#### FRANCE - SLOVENIA

# Scientific impact of the programme PROTEUS (2005-2020)

**MESRI-DAEI / MEAE** 

2020

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



#### **GENERAL PRESENTATION OF THE PROGRAMME**

**Creation: 1994** 

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

Total budget (France + Slovenia): 71 000 € / year

- >> including budget from the French part : around 31 000 € / year
- >> including budget from the Slovenian part : around 40 000 € / year

Average budget per project (France + Slovenia) : around 3 500 € / year

Number of new funded projects per year : around 10

From 2005-2020:

559 applications submitted

209 projects funded



#### **DATA SOURCES**

# **Campus France (2005-2020)**

- Information about the PHC Proteus applications
- List of mobilities (from France to Slovenia and from Slovenia to France)

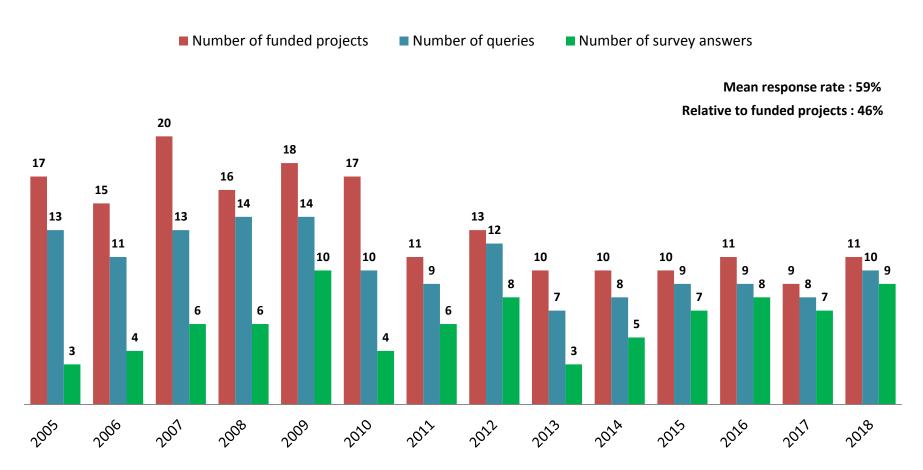
# **Survey (2005-2018)**

- Target: French Principal Investigators of selected projects between 2005 and 2018
- Survey duration: 10 weeks between March and May 2020
- 59% response ratio (86 respondents for 147 queries)



#### **ANSWERS TO THE SURVEY**

Average response rate to the survey: 59 % (86 answers)



188 funded projects between 2005 and 2018, 147 valid email adresses

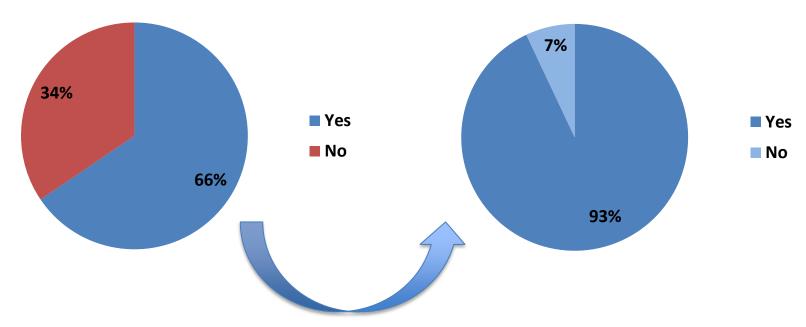


# **2005-2020 Key Points**

## BEFORE THE PROTEUS PROJECT (1/2)

Did you already cooperate with Slovenia in the past?

If yes, was it with the same partner?



