

Research University: From work to paper

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PhD. in Projects and Rural Planning

Year 2010/11

**Master's in Projects Planning for
Rural Development and Sustainable Management**

Research Universities all over the world

They are on top rankings and are characterized by:

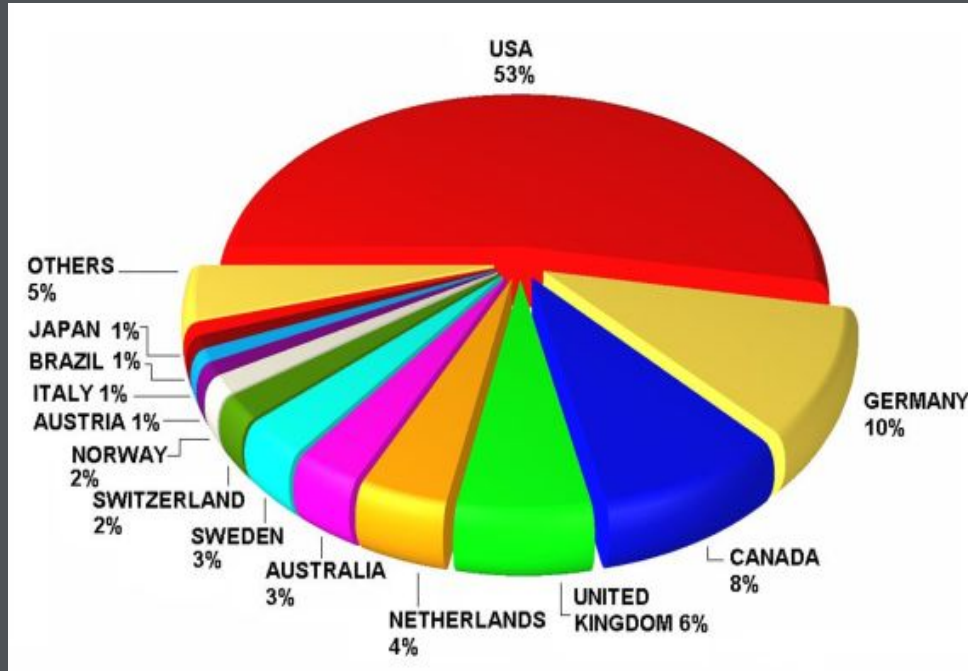
Research: relevant because of the results
patents
papers

Teaching: postgraduate degree takes
precedence over graduate with a strong demand
(Berkeley admits 2.000 master students over
28.000 applications)

Relevance in society that understands the
University as very helpful

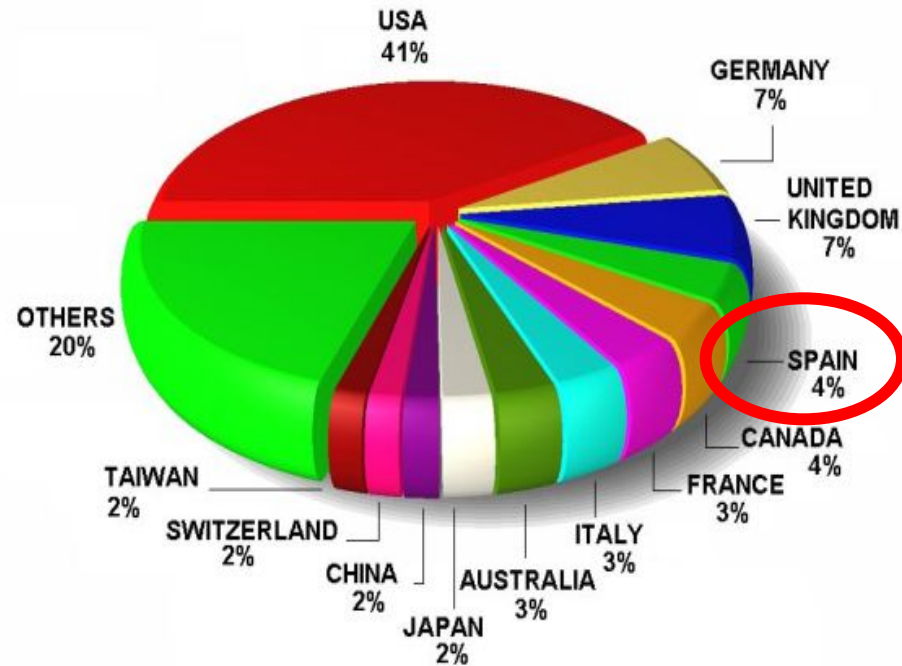
	Country	World	Size	Visib	Rich	Scholar
Berkley	4 ^a USA	4 ^a	6	4	4	28
UPM	2 ^a Spain	184 ^a	113	258	258	168

