

**FRANCE – ICELAND**

**Scientific impact of the program JULES VERNE  
(2006-2020)**

**MESRI-DAEI / MEAE**

**2021**

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

# GENERAL PRESENTATION OF THE PROGRAM

## Creation : 2004

**The purpose of this program** is to develop excellence scientific and technological exchanges between the French and Icelandic laboratories, by promoting new scientific collaborations and integrating in the projects young researchers and PhD students. The call for offer is published every other year.

**Total budget (France + Iceland) : around 30 000 € / year**

>> French budget : around 15 000 € / year

>> Icelandic budget : around 15 000 € / year

Average budget per project (France + Iceland) : around 2 500 € / year

**Average number of new funded projects per year : around 7**

**From 2006 to 2020 :**

**100 applications submitted**

**59 projects funded**

# DATA SOURCES

## Campus France (2006-2020)

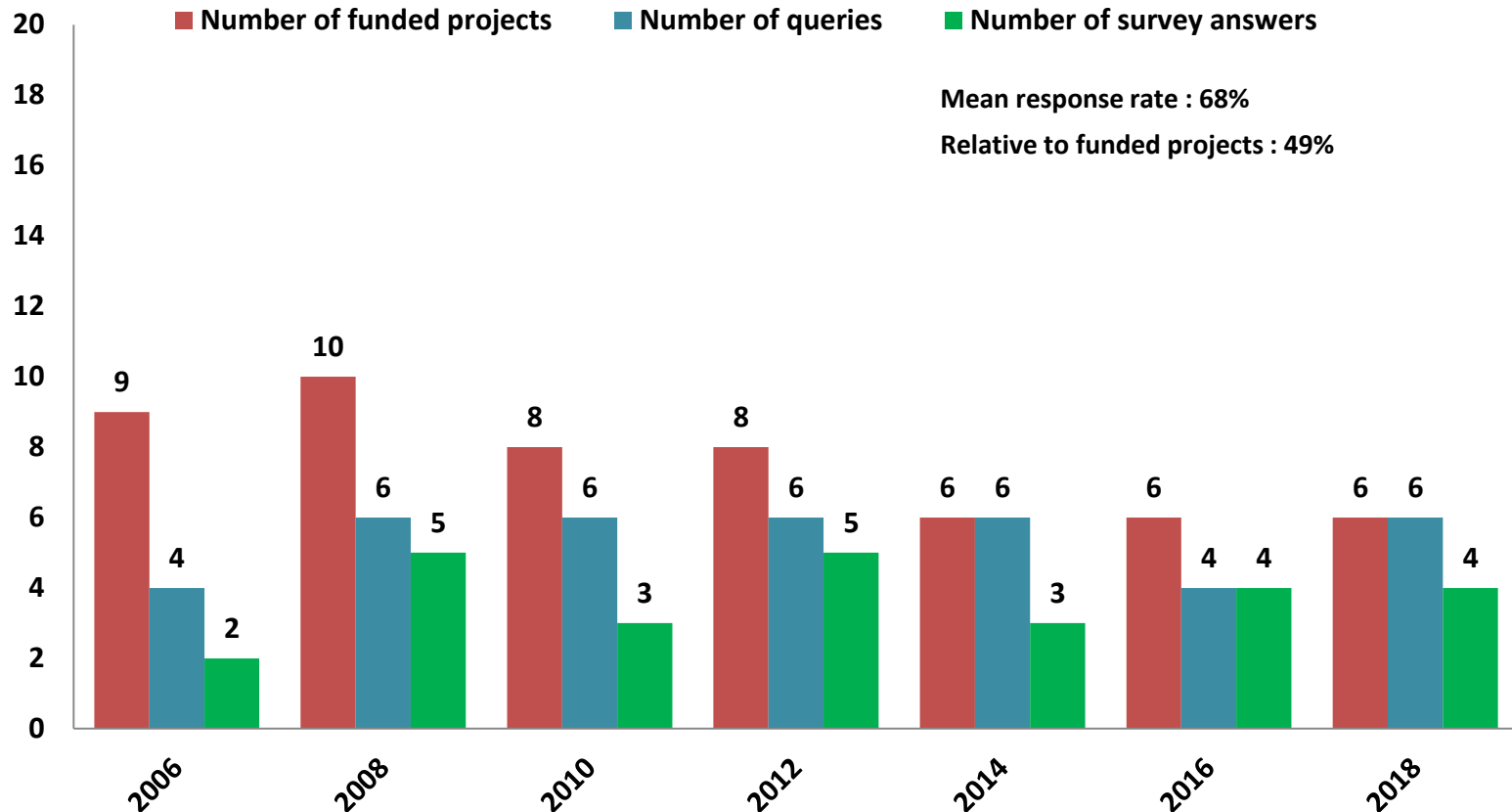
- Information about the PHC Jules Verne applications
- List of mobilities (from France to Iceland)

## Survey (2006-2018)

- Target : French Principal Investigators of selected projects between 2006 and 2018
- Survey duration : 7 weeks between November 2020 and January 2021
- **68%** response ratio (26 respondents for 38 queries)

# ANSWERS TO THE SURVEY

Average response rate to the survey : **68 % (26 answers)**



**53 funded projects between 2006 and 2018**

**Laureates funded more than one time : 15**

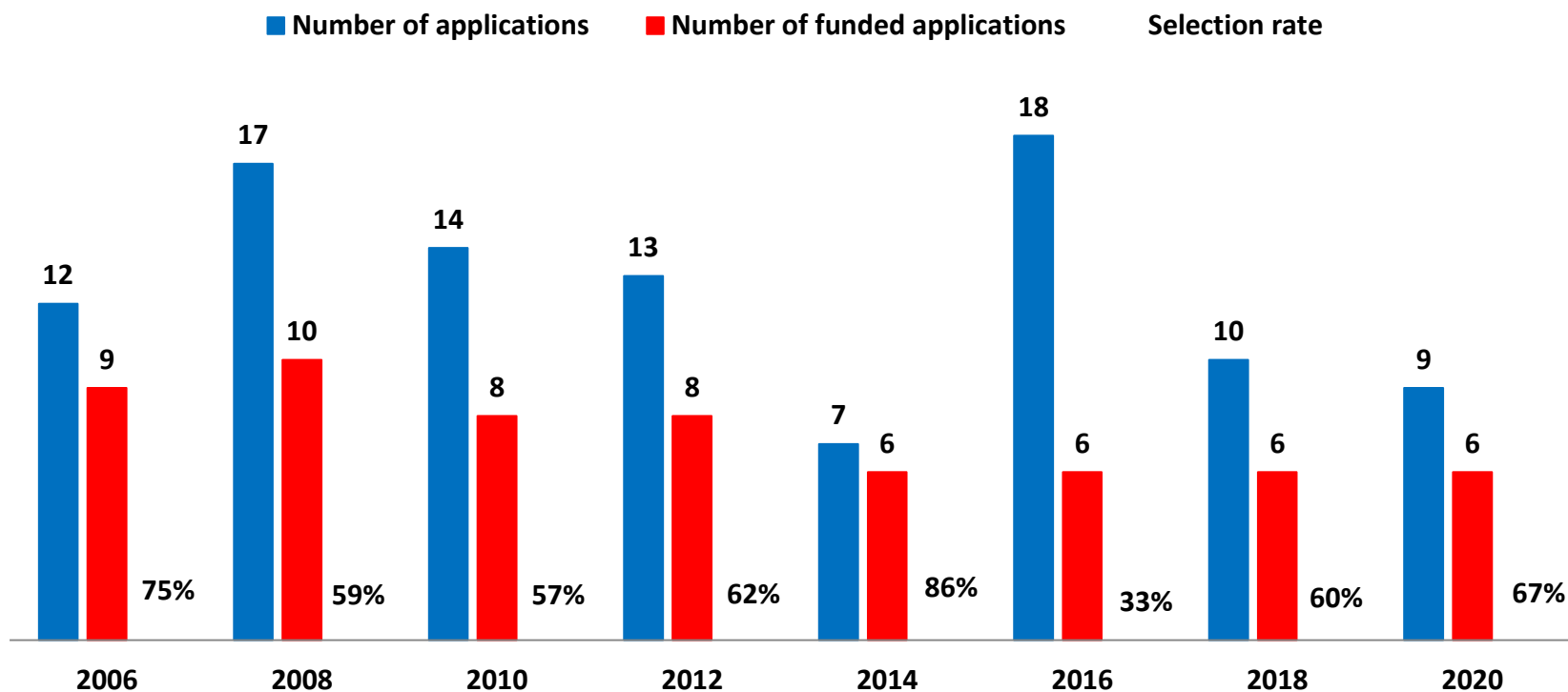
**38 valid email addresses**

# 2006-2020

## Key Points

# NUMBER OF APPLICATIONS AND SELECTION RATE

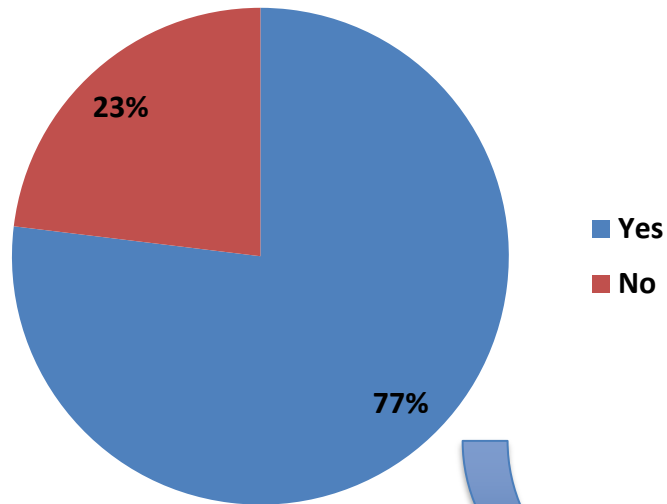
Average selection rate from 2006-2020: **59%**



