

**FRANCE – HUNGARY
PHC BALATON - 25th ANNIVERSARY**

Scientific impact of the program (2005-2017)

MESRI-DAEI / MEAE

2018

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

GENERAL PRESENTATION OF THE PROGRAMME

Creation : 1993

Total budget (France + Hungary) : around 100 000 € / year

>> including budget from the French part : 50 000 € / year *

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

Number of new funded projects per year : around 11 since 2013, around 21 between 2005 and 2012

From 2005-2016 :

474 applications submitted

216 projects funded

DATA SOURCES

Campus France

- Informations about the PHC Balaton program applications
- List of mobilities (from France to Hungary)

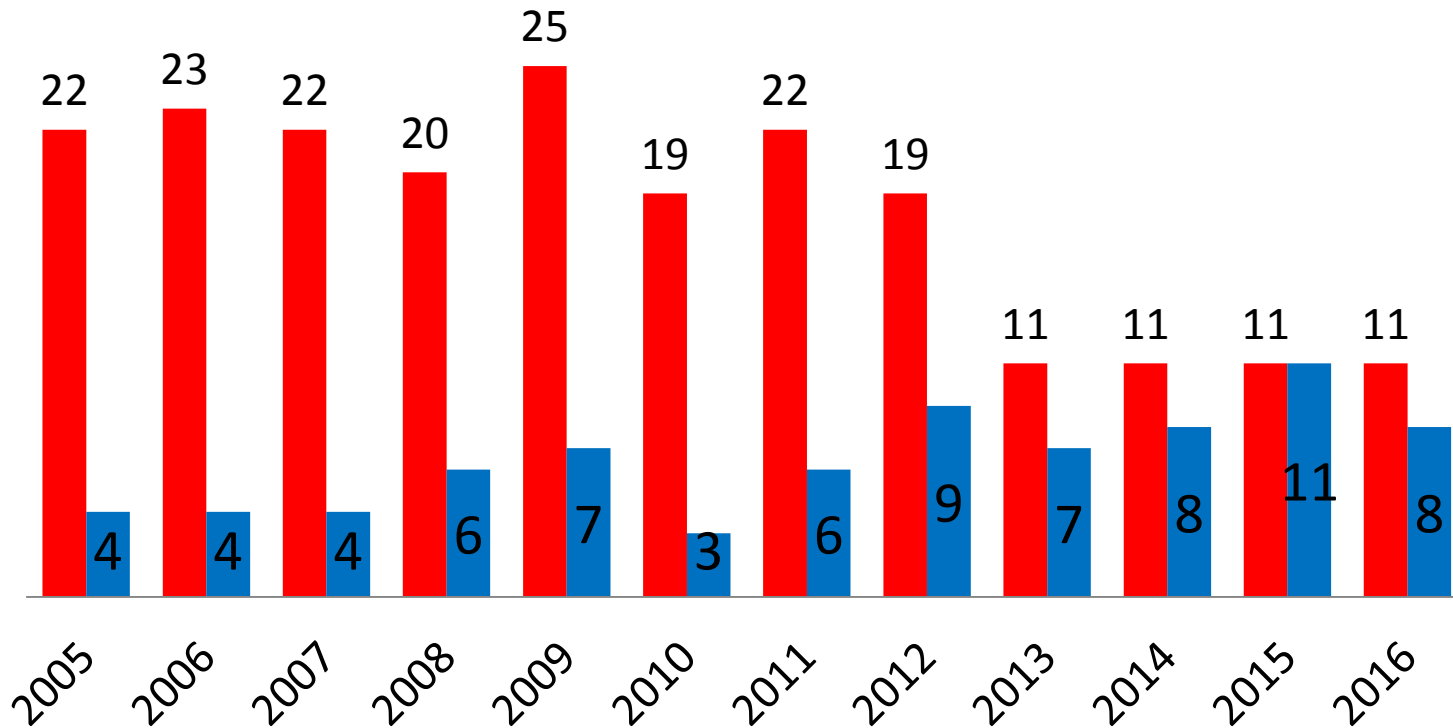
Survey *(conducted by the French Ministry of Higher Education, Research and Innovation and Ministry for Europe and Foreign Affairs)*

- Target : Principal Investigators of selected projects between 2005 and 2016
- Survey **duration** : **6 weeks between June and July 2018**
- **36%** response ratio *(77 respondents for 216 funded projects)*


ANSWERS TO THE SURVEY

Average response rate to the survey : **36 % (77 answers)**

- Number of funded projects
- Number of survey answers



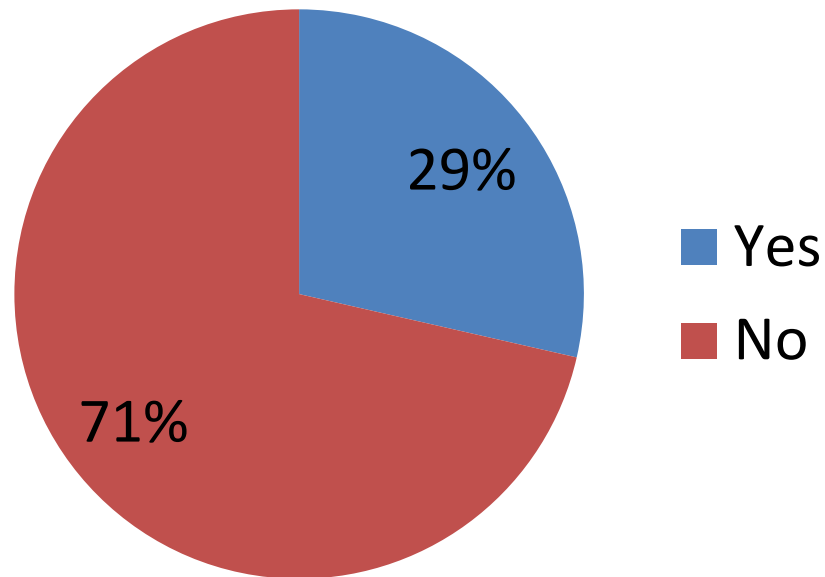
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2005-2017 KEY POINTS

