



# Women in Sciences: Enhancing their International Training and Career Prospects through an Innovative Networked triple "I" Doctoral Program (the European/International Joint PhD in Social Representations and Communication)

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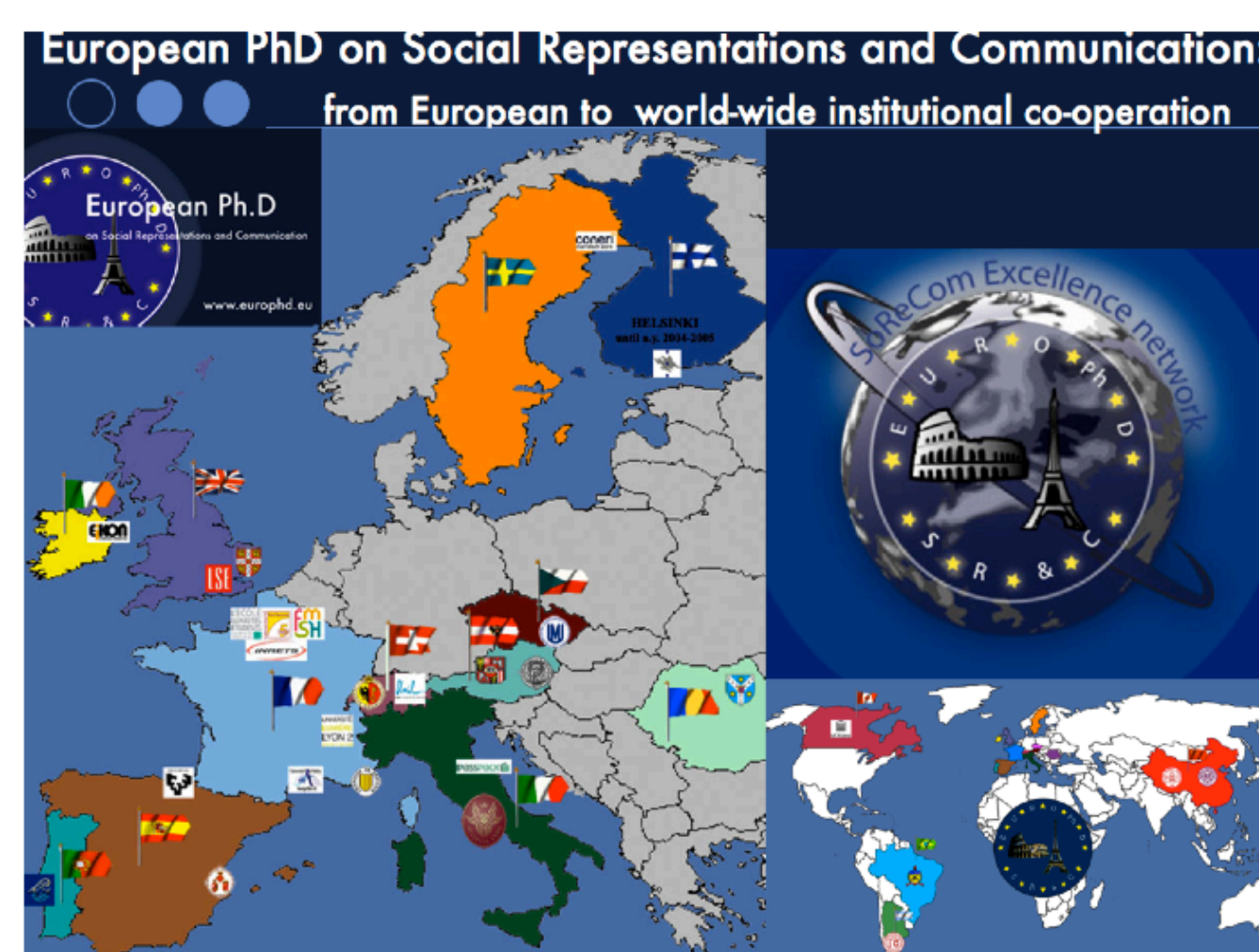