**Clear decrease in the number of applications since 2016**

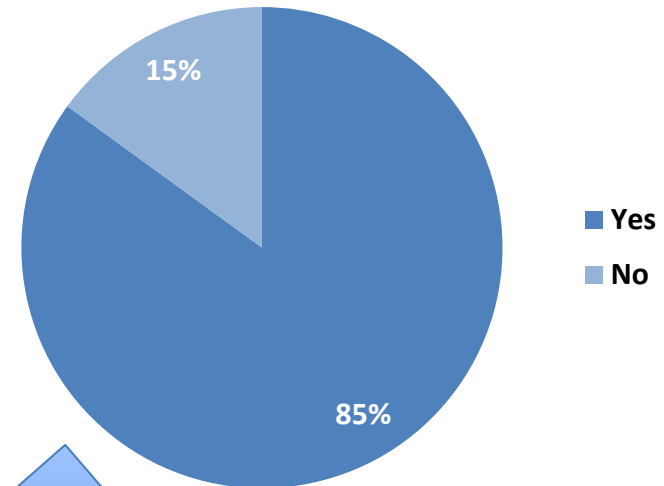
# BEFORE THE JULES VERNE PROJECT (1/2)

**Did you already cooperate with Iceland in the past ?**



Data from 26 responses

**If yes, was it with the same partner?**



Data from 20 responses

## BEFORE THE DE JULES VERNE (2/2)

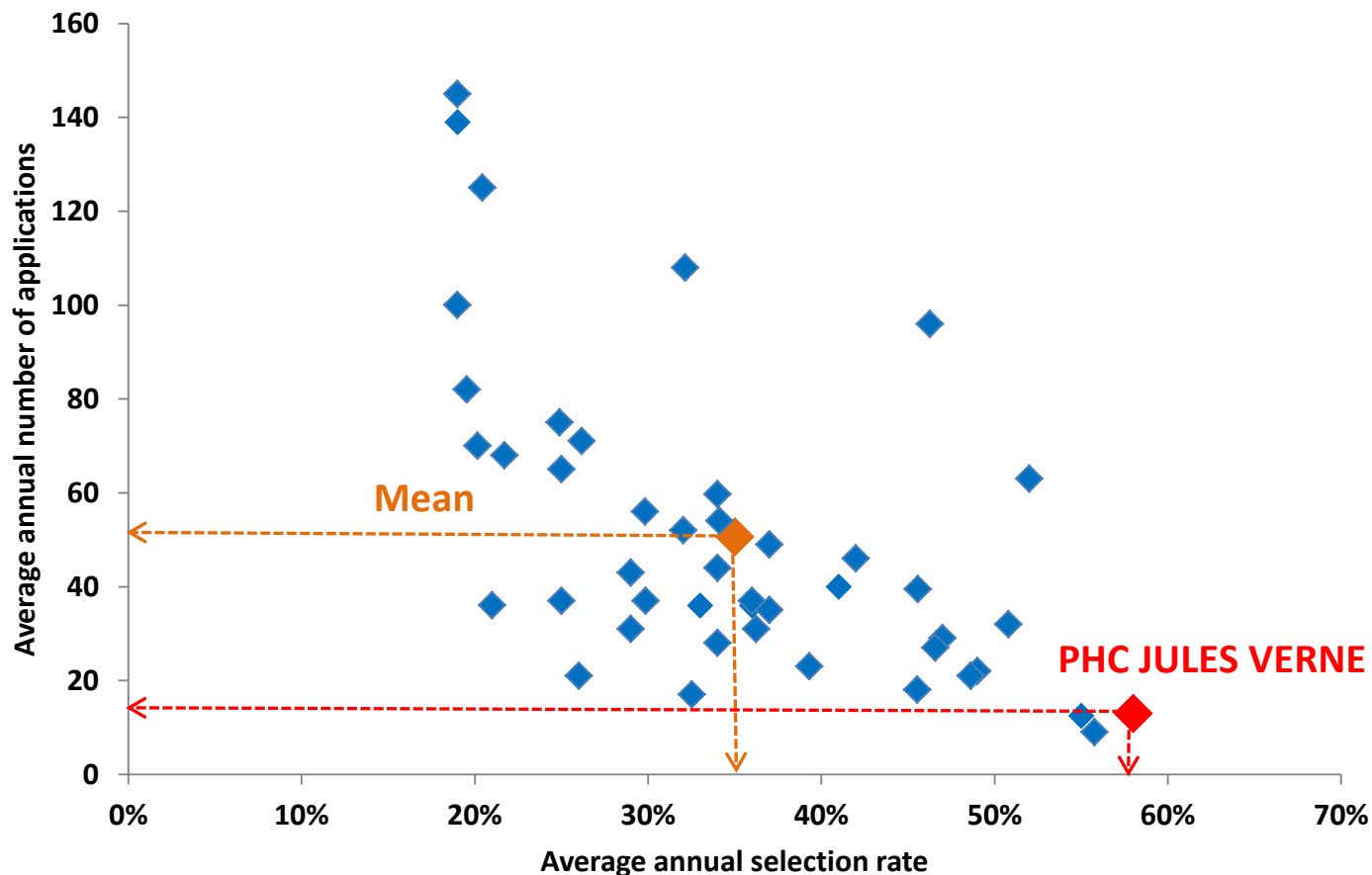
With which scientific collaboration program ?	
PHC Jules Verne	62%
European H2020	14%
European 7th PCRD	14%
Other	10%

Plus 10 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 18 responses



# NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)

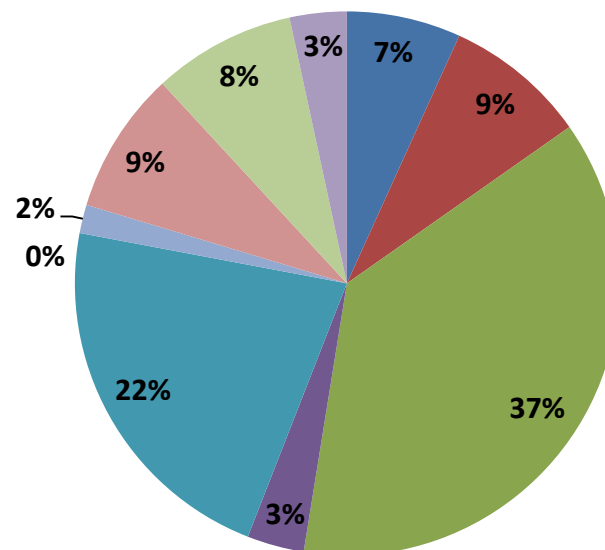
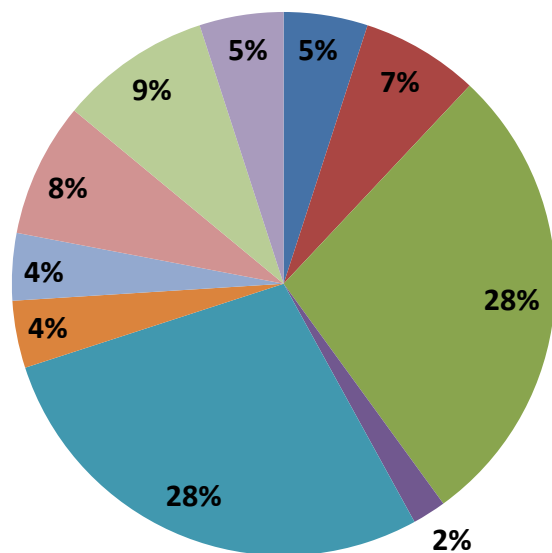


**Average selection rate for 2006-2020 : 58% vs 35% mean**  
**Average annual number of applications 2006-2020 : 13 vs 51 mean**

