

**FRANCE – UKRAINE
PHC DNIPRO
Scientific impact of the program (2005-2015)**

MESRI-DAEI / MEAE

2019

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

GENERAL PRESENTATION OF THE PROGRAMME

Creation :

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

Total budget 2019-2020 (France + Ukraine) : around 80 000 € /year

>> including budget from the French part (MEAE) : ~30 000 € / year

>> including budget from the Ukrainian part : ~50 000 € / year

Average budget per project (France + Ukraine) : ~3 000 € / year

From 2005-2015 (6 calls for offer) :

Number of new projects submitted every two years : around 71

424 applications submitted

111 projects funded

DATA SOURCES

Campus France

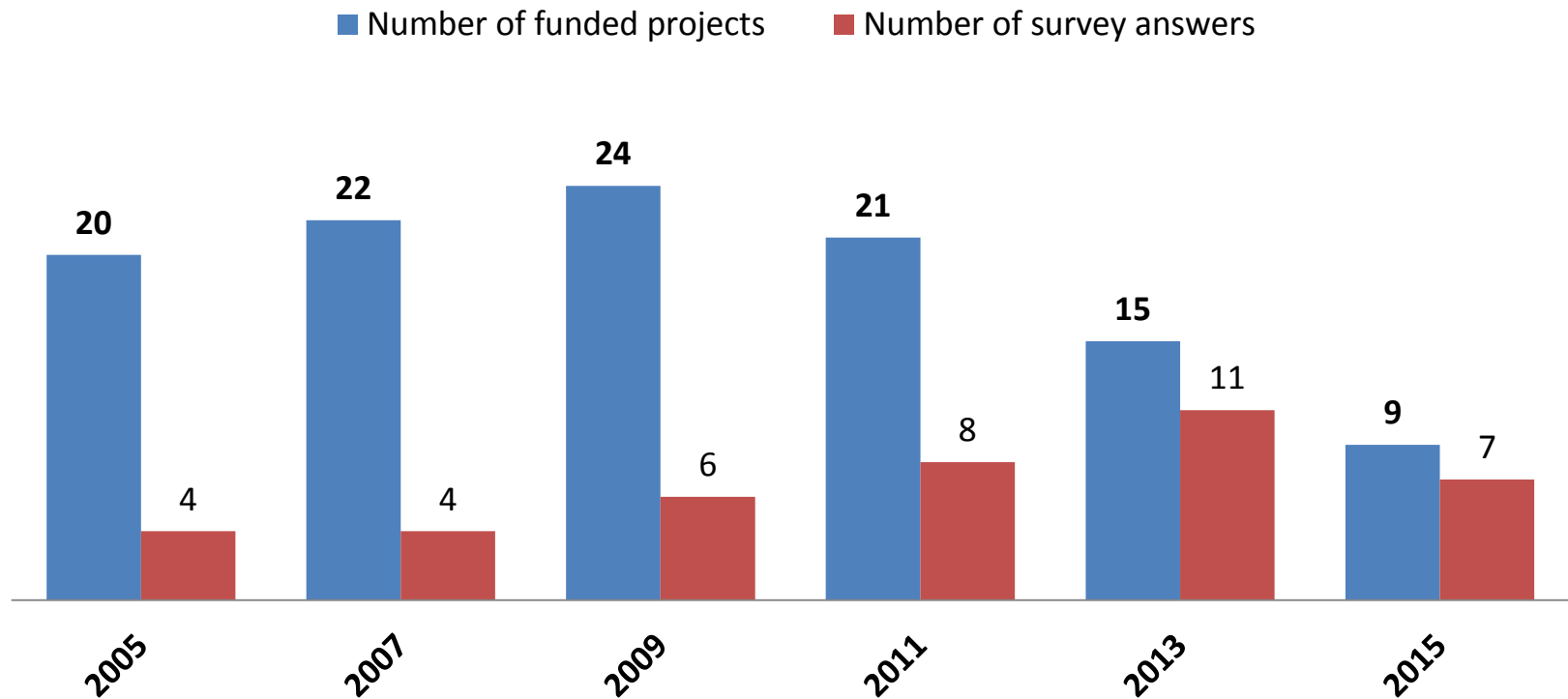
- Information about the PHC Dnipro program applications
- List of mobilities (from France to Ukraine)

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

- Target : French Principal Investigators of selected projects between 2005 and 2015
- Survey **duration** : **from November 2016 to January 2017**
- **36%** response ratio *(40 respondents for 111 funded projects)*

ANSWERS TO THE SURVEY

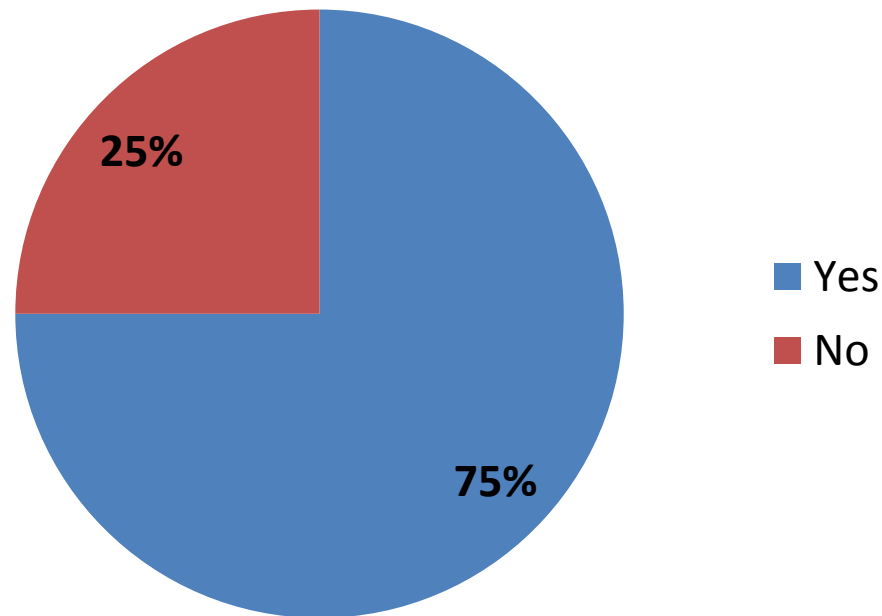
Average response rate to the survey : **36 % (40 answers)**