## Introduction

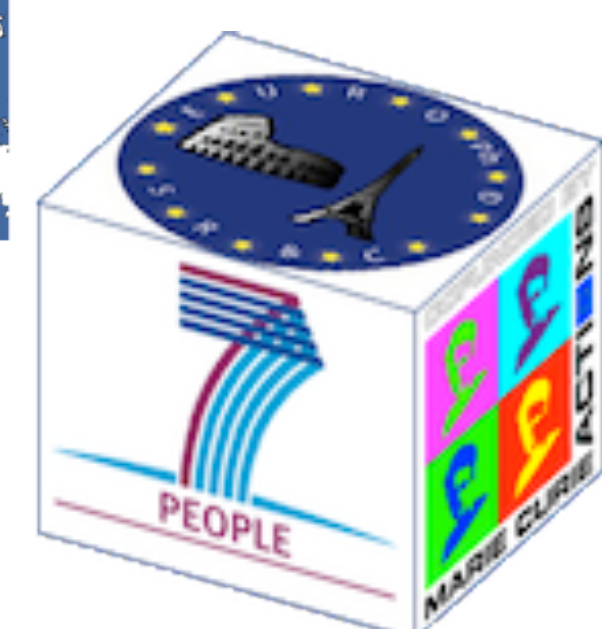
A key driver to promote the leading role of women in science is to train new generations by offering international research networking and career opportunity in and outside academia. Our contribution outlines how this goal has been pursued through the *European/International Joint PhD in Social Representations and Communication* (<http://www.euophd.eu>). This networked joint doctorate is a pioneer case of the integration of the triple "i" (international, interdisciplinary, intersectoral) transversal dimensions of the innovative doctoral training, selected by the European Commission as the top project among the 1147 project submitted in the 2013 call Marie Curie People – ITN-IDP (Innovative Doctoral Program) with top marks 98,80/100 (<http://www.euophd.eu/SoReComJointIDP>).

Combining the strength of its long-term top institutional history and the power of its capacity for innovation, currently this doctoral program represents a substantial development of a well-established European/International Joint Doctorate, formally recognised since 1993 within the triple framework of Universities, Ministries, the European Commission.

Headquartered at the state of the art Social Representations and Communication Research Centre and Multimedia Lab of Sapienza University of Rome, currently the European/International Joint PhD in Social Representations and Communication is an international, intersectoral and interdisciplinary networked doctoral programme led by Sapienza University (Italy) in 12 EU (AT, CH, CZ, FR, IT, NL, RO, ES, PT, SE, SK, UK) and 6 extra-EU countries from North America (U.S.A. and Canada) and Latin America (Argentina, Brazil, Mexico) to China. It includes a worldwide network of 25 universities, 1 French Research Institute IFSTTAR (a national research institute of science and technology for transport, development and network with intensive and extensive cooperation with the private sector), 2 SME in Sweden and in Italy in diversified sectors (information technologies, work and organisation, communication and marketing) and the multinational ELSEVIER in the strategic sector of publishing and science dissemination.



institutional web site: <http://www.euophd.eu>



The *European/International Joint PhD in Social Representations and Communication* is an institution working across the globe for gender equality and excellence in science. Concerning the selection process, in case of "draw" between two equally good applicants, priority is given to women.

## Social Representations

This research training program focuses on a supra-disciplinary area of the social sciences, and in particular of social psychology, inspired by the Social Representations Theory, one of the most important theories of the social construction of knowledge. Founded by Serge Moscovici (program director of the European/International Joint PhD in S.R. & C.) in 1961, the study of social representations, originally specifically European, is currently a multilingual, worldwide discipline with a substantial body of literature, involving leading scholars from social psychology and other social sciences.