Data from 87 responses

Data from 57 responses



# BEFORE THE PROTEUS PROJECT (2/2)

With which scientific collaboration programme ?		
PHC Proteus	57%	
European projects (FP5, FP6, FP7, COST, H2020)	17%	
Others (Erasmus, Networks)	12%	
CNRS (PICS, LEA, LIA)	10%	
National Research Agency (ANR)	3%	
BGF (French government grants)	1%	

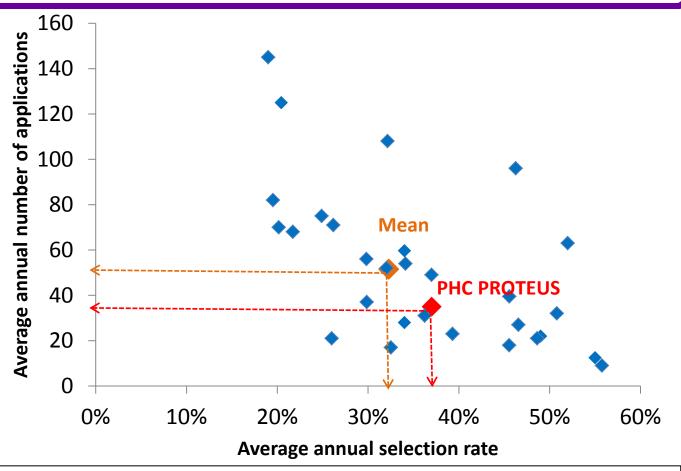
Data from 49 responses

Plus 27 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)



#### **NUMBER OF APPLICATIONS VS SELECTION RATE**

(COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)

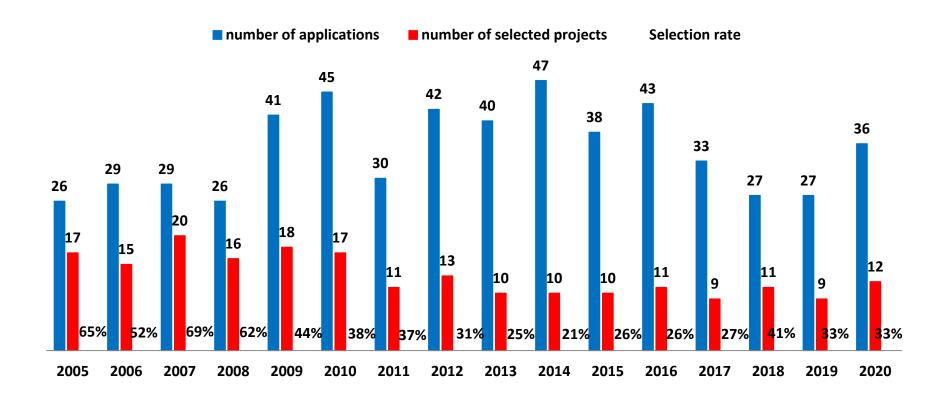


Average selection rate for 2005-2020 : 37% vs 32% mean Average number of applications 2005-2017 : 35 vs 52 mean



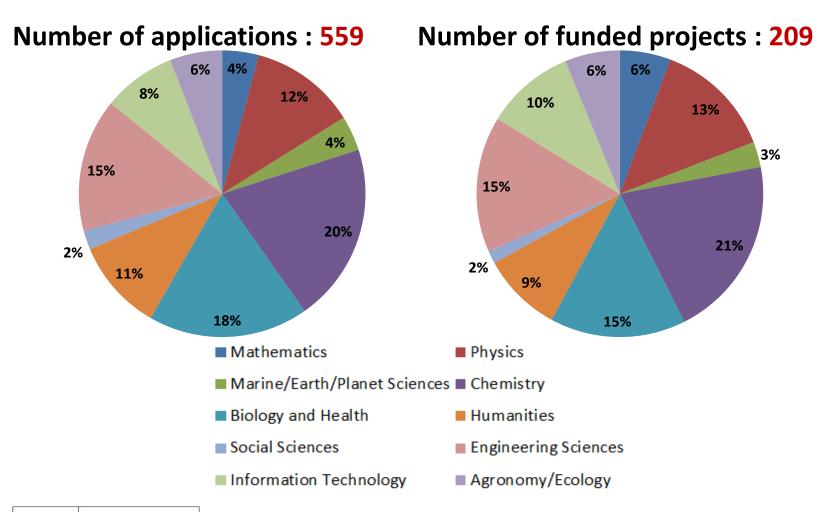
### **NUMBER OF APPLICATIONS AND SELECTION RATE**