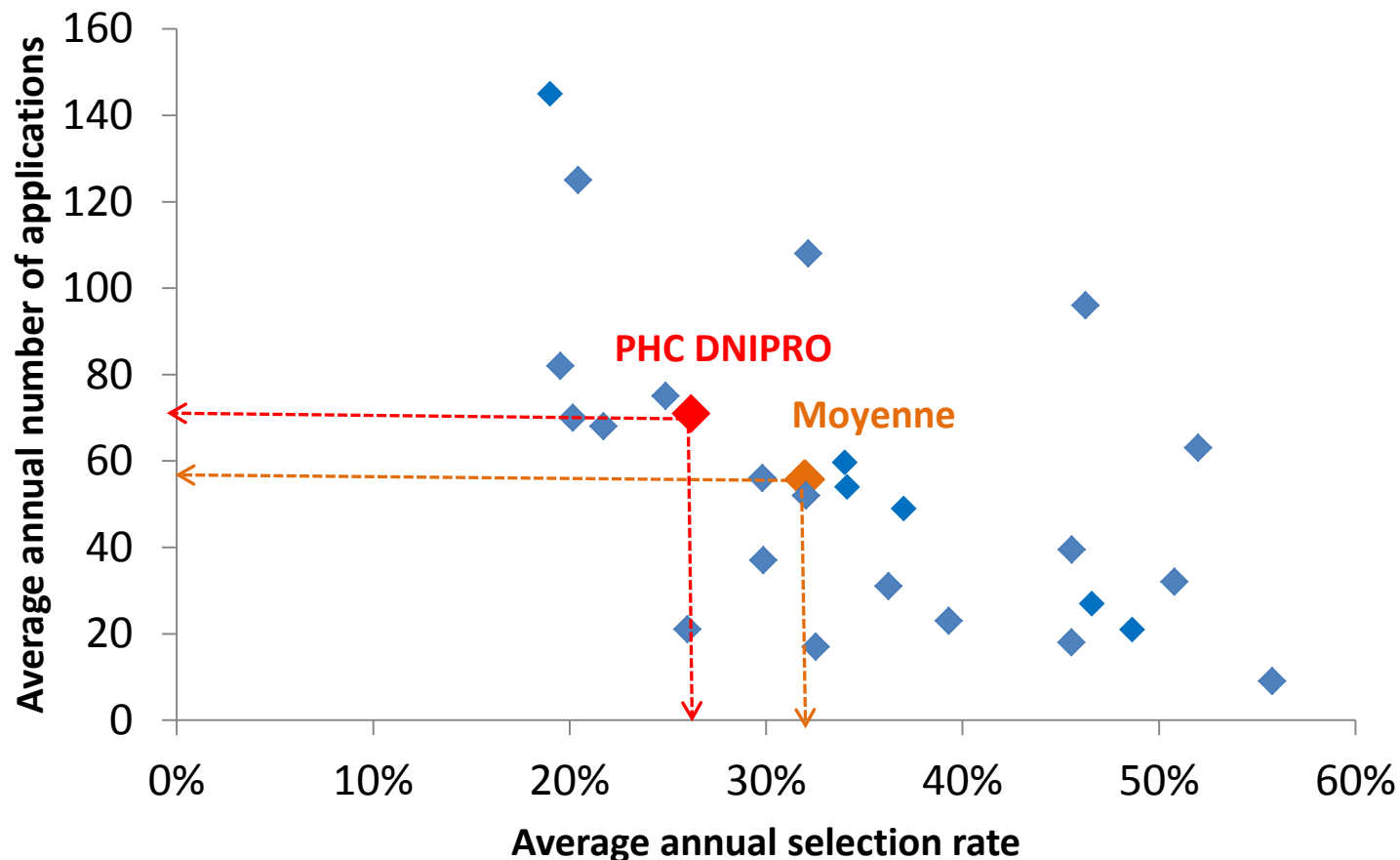
2005-2015 Key Points

BEFORE THE PHC DNIPRO PROJECT

Did you already cooperate with the Ukrainian partner in the past ?



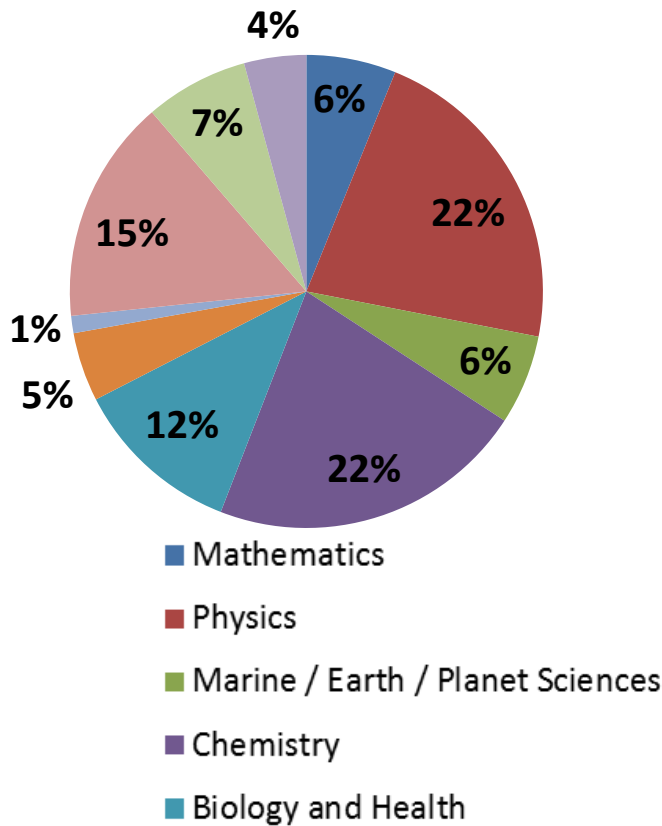
NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMS)



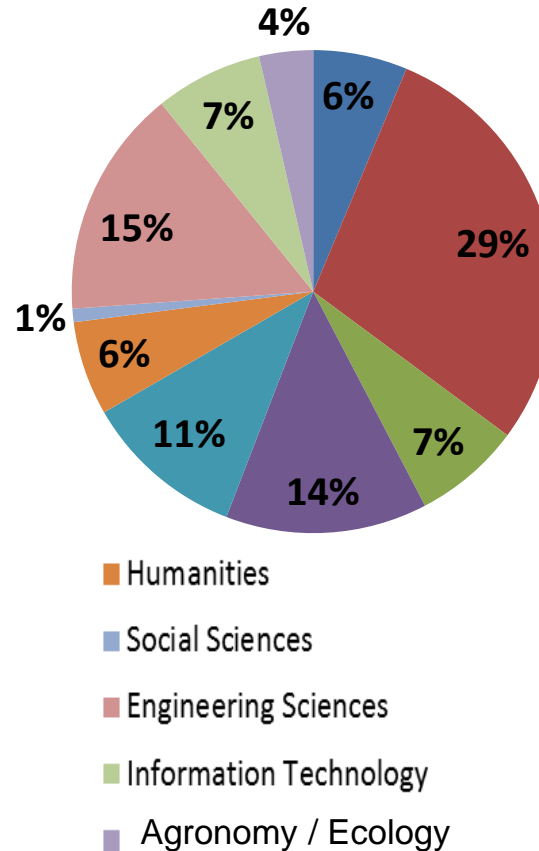
Average selection rate for 2005-2015 : 26% vs 32% mean
Average number of applications 2005-2015 : 71 vs 53 mean

