

**FRANCE – AUSTRIA  
PHC AMADEUS  
50th ANNIVERSARY OF THE  
PHC AMADEUS CREATION AGREEMENT**

**Scientific impact of the program (2005-2017)**

**MESRI-DAEI / MEAE**

**2019**

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

# GENERAL PRESENTATION OF THE PROGRAMME

**Creation : intergovernmental agreement of September 6th, 1968 between France and Austria and PHC agreement in 1996**

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

**Total budget (France + Austria) : around 110 600 € / year**

>> including budget from the French part : 55 300 € / year \*

>> including budget from Austrian part : same € / year

**Number of new funded projects per year : around 16**

**From 2005-2016 : 378 applications submitted, 192 projects funded**

# DATA SOURCES

## Campus France

- Informations about the PHC Amadeus program applications
- List of mobilities (from France to Austria)

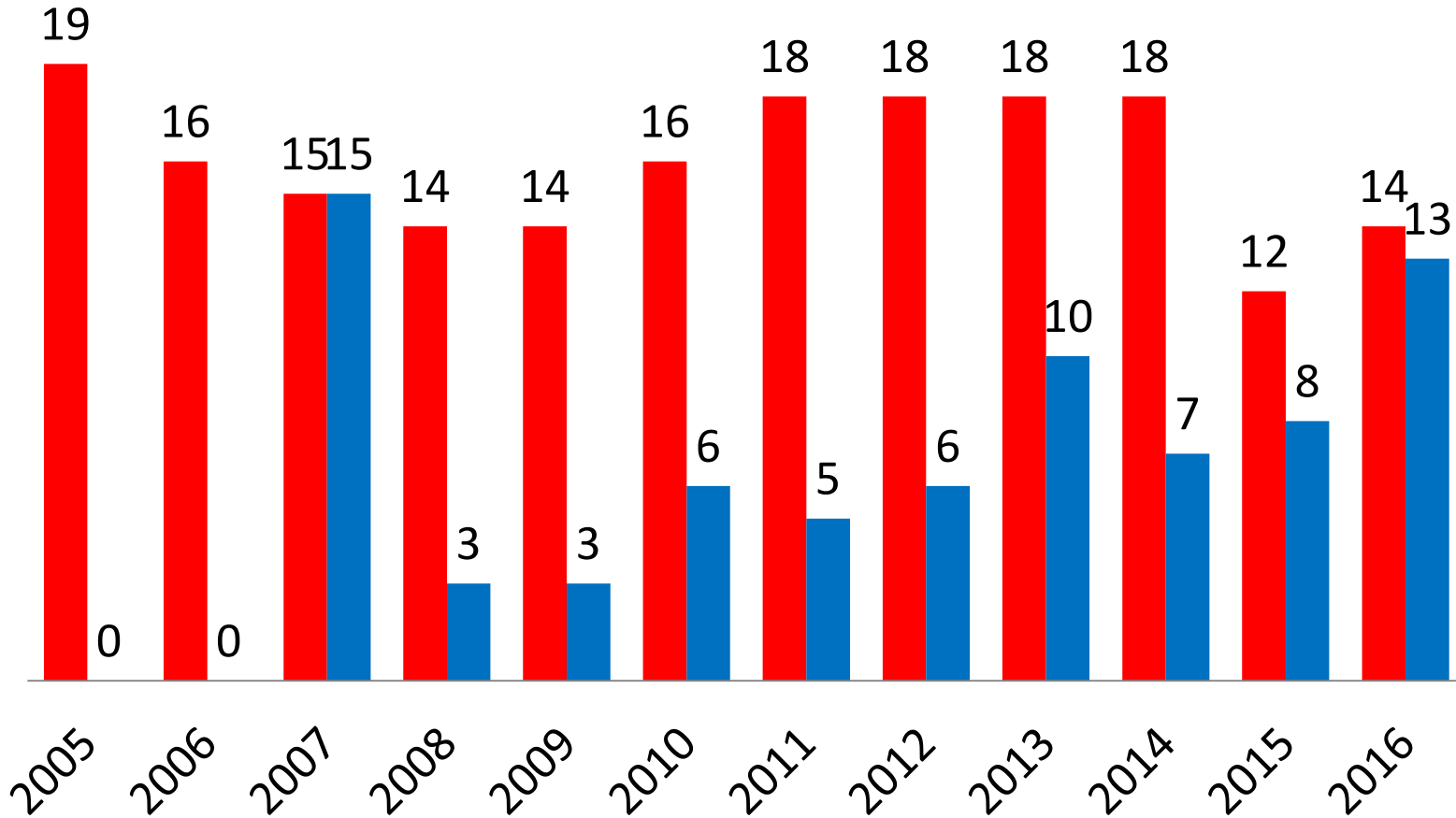
## **Survey** *(conducted by the French Ministry of Higher Education, Research and Innovation and Ministry for Europe and Foreign Affairs)*

- Target : Principal Investigators of selected projects between 2005 and 2016
- Survey **duration** : **5 weeks between June and July 2018**
- **40%** response ratio *(76 respondents for 192 funded projects)*