The field of Social Representations represents a unifying meta-theoretical perspective on the social construction of knowledge and its relation to socially situated practices. It has important applications for the public and private sectors, acting as a bridge among disciplines including psychology, social psychology, sociology, cultural studies with pragmatic approach to language, semiotics, socio-history, anthropology, and communication studies (also including multidisciplinary approaches from computer sciences and new technologies) with important implications for institutional and organizational contexts, culture and health practices, inter-group relations, ideology and politics, economics, the environment, etc. Interested in how scientific knowledge is transformed by lay people and the media into common sense, it is also a supra-disciplinary field because it has activated a conversation among social, human and natural scientists in a wide range of internationally recognized research programs. These concern public understanding of the sciences and discoveries in various fields, such as medicine, environmental studies, biology, informatics, economy, political science, etc., and the social representations of complex new multidisciplinary topics like biogenetic foods, medical innovation, globalization and climate change, forms of interaction through new media, the risk society, immigration, minority groups, racism and multiculturalism, human rights, European integration and enlargement, etc. Consequently, this doctoral program is open to trans-disciplinary and multi-methodological research approaches (experimental and field work). The "objects" studied have a strong societal impact and important practical applications "within" and "for" society in the political, economic and social spheres.

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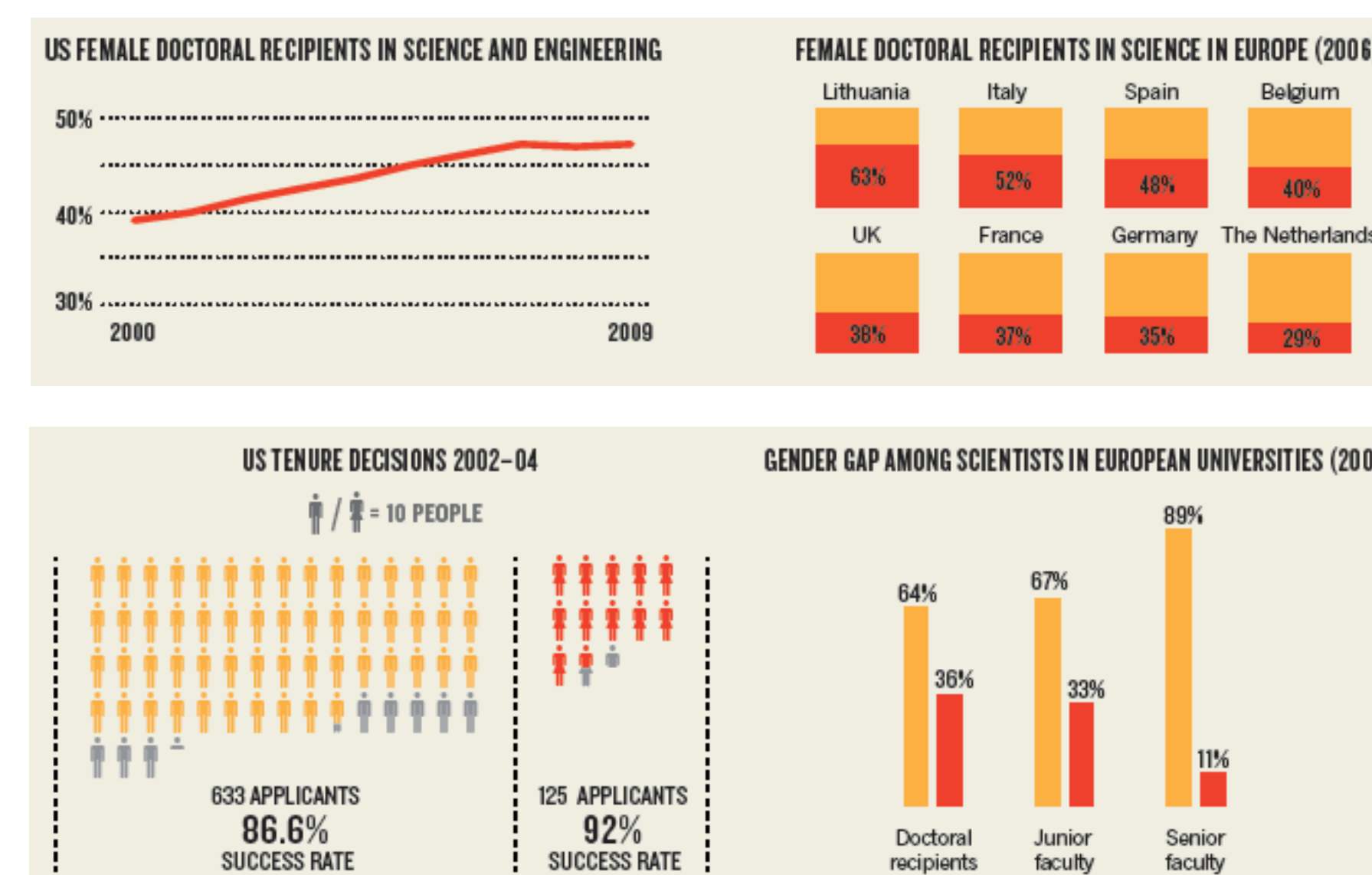
## Women in Science