CRITERIA	WR (webometrics)	ARWU (Shanghai)
Univ's Analyzed	15 000	3000
Univ's Ranked	5000+	500
Quality of Education		Alumni Nobel&Field 10%
Internazionalization		
Size	Web Size 20%	Size of Institution 10%
Research Output	Rich Files 15%	Nature & Science 20%
	(Google) Scholar 15%	SCI & SSCI 20%
Impact	(Link) Visibility 50%	Highly Cited Res'ers 20%
Prestige		Staff Nobel&Field 20%

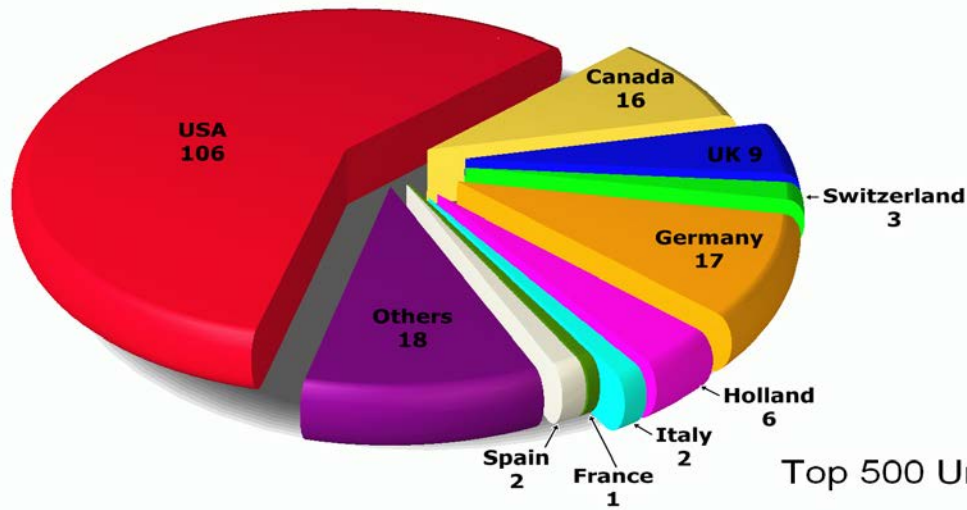


Position ranking of the top 100 universities on the internet by countries
Source: Webometrics

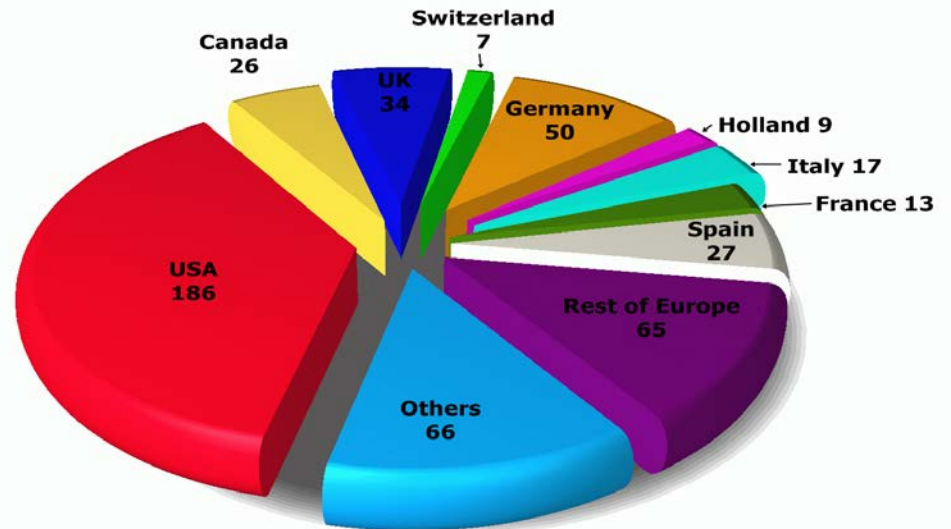
Position ranking of the top 1.000 universities on the internet by countries
Source: Webometrics