# SCIENTIFIC DOMAINS OF PROJECTS 2006-2020

Number of applications : 100

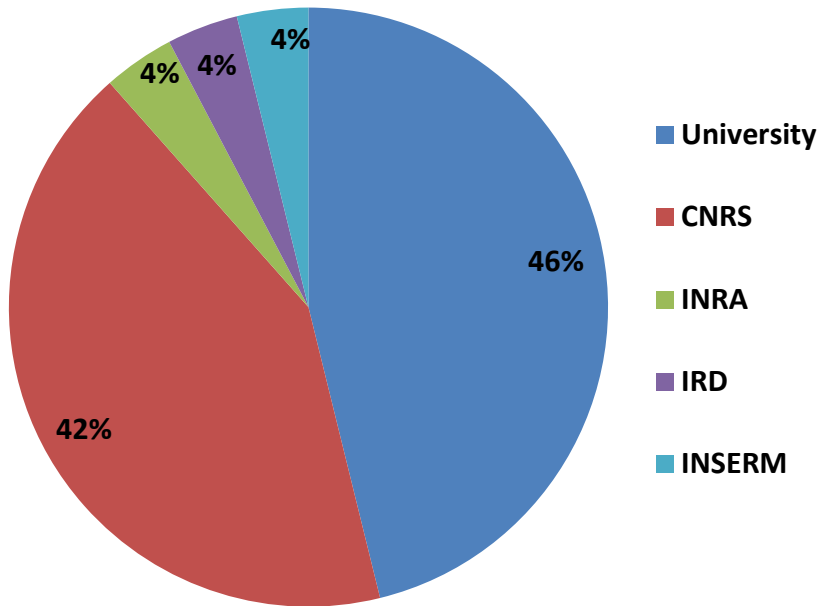
Number of funded projects : 59



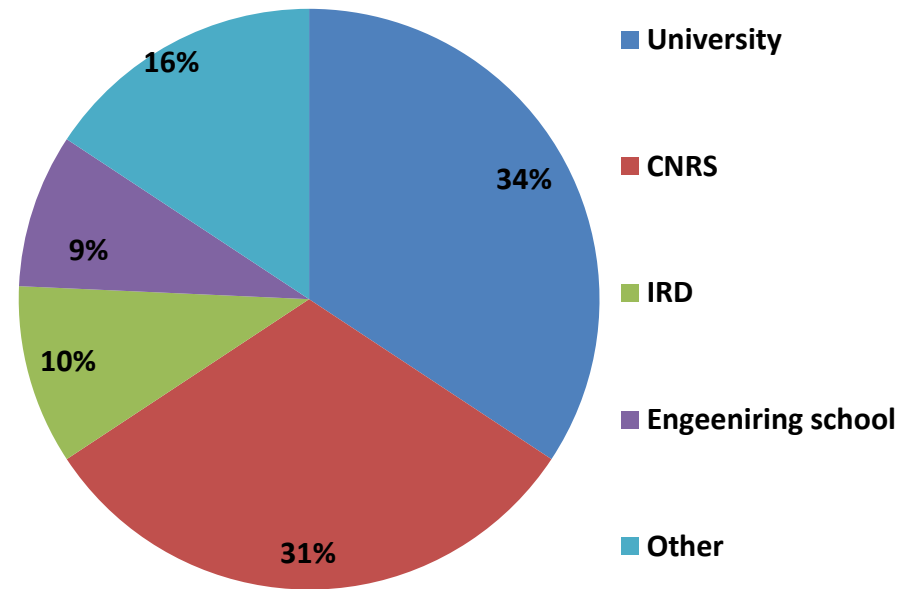
- Mathematics
- Marine/Earth/Planet Sciences
- Biology and Health
- Chemistry
- Social Sciences
- Humanities
- Engineering Sciences
- Information Technology
- Agronomy/Ecology
- Physics

# FRENCH PARTICIPATING INSTITUTIONS 2006-2018

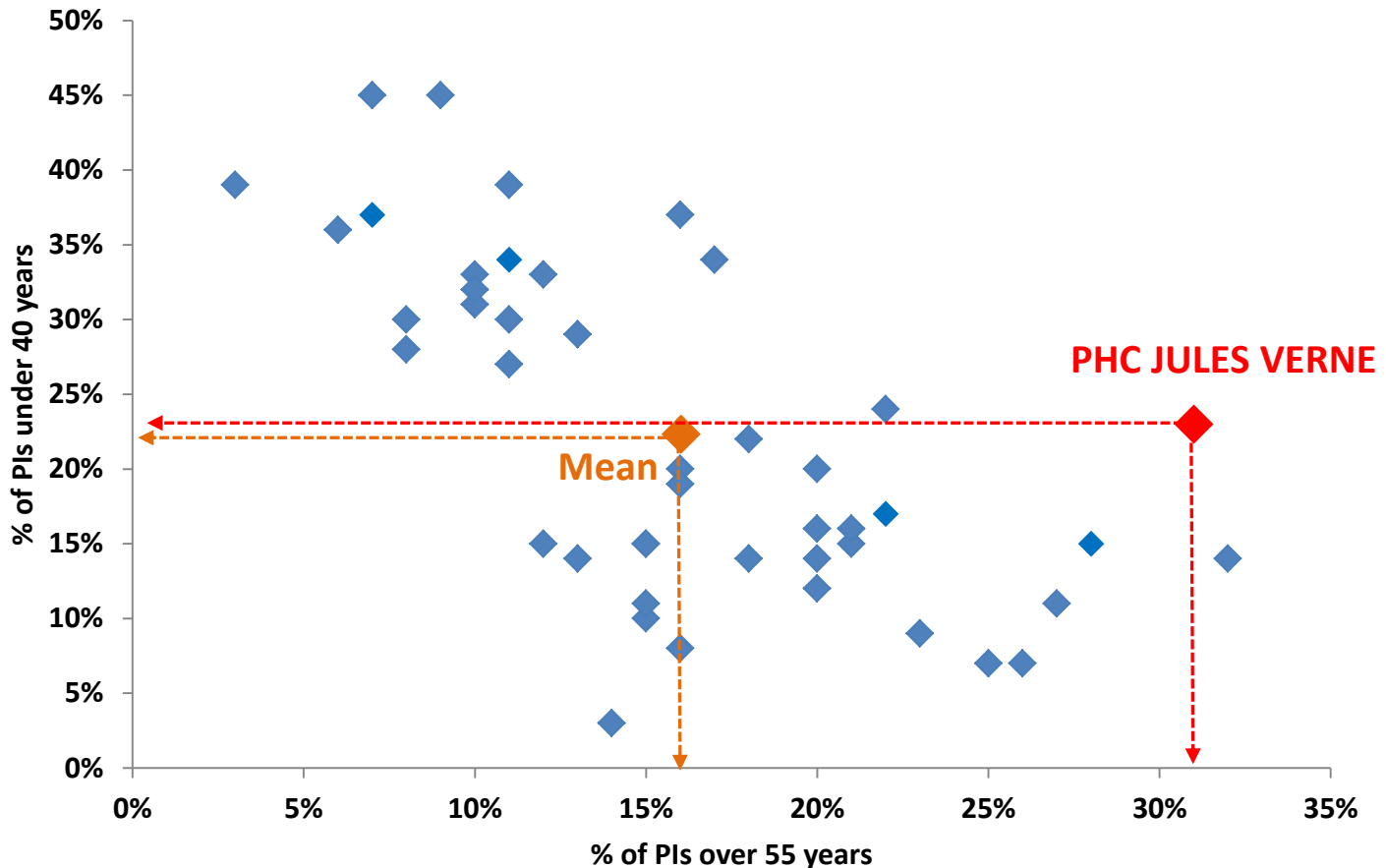
## PI's employers



## Laboratories authorities



# AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)

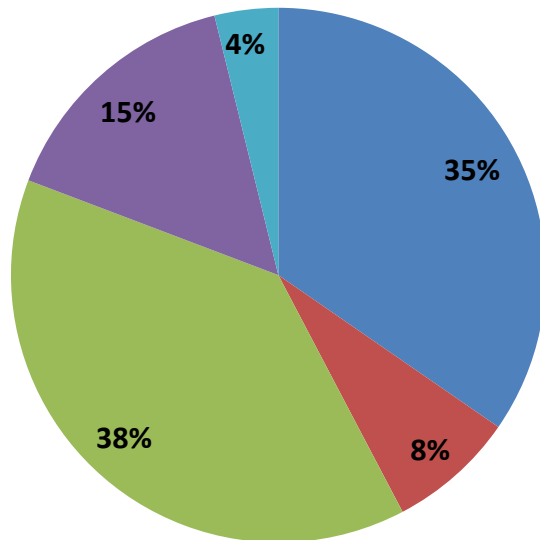


**PIs under 40 years : 23% vs 22% mean**  
**PIs over 55 years : 28% vs 16% mean**  
**49% of the PIs are between 40 and 55 years**