#### Average selection rate from 2005-2020: 37%





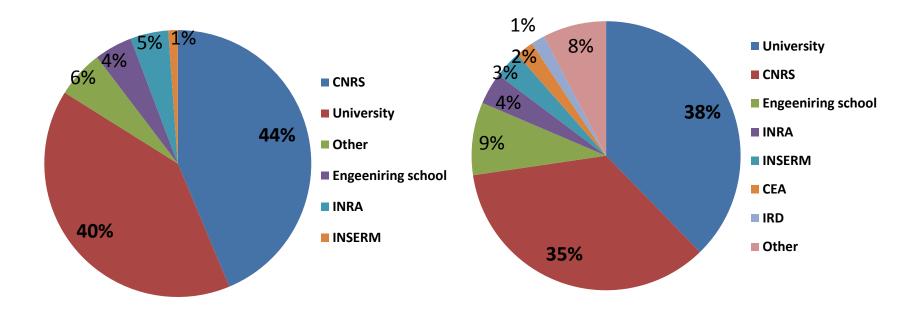
#### **SCIENTIFIC DOMAINS OF PROJECTS**



#### FRENCH PARTICIPATING INSTITUTIONS

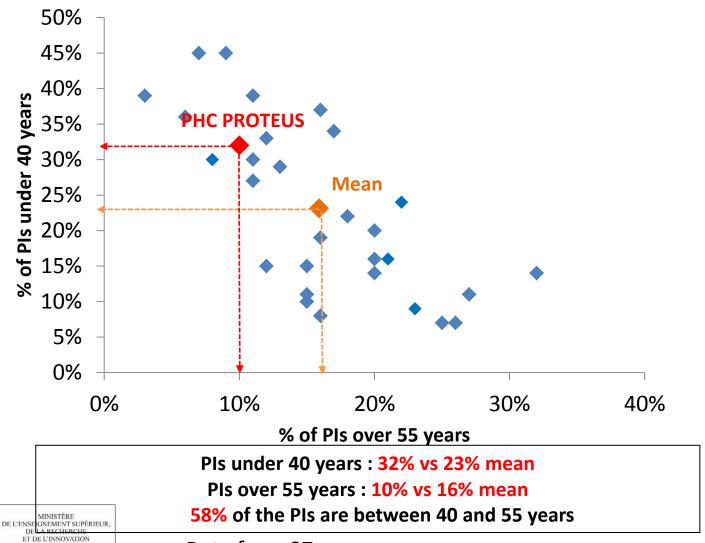
#### PI's employers

#### **Laboratories authorities**



# **AGE OF PRINCIPAL INVESTIGATORS (PI)**

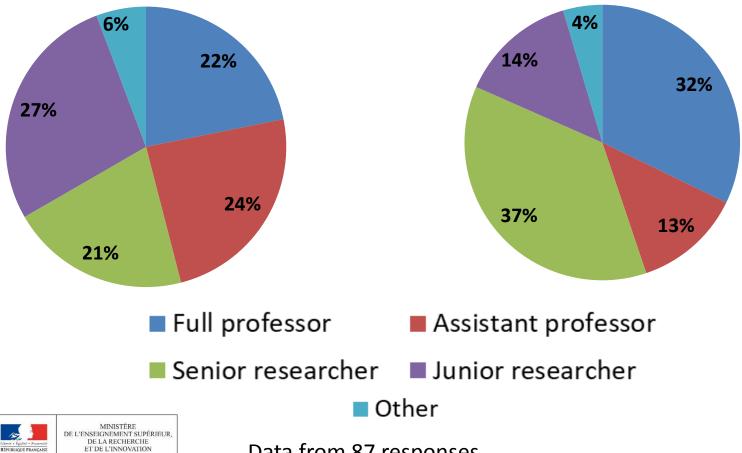
(COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)