Top 200 Universities Distribution by Country

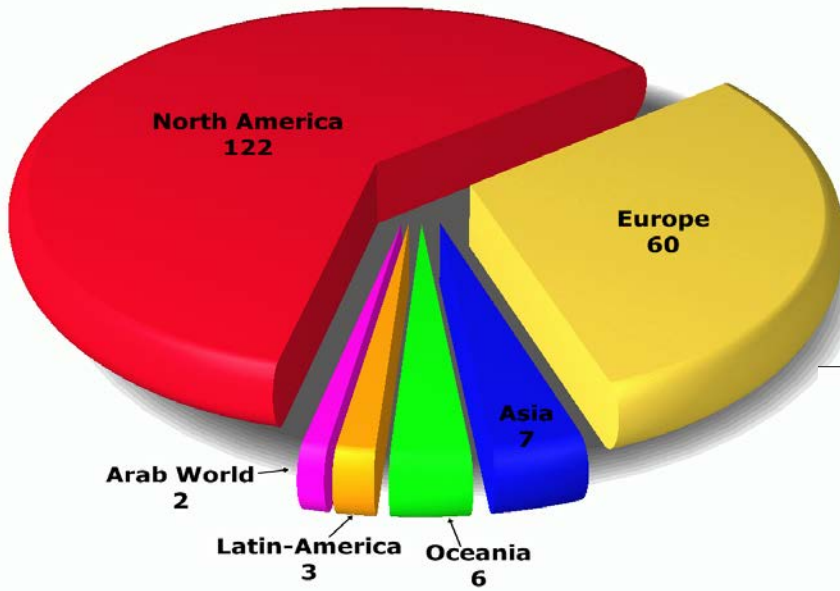


Top 500 Universities Distribution by Country

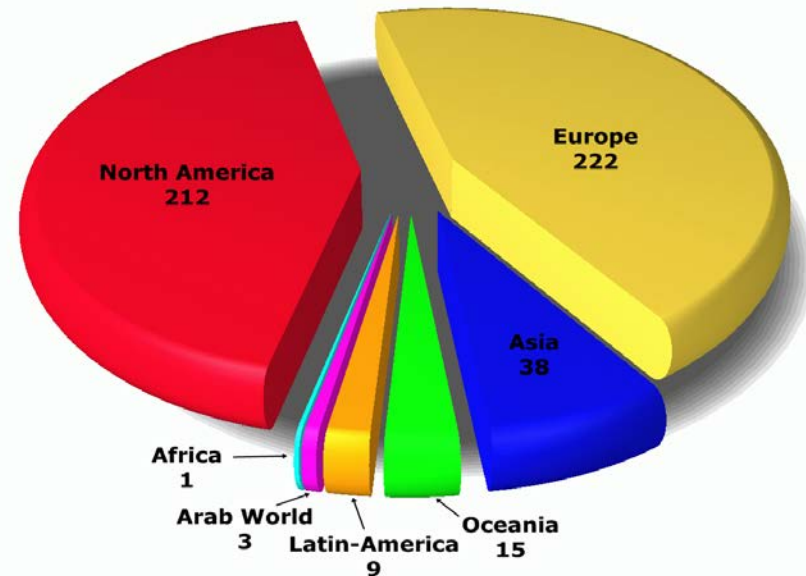


Rankings Web
Cybermetrics Lab CSIC

Top 200 Universities Distribution by Region



Top 500 Universities Distribution by Region



Rankings Web
Cybermetrics Lab CSIC

4th International Conference on World-Class Universities
 October 30 - November 2, 2010, Shanghai, China

World Rank	Institution*	Region	Regional Rank	Country	National Rank
1	Harvard University	Americas	1		1
2	University of California, Berkeley	Americas	2		2
3	Stanford University	Americas	3		3
4	Massachusetts Institute of Technology (MIT)	Americas	4		4
5	University of Cambridge	Europe	1		1
6	California Institute of Technology	Americas	5		5
7	Princeton University	Americas	6		6
8	Columbia University	Americas	7		7
9	University of Chicago	Americas	8		8
10	University of Oxford	Europe	2		2
11	Yale University	Americas	9		9
12	Cornell University	Americas	10		10
13	University of California, Los Angeles	Americas	11		11
14	University of California, San Diego	Americas	12		12
15	University of Pennsylvania	Americas	13		13
16	University of Washington	Americas	14		14
17	University of Wisconsin - Madison	Americas	15		15
18	The Johns Hopkins University	Americas	16		16
18	University of California, San Francisco	Americas	16		17
20	The University of Tokyo	Asia/Pacific	1		1
21	University College London	Europe	3		3
22	University of Michigan - Ann Arbor	Americas	18		18
23	Swiss Federal Institute of Technology Zurich	Europe	4		1
24	Kyoto University	Asia/Pacific	2		2
25	University of Illinois at Urbana-Champaign	Americas	19		19

until recently Technical University of Madrid has been a professional University:

well trained engineers, technical engineers, architects, and technical architects, but with a stronger vision of technical college than of university

Advantages:

- Good and prestigious professionals in companies
- Good basis in maths, physics and chemistry
- We know how to do it but with a high human cost
- A lot of money is spent because of business deals

Disadvantages:

- Few teachers are involved in research
- Professional promotion depends on the number of years you have worked at University
- We are not included into the best universities ranking (the top 500)
- Regional/National University