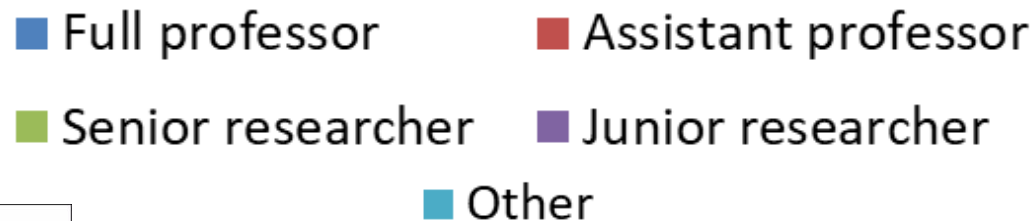
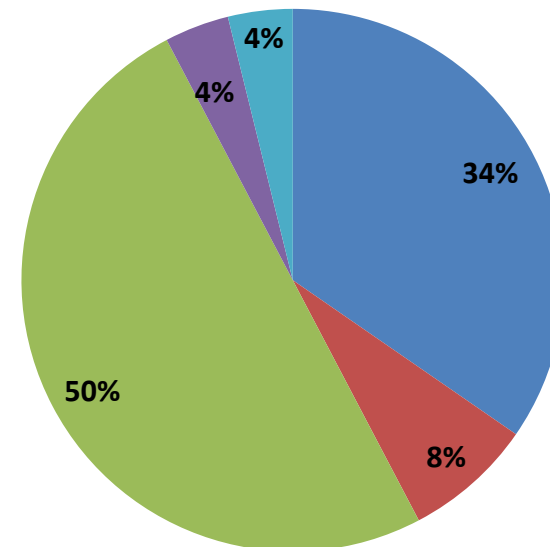
Data from 26 responses

# FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

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

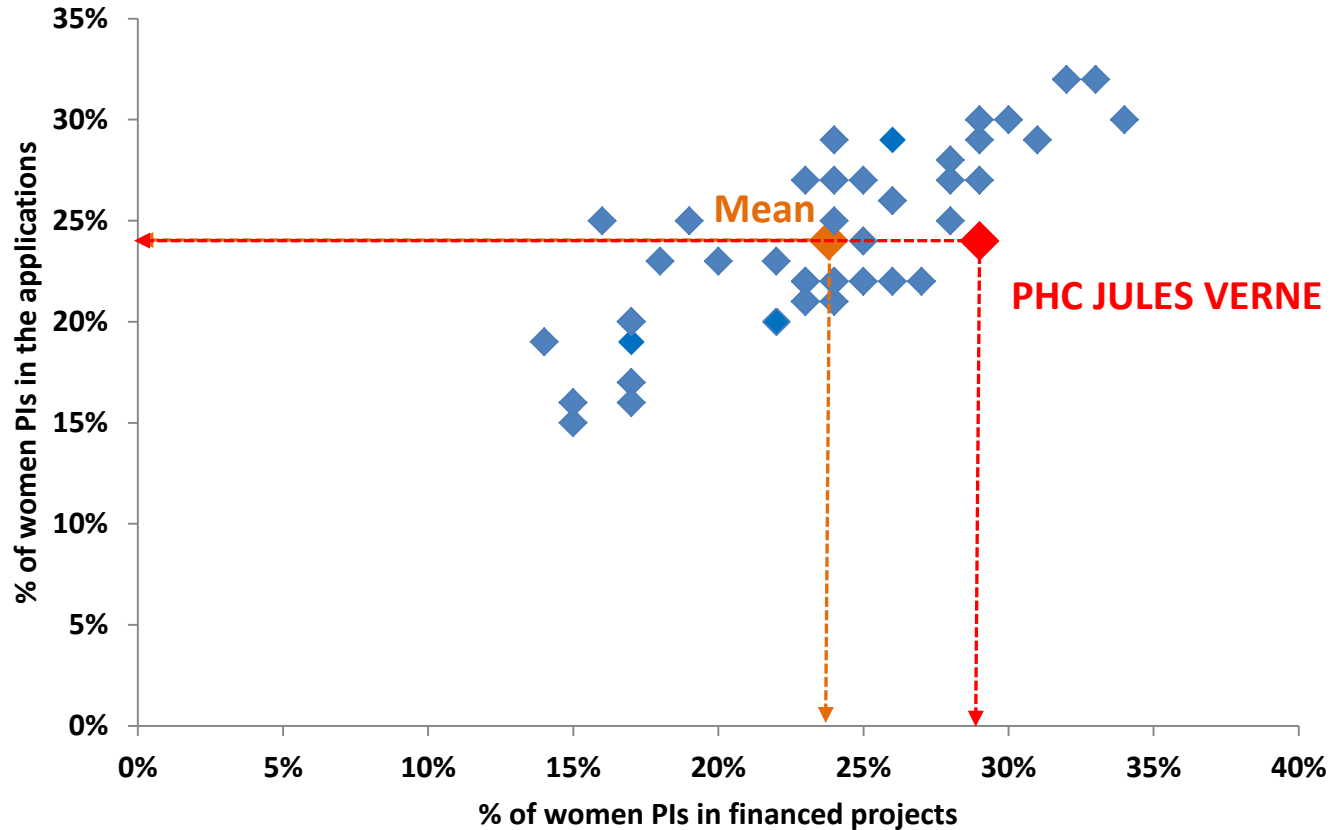


**Current professional status**



# IMPLICATION OF WOMEN (FRANCE)

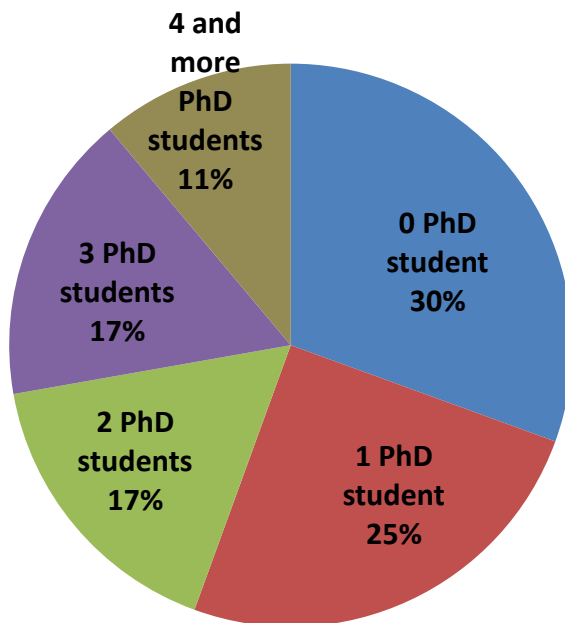
## (COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)



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

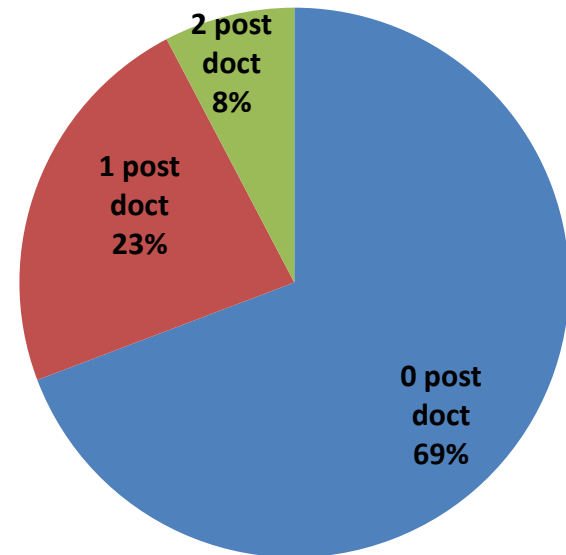
# PARTICIPATION OF FRENCH YOUNG RESEARCHERS

## Number of French PhD students



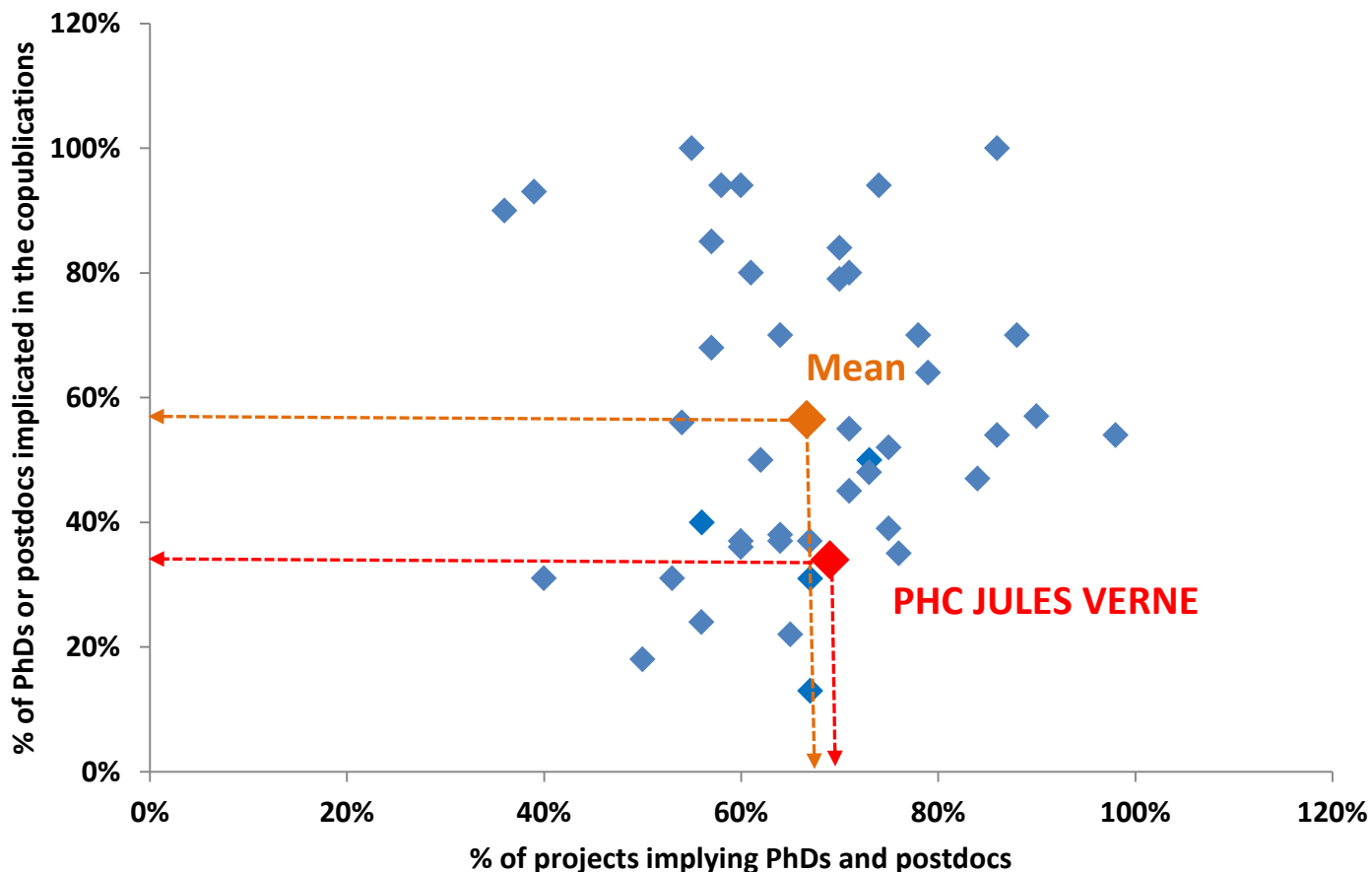
**58%** of projects involve at least one French PhD student