## FRENCH PIS (PRINCIPAL INVESTIGATORS): STATUS

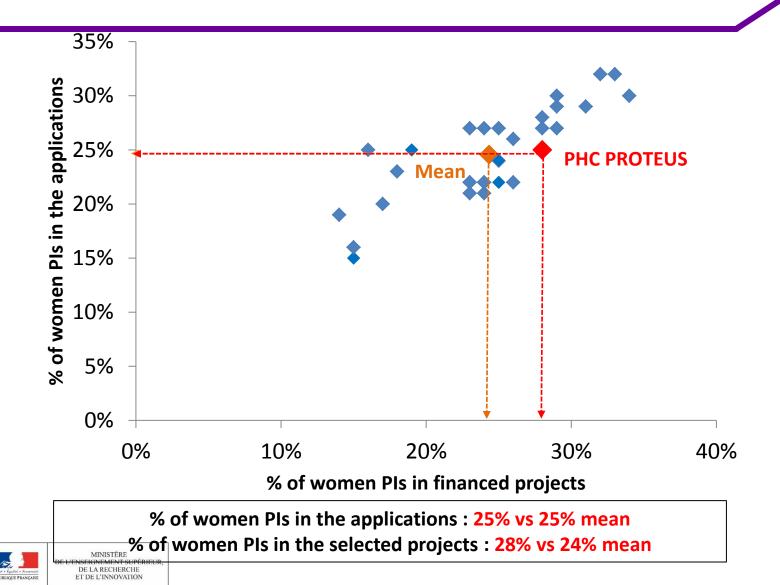
# **Previous professional status** (at the beginning of the project)

## **Current professional status**



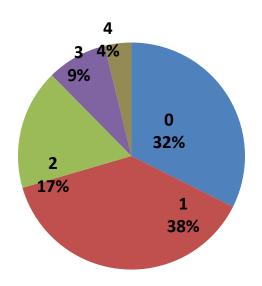
# **IMPLICATION OF WOMEN (FRANCE)**

(COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)

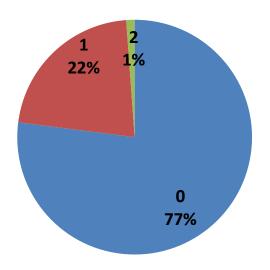


# PARTICIPATION OF FRENCH YOUNG RESEARCHERS

#### **Number of PhD students**



#### Number of postdoctoral researchers



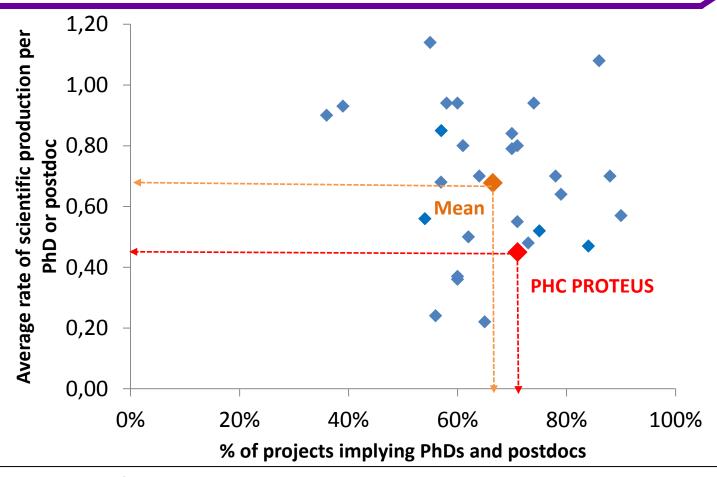
63% of projects involve at least one PhD student

25% of projects involve at least one post-doctoral researcher



#### **IMPLICATION OF YOUNG RESEARCHERS**

#### (COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)



% of projects implying young researchers: 71% vs 66% mean

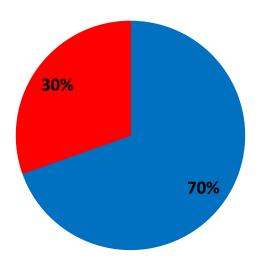
Average rate of scientific production per young researcher: 0,45 vs 0,68 mean