Changes from 2004

- Boosting of the research
new structures with others organisms,
CSIC, INIA
- Bolonia as an opportunity to improve by changing
- Teaching in Master and PhD is better organized
- More UPM brand in a slow and political process of
decision making

TECHNICAL UNIVERSITY OF MADRID

The UPM situation in **international rankings** that mainly assesses **bibliometric indicators** is almost stagnated

- Although we **improve** and have more number of publications, we do not improve compared to other universities (neither spanish nor foreing)
- We are not yet in the well-known rankings
i.e. Shanghai (500 best) or Times (200 best)
- There is a **regular UPM valuation** in studies funded by the MICINN in a national context
i.e. Reports of the University of Granada Group
- The rest of the technical spanish universities are better than us in number of scientific publications or sexennial periods
weakness in relation to UPC y UPV

TECHNICAL UNIVERSITY OF MADRID

There is a positive valuation of the UPM in teaching and transfer of results

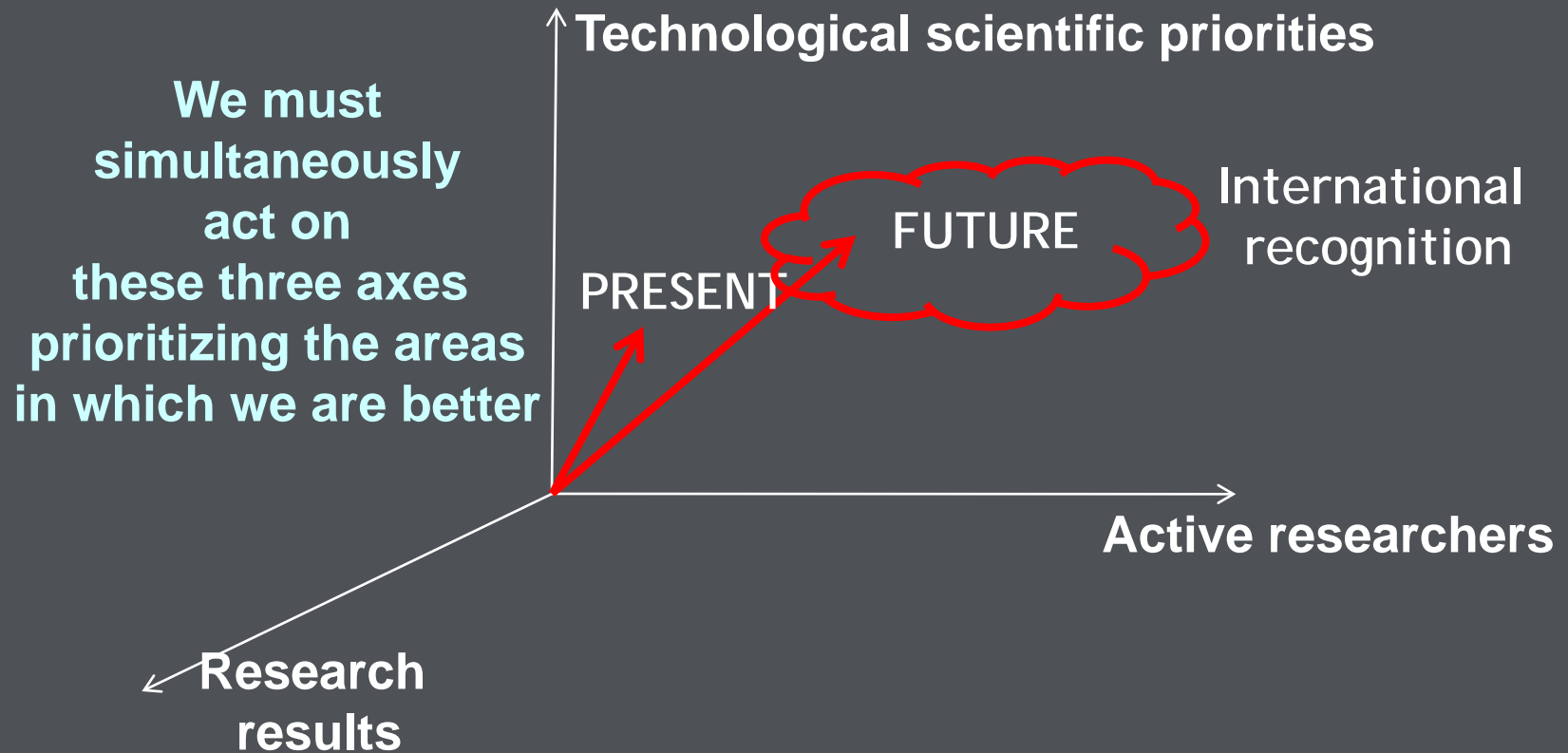
- Recognition of engineers and architects training
- Very good results in transfer of results
Patents filed, spin-offs, projects article 83