## Number of French post-doctoral researchers



**31%** of projects involve at least one French post-doctoral researcher

# IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)



**% of projects implying young researchers : 69% vs 67% mean**

**% of PhD or postdoc implicated in the copublications : 34% vs 57% mean**

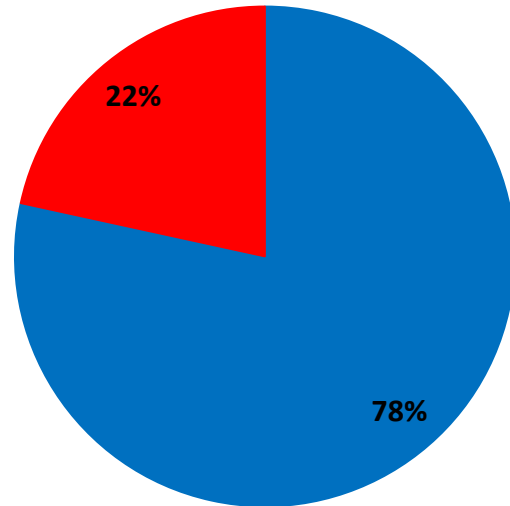




# MOBILITY 2005-2019

# MOBILITY : GENDER DISTRIBUTION

France → Iceland

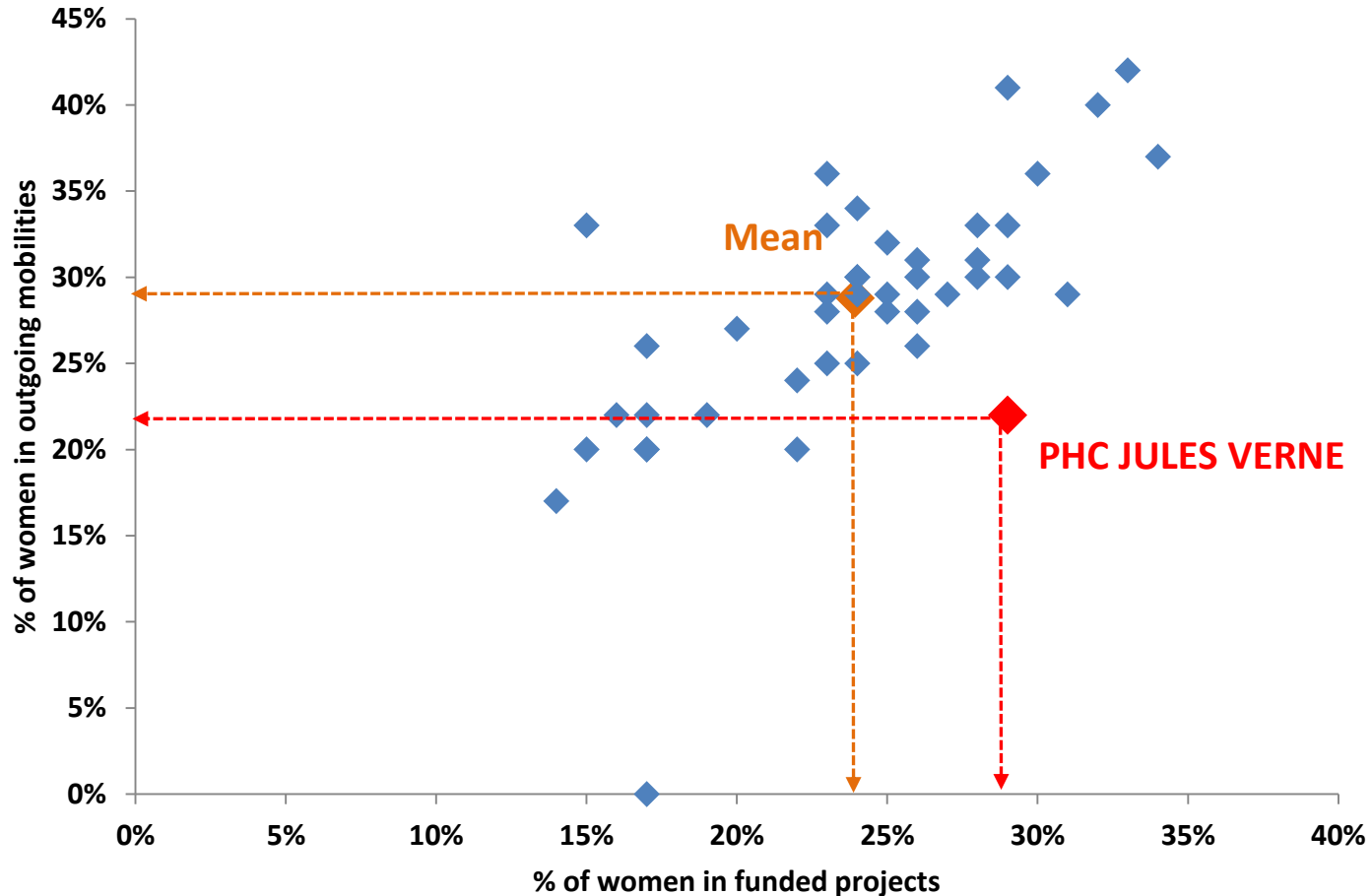


■ Men ■ Women

Data from 57 funded projects

# WOMEN MOBILITY FRANCE – ICELAND

(COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)