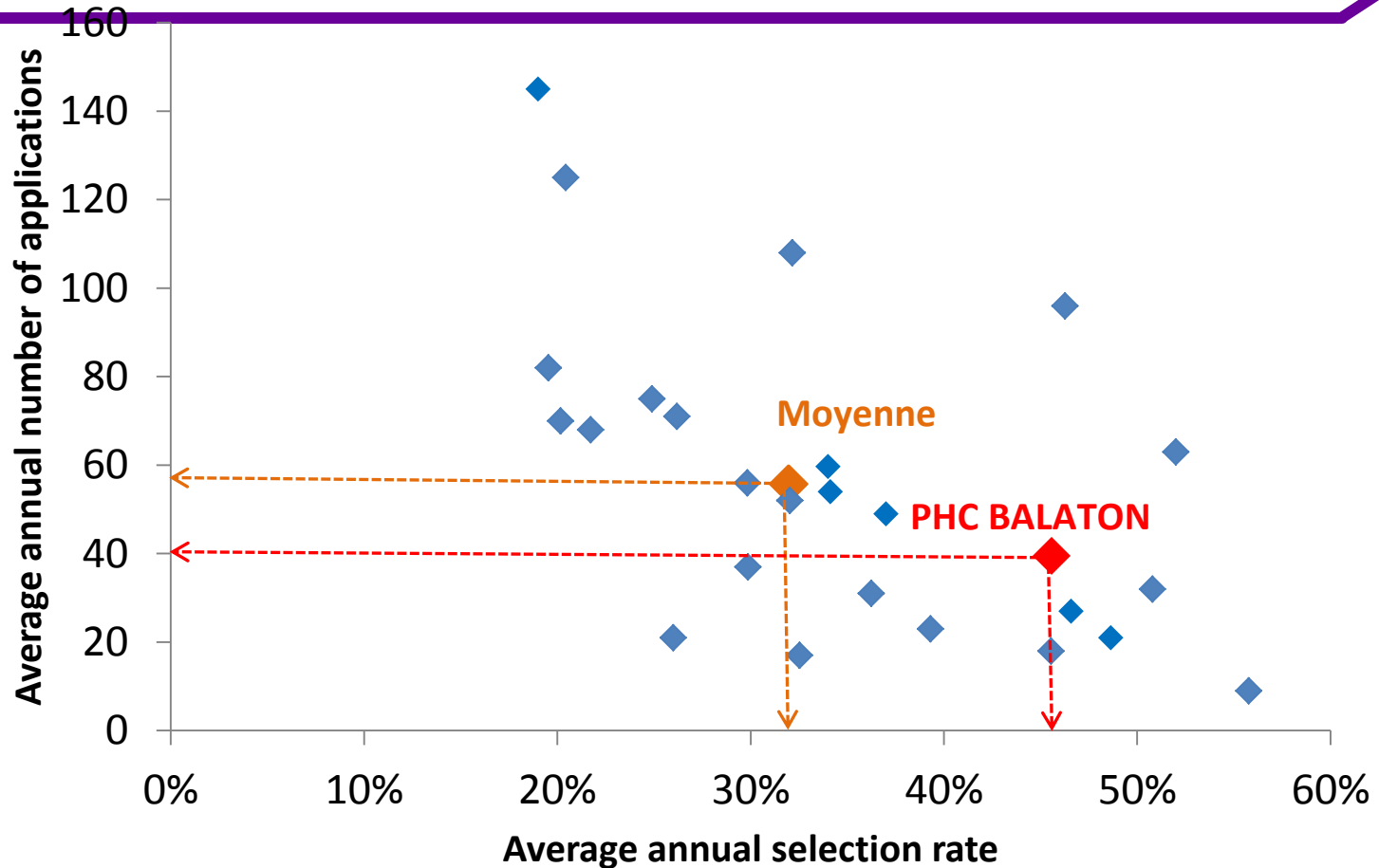
BEFORE PHC BALATON PROJECT

Have you ever worked with this Hungarian partner?



Survey data

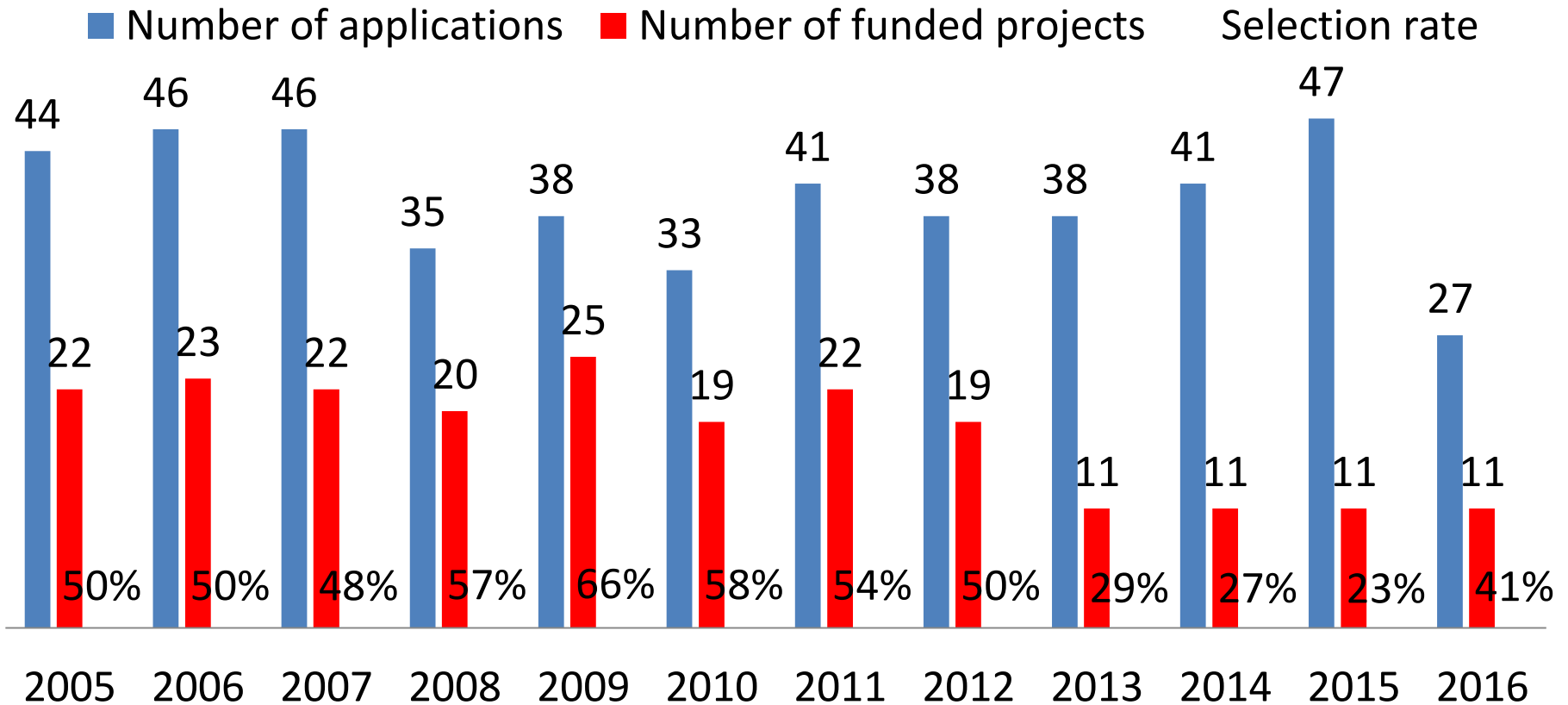
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



Average selection rate for 2005-2017 : 46% vs 32% mean
Average number of applications 2005-2017 : 40 vs 56 mean

NUMBER OF APPLICATIONS AND SELECTION RATE

Average selection rate from 2005-2016: **46 %**

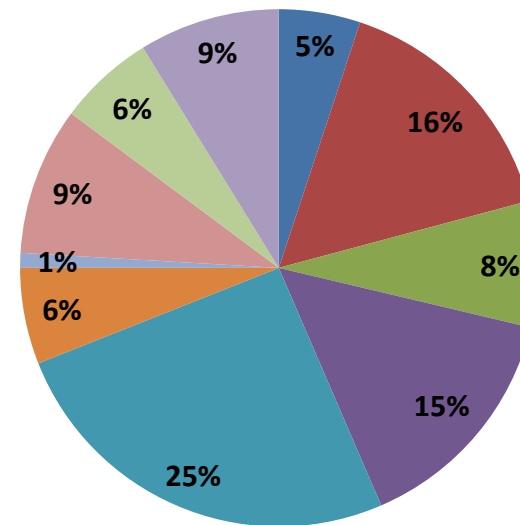
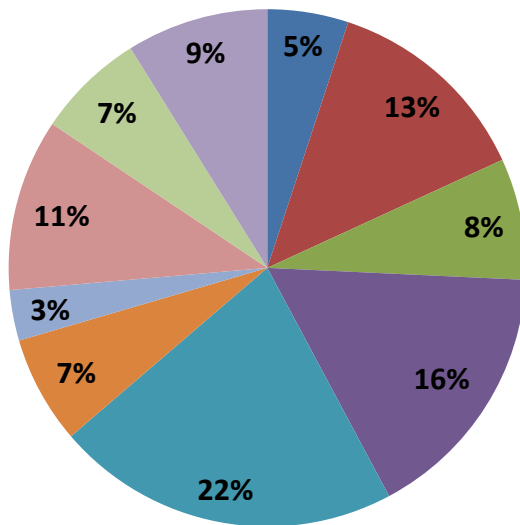


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SCIENTIFIC DOMAINS OF PROJECTS