SCIENTIFIC DOMAINS OF PROJECTS

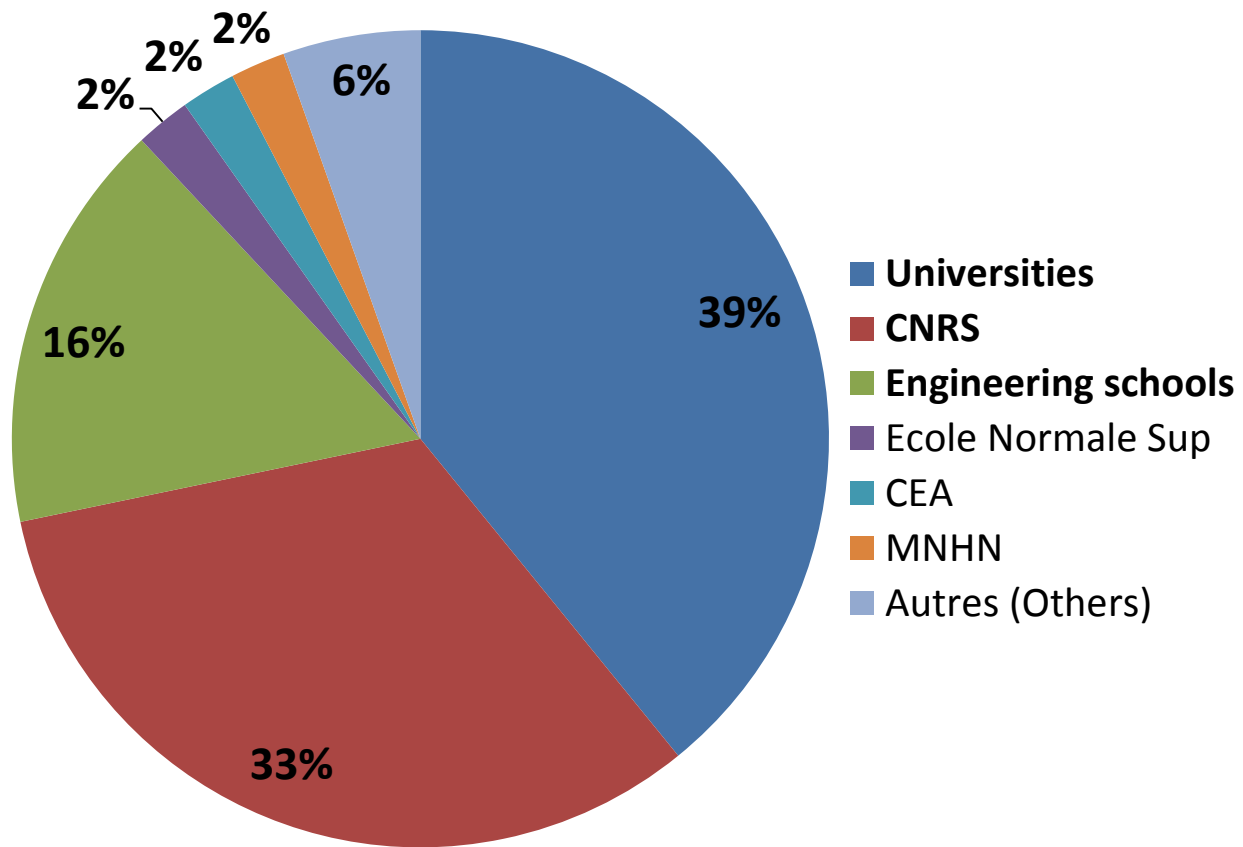
Number of applications : **424**



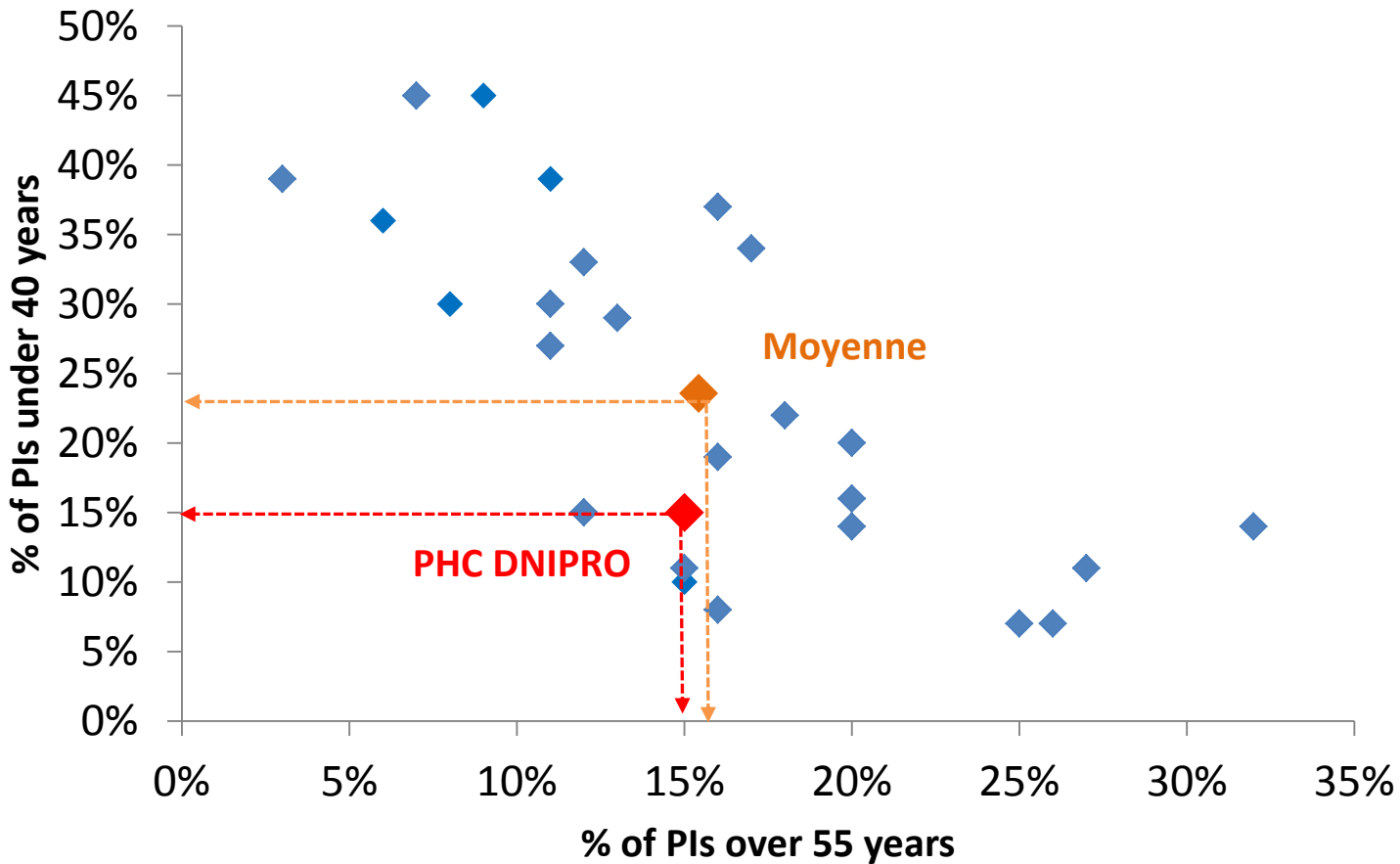
Number of funded projects : **111**



FRENCH PARTICIPATING INSTITUTIONS

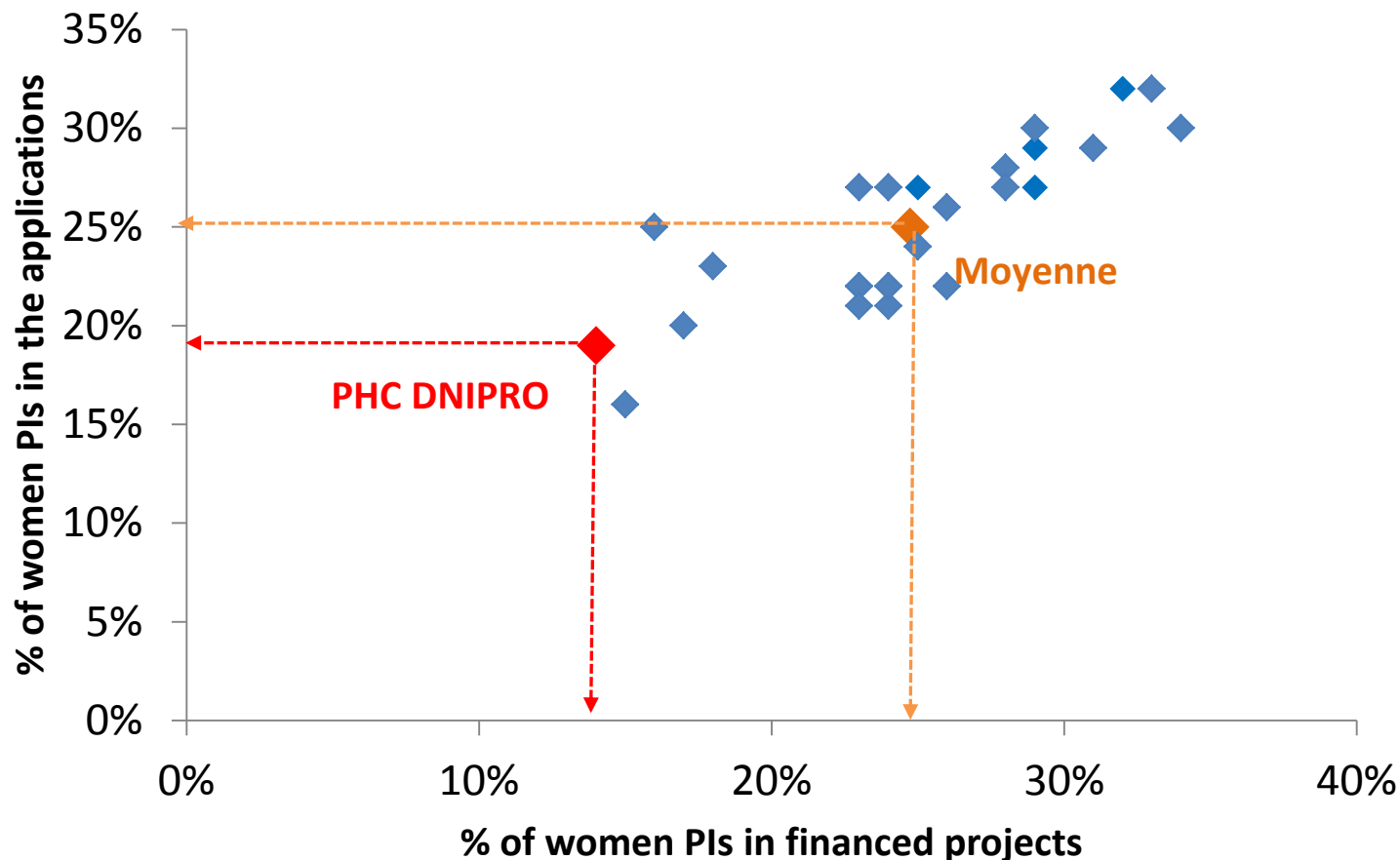


AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMS)



PIs under 40 years : 15% vs 24% mean
PIs over 55 years : 15% vs 15% mean