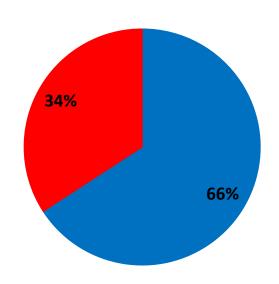
# **MOBILITY**

#### **MOBILITY: GENDER DISTRIBUTION**

France → Slovenia



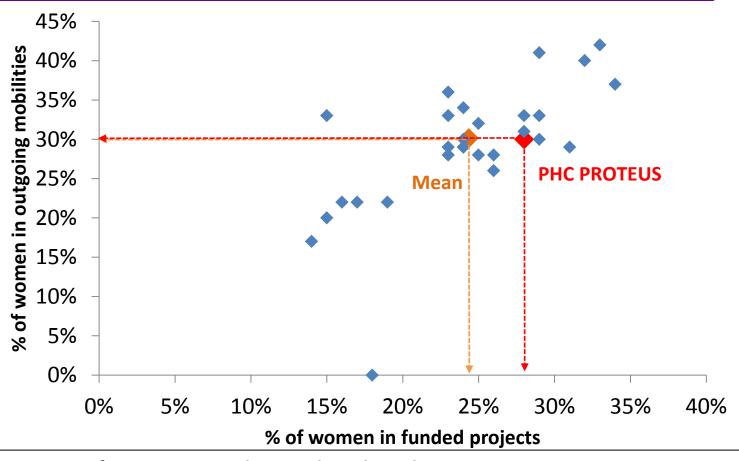
#### Slovenia → France



■ Men
■ Women

# WOMEN MOBILITY FRANCE – SLOVENIA

#### (COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)

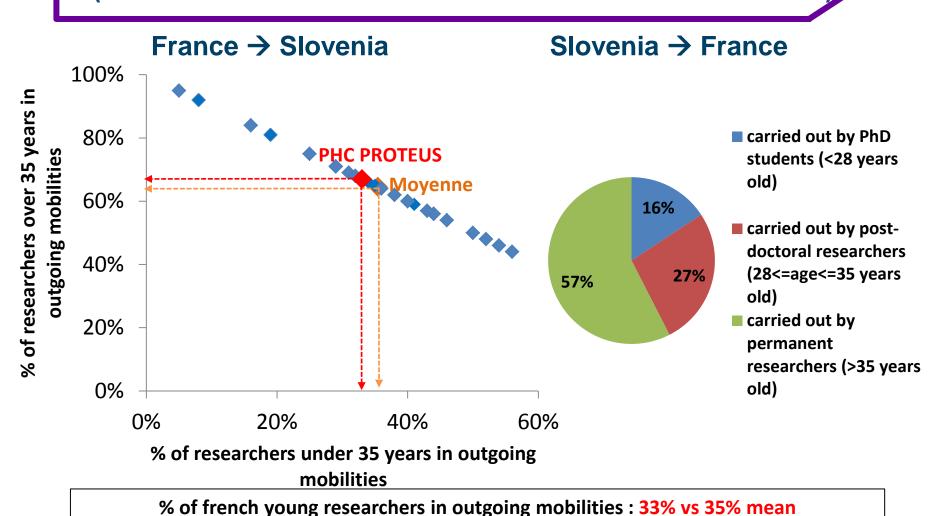


% of women researchers in the selected projects: 28% vs 24% mean % of women researchers in outgoing mobilities: 30% vs 30% mean



# YOUNG RESEARCHERS MOBILITY FRANCE – SLOVENIA

(COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)



DE LA RECHERCHE

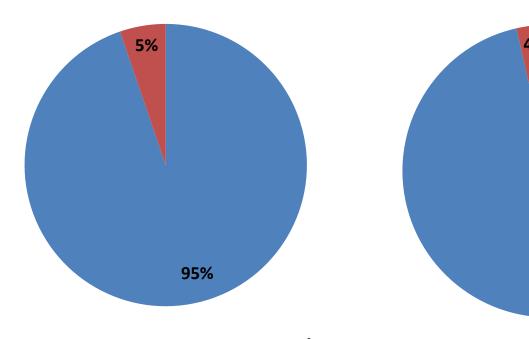
% of slovenian young researchers in incoming mobilities: 43%