Number of applications : **474**

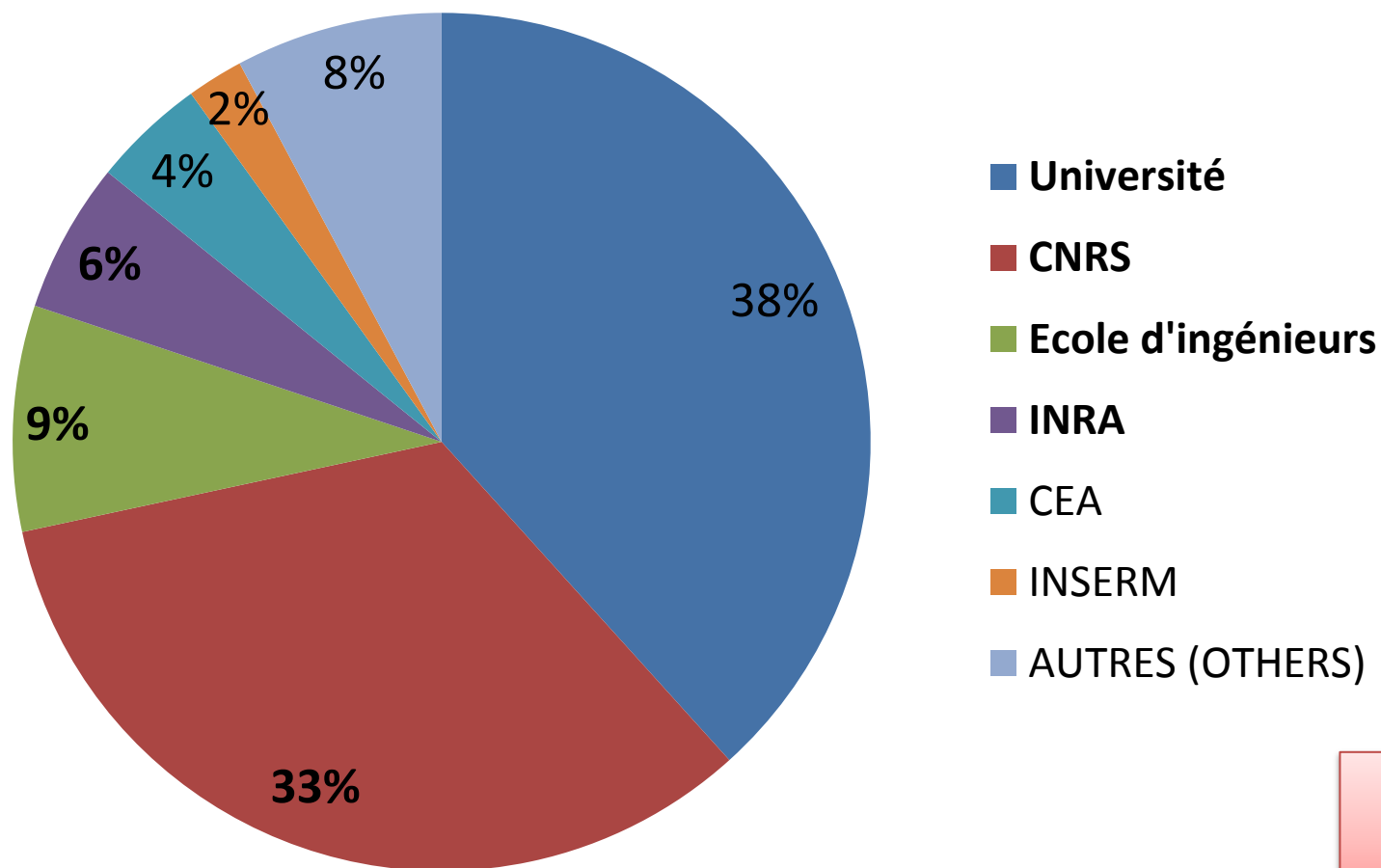
Number of funded projects : **216**



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

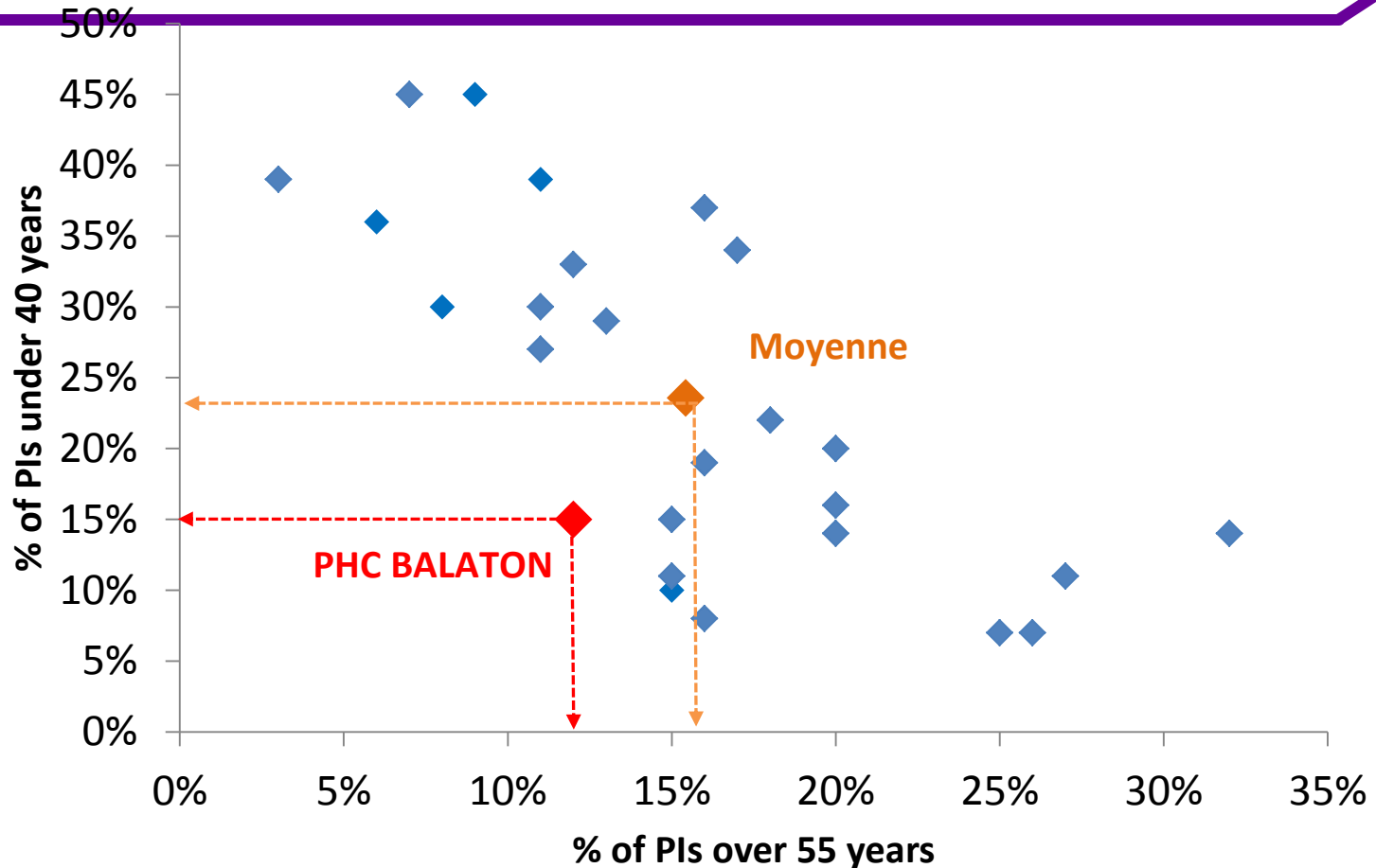
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FRENCH PARTICIPATING INSTITUTIONS



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



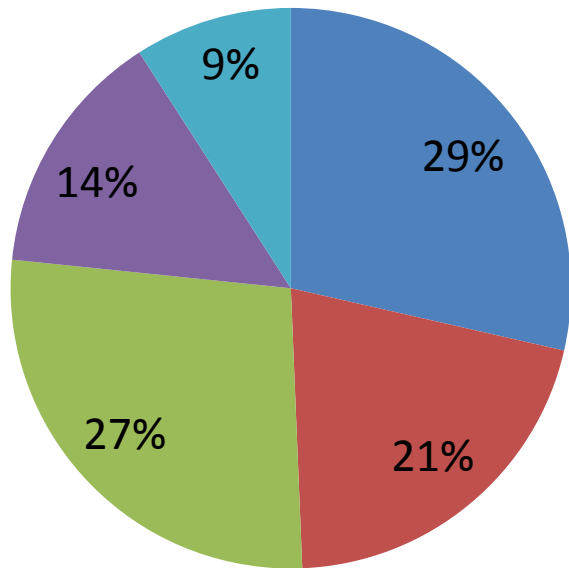
PIs under 40 years : **15% vs 24% mean**