However, weakness in investigation activity and international rankings has its consequences and will have more

- Less resources obtained in public calls
 - Decrease in PN project public
 - Low involvement in ERC of FP7
 - Low involvement in CONSOLIDER, FPI or FPU
 - Little prospect in the Programa Severo Ochoa future program
- Less attractive to attract talent (R and C or Juan de la Cierva)

Objectives

We want to become an excellence research university so recognized in Spain and in UE



Objectives

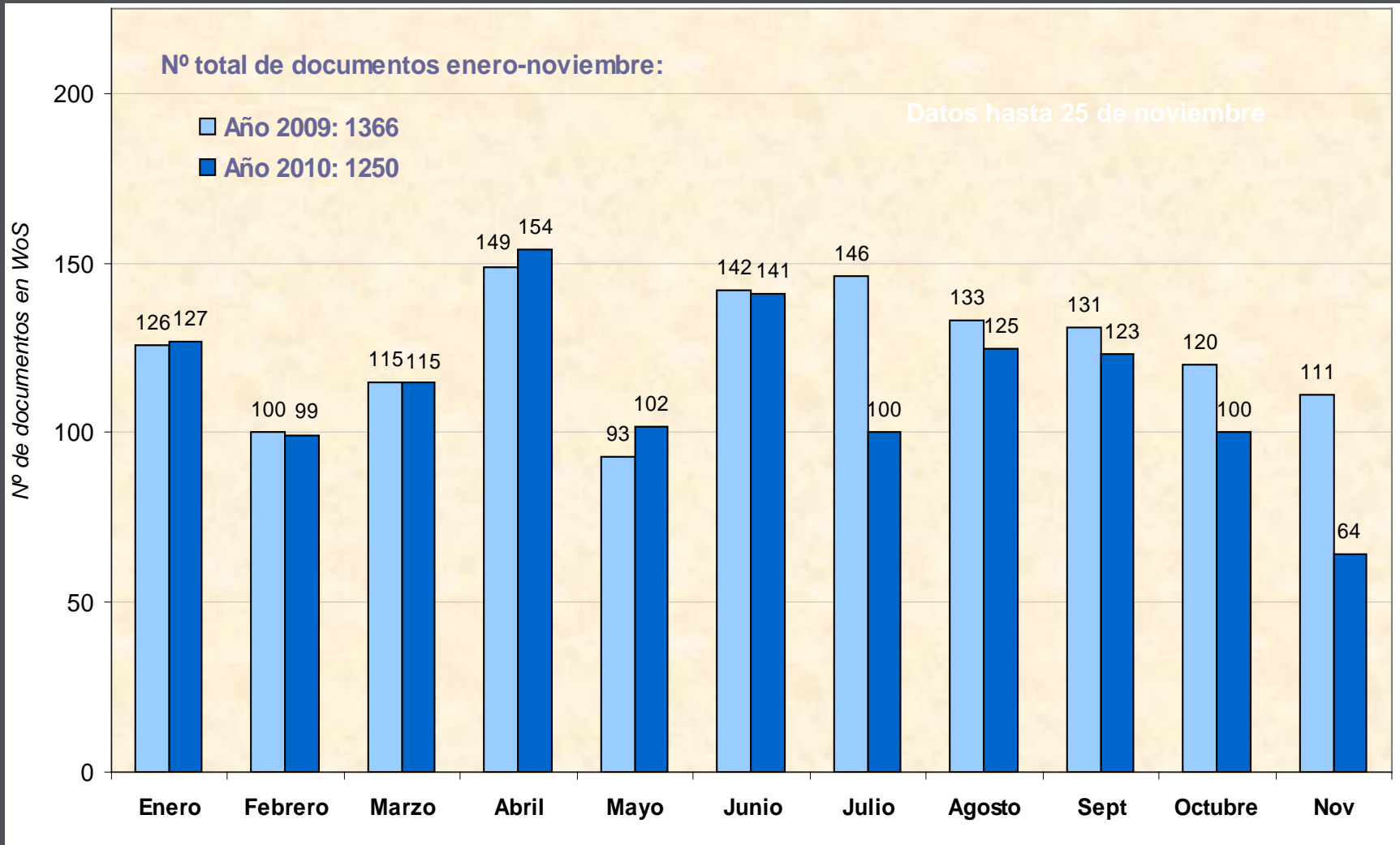
Factors to become a research excellence University

- › Increase of the **scientific publications** and its **impact**
- › Institutional recognition of the research activity with **priorities in some scientific-technical areas**
- › Availability of **advanced equipments** that allows a modern activity in some areas
- › Improvement of the **institutional recognition** of the investigation training of the PDI staff in order to keep and attract **international talent**
- › Focus on the teaching effort in **quality doctorate programs** with international projection
- › Improvement of the technical training of the **PAS staff**