#### **MOBILITY: DURATION**

#### France → Slovenia

#### Slovenia → France

96%



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

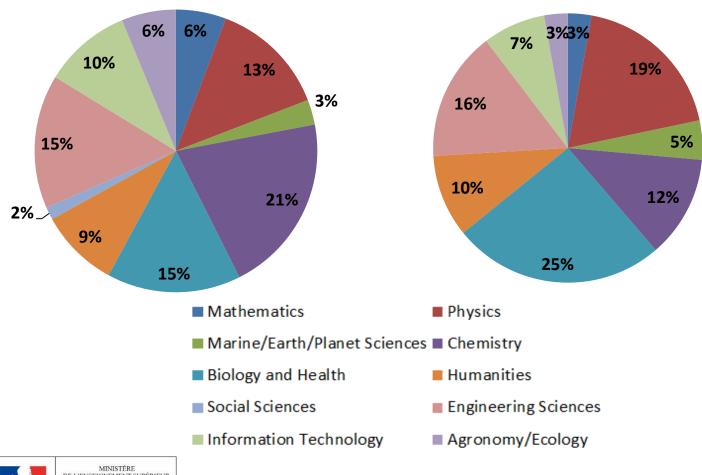


# SCIENTIFIC PRODUCTION

# **SCIENTIFIC OUTPUT (1/2)**

#### Number of funded projects: 209

#### Percentage of copublications (87 responses)



# **SCIENTIFIC OUTPUT (2/2)**

#### **Data from 87 funded projects**

	Number of financed projects in the survey	Average number of co-publications per project
Mathematics	4	1,5
Physics	10	4,0
Marine/Earth/Planet Sciences	5	2,0
Chemistry	18	1,4
Biology and Health	14	3,9
Humanities	6	3,5
Social Sciences	0	0
Engineering Sciences	16	2,1
Information Technology	9	1,8
Agronomy / Ecology	5	1,2
TOTAL	87	2,4

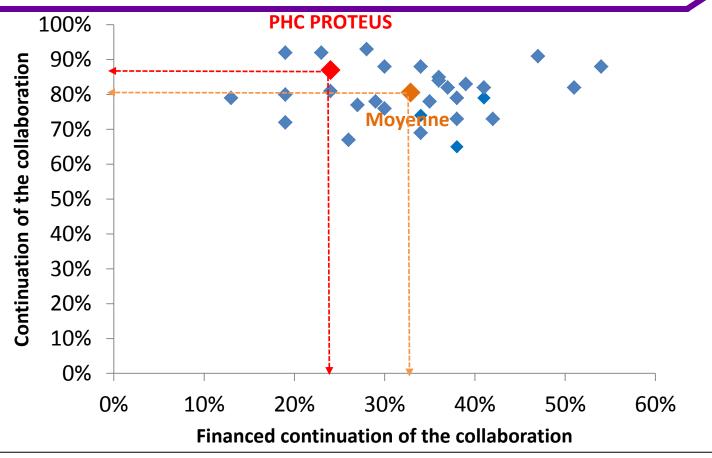
Overall average annual number of copublications per project : 1,20 vs 0,93 mean

67% of funded projects led to one co-publication at least 30% of copublications include at least 1 PhD or PostDoc



# WHAT HAPPENS AFTER A PROTEUS PROJECT?

# CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 30 DIFFERENT BILATERAL PROGRAMMES)



Continuation of the collaboration: 87% vs 81% mean

Continuation of the collaboration with other sources of subvention: 24% vs 33% mean



# **CONTINUATION OF THE COLLABORATION (2/5)**

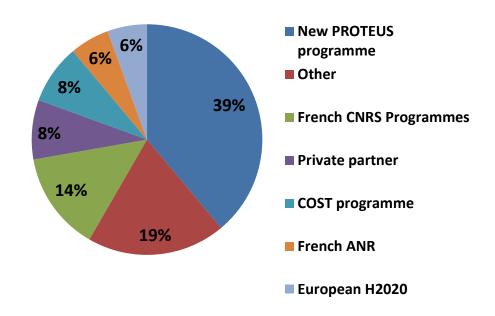
#### **88%** of the collaborations continued after the Proteus project

