ?



Among the others fundings : one European ERC Consolidator Grant has to be noted

CONTINUATION OF THE COLLABORATION (6/6)

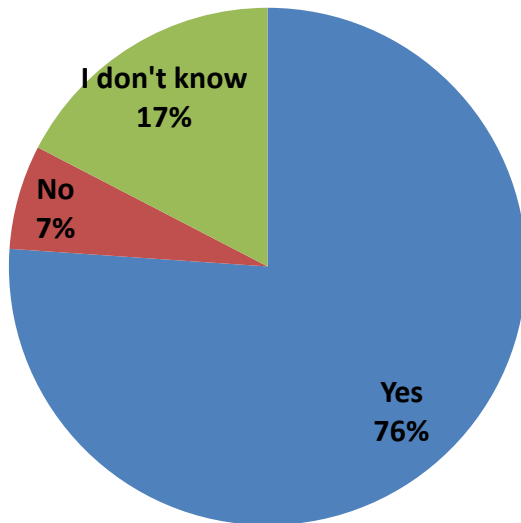
Has the French-US collaboration involved new partners?



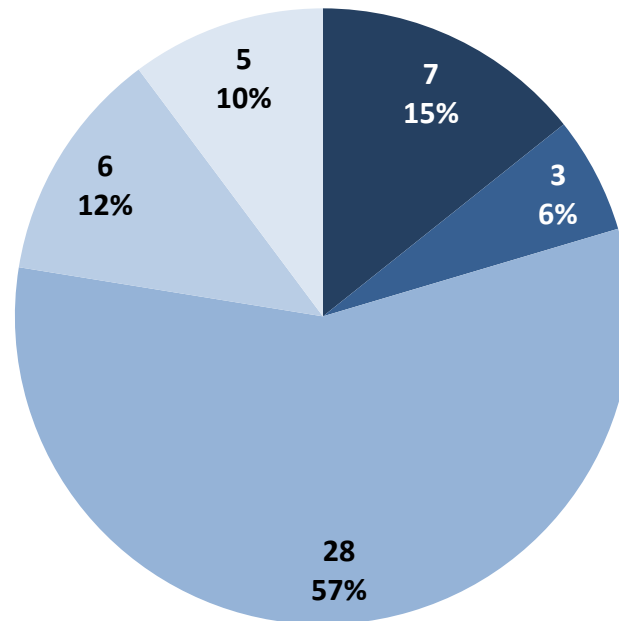
For a total of 12 new partners from 7 different countries

IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

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

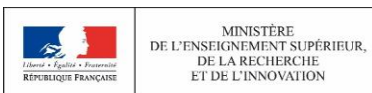


Type of impacts



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

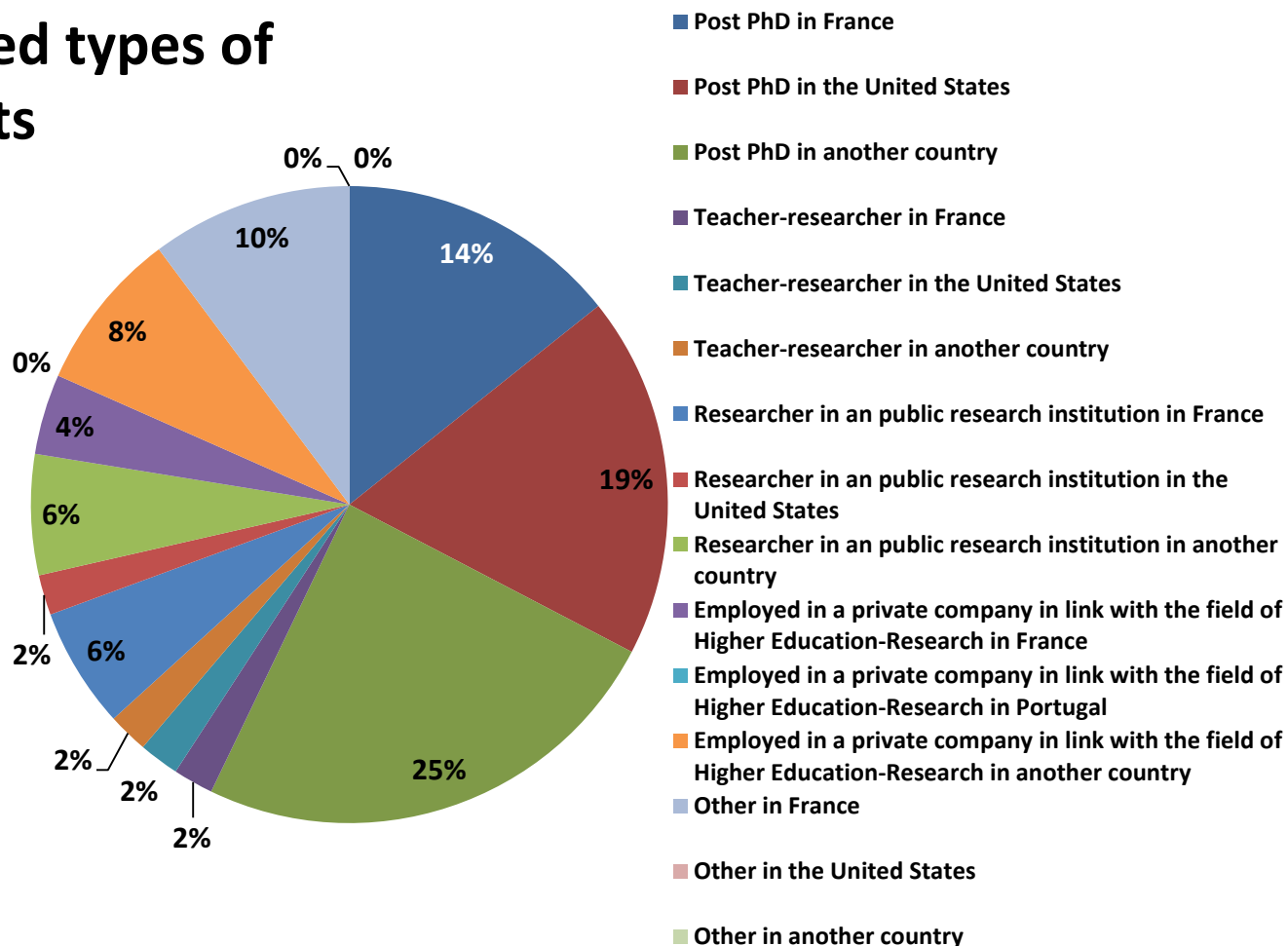
Data from 46 responses



Data from 35 positive responses for a total of 49 young researchers

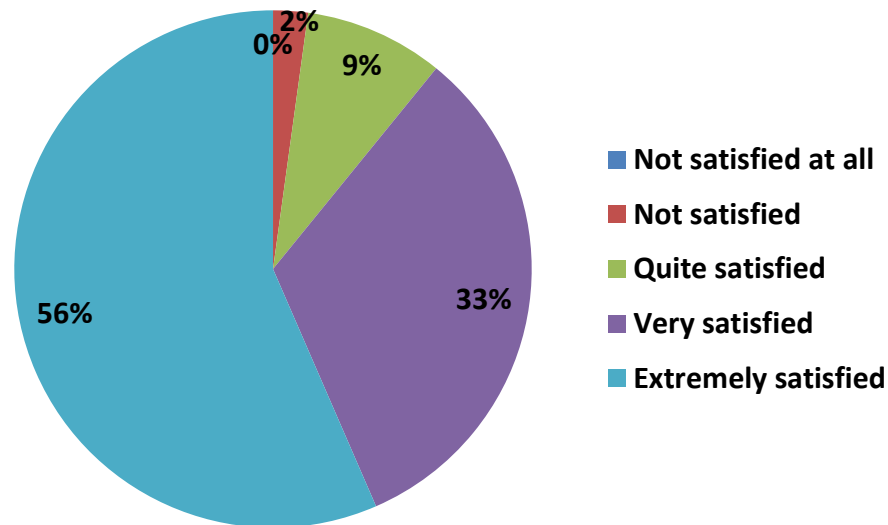
IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

98% 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 205)	% (out of 46)
Simplicity of the application process	41	89%
Fostering researchers' mobility	29	63%
Easy implementation (administrative flexibility)	28	61%
Fostering an international research collaboration	27	59%
Fostering the training of the young researchers	22	48%
Fostering exchanges enabling scientific production	14	30%
Sufficient financial means for the mobility costs	13	28%
Good scientific-added value on financial investment	9	20%
Transparency of the selection process	7	15%
Helpful to initiate other fundraising	6	13%
Helping to know the partner country	5	11%
Sufficient amount of mobility time given to collaborate	3	7%
Other	1	2%
<i>Total number of occurrences</i>	<i>205</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 98)	% (out of 46)
Too short duration of mobilities	28	61%
Length of support too short	28	61%
Financial means insufficient for the expenditure of mobility (transport)	15	33%
Financial means insufficient for the expenditure of mobility (per diem)	15	33%
Difficult to continue the collaboration	7	15%
Lack of transparency in the selection process	3	7%
Insufficient financial means to cover a project	0	0%
Administrative complexity	0	0%
Too long 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	2	4%
<i>Total number of occurrences</i>	<i>98</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-Chicago program initiates 67% of new collaborations

Increase in the number of applications since 2015

Applications by young PIs (39%) better than the general mean (25%) but below the mean USA (43%)

Average scientific production close to the mean (1,01 vs 0,90)

Good percentage of continuation of the cooperation (85%)

Performant financing during continuation of the projects (H2020, ERC, ANR)

Low implication of PhDs in the projects (41% vs general mean : 67%) and of young researchers in the mobilities

Almost half of the funded projects producing no co-publications

Capacity of involving new partners during continuation of the cooperation (only 26% of the projects)

57% of young researchers involved in the projects are still on a postdoctoral position

PRELIMINARY RECOMMENDATIONS FOR FRENCH PIS

RECOMMENDATIONS

- **Increase the participation of PhD students in the projects and 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