The current situation requires taking urgent decisions
Institutional support measures

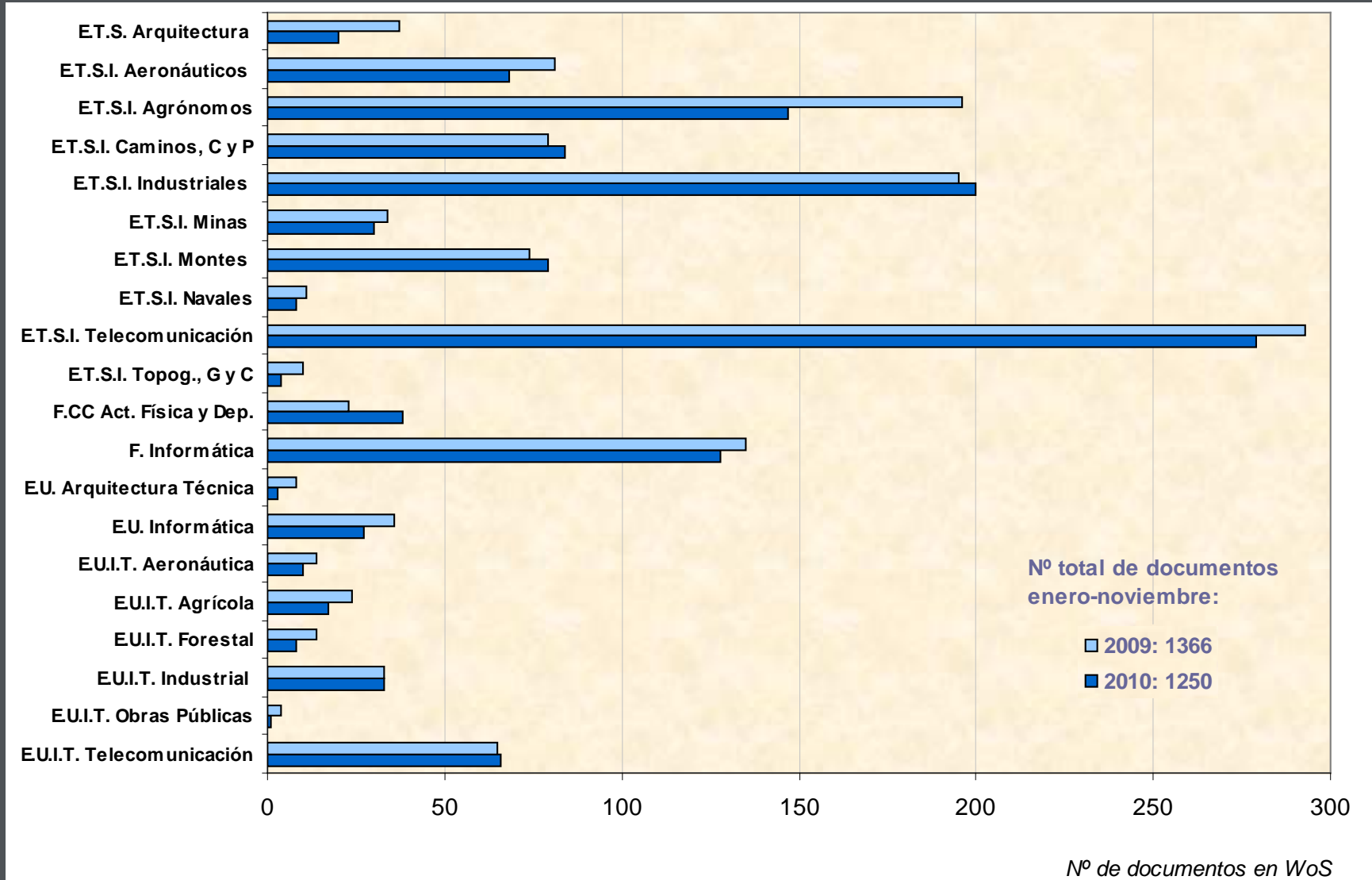
Incentives for the publication of scientific articles

Current situation of UPM (Web of Science):



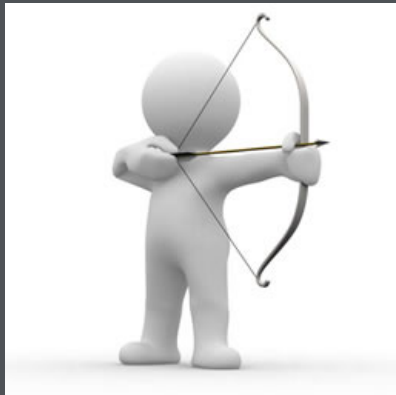
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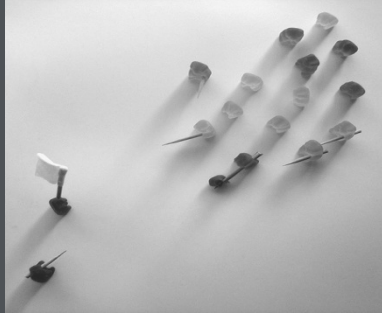
GESPLAN

Cohesive team with close partners



- Skill to get every opportunity during these years
Research/ Teaching / Innovation projects
- We are a little team with the elements of a Research University:

Let's show it...