# ANSWERS TO THE SURVEY

Average response rate to the survey : **40 % (76 answers)**

■ Number of funded projects ■ Number of survey answers



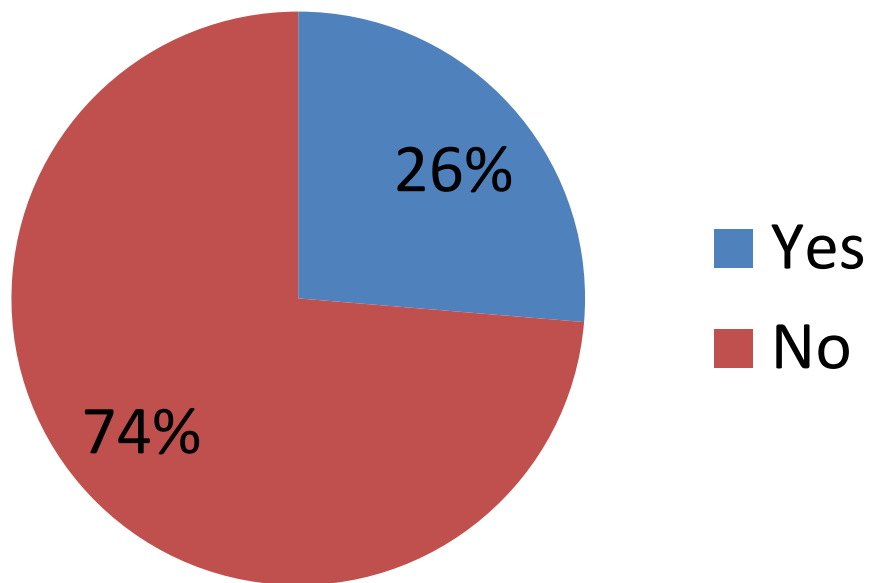
Campus  
France &  
Survey  
data



# 2005-2017 KEY POINTS

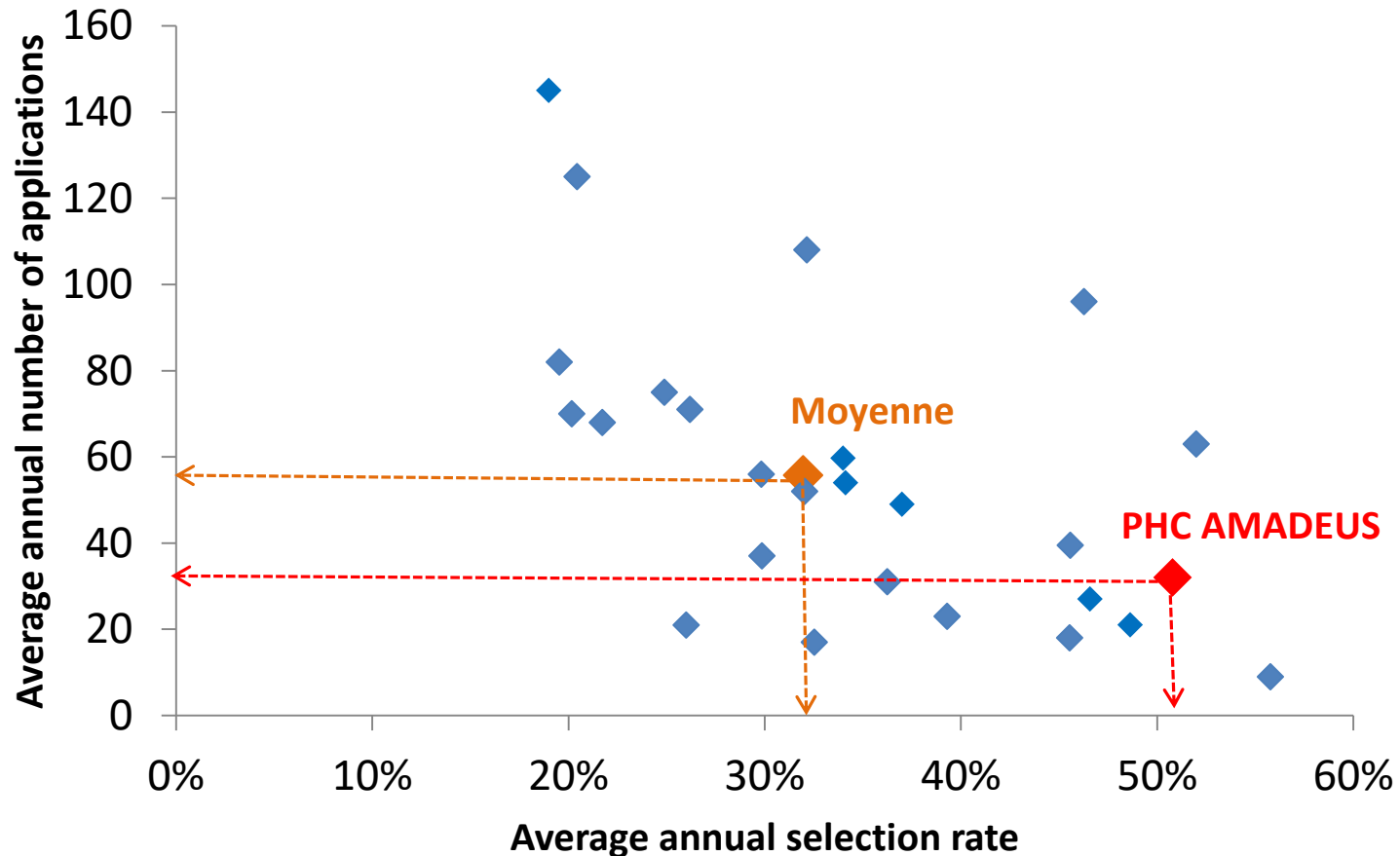
# BEFORE PHC AMADEUS PROJECT

Have you ever worked with this Austrian partner?



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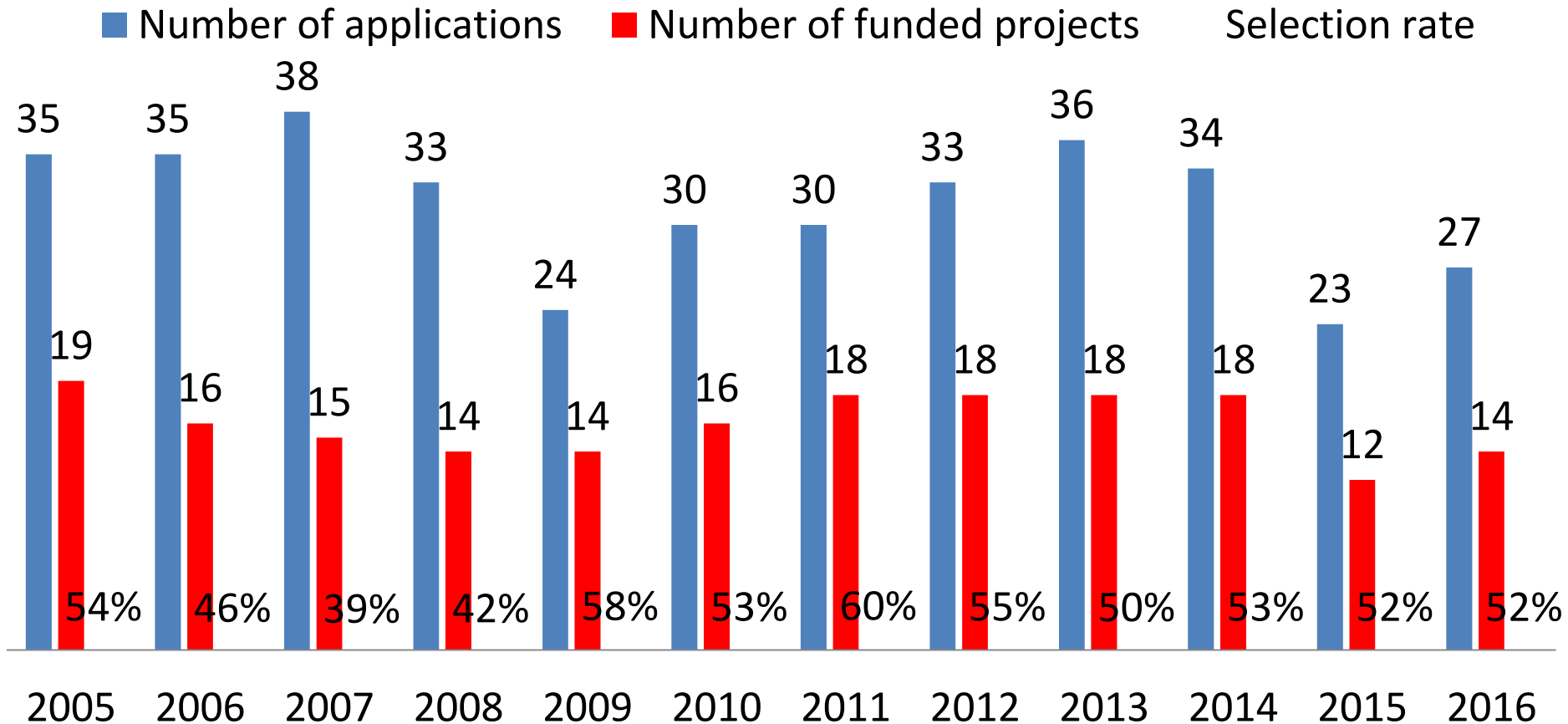
# NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



**Average selection rate for 2005-2017 : 51% vs 32% mean**  
**Average number of applications 2005-2017 : 32 vs 56 mean**

# SUCCESS RATE

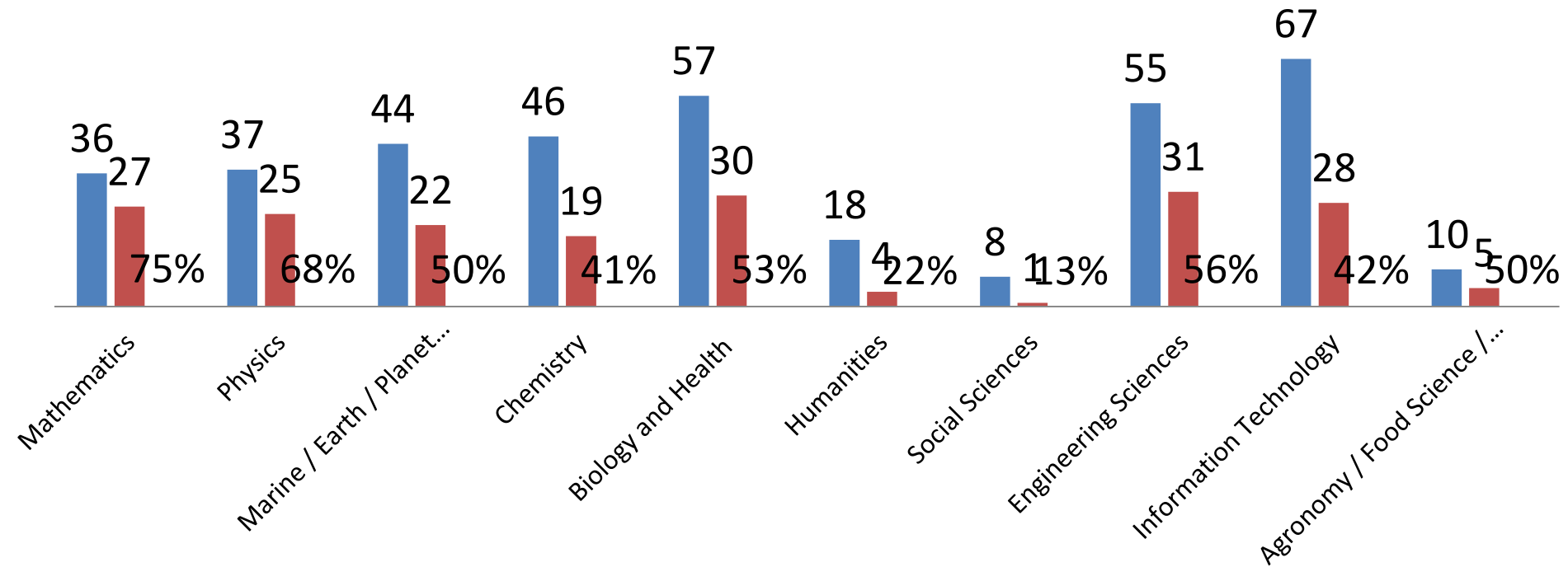
Average selection rate from 2005-2016: **51 %**