Which activities?	
Collaborative research	74%
Co-publications	64%
Researchers mobility	53%
Joint participation to conferences	51%
PhD mobility	26%
Others	18%
Co-organisation of scientific events	15%
Joint participation to PhD thesis jury	8%



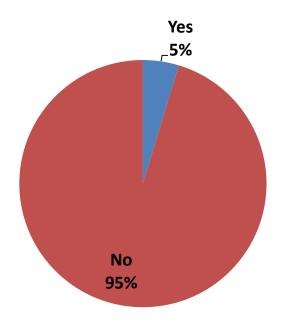
# **CONTINUATION OF THE COLLABORATION (3/5)**

## What kind of funded collaborations after the Proteus project?



# **CONTINUATION OF THE COLLABORATION (4/5)**

#### Has the Proteus project led to the set-up of joint structures?

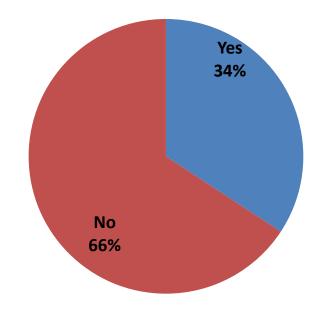


- 2 CNRS Associated European Laboratories
- 1 Network Paris, Ljubljana, Prague
- 1 Network IUF



# **CONTINUATION OF THE COLLABORATION (5/5)**

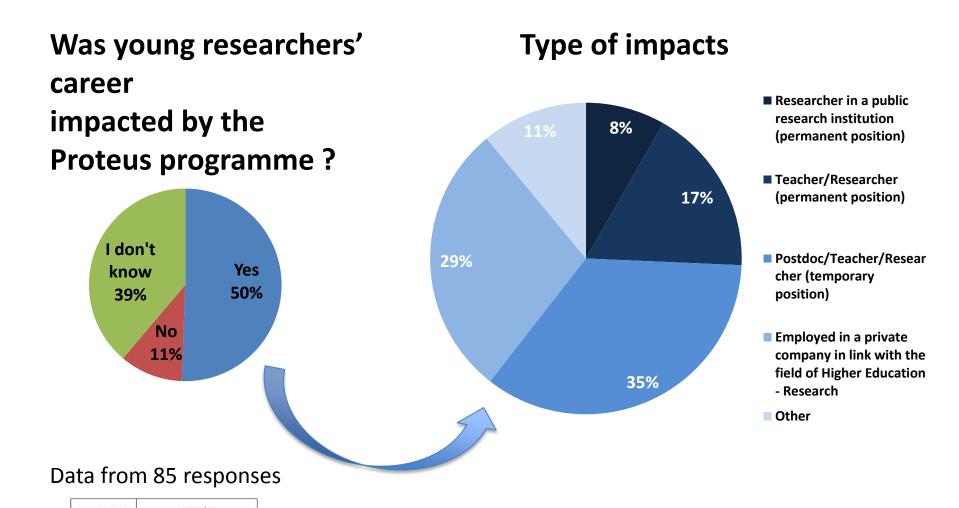
#### Has the French-Slovenian collaboration involved new partners?