*1.- We have: relevant Topic
Rural development as Working with People*

2.- Educational tour

- *Excellence postgraduate*
- *Professional Master*
- *Master in Research (Agrismundus)*
- *9 over 149 (3 at UPM, 2 of the have studied with us!)*
- *Doctorate (Agrismundus)*

3.- Researcher tour:

Until 2010: thesis, articles, books, six-years period

From now on: articles, thesis, six years periods, books



4.- International relationships

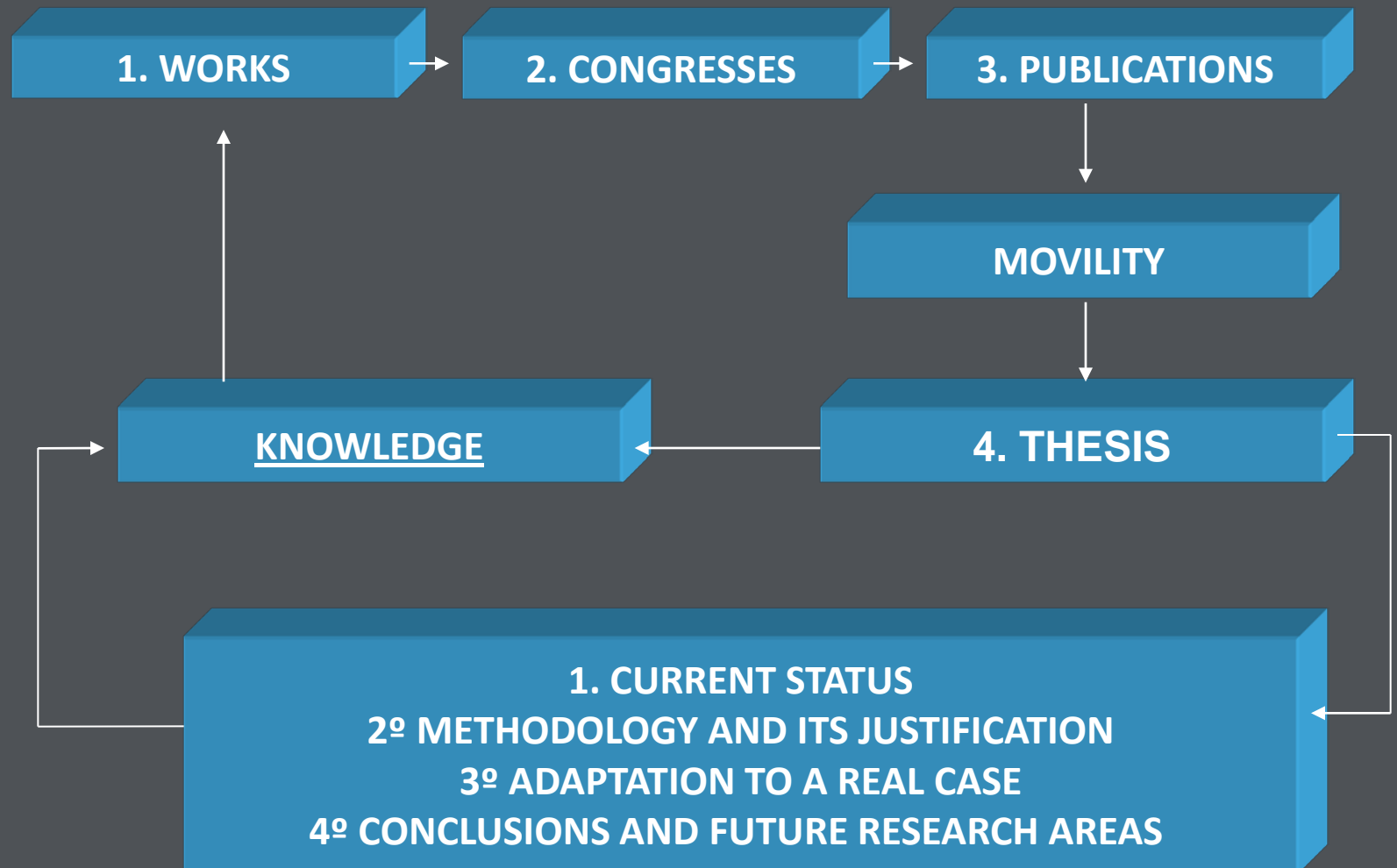
*Perú, México, Argentina, Chile y Honduras
Wageningen y Montpellier
Berkeley (before Stanford)*