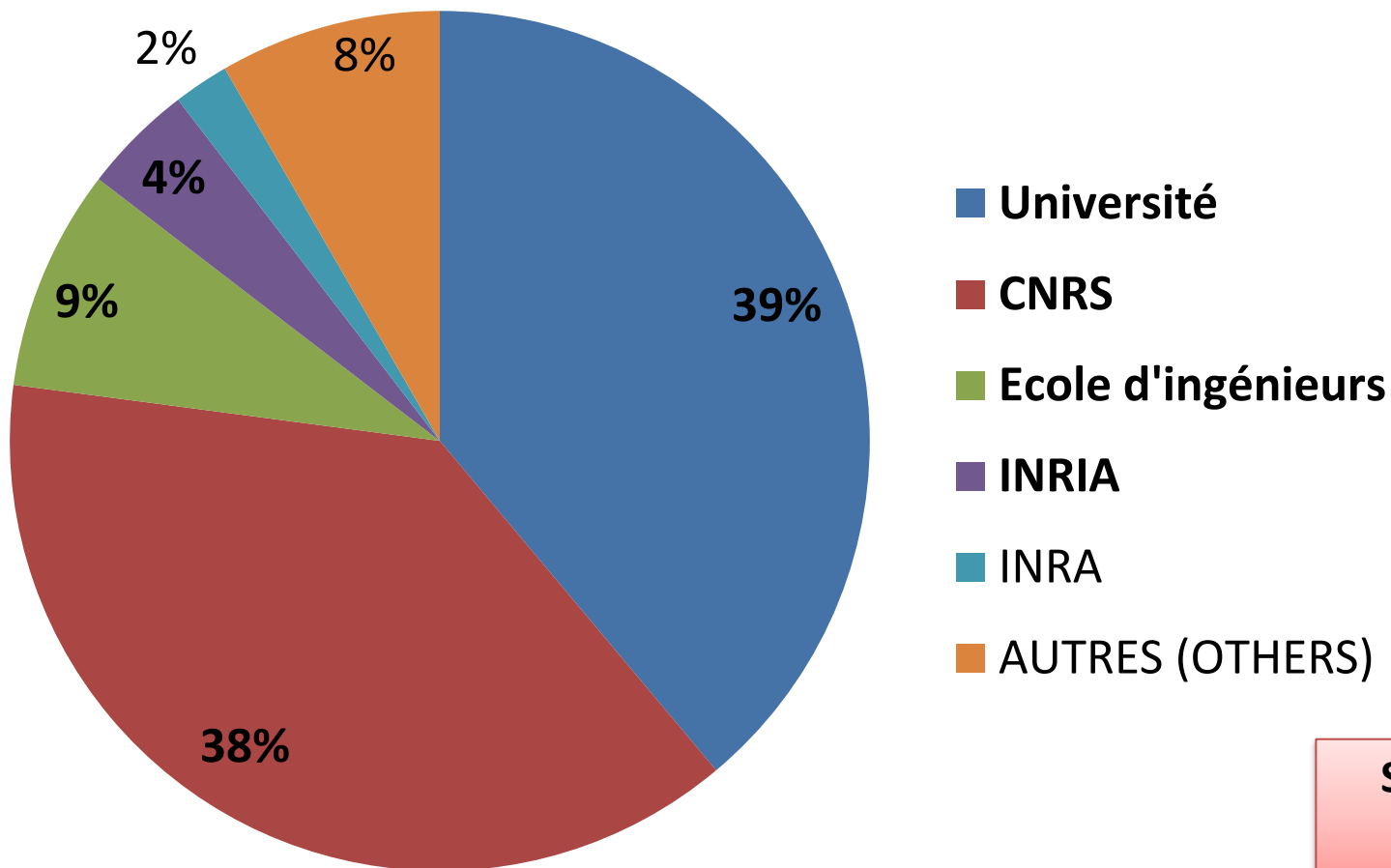


# SCIENTIFIC DOMAINS

■ Number of applications ■ Number of funded projects Selection rate

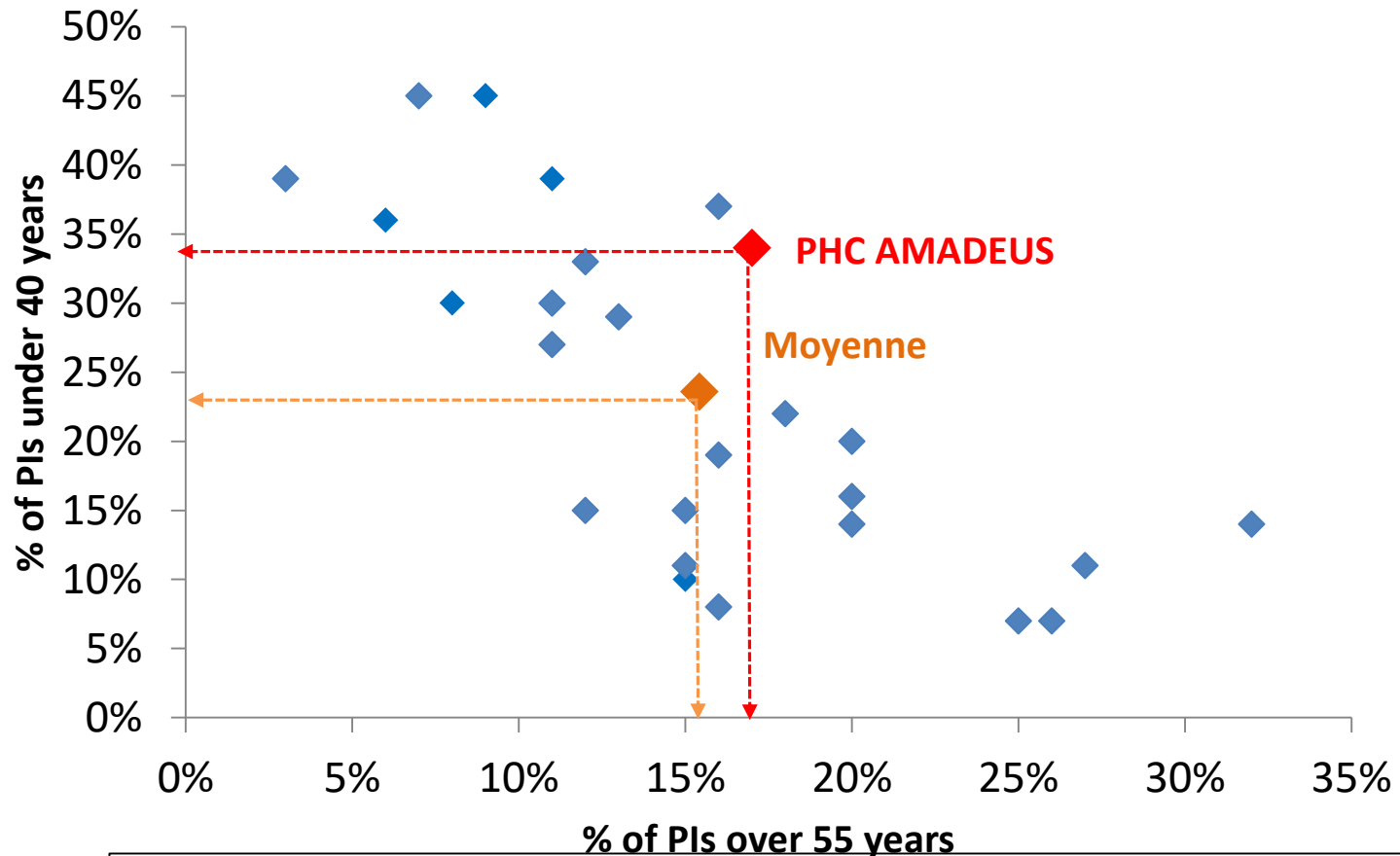


# FRENCH PARTICIPATING INSTITUTIONS



Survey data

# AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



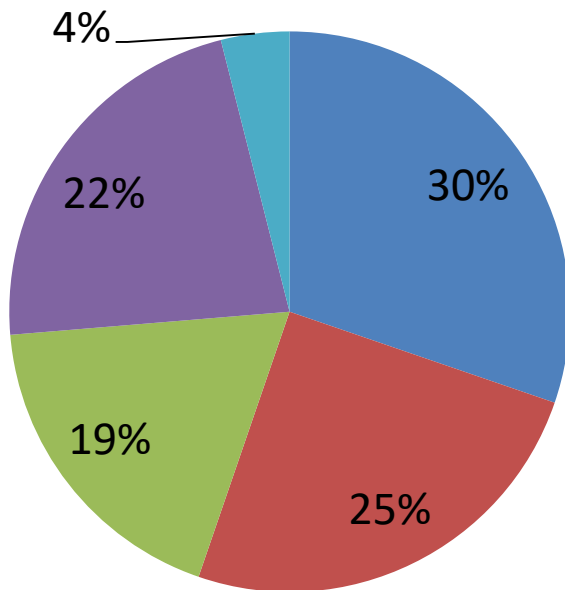
PIs under 40 years : **34% vs 23% mean**