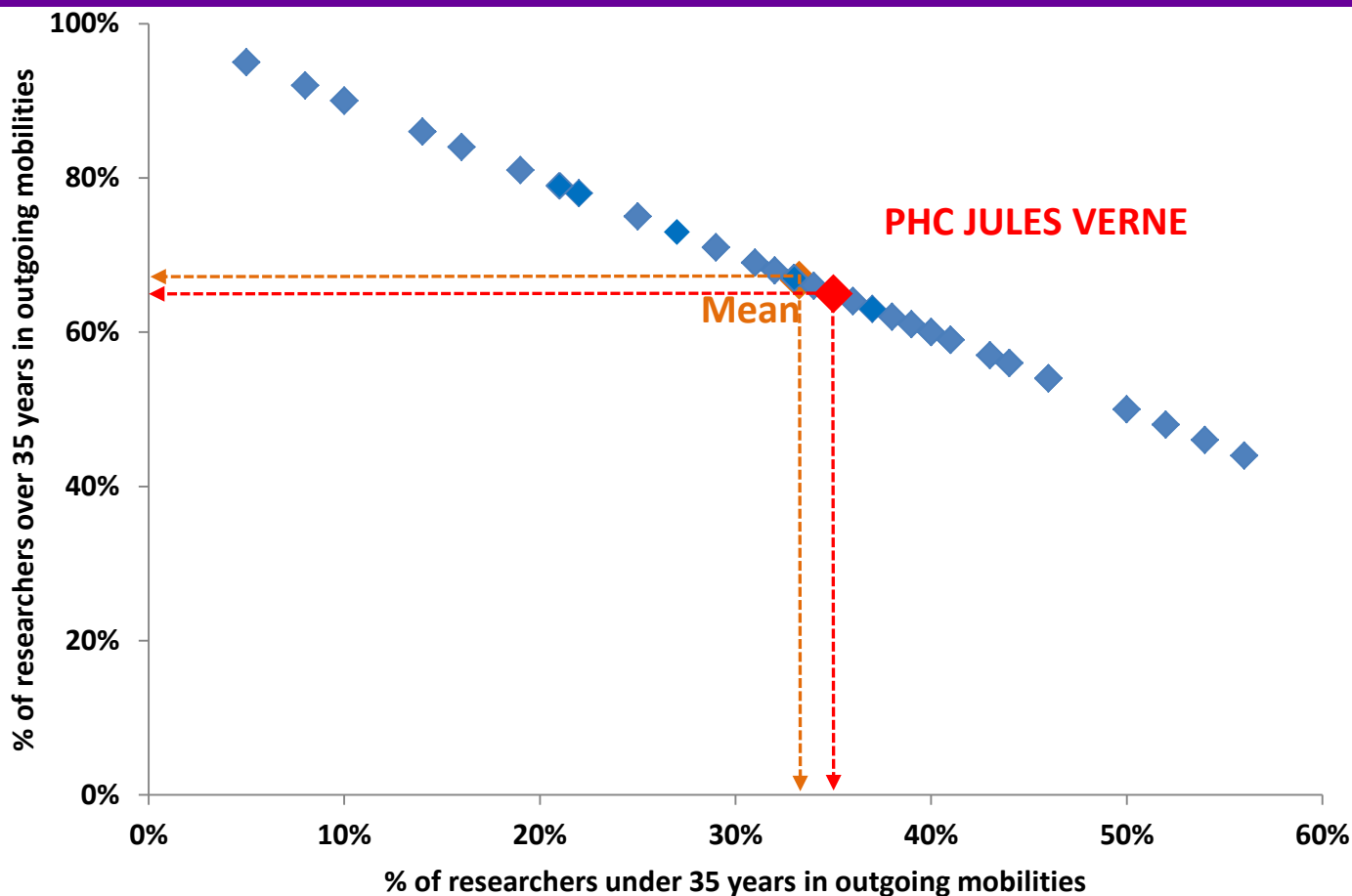


**% of women researchers in the selected projects : 29% vs 24% mean**

**% of women researchers in outgoing mobilities : 22% vs 29% mean**

# YOUNG RESEARCHERS' MOBILITY FRANCE - ICELAND

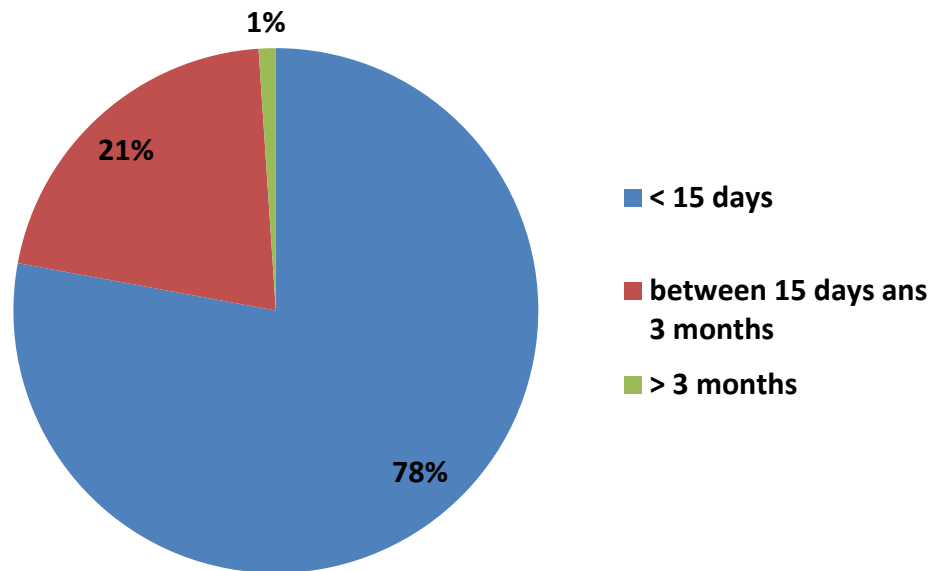
(COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)



**% of French young researchers in outgoing mobilities : 35% vs 33% mean**

# MOBILITY : DURATION

## France → Iceland



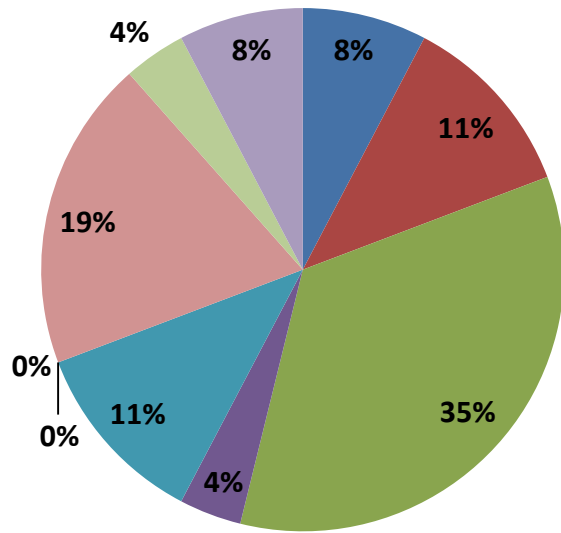


# SCIENTIFIC PRODUCTION 2006-2016

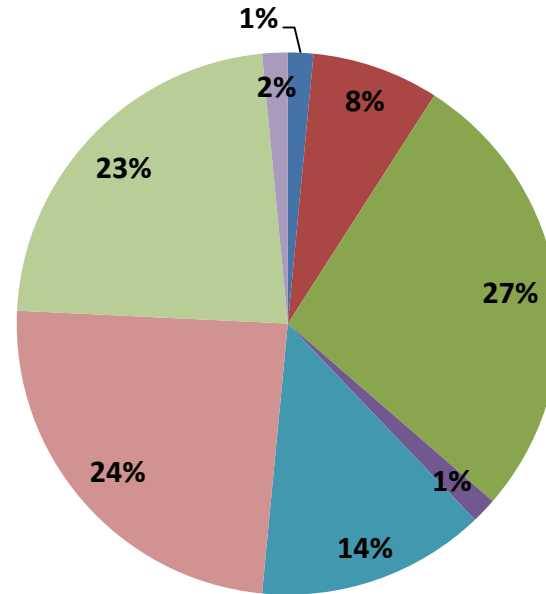


# SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (26)



Percentage of copublications



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

No funded projects for Humanities and Social sciences

# SCIENTIFIC OUTPUT (2/2)

Data from 26 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	2	0,50
Physics	3	1,67
Marine/Earth/Planet Sciences	9	2,00
Chemistry	1	1,00
Biology and Health	3	3,00
Humanities	0	
Social Sciences	0	
Engineering Sciences	5	3,20
Information Technology	1	15,00
Agronomy / Ecology	2	0,50
<b>TOTAL</b>	<b>26</b>	<b>2,54</b>

Overall average **annual** number of copublications per project : **1,27 vs 0,94 mean**

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

**39%** of copublications include at least 1 PhD or PostDoc

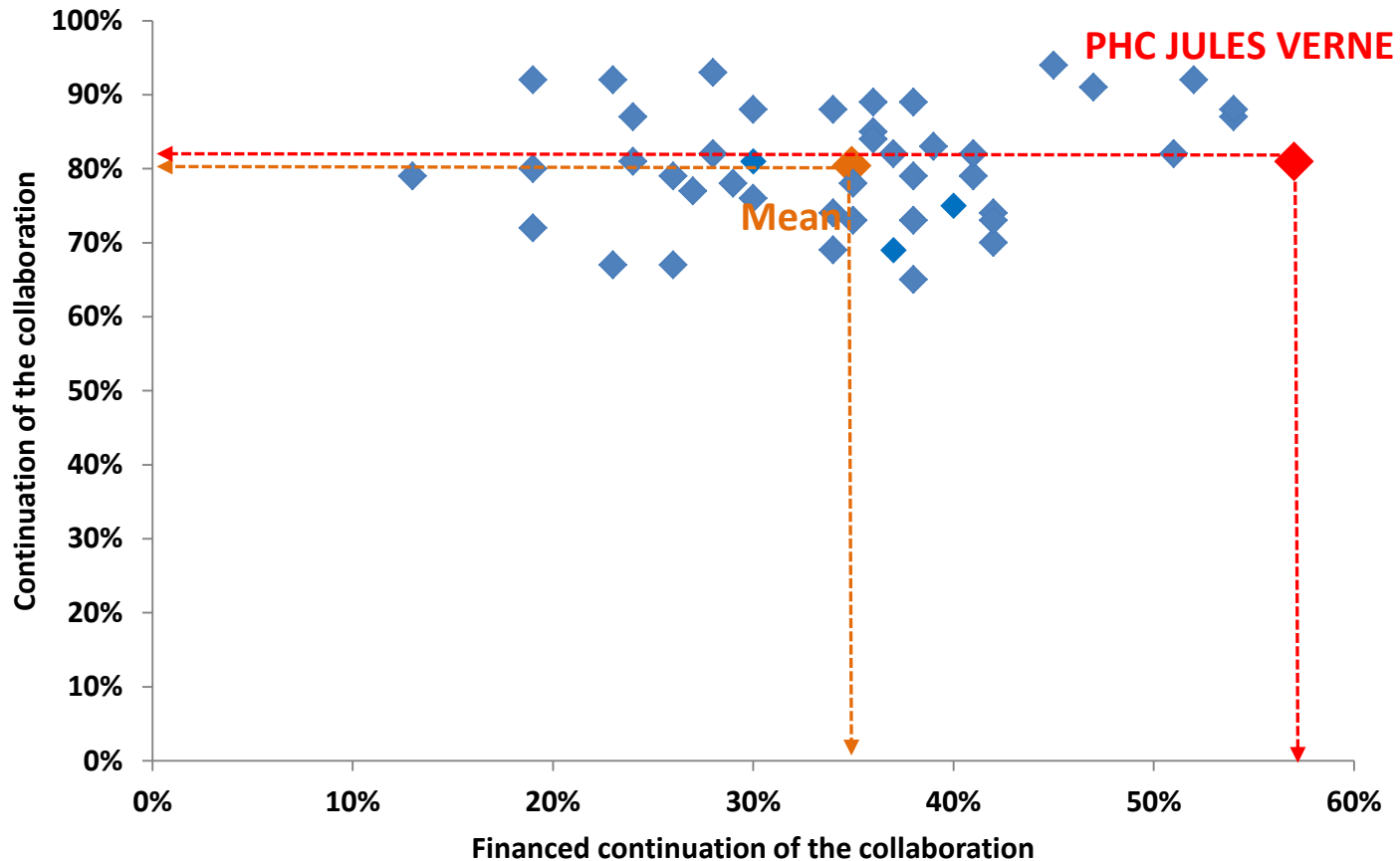
The average annual rate of publication for young researchers involved in the projects is **0,42**