*5.- Relationships with the professional area
Agri-food platform*

6.- Innovation projects

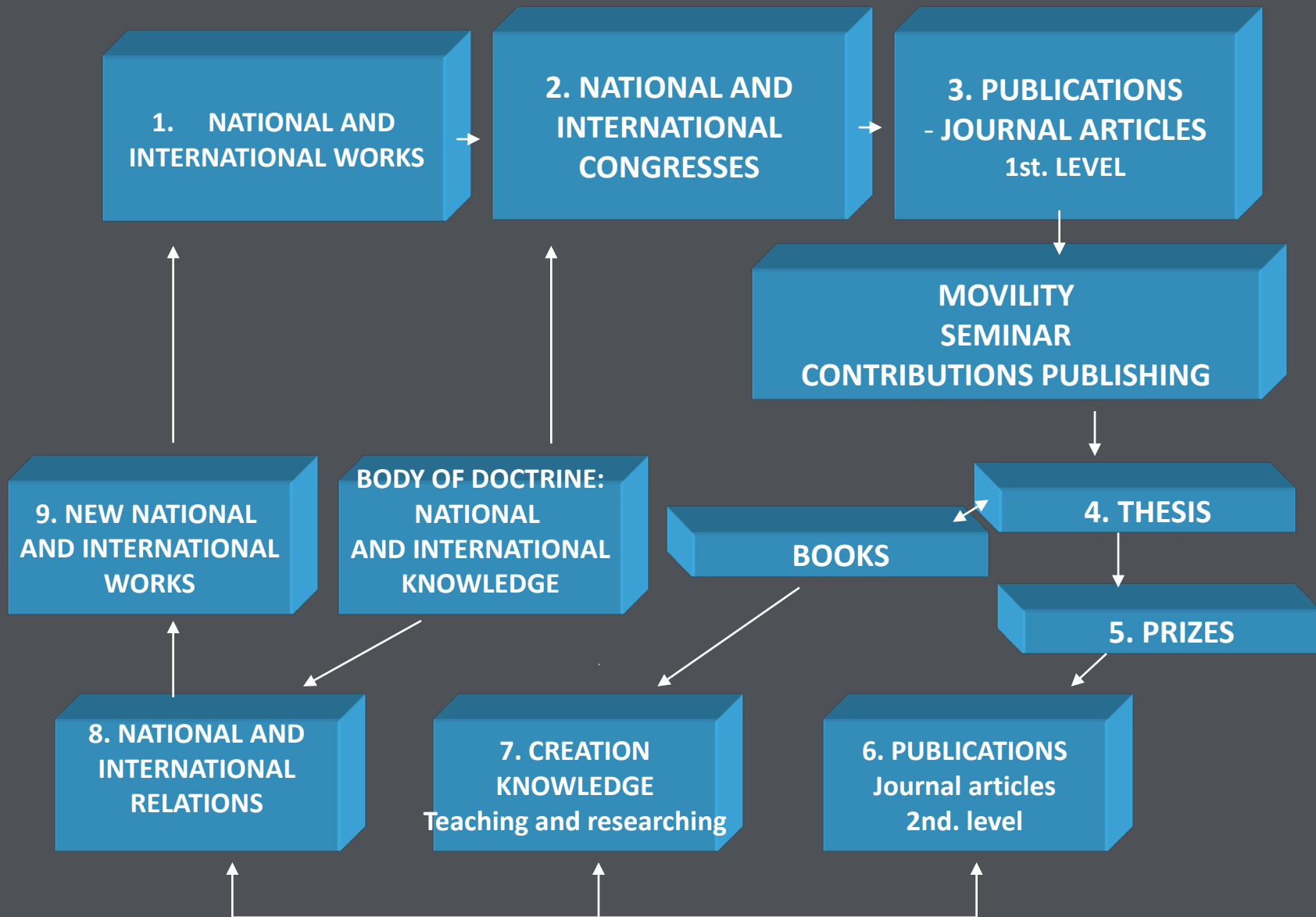
PROFESSIONAL TRAINING – TEAM LEARNING



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TWO FORMS OF UNION

1.- Peaceful coexistence: mutual support in publications, congresses, etc.

2.- Shared adventures: promote works and projects that complement us, contributing to funding and research issues to develop our methodology





WHAT DO WE WANT TO
BUILD?



**Thank you for your
attention**