PIs over 55 years : **17% vs 15% mean**

**49% of the PIs are between 40 and 55 years**

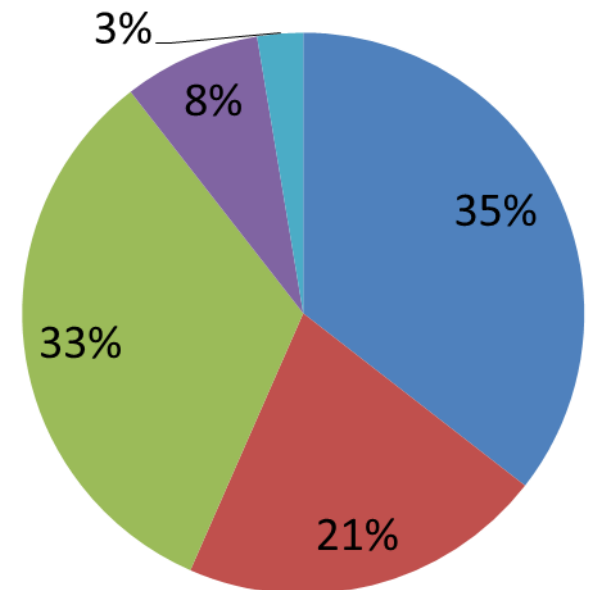
# FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

Previous professional status  
(at the beginning of the project)



- Full professor
- Assistant professor
- Senior researcher
- Junior researcher
- Other

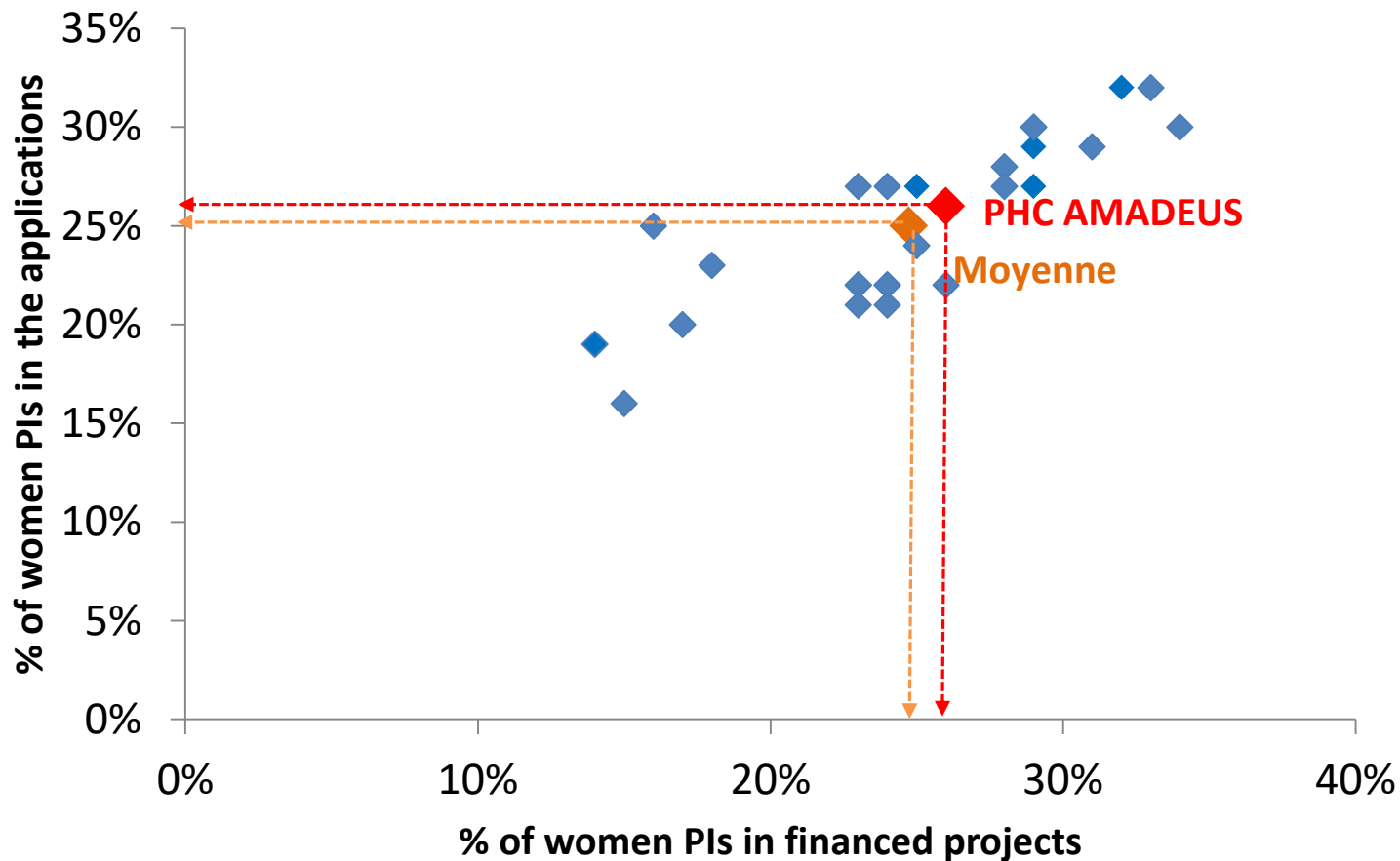
Current professional status



Survey data

# IMPLICATION OF WOMEN (FRANCE)

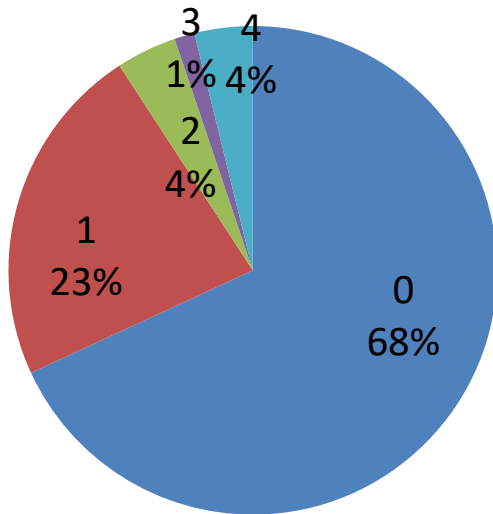
## (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



**% of women PIs in the applications : 26% vs 25% mean**  
**% of women PIs in the selected projects : 26% vs 25% mean**

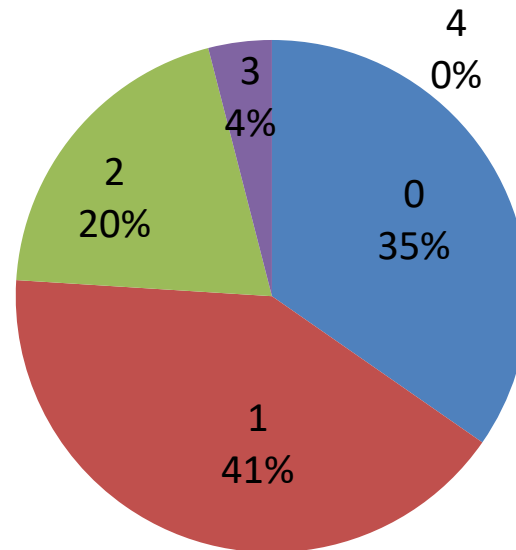
# PARTICIPATION OF YOUNG RESEARCHERS

Number of Master degree students



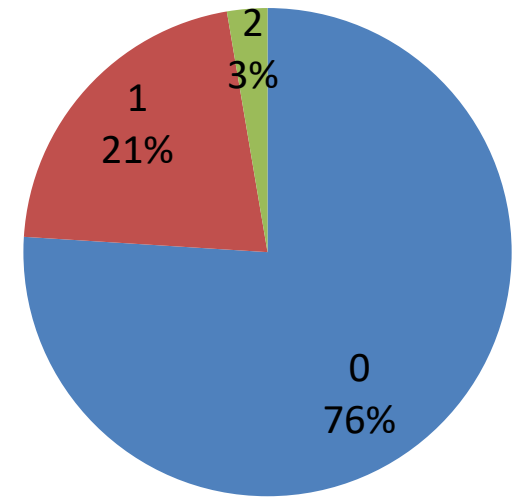
**32 %** of projects involve at least 1 Master degree student