For a total of 42 new partners from 24 different countries



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

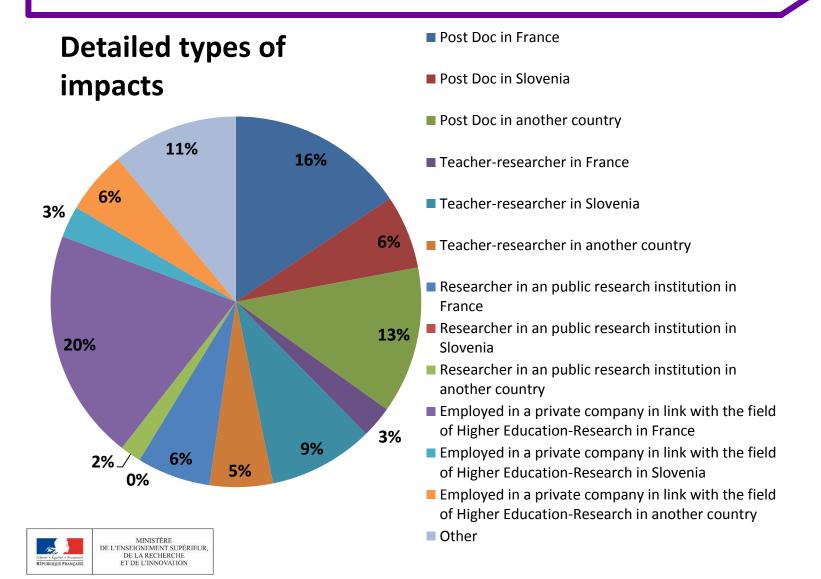


Data from 52 responses for a total of 109 young researchers

DE L'ENSEIGNEMENT SUPÉRIEUR.

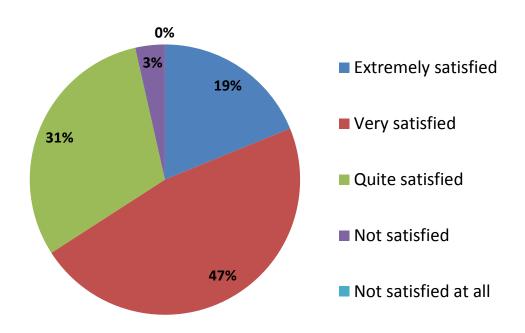
DE LA RECHERCHE

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



# GENERAL OPINION OF FRENCH PIS ON THE PROGRAMME

#### **97%** of French principal investigators are satisfied





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



#### **SURVEY OF 85 FUNDED PROJECTS**

Strengths of this program	Number of occurencies (out of 455)	% (out of 85)
Allows the mobility of the researchers	70	80%
Allows an international scientific collaboration	61	70%
Simplicity of the application process	55	63%
Allows exchanges which allow a scientific production	49	56%
Allows the training of the young researchers	46	53%
Easy implementation (administrative flexibility)	38	44%
Good scientific appreciation compared to the financial investment	30	34%
Allows a knowledge of the country partner	27	31%
Financial means sufficient for the expenditure of mobility	21	24%
Is used as starting for raising other funds	17	20%
Sufficiently long duration of the projects	17	20%
Duration of mobilities adapted to the needs	15	17%
Transparency of the methods for selecting the projects	6	7%
Others	3	3%
Total number of occurencies	455	

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



#### **SURVEY OF 84 FUNDED PROJECTS**

Weaknesses of this program	Number of occurencies (out of 238)	% (out of 84)
No funding of the operation and capital expenditures	42	48%
Too short duration of the projects	33	38%
Financial means insufficient for the expenditure of mobility (transport)	25	29%
Difficult perpetuation of collaboration	24	28%
Lack of transparency on the methods of projects selection	23	26%
Financial means insufficient for the expenditure of mobility (per diem)	22	25%
Too short duration of mobilities	21	24%
Insufficient communication on the evaluation's results	17	20%
Heaviness of the process of applications	10	11%
Too low number of mobilities	8	9%
Other	5	6%
Administrative heaviness of the missions management	5	6%
Too long duration of mobilities	3	3%
Number of occurencies	238	

#### 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".



High percentage of young PIs (32%)
High percentage of projects implying young researchers (71%)
Good scientific production higher than the mean (1,20 vs 0,93)



Proteus programme should initiate more new collaborations (only 34%)
Too many applications to Proteus programme after a Proteus funding (39%)
33% of funded projects with no co-publications
Insufficient rate of scientific production (0,45) and outgoing mobilities (33%)
for young researchers

Only 30% of co-publications include at least one young researcher



# PRELIMINARY RECOMMENDATIONS

#### **RECOMMENDATIONS**

- Promote REAL new cooperations
- Explore new financial supports after the Proteus funding
- Promote co-publications (33% of projects with no co-publications)
- Encourage PIs to increase the implication of young researchers in the publications and the mobilities
- Consider a "PROTEUS +" to help PIs at the end of their financing to develop a European application?



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