70% of the candidates are between 40 and 55 years

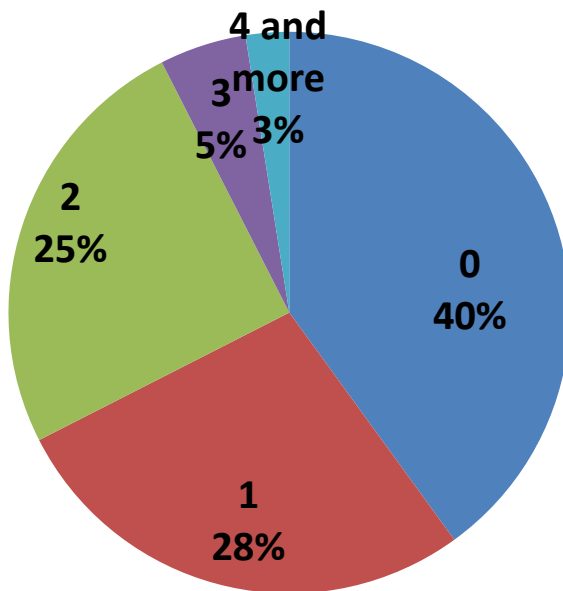
IMPLICATION OF WOMEN IN THE PROGRAM (COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : 19% vs 25% mean
% of women PIs in the selected projects : 14% vs 25% mean

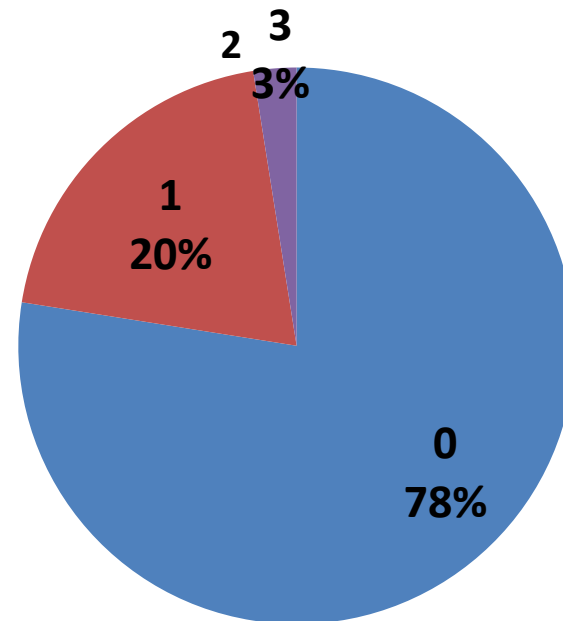
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of PhD students