Number of PhD students



**65 %** of projects involve at least one PhD student

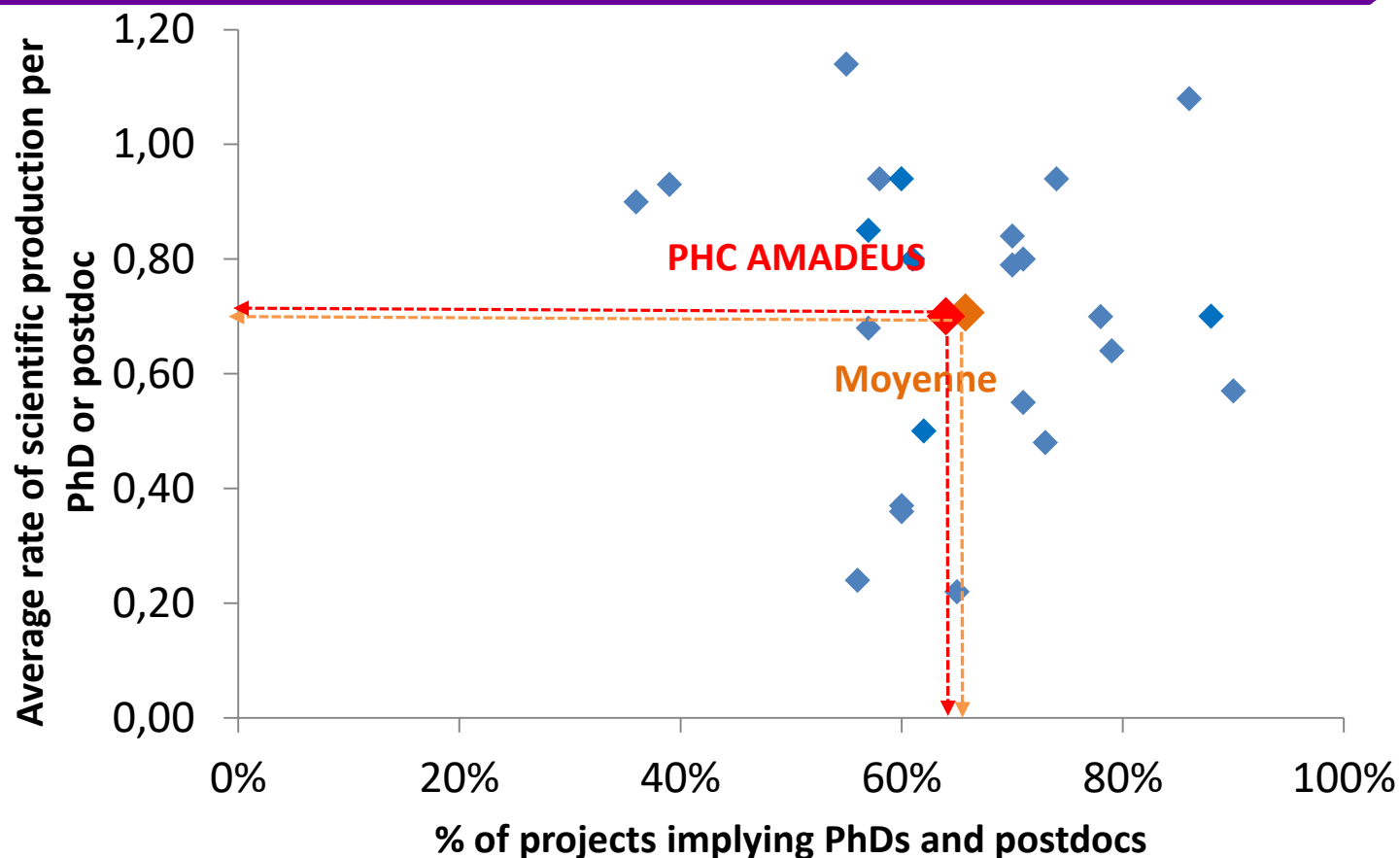
Number of post-doctoral researchers



**24 %** of projects involve at least 1 post-doctoral researcher

# IMPLICATION OF PhDs

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



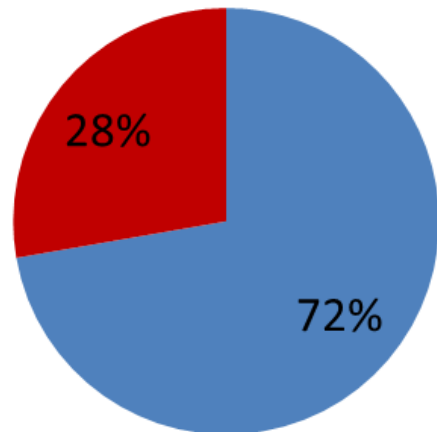
**% of projects implying PhDs and Post-doc : 66% vs 65% mean**  
**Average rate of scientific production per PhD : 0,70 vs 0,70 mean**

# Mobility



# MOBILITY : GENDER DISTRIBUTION

France → Austria



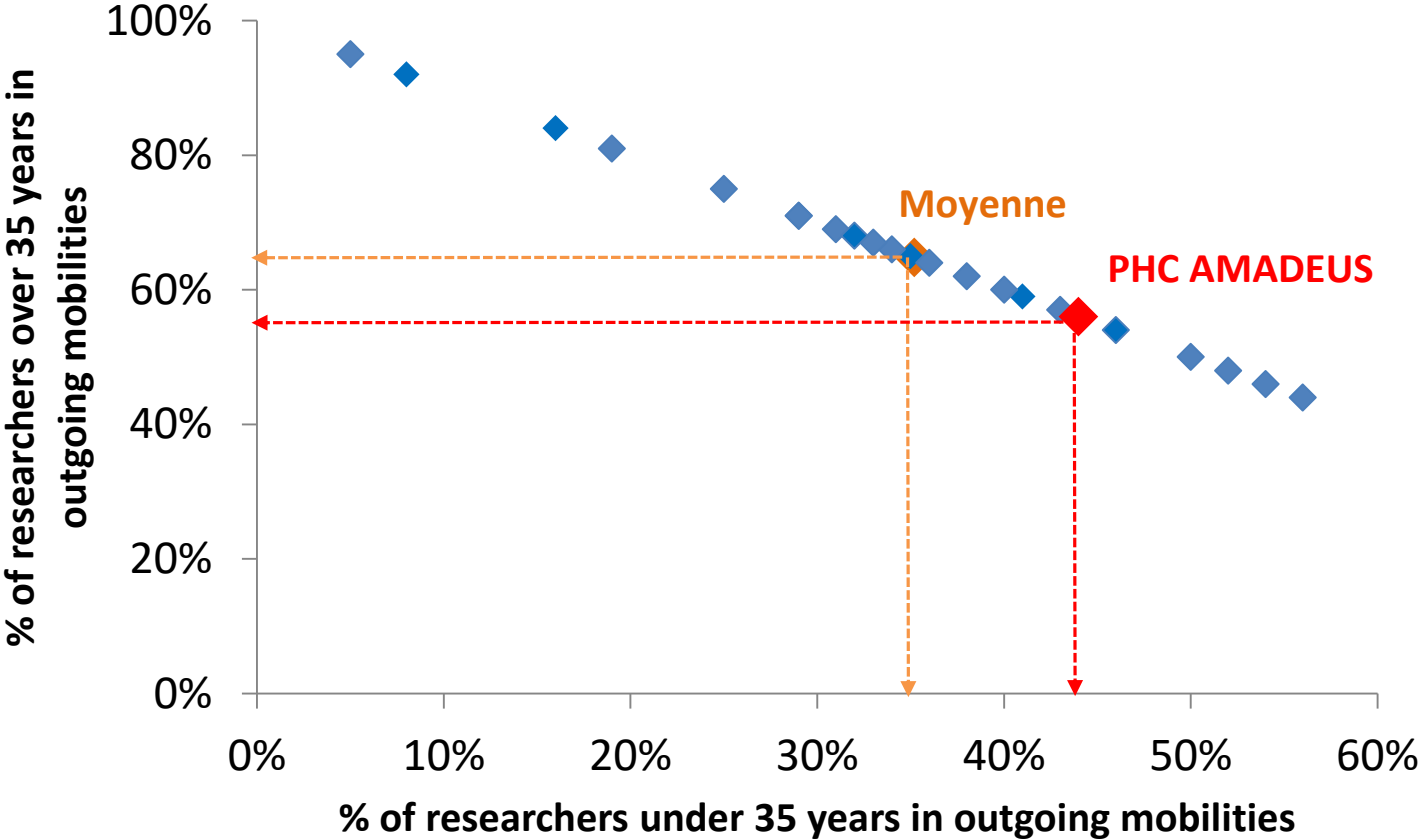
Austria → France

No data available

■ Men ■ Women

Campus  
France  
data

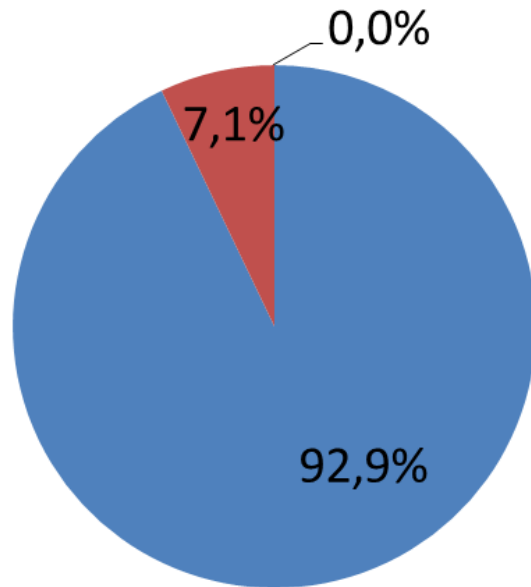
# MOBILITY FRANCE – AUSTRIA (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