Source: MO BIO Labs (2015), [www.mobio.com](http://www.mobio.com)

Iconic aspect of historic social representations of women (photo by taken in the Parliament Square Ottawa – Canada)

The overrepresentation of women in Social Sciences may be interpreted at the same time as gender role stereotype effect linked to the system of expectations of pro-social work attitude for women and the de-evaluation of Social Sciences as Science.



Source: Special issue of *Nature* (2013)

### Distribution by detailed field of study and gender

Field of study	Gender	Proportion %	Confidence limits (95%)		Coefficient of variation %
			Lower	Upper	
Agricultural sciences	Male	66.2	58.7	73.8	5.84
	Female	33.8	26.2	41.3	11.45
Biological sciences	Male	56.5	53.8	59.2	2.44
	Female	43.5	40.8	46.2	3.17
Health sciences	Male	27.8	22.1	33.6	10.46
	Female	72.2	66.4	77.9	4.04
Engineering	Male	84.8	82.2	87.4	1.55
	Female	15.2	12.6	17.8	8.65
Computer and information sciences, and Mathematics	Male	79.8	75	84.6	3.07
	Female	20.2	15.4	25	12.13
Physical sciences	Male	77.1	73.6	80.7	2.33
	Female	22.9	19.3	26.4	7.87
Psychology	Male	29.8	25.6	34	7.19
	Female	70.2	66	74.4	3.05
Social sciences	Male	52.9	48	57.7	4.68
	Female	47.1	42.3	52	5.25
Humanities	Male	49.3	45.7	52.9	3.7
	Female	50.7	47.1	54.3	3.6
Education	Male	35.2	30	40.4	7.51
	Female	64.8	59.6	70	4.08
Professional fields/ Other fields of study	Male	62.3	56.1	68.5	5.07
	Female	37.7	31.5	43.9	8.36