60% of projects involve at least one PhD student

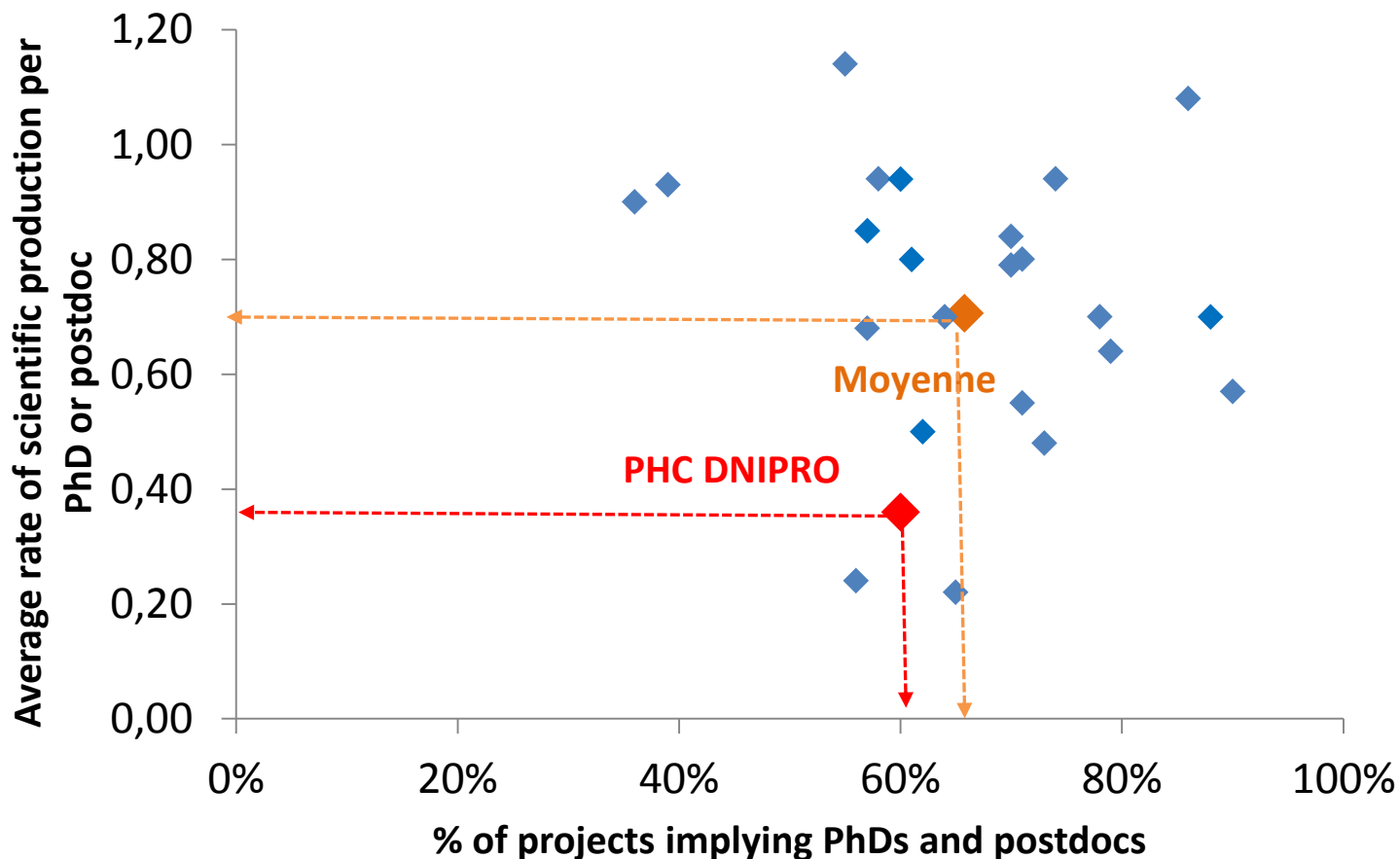
Number of post-doctoral researchers



23% of projects involve at least one post-doctoral researcher

IMPLICATION OF PhDs

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)



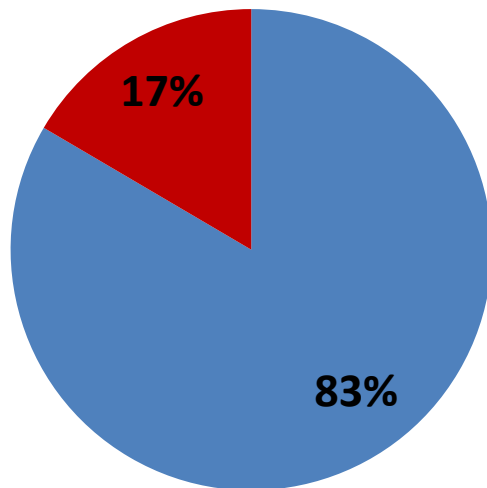
% of projects implying PhDs : 60% vs 66% mean
Average rate of scientific production per PhD : 0,36 vs 0,71 mean