PIs over 55 years : **12% vs 15% mean**

73% of the PIs are between 40 and 55 years

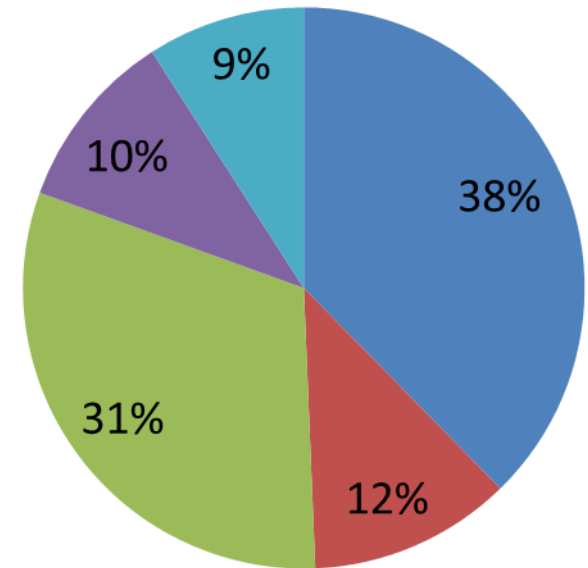
FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

Previous professional status
(at the beginning of the project)



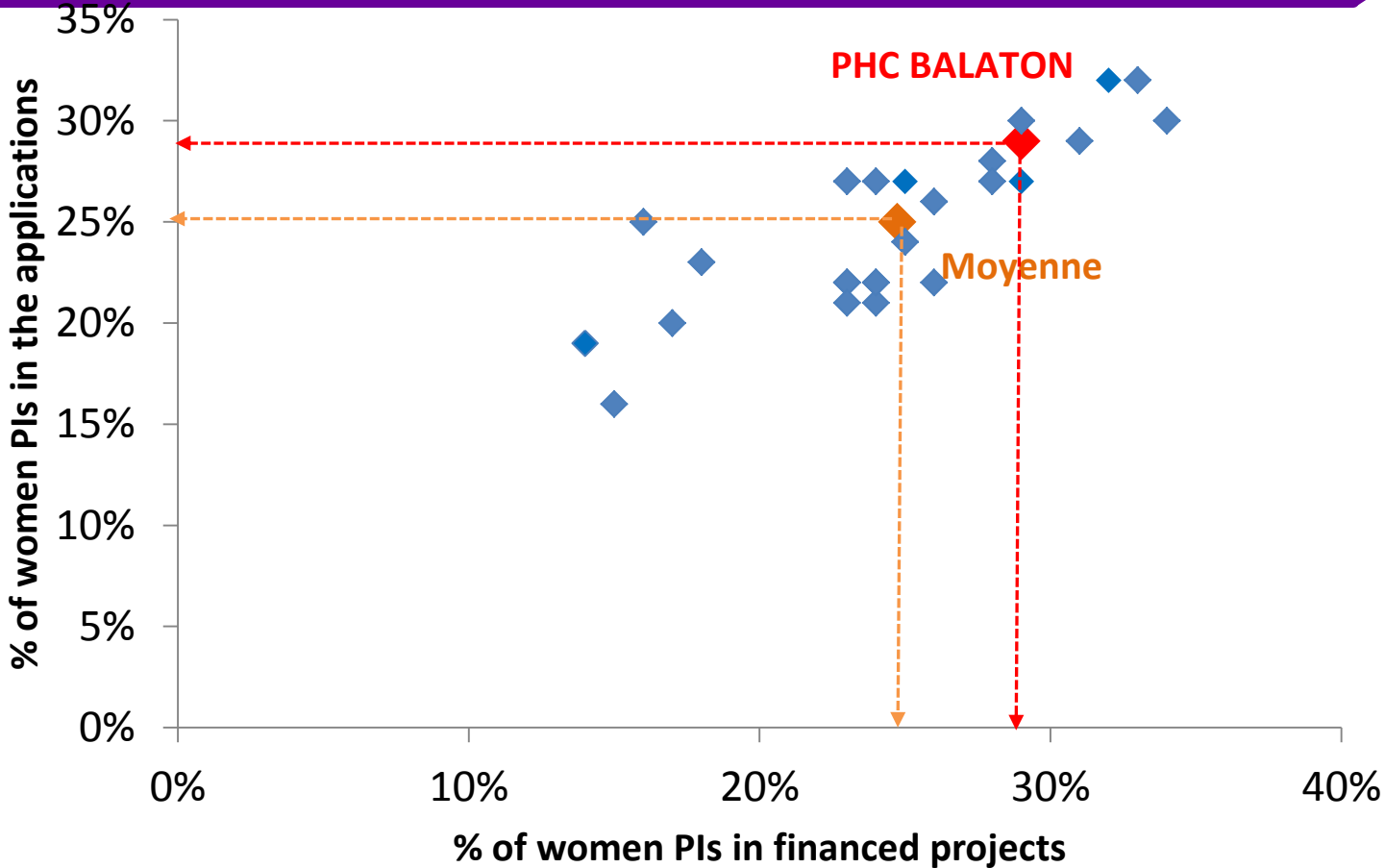
Current professional status

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



Survey data

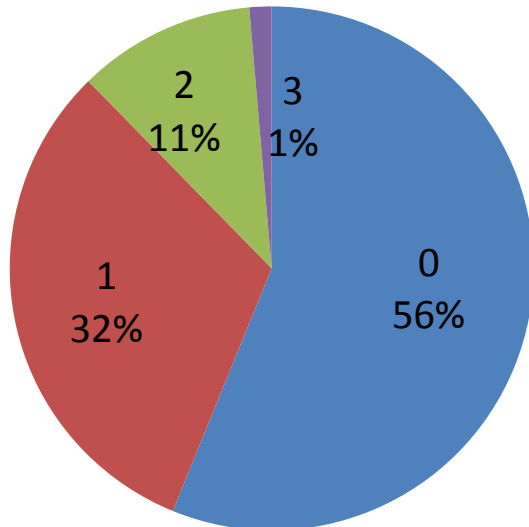
IMPLICATION OF WOMEN (FRANCE) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



% of women PIs in the applications : 30% vs 25% mean
% of women PIs in the selected projects : 29% vs 25% mean

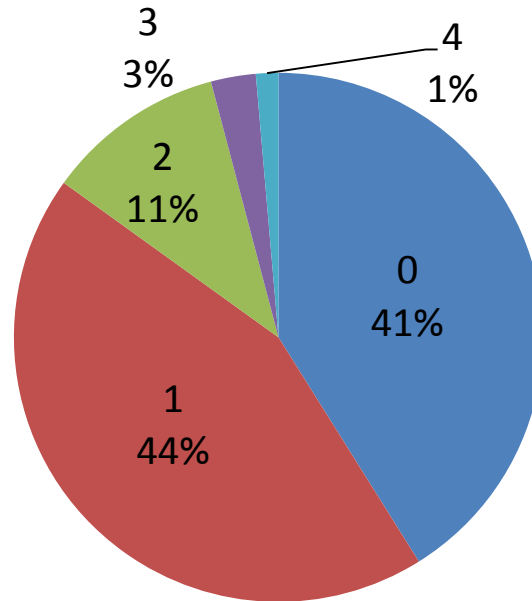
PARTICIPATION OF YOUNG RESEARCHERS

Number of Master degree students



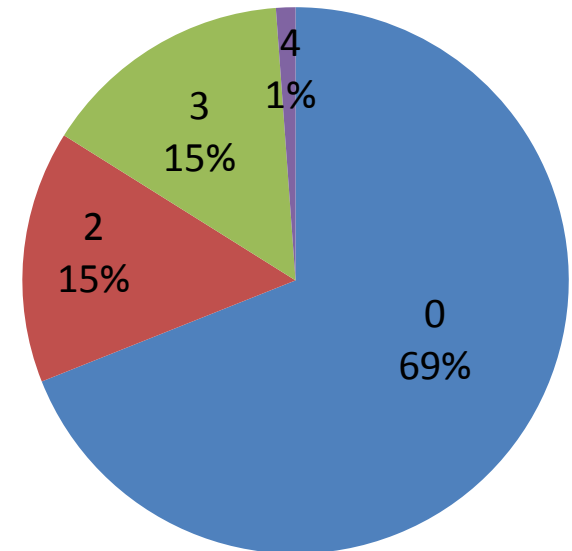
44 % of projects involve at least 1 Master degree student