**% of french young researchers in outgoing mobilities : 44% vs 35% mean**

# MOBILITY : DURATION

France → Austria



■ < 15 days

■ between 15 days and 3 months

■ > 3 months

Austria → France

No data available

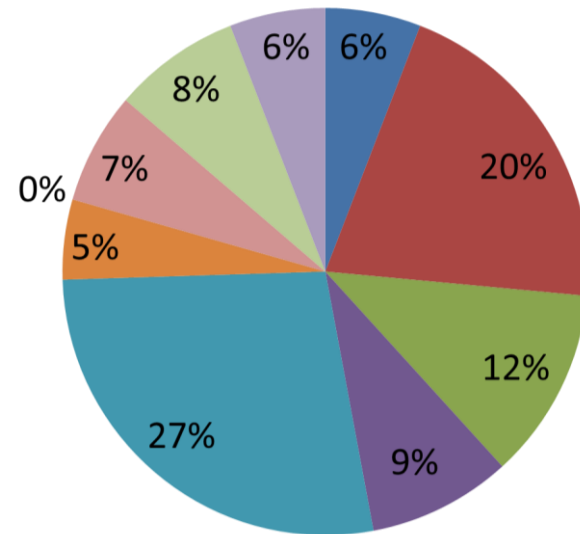
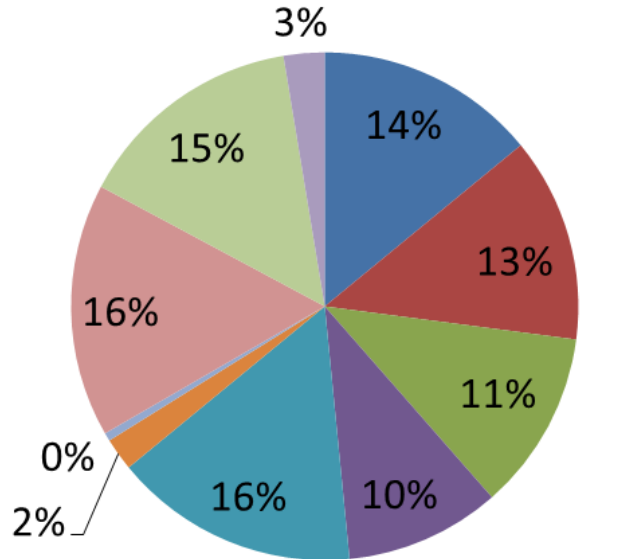
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France  
data

# Scientific production

# SCIENTIFIC OUTPUT (1/3)

Number of funded projects : **192**

Percentages of co-publications



- Mathematics
- Physics
- Marine / Earth / Planet Sciences
- Chemistry
- Biology and Health

- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy / Food Science / Environment / Biodiversity

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France  
data**

**Survey  
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# SCIENTIFIC OUTPUT (2/3)

**63%** of funded projects led to one co-publication at least  
**42%** of copublications include at least 1 PHD or PostDoc

|  | Number of funded projects by thematic area | Ratio of funded projects by thematic area | Number of co-publications | Ratio of co-publications by thematic area | Ratio of funded projects by thematic area that led to one co-publication at least | Mean number of co-publications per project |
|--|--|---|---------------------------|---|---|--|
| Mathematics  | 9  | 14%                                       | 6                         | 6%  | 44%   | 0,7  |
| Physics  | 9  | 14%                                       | 21                        | 21%                                       | 89%   | 2,3  |
| Marine / Earth / Planet Sciences                     | 7  | 11%                                       | 12                        | 12%                                       | 57%   | 1,7  |
| Chemistry  | 3  | 5%  | 9                         | 9%  | 67%   | 3,0  |
| Biology and Health                                   | 12   | 19%                                       | 28                        | 27%                                       | 75%   | 2,3  |
| Humanities   | 3  | 5%  | 5                         | 5%  | 100%  | 1,7  |
| Social Sciences                                      | 0  | 0%  | 0                         | 0%  | 0%  | 0,0  |
| Engineering Sciences                                 | 9  | 14%                                       | 7                         | 7%  | 33%   | 0,8  |
| Information Technology                               | 8  | 13%                                       | 8                         | 8%  | 63%   | 1,0  |
| Agronomy / Food Science / Environment / Biodiversity | 3  | 5%  | 6                         | 6%  | 67%   | 2,0  |
| <b>TOTAL</b>   | <b>63</b>                                  | <b>100%</b>                               | <b>102</b>                | <b>100%</b>                               | <b>63%</b>  | <b>1,6</b>                                 |

# SCIENTIFIC OUTPUT (3/3)

## Success story

### Publication prestigieuse dans Nature :

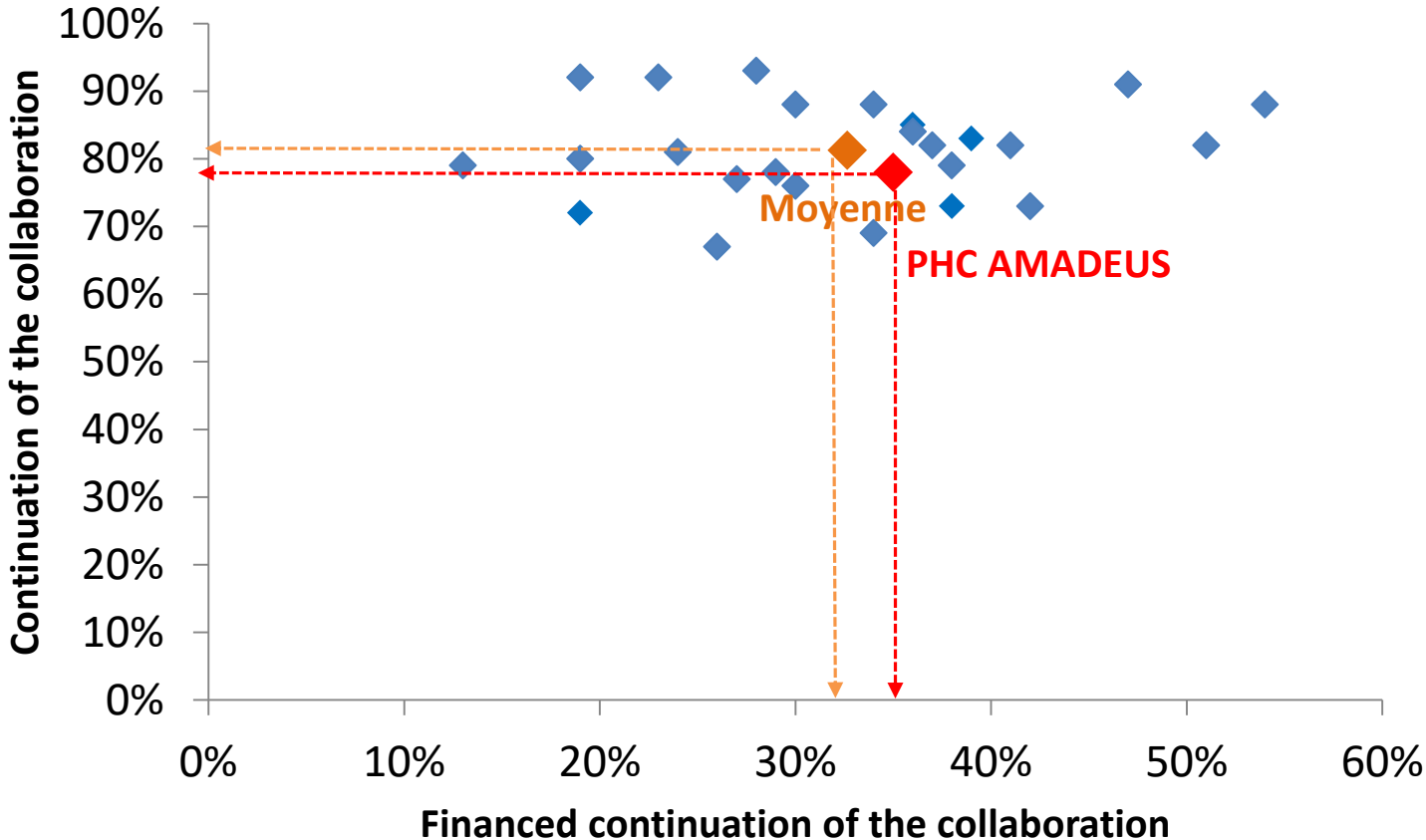
Hnri Godfrin (Directeur de recherche au CNRS : Institut Néel - UPR2940) - Intitulé du projet : ANR Internationale France-Autriche "HighQ-Fermions" ANR-2010-INTB-403-01 - DS : Physique -  
Référence de la publi : Proceedings of the 5th European Conference on Neutron Scattering Observation of a roton collective mode in a two-dimensional Fermi liquid Henri Godfrin, Matthias Meschke, Hans-Jochen Lauter, Ahmad Sultan, Helga M. Böhm, Eckhard Krotscheck and Martin Panholzer Nature 483, 576–579 (29 March 2012), doi:10.1038/nature10919 - **Facteur d'impact : 38**

# What happens after a PHC Amadeus project ?



# CONTINUATION OF THE COLLABORATION (1/5)

## (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



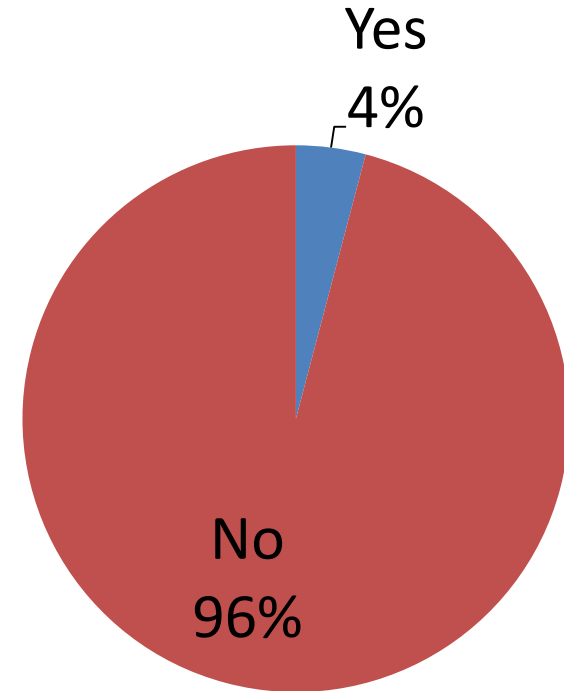
**Continuation of the collaboration : 78% vs 81% mean**  
**Continuation of the collaboration with other sources of subvention : 35% vs 33% mean**

# CONTINUATION OF THE COLLABORATION (3/4)

Has the program Amadeus led to the set-up of **joint structures**?