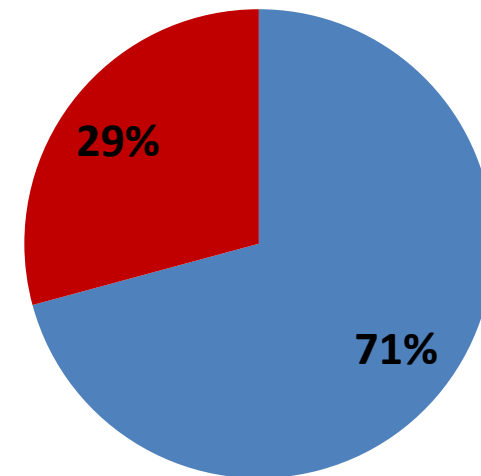
MOBILITY

MOBILITY : GENDER DISTRIBUTION

France → Ukraine



Ukraine → France



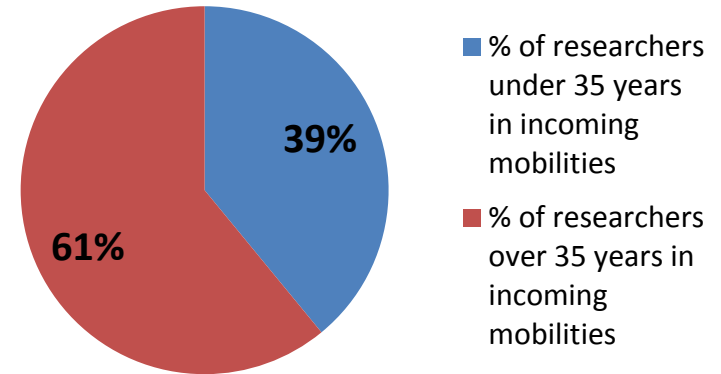
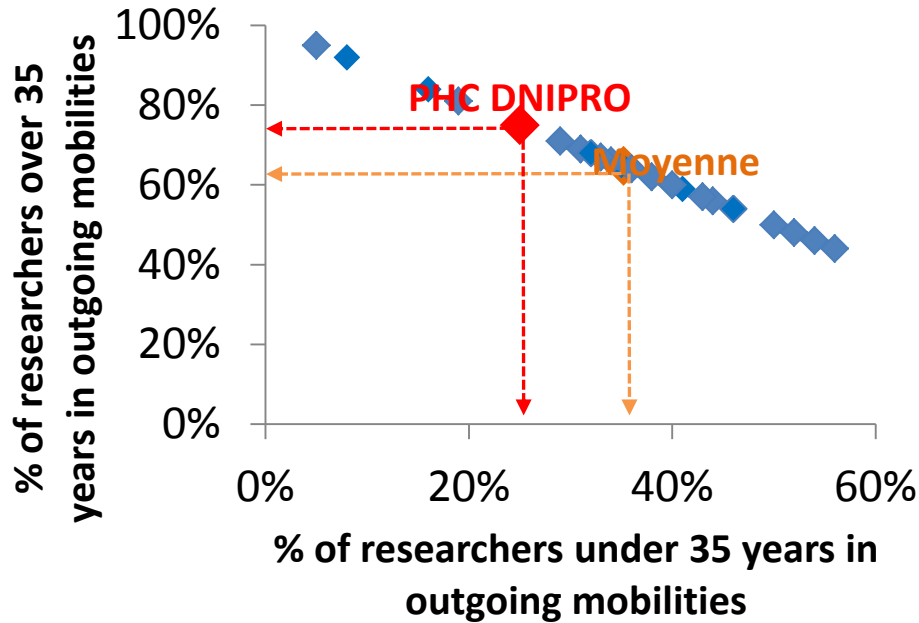
■ Men ■ Women

MOBILITY

(COMPARISON BETWEEN 26 DIFFERENT BILATERAL PROGRAMMES)

France → Ukraine

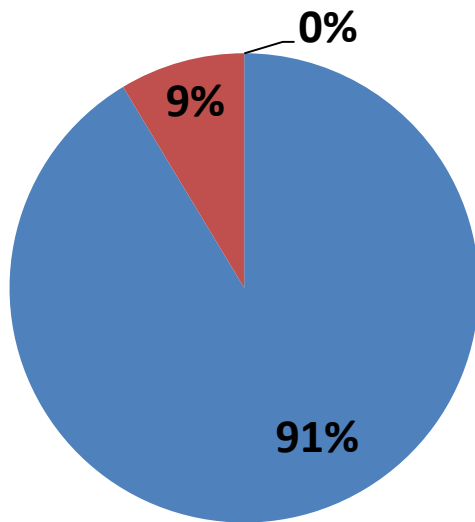
Ukraine → France



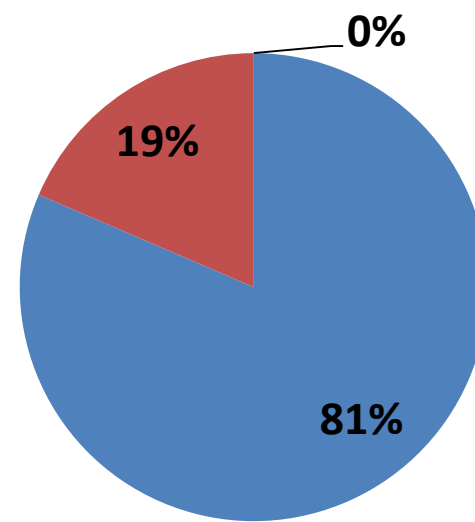
% of french young researchers in outgoing mobilities : 25% vs 35% mean
% of ukrainian young researchers in incoming mobilities : 39%

MOBILITY : DURATION

France → Ukraine



Ukraine → France

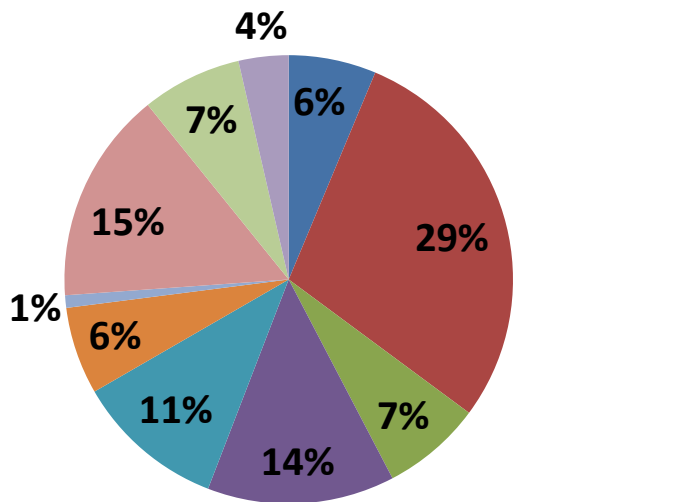


- < 15 days
- between 15 days and 3 months
- > 3 months

SCIENTIFIC PRODUCTION

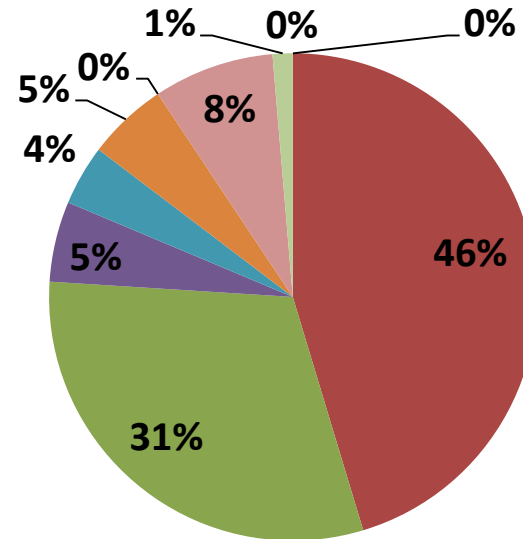
SCIENTIFIC OUTPUT (1/2)

Number of funded projects : **111**



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

Percentage of copublications



- Humanities
- Social Sciences
- Engineering Sciences
- Information Technology
- Agronomy / Ecology

SCIENTIFIC OUTPUT (2/2)

50% of funded projects led to one co-publication at least
17% of copublications include at least 1 PhD or PostDoc