Number of PhD students



59 % of projects involve at least one PhD student

Number of post-doctoral researchers

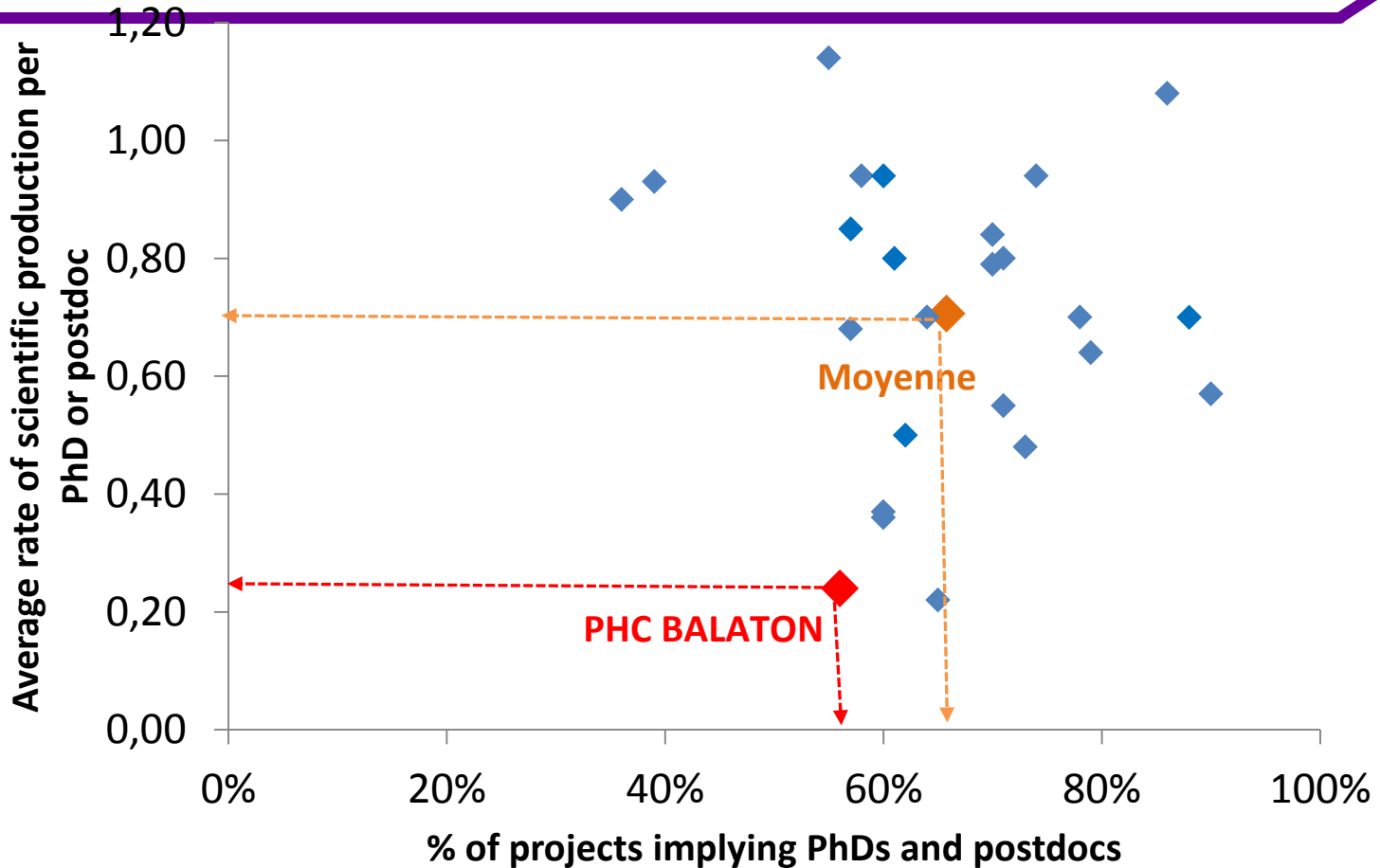


31 % of projects involves at least 1 post-doctoral researcher

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IMPLICATION OF PhDs

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)

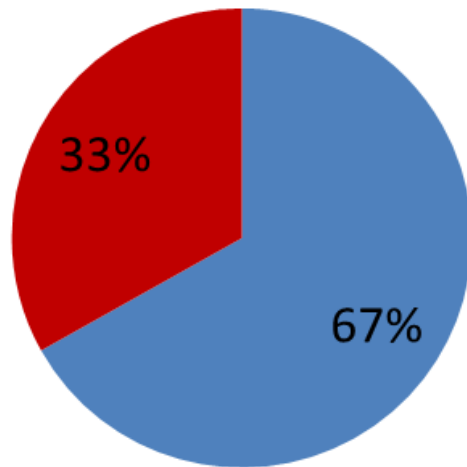


% of projects implying PhDs and Post-doc : 56% vs 66% mean
Average rate of scientific production per PhD : 0,24 vs 0,71 mean

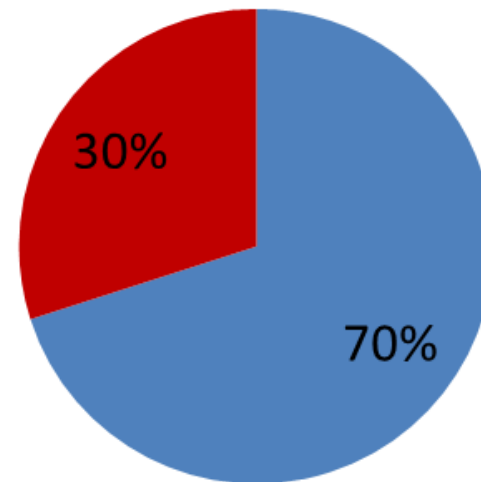
Mobility

MOBILITY : GENDER DISTRIBUTION

France → Hungary



Hungary → France

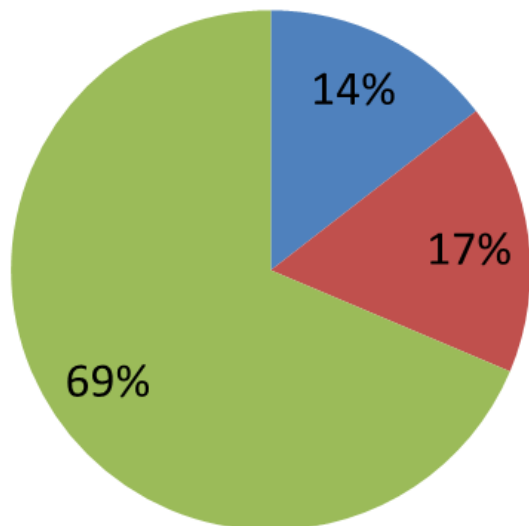


■ Men ■ Women

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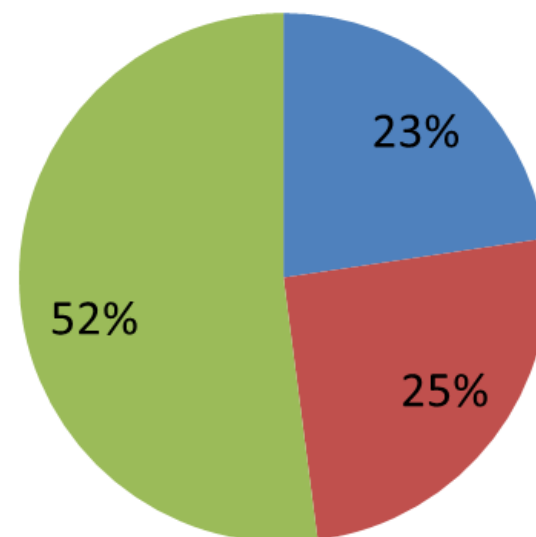
MOBILITY : STATUS

France → Hungary



- carried out by PhD students (<28 years old)
- carried out by post-doctoral researchers (28<=age<=35 years old)
- carried out by permanent researchers (>35 years old)