3 joint structures :

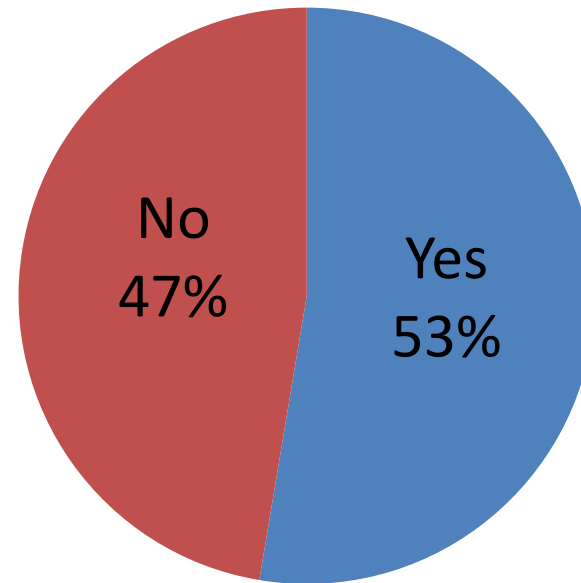
- Groupe de recherche clinique international sur la curiethérapie gynécologique: projet EMBRACE
- Consortium FRESCO de stratégie internationale sur l'écologie des foraminifères benthiques côtiers
- Conférence internationale Globe (cadre cluster des Dexa conferences) avec 5 Editions.



Survey data

# CONTINUATION OF THE COLLABORATION (4/4)

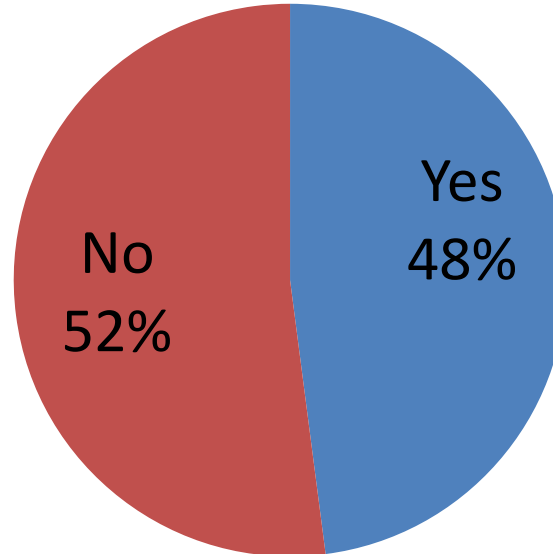
Has the French-Austrian collaboration involved new partners?



Survey data

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

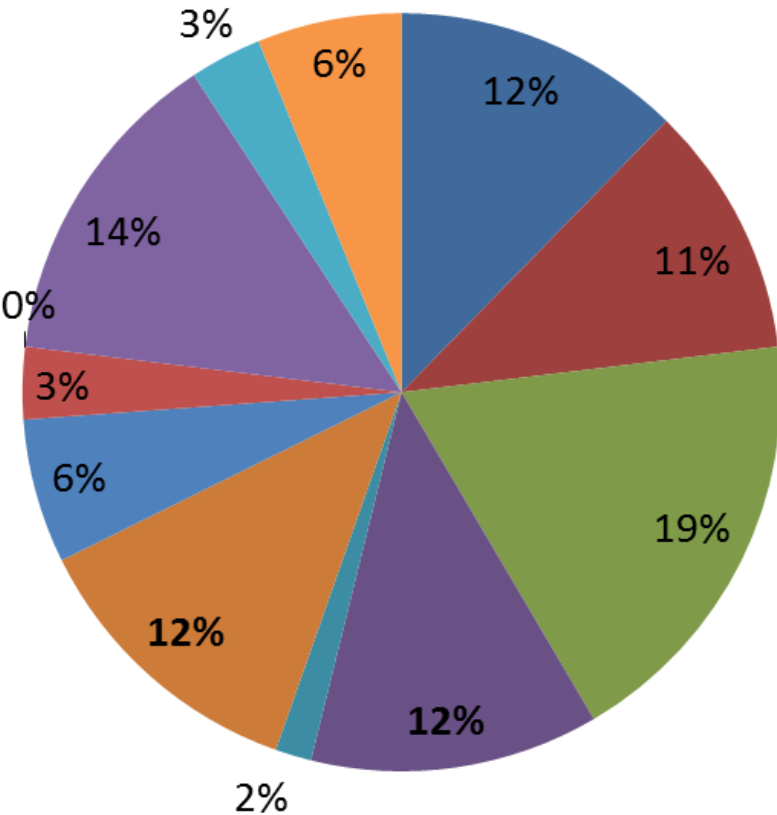
**% of young researchers whose career was impacted by the PHC program**



**Survey data**

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

## Type of impacts

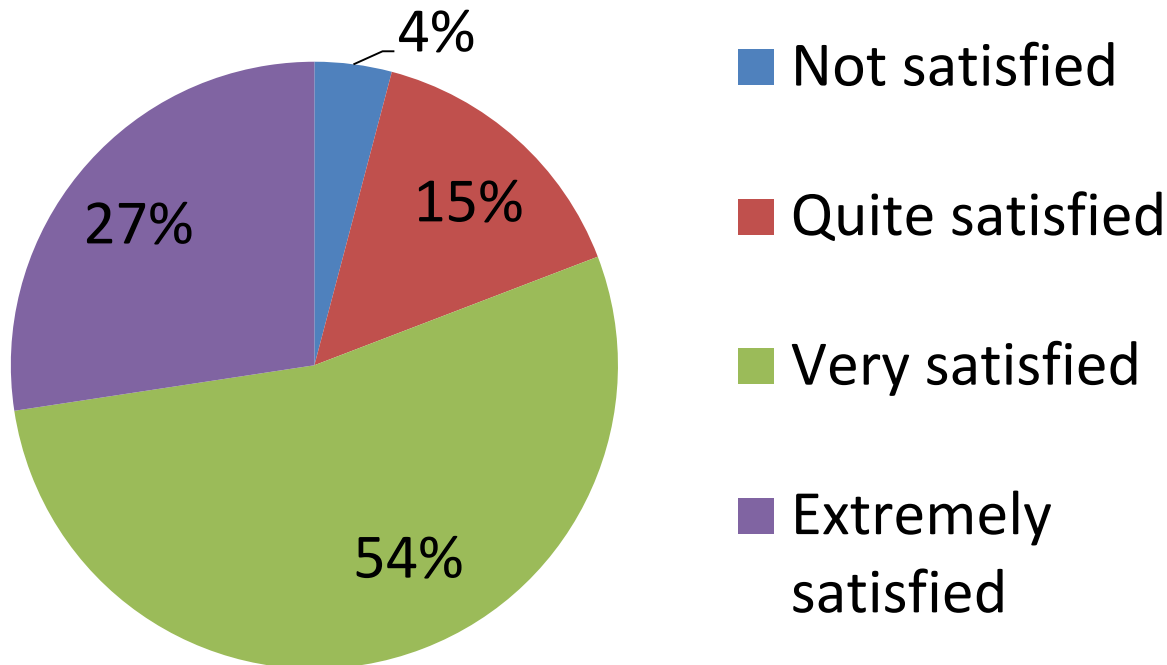


- Post PhD in France
- Post PhD in Hungary
- Post PhD in another country
- Teacher-researcher in France
- Teacher-researcher in Hungary
- Teacher-researcher in another country
- Researcher in a public research institution in France
- Researcher in a public research institution in Hungary
- Researcher in a 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 Hungary
- Employed in a private company in link with the field of Higher Education-Research in another country