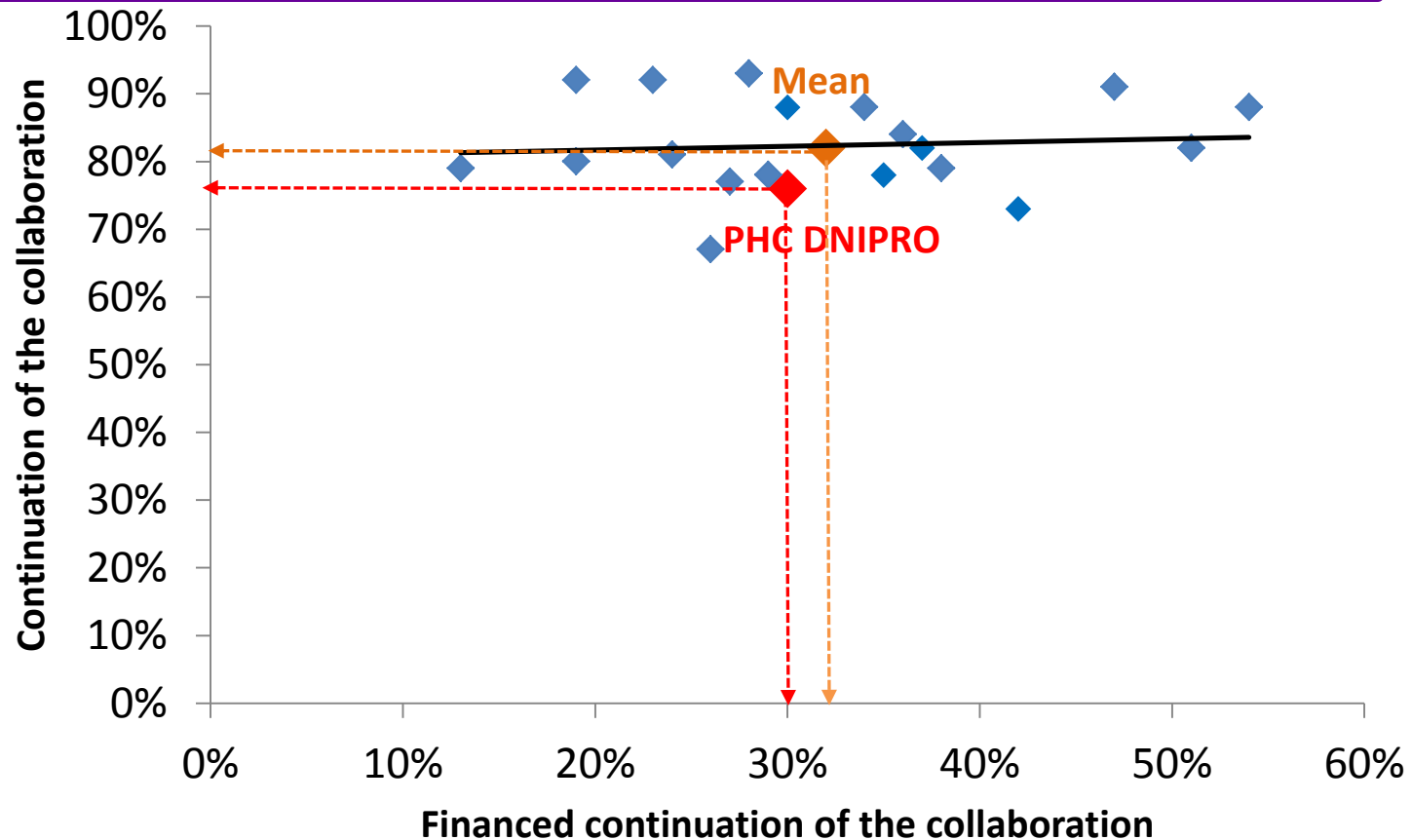
Data from 40 funded projects

	Average number of co-publications per project
Mathematics	0,0
Physics	2,4
Marine / Earth / Planet Sciences	7,7
Chemistry	0,7
Biology and Health	1,5
Humanities	1,0
Social Sciences	0,0
Engineering Sciences	1,2
Information Technology	0,5
Agronomy / Food Science / Environment / Biodiversity	0,0
TOTAL	1,9

Overall average annual number of copublications : **1,0**

WHAT HAPPENS AFTER A DNIPRO PROJECT ?

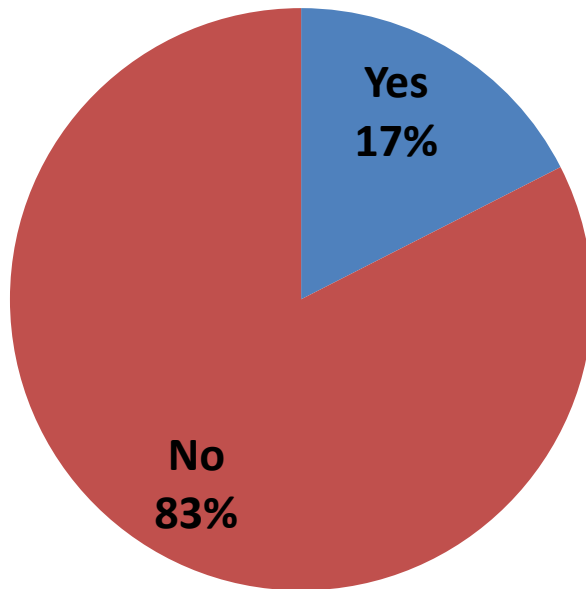
CONTINUATION OF THE COLLABORATION VS FINANCED CONTINUATION OF THE COLLABORATION (1/3) (COMPARISON BETWEEN 20 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 76% vs 82% mean
Continuation of the collaboration with other sources of subvention : 30% vs 32% mean

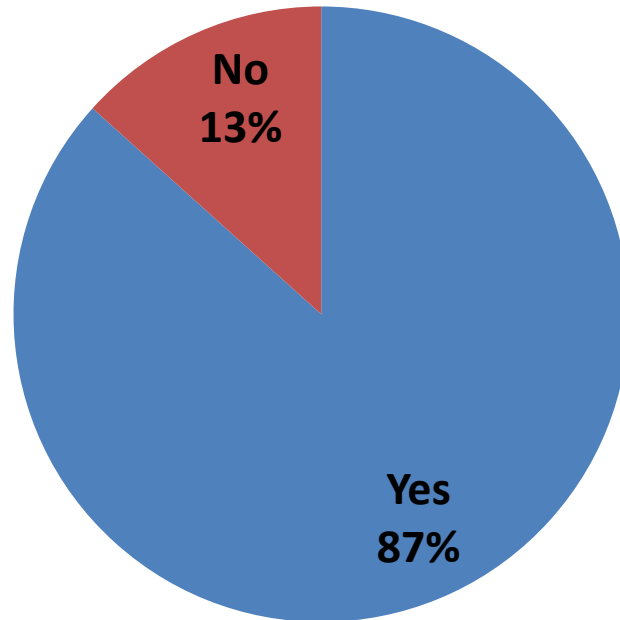
CONTINUATION OF THE COLLABORATION (2/3)