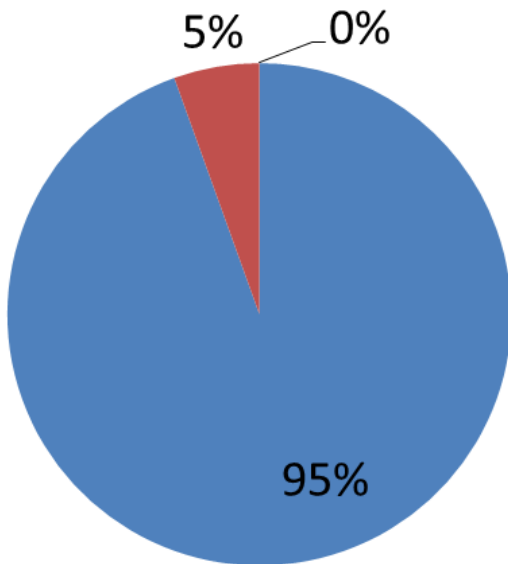
Hungary → France



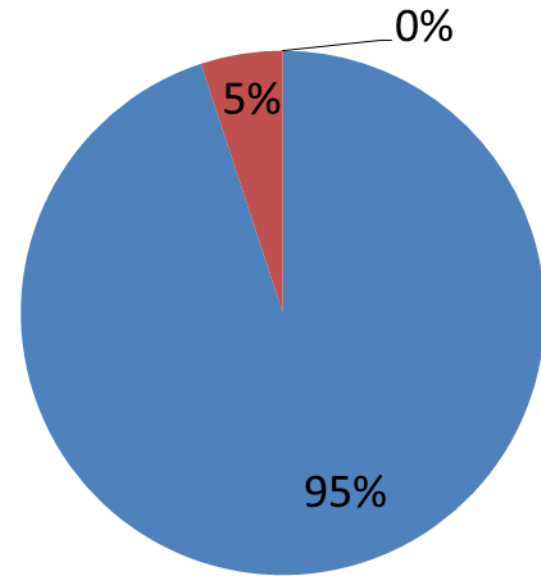
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MOBILITY : DURATION

France → Hungary



Hungary → France



- < 15 days
- between 15 days and 3 months
- > 3 months

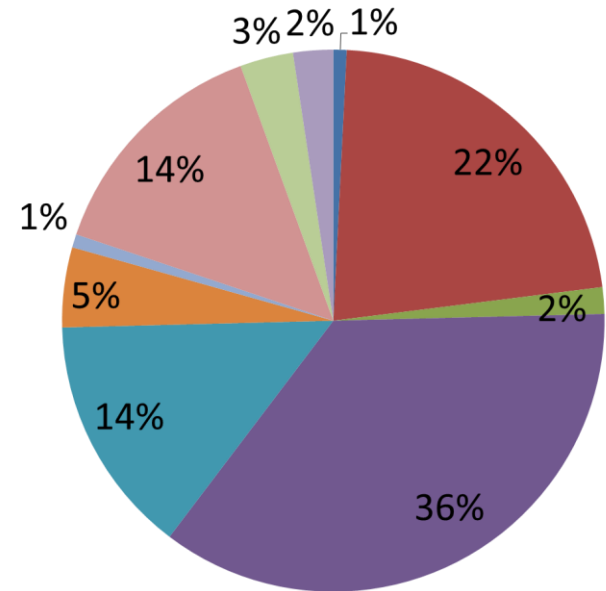
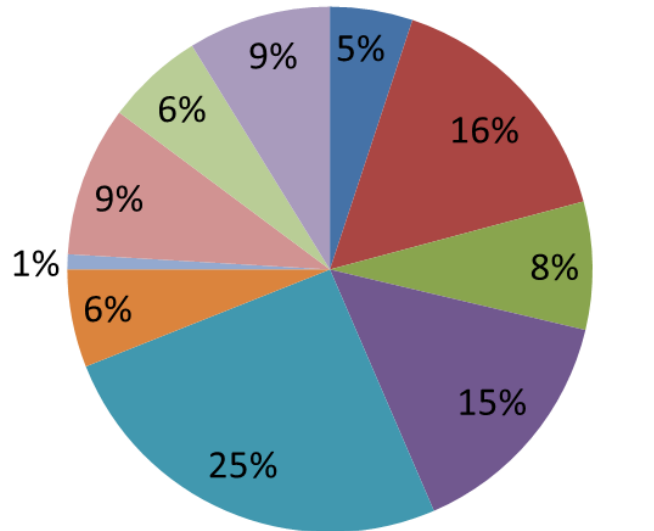
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Scientific production

SCIENTIFIC OUTPUT (1/2)

Number of funded projects : **216**

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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SCIENTIFIC OUTPUT (2/2)

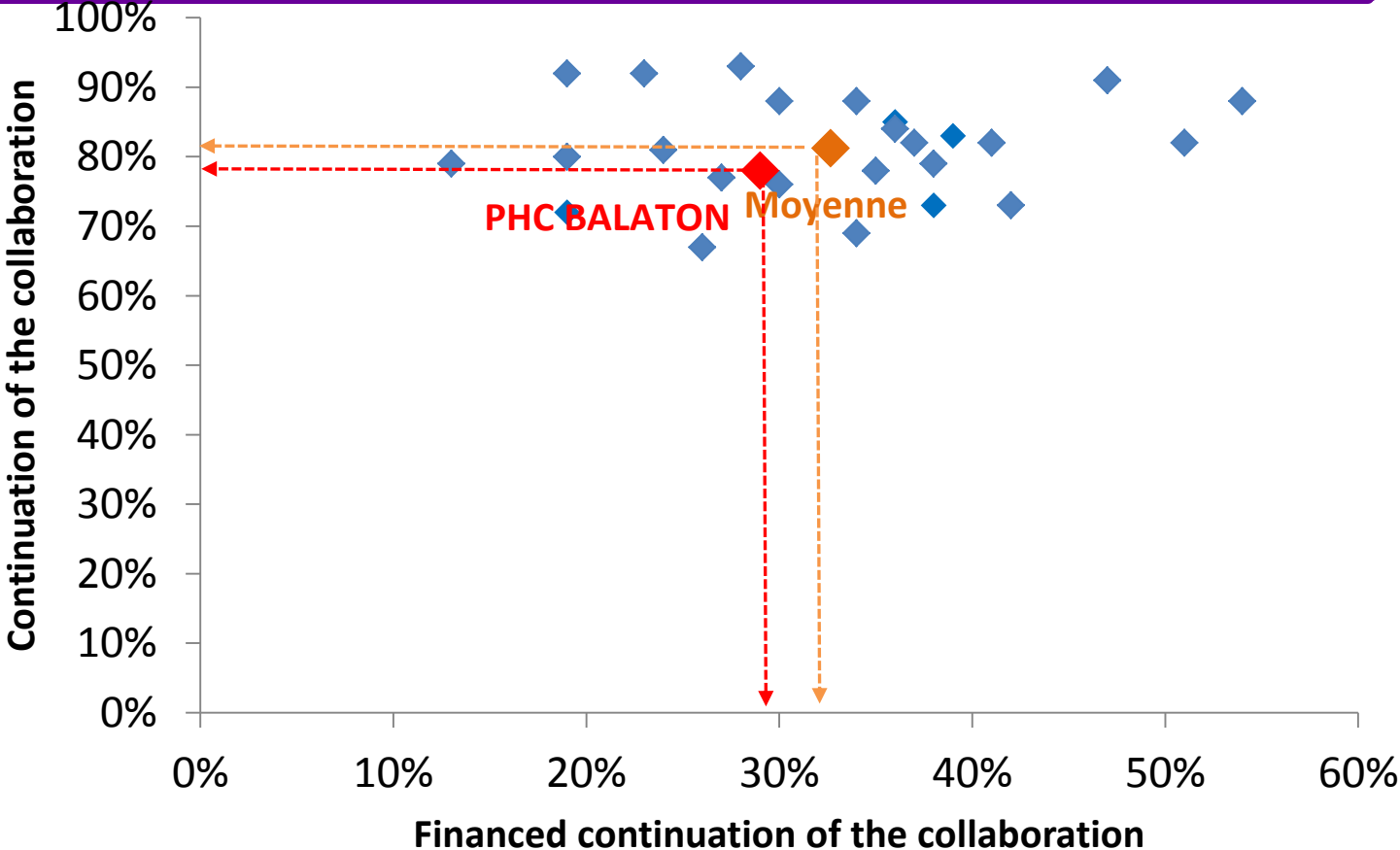
52% of funded projects led to one co-publication at least
25% of copublications include at least 1 PHD or PostDoc

	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	3	4%	1	1%	33%	0,3
Physics	10	14%	28	22%	80%	2,8
Marine / Earth / Planet Sciences	3	4%	2	2%	33%	0,7
Chemistry	14	20%	45	36%	64%	3,2
Biology and Health	15	22%	18	14%	53%	1,2
Humanities	5	7%	6	5%	20%	1,2
Social Sciences	3	4%	1	1%	33%	0,3
Engineering Sciences	5	7%	18	14%	60%	3,6
Information Technology	4	6%	4	3%	25%	1,0
Agronomy / Food Science / Environment / Biodiversity	7	10%	3	2%	43%	0,4
TOTAL	69	100%	126	100%	52%	1,8

Survey data

What happens after a PHC Balaton project ?