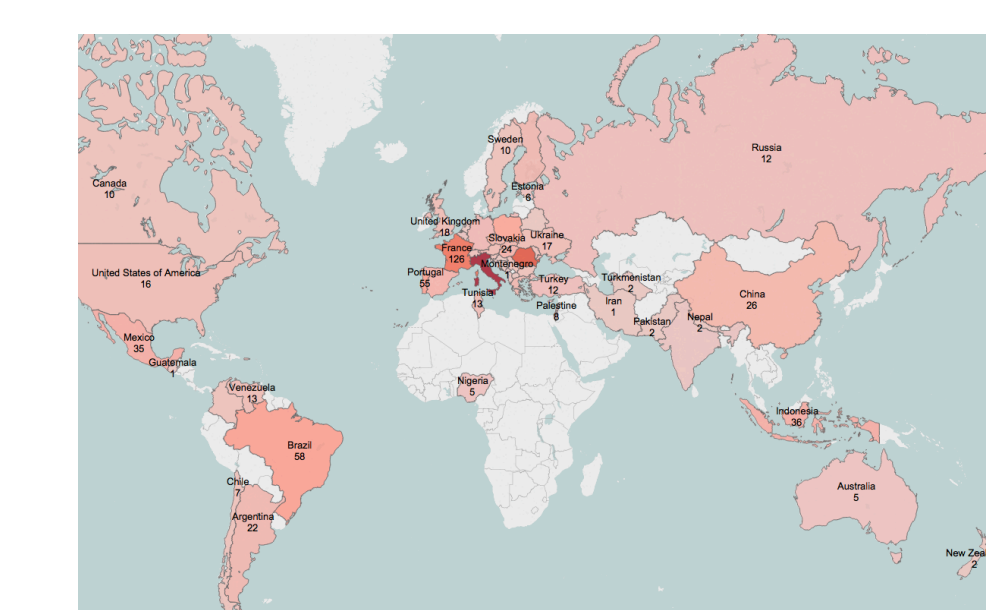
Source: Doctoral Graduates in Canada (2008)

## Women in the European/International Joint PhD in Social Representations and Communication

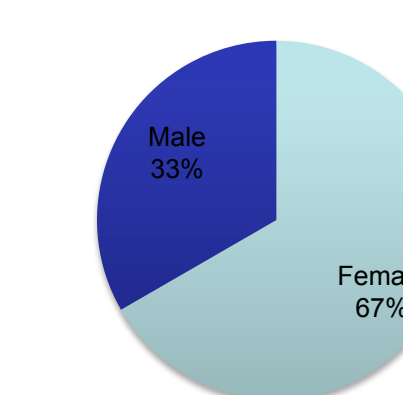
The European/International Joint PhD in Social Representations and Communication attract Women in Science worldwide (from Europe to North America, Latin America and China) and constitutes a way to empower female participants from different geo-cultural backgrounds to become leaders, promoting excellence in research.

**GENDER** is a very sensitive issue in our research training network from many points of view:

- it is a scientific topic related to identity, minority groups, including women in the sciences, women as managers and in the political hierarchy, etc.;
- consistent with the general trend in the social and human sciences, most of the research trainees in our programmes are women;
- contrary to the general trend in academic leadership (in European FP7 projects only 21,2% are led by women compared to 78,8% of man), the creator and director of the both the European/International Joint PhD in S.R. & C. programme and of the SoReComTHEmatic NETwork is a woman: Annamaria Silvana de Rosa.