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



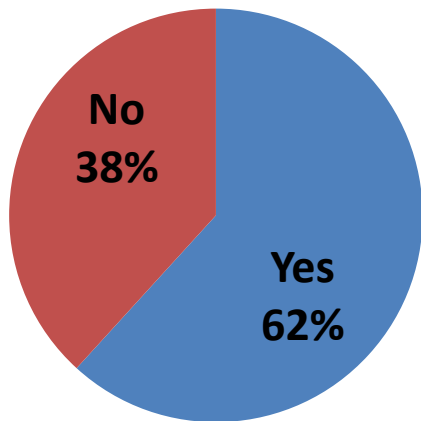
CONTINUATION OF THE COLLABORATION (3/3)

**Has the French-Ukrainian
collaboration involved new
partners?**

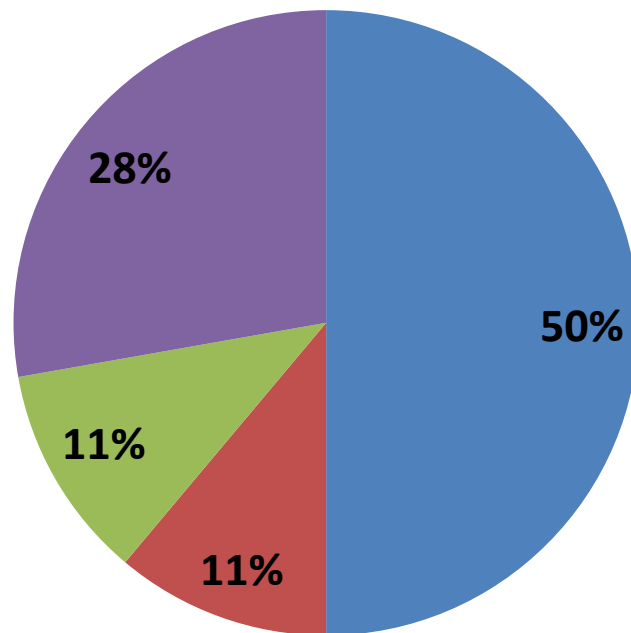


IMPACT ON YOUNG RESEARCHERS' CAREER

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



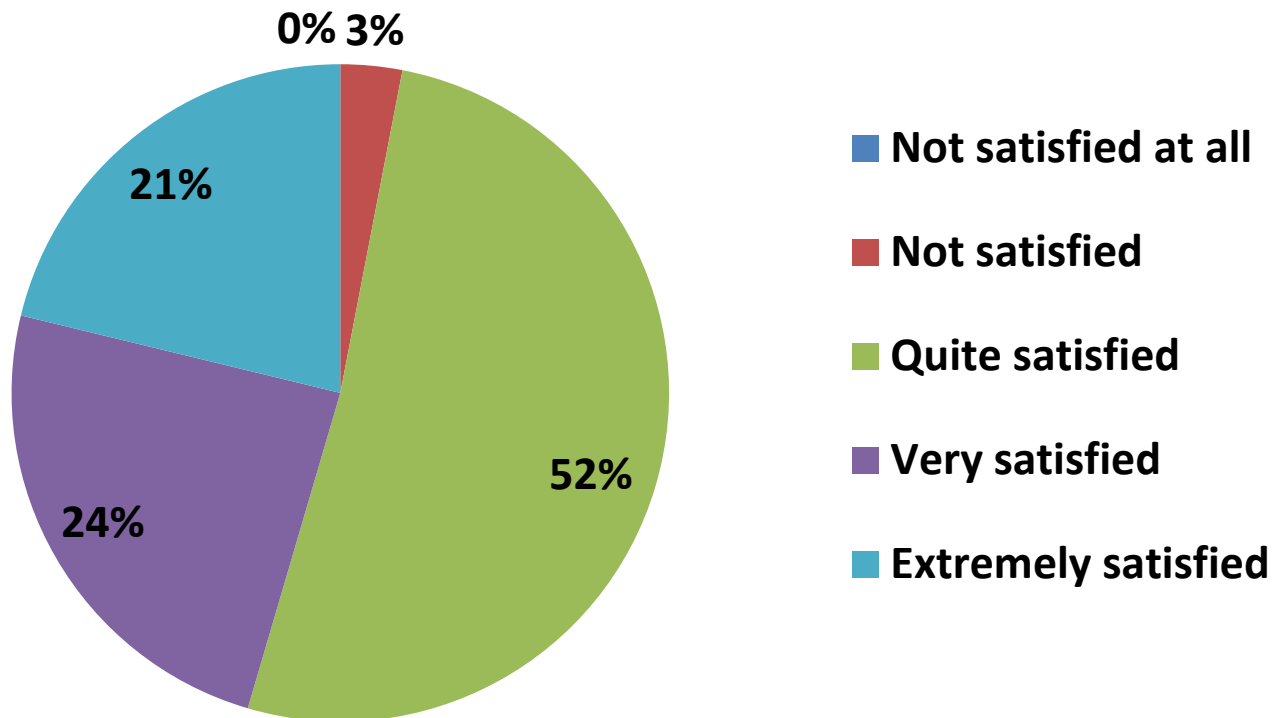
Type of impacts



- Get a permanent or temporary academic job
- Get a post-doctorate contract
- Get a job in a private company
- Others

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

97% of French principal investigators are satisfied



GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (POSITIVE COMMENTS)

Strengths of the program	number
Promote international scientific cooperation	14
Easy setting-up (administrative flexibility)	13
Promote researchers mobility	11
A light/flexible application process	7
Sufficient financing for mobility	4
Promote young researchers training	3
Promote exchanges in favor of scientific production	2
Useful to seed other fundings	2
Good scientific added-value compared to the financial investment	1
<i>Total of occurrences</i>	<i>57</i>

GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME (NEGATIVE COMMENTS)

Weaknesses of this program	number
No fundings for equipment and functioning	8
Insufficient funding	8
Too short duration of the projects	5
Heavy administration	4
Late financing	4
Absence of possible renewal	3
Unbalanced exchanges, limited to only two countries	2
Difficulty to initiate a sustained collaboration	1
Too short mobility durations	1
Others	3
<i>Total of occurences</i>	<i>39</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”.

However

- **Although the average number of co-publications per year with regards to the budget per project is satisfying (1,0 vs a mean value of 0,9), the number of publications per project could be increased (1,9 vs a mean value of 2,3)**
- **Co-publication rate (funded projects that led to one co-publication at least) is only 50%**
- **Involvement of young researchers could be improved for scientific output (average rate of scientific production per PhD : 0,4 vs a mean value of 0,7)**
- **Involvement of women PIs could be improved both as applicants (19% vs a mean value of 25%) as well as laureates (14% vs a mean value of 24%)**

PRELIMINARY RECOMMENDATIONS

RECOMMENDATIONS

- Aim an average 30% success rate
- Promote scientific co-publications
- Promote co-publications by young researchers
- Promote applications from women

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.

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Thank you for your attention