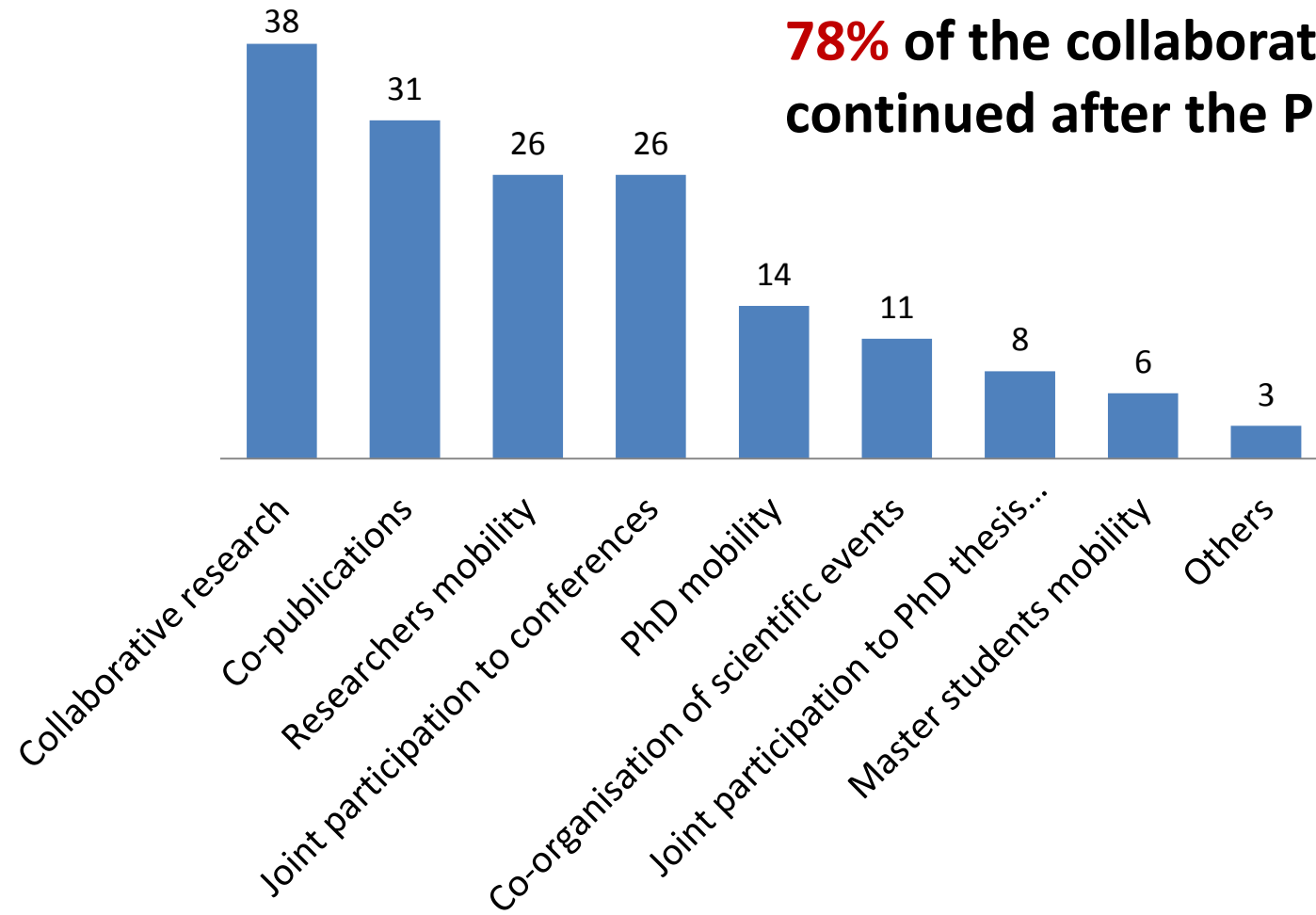
CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration : 78% vs 81% mean
Continuation of the collaboration with other sources of subvention : 29% vs 33% mean

CONTINUATION OF THE COLLABORATION (2/5)

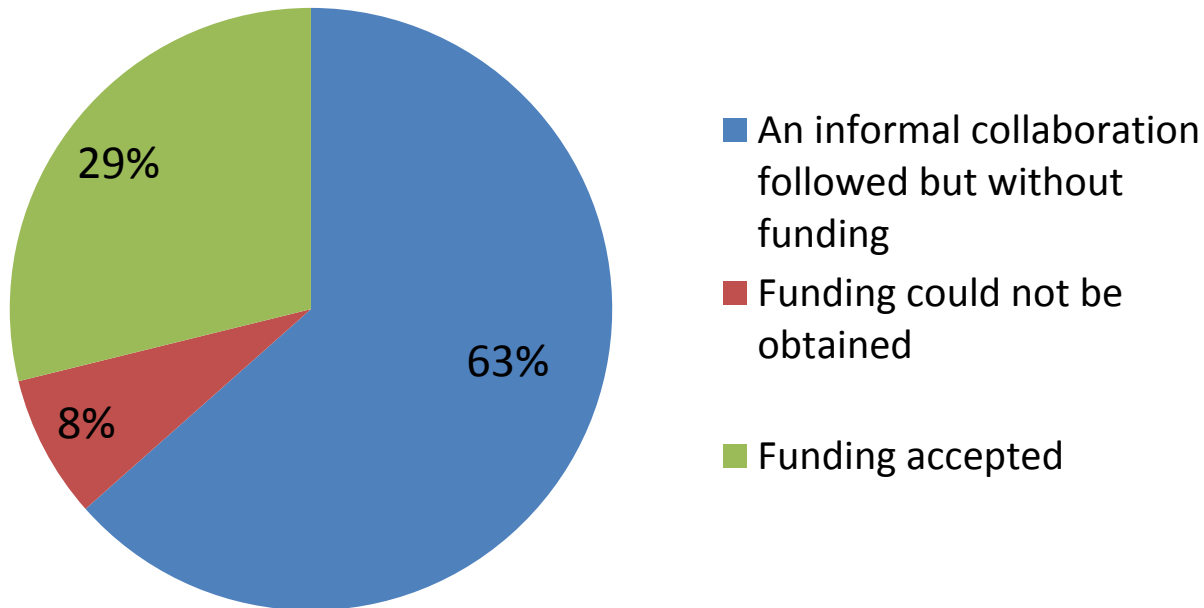
78% of the collaborations continued after the PHC



Survey data

CONTINUATION OF THE COLLABORATION (3/5)

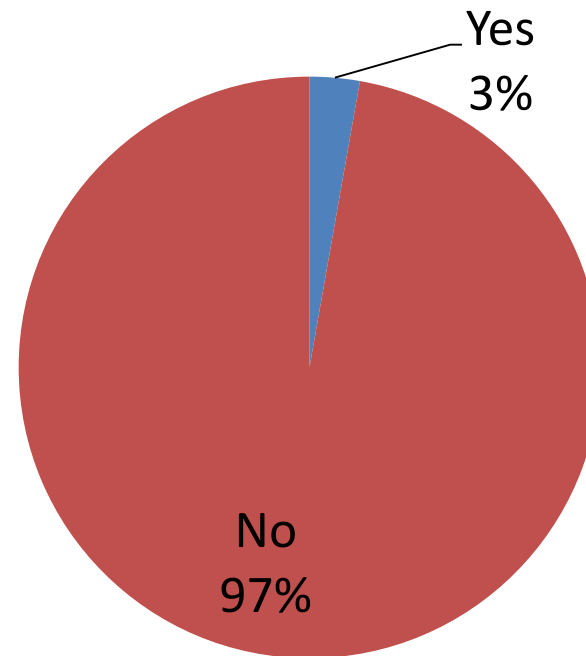
29% of funded collaborations after the PHC