Each young researcher involved in the publications has published **1,08 publication per year**



# WHAT HAPPENS AFTER A JULES VERNE PROJECT ?

# CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 45 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : **81% vs 80% mean**

Continuation of the collaboration with other sources of subvention : **57% vs 35% mean**

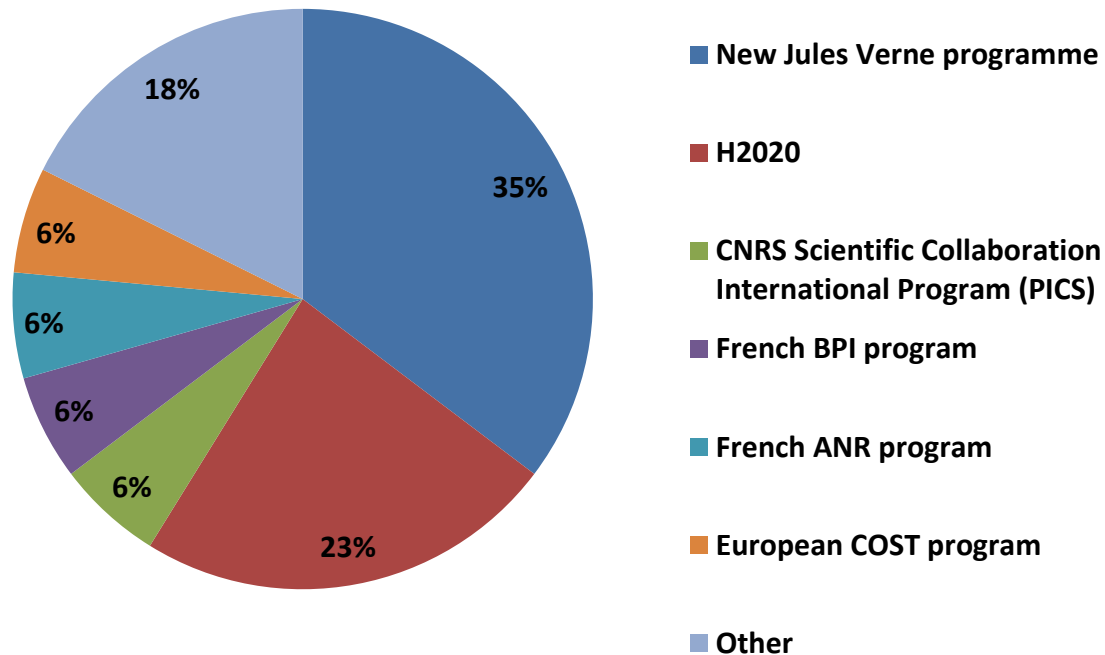
## CONTINUATION OF THE COLLABORATION (2/5)

**81%** of the collaborations continued after the Jules Verne project

Which activities?	
Collaborative research	71%
Co-publications	67%
Researchers' mobility	52%
PhD mobility	43%
Joint participation to conferences	38%
Co-organisation of scientific events	19%
Joint participation to PhD thesis	19%
Joint diplomas	0%
Other	14%

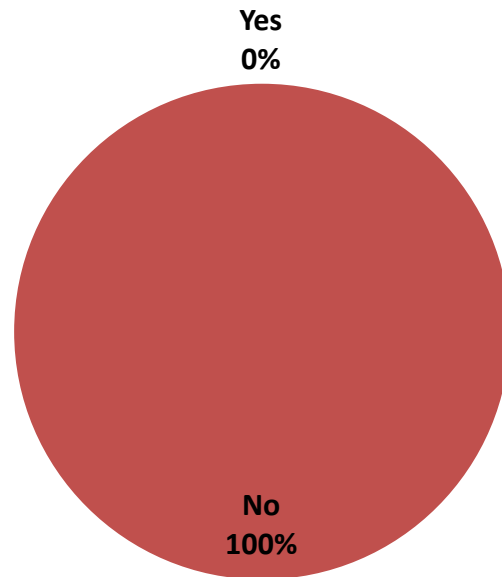
# CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the Jules Verne project ?



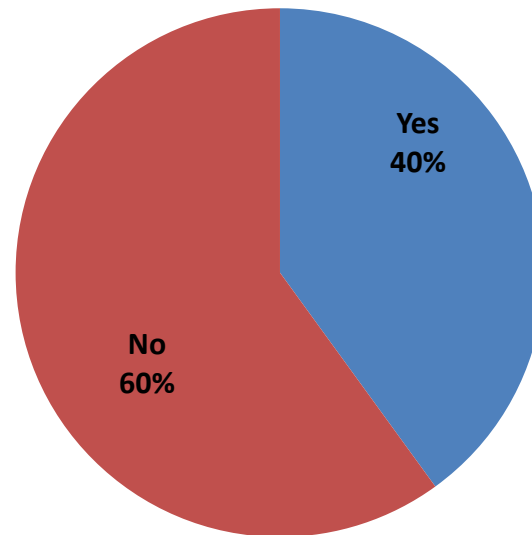
# CONTINUATION OF THE COLLABORATION (4/5)

Has the Jules Verne project led to the set-up of joint structures?



# CONTINUATION OF THE COLLABORATION (5/5)

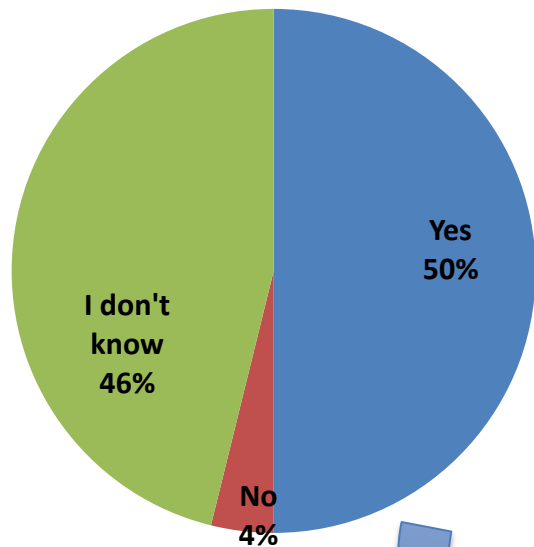
Has the French-Icelandic collaboration involved new partners?



For a total of 12 new partners from 10 different countries

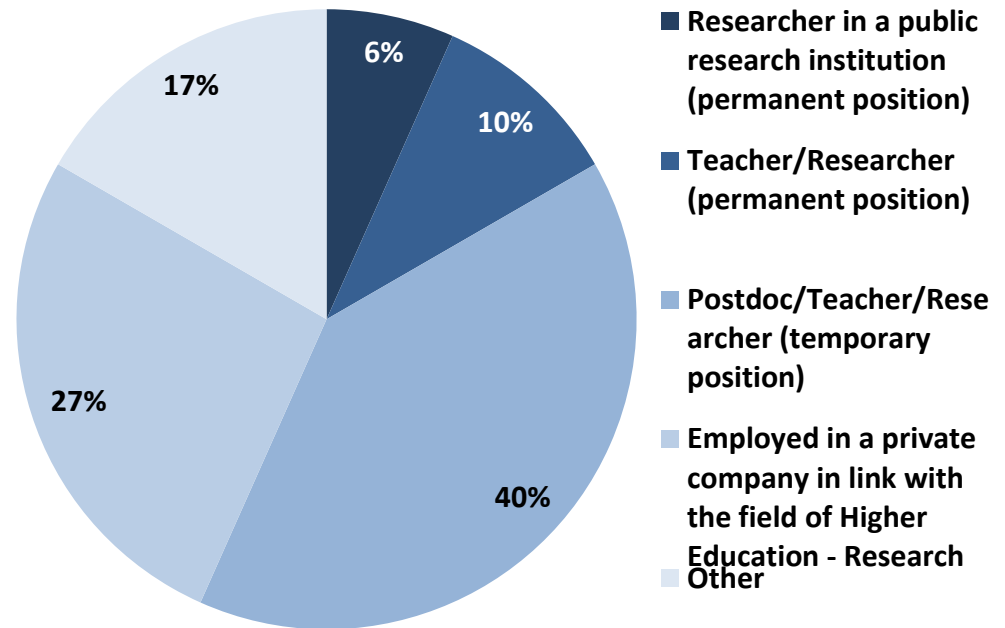
# IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER (1/2)

Was french young researchers' career impacted by the Jules Verne program ?