**Survey data**

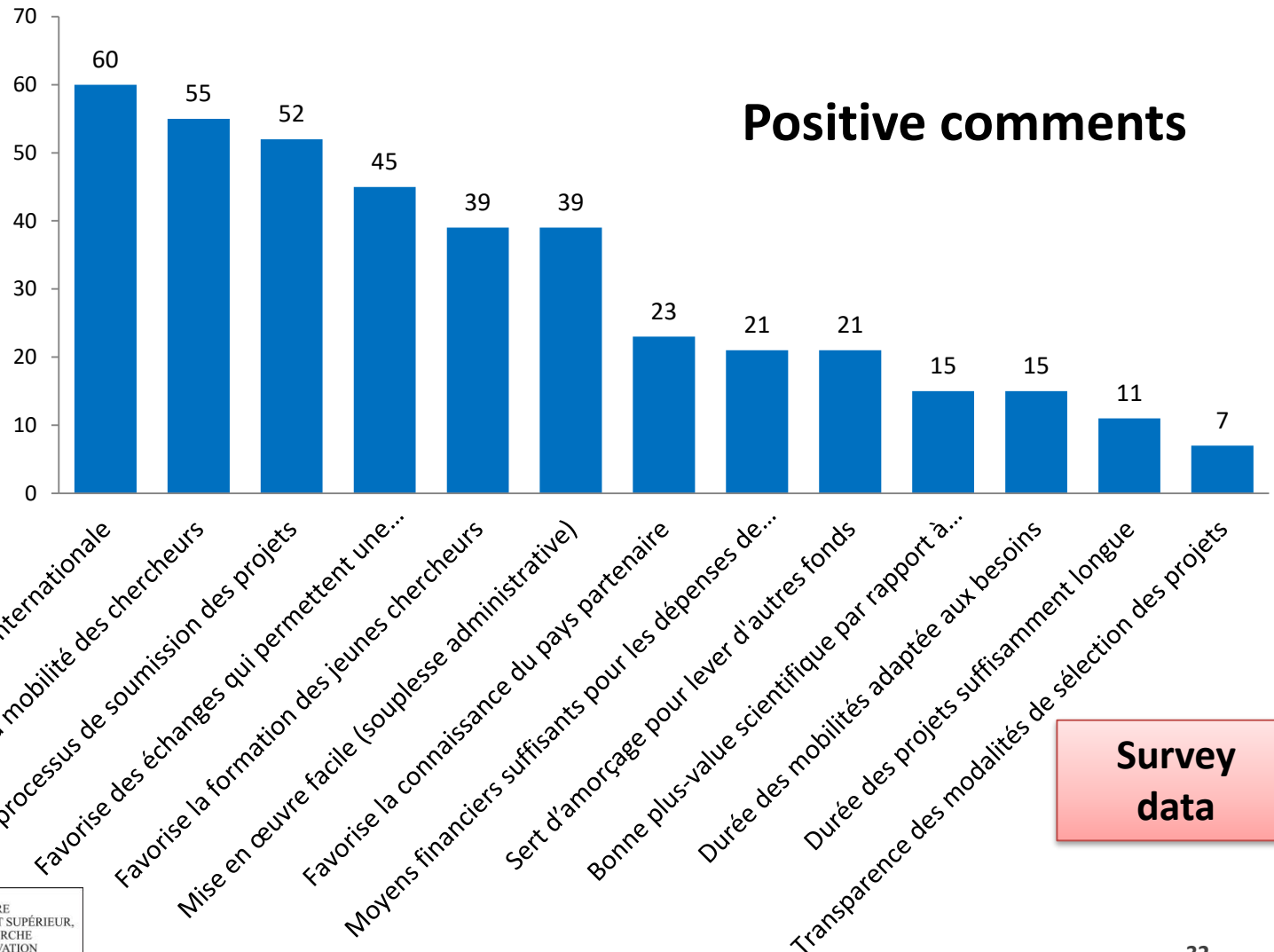
# GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (1/3)

**96%** of French principal investigators are satisfied



Survey data

# GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (2/3)



Favorise une collaboration scientifique internationale

Favorise la mobilité des chercheurs

Simplicité du processus de soumission des projets

Favorise des échanges qui permettent une...

Favorise la formation des jeunes chercheurs

Mise en œuvre facile (souplesse administrative)

Favorise la connaissance du pays partenaire

Moyens financiers suffisants pour les dépenses de...

Sert d'amorçage pour lever d'autres fonds

Bonne plus-value scientifique par rapport à...

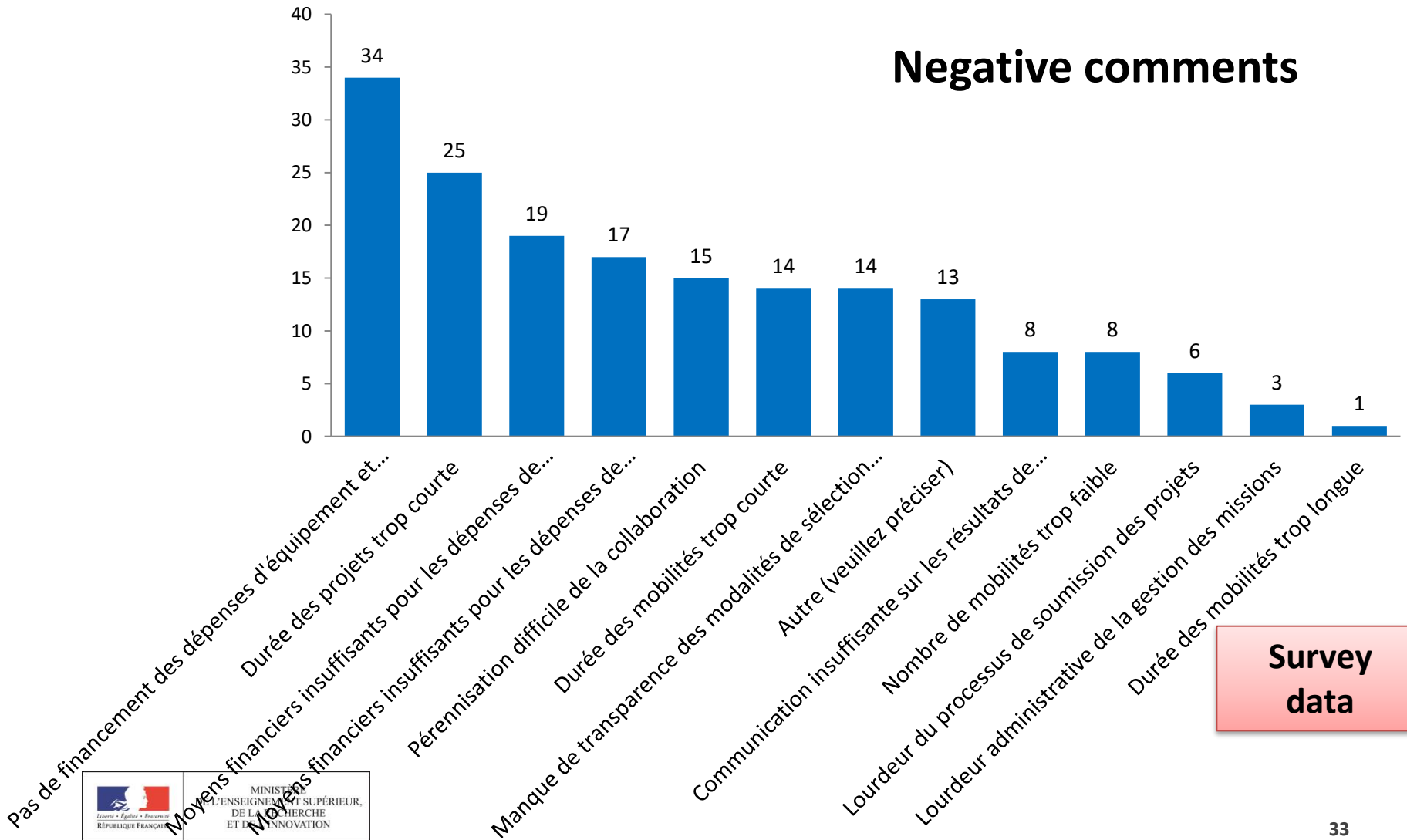
Durée des mobilités adaptée aux besoins

Durée des projets suffisamment longue

Transparence des modalités de sélection des projets



# GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (3/3)





# 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”.

- + 34 % of French PIs are young researchers**
- + 96% of French principal investigators are satisfied**
- only 42% of copublications include at least 1 PHD or PostDoc**
- Only 1,6 mean number of co-publications per project**
- Average selection rate from 2005-2016 : 51 %**
- only 65 % of projects involve at least one PhD student**
- only 4% of joint structures setting-up of after the projects**

# PRELIMINARY RECOMMENDATIONS

## RECOMMENDATIONS

- Aim an average 30% success rate
- Promote involvement of young researchers
- Promote scientific co-publications (37% of projects with no co-publications ; 1,6 mean number of co-publications per project)
- Promote co-publications by young researchers (58% of co-publications are done without any young researcher)
- Promote the set-up of joint structures

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

## **Contacts**

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**frederic.tinland@recherche.gouv.fr**