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CONTINUATION OF THE COLLABORATION (4/5)

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

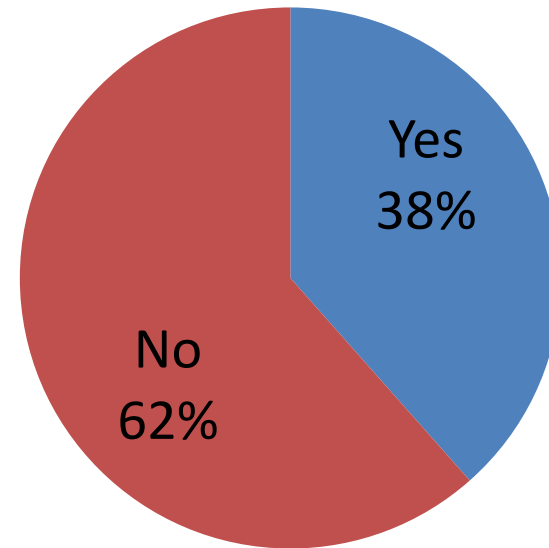


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1 CNRS / LIA (international associated laboratory)
1 CNRS / International research network (IRN ex GDRI)

CONTINUATION OF THE COLLABORATION (5/5)

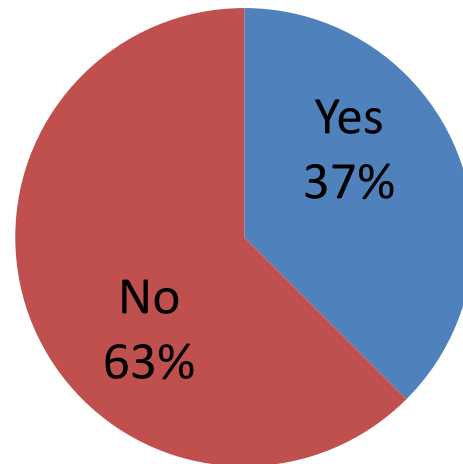
Has the French-Hungarian collaboration involved new partners?



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IMPACT ON YOUNG RESEARCHERS' CAREER (1/2)

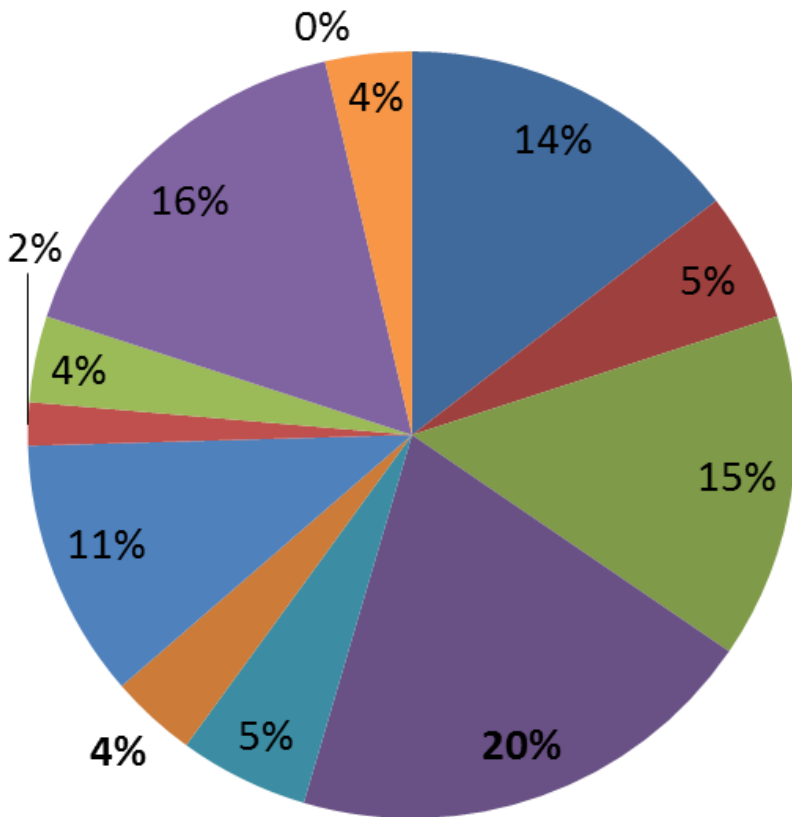
% of young researchers whose career was impacted by the PHC program



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IMPACT ON YOUNG RESEARCHERS' CAREER (2/2)

Type of impacts

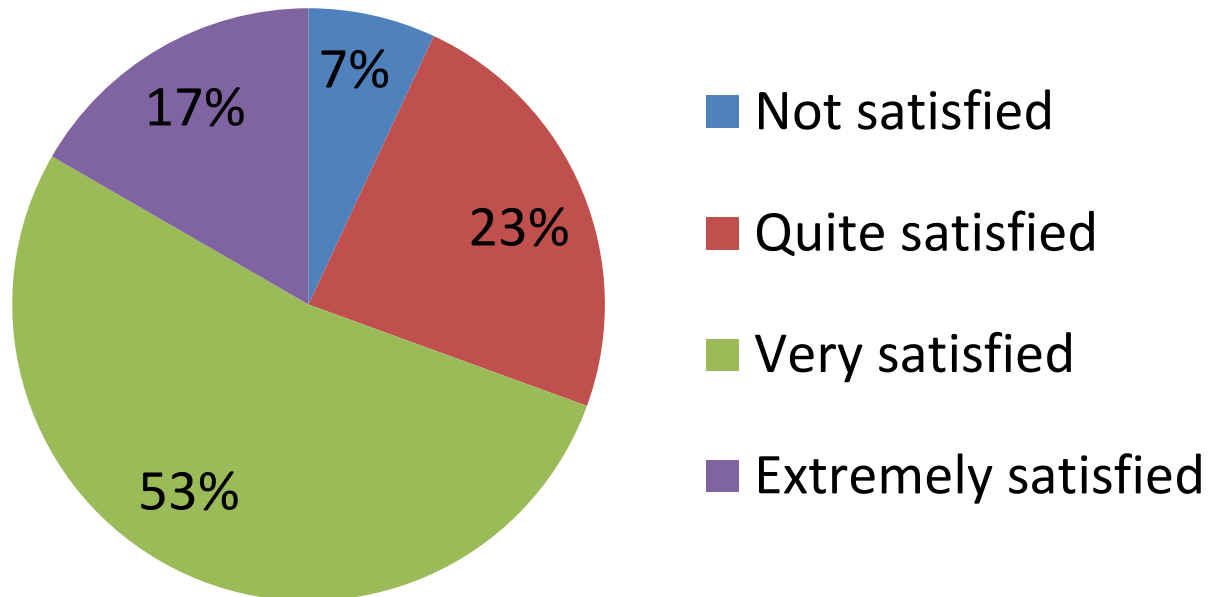


- Post PhD in France
- Post PhD in Hungary
- Post PhD in another country
- Teacher-researcher in France
- Teacher-researcher in Hungary
- Teacher-researcher in another country
- Researcher in a public research institution in France
- Researcher in a public research institution in Hungary
- Researcher 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

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GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

93% of French principal investigators are satisfied



Survey data

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”. Involvement of young researchers and co-publication rate could be improved.

PRELIMINARY RECOMMENDATIONS

- **Promote scientific co-publications (48% of projects with no co-publications)**
- **Promote young French PIs (15 % of young researchers)**
- **Promote PHD students involvement (59 %)**
- **Promote project selection in Social Science domain (13% Success rate)**
- **Promote the set-up of joint structures**
- **Thoughts about new schemes for collaboration sustainability**

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.

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