Data from 26 responses

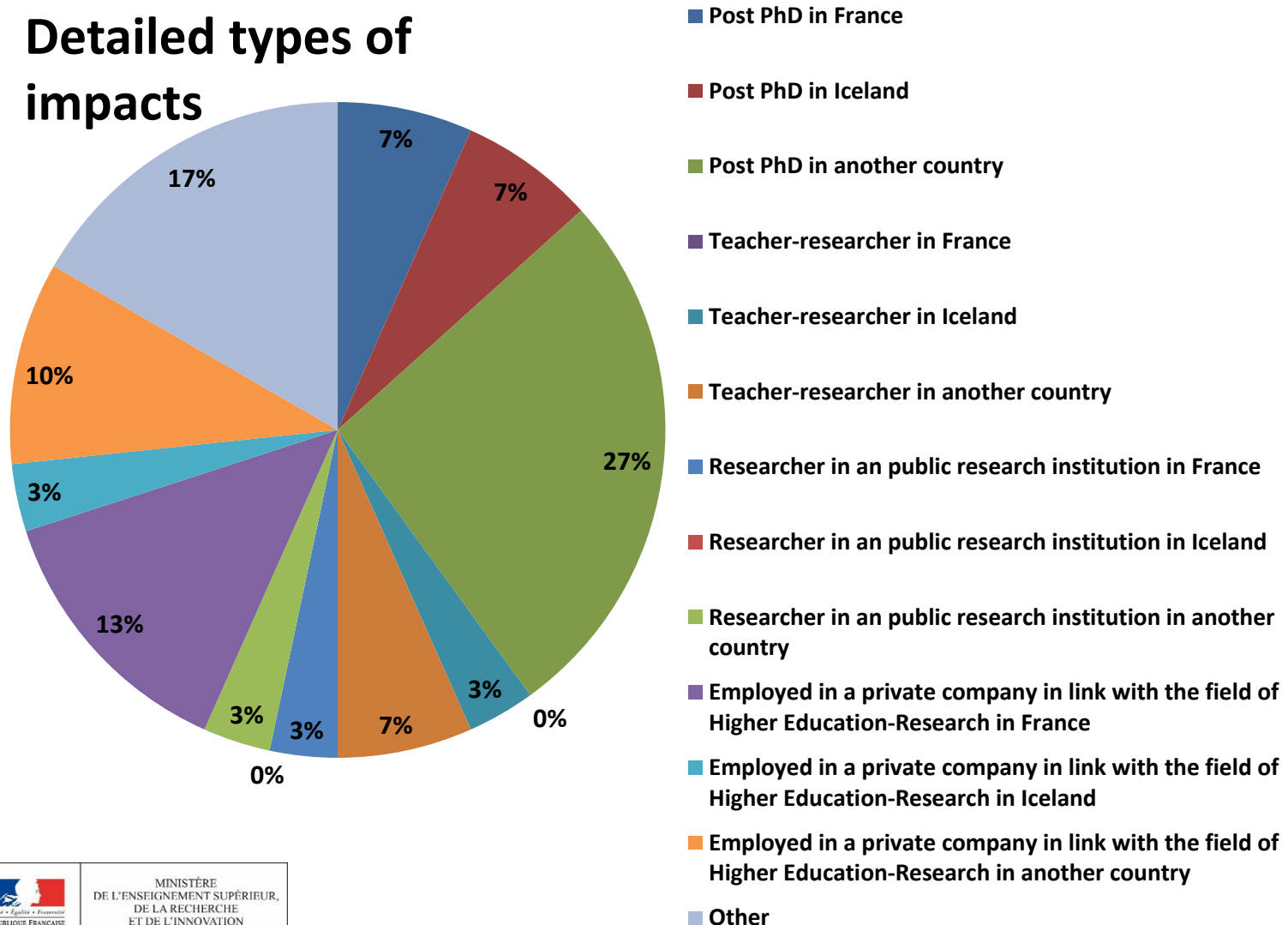
Type of impacts



Data from 13 positive responses for a total of 30 french young researchers

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

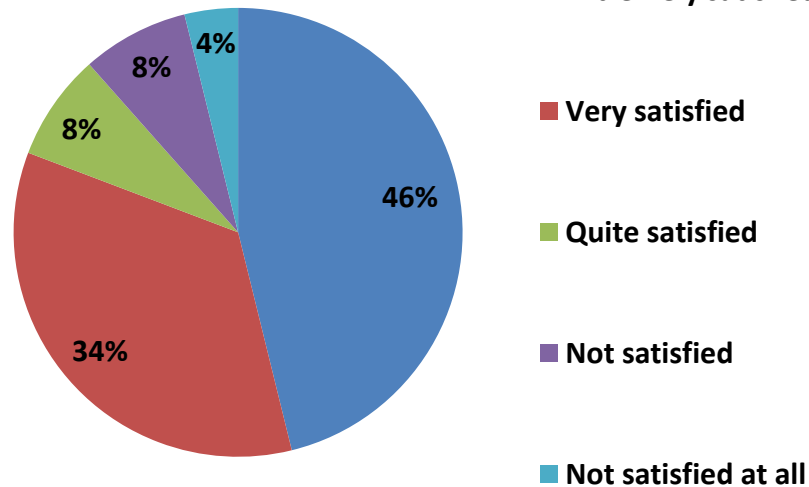
## Detailed types of impacts





# GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

**88%** of French principal investigators are satisfied



Data from 26 responses

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

## SURVEY OF 26 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 152)	% (out of 26)
Simplicity of the project application process	20	77%
Fostering researchers' mobility	19	73%
Fostering an international research collaboration	16	62%
Fostering the training of young researchers	15	58%
Fostering exchanges enabling scientific production	13	50%
Helping to know the partner country	13	50%
Financial autonomy towards your institution	11	42%
Easy implementation (administrative flexibility)	9	35%
Sufficient financial means for the mobility costs	8	31%
Good scientific-added value on financial investment	8	31%
Helpful to initiate other fundraising	5	19%
Sufficiently long duration of the projects	5	19%
Sufficient amount of mobility time given to collaborate	4	15%
Timetable for implementation	2	8%
No strenght point	1	4%
Transparency of the selection process	1	4%
Other	2	8%
<b>Total number of occurrences</b>	<b>152</b>	

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

## SURVEY OF 26 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 76)	% (out of 26)
Insufficient financial means to cover a project	14	54%
Financial means insufficient for the expenditure of mobility (per diem)	10	38%
Too short duration of the projects	8	31%
Difficult to continue the collaboration	7	27%
Lack of transparency in the selection process	6	23%
Financial means insufficient for the expenditure of mobility (transport)	6	23%
Length of support too short	6	23%
No weakness	3	12%
Too low number of mobilities	3	12%
Heaviness of the process of applications	2	8%
Insufficient communication on the evaluation's results	2	8%
Administrative heaviness of the missions management	2	8%
Financial autonomy towards your institution	2	8%
Timetable for implementation	2	8%
Too long duration of mobilities	0	0%
Flexibility of the program for actions co-financed with the partner	0	0%
Other	3	12%
Number of occurrences	76	

# 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”.

Implication of French young researchers in 69% of the projects slightly better than the general mean (67%)

Implication of French young researchers in the mobilities (35%) slightly better than the general mean (33%)

Scientific coproduction better than the general mean

81% of the projects led to a continued collaboration and 57% of them benefited a new funding (29% from European funds)

**Beware of the recent decrease in the number of applications**

**77% of the PIs have already collaborated with Iceland and 62% of them have already benefited from a Jules Verne program**

**Only 23% of the applicants are under 40 years**

**Only 34% of young researchers are implicated in the co-publications (mean 57%)**

**42% of funded projects with no eligible co-publications**

**Only 39% 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**



# PRELIMINARY RECOMMENDATIONS

- **Try to make the call for offer more appealing**
- **Promote newer cooperations between France and Iceland**
- **Encourage French PIs to increase the implication of young researchers in the co-publications**
- **Increase the number of projects leading to co-publications**
- **Consider a “Jules Verne +” 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*