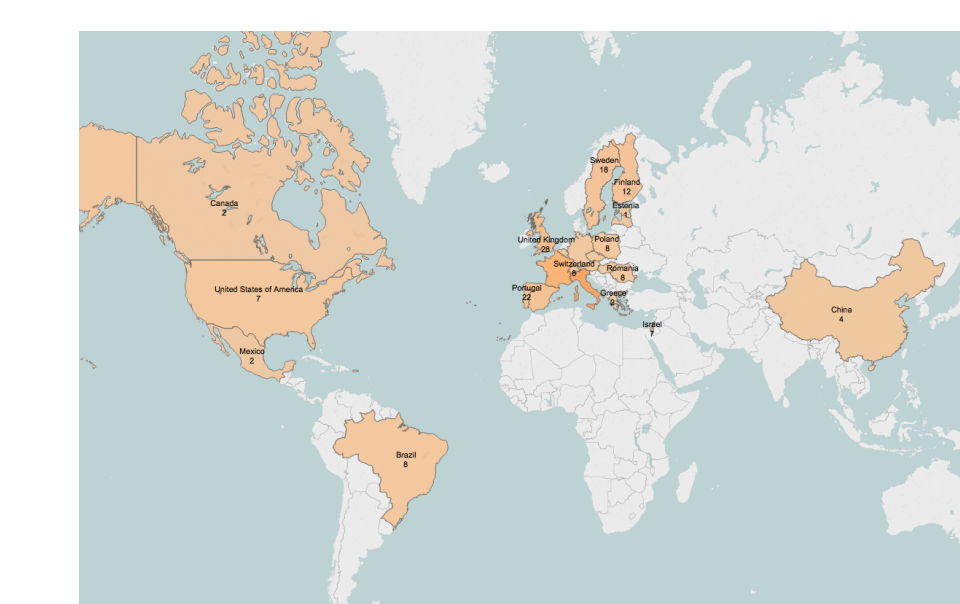


Participants by gender

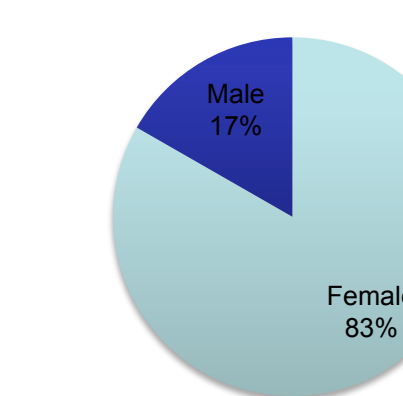


1408 participants from 57 countries

Source: [www.euophd.eu](http://www.euophd.eu) (2015)



Speakers by gender

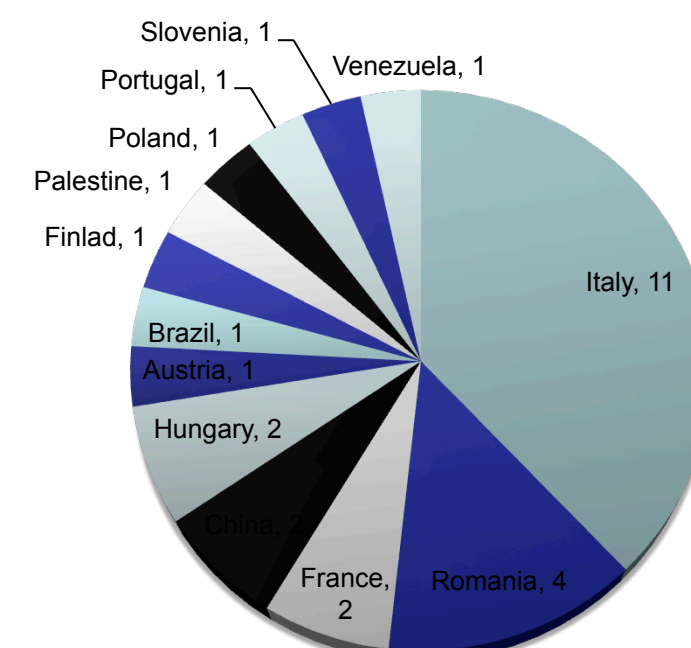


341 guest speakers from 24 countries

Source: [www.euophd.eu](http://www.euophd.eu) (2015)

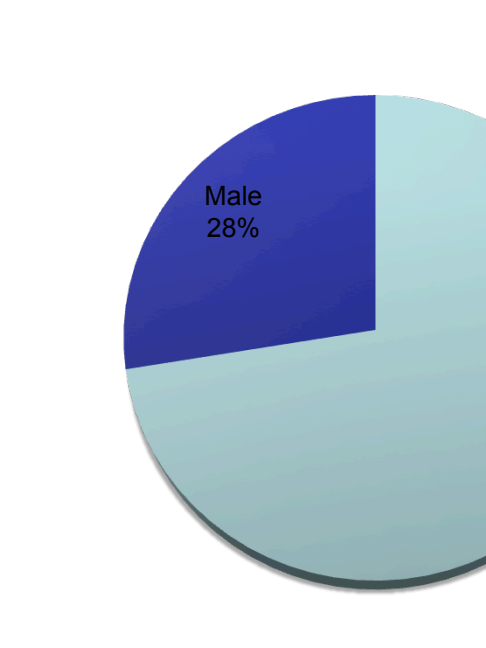
### Degree holders by nationality

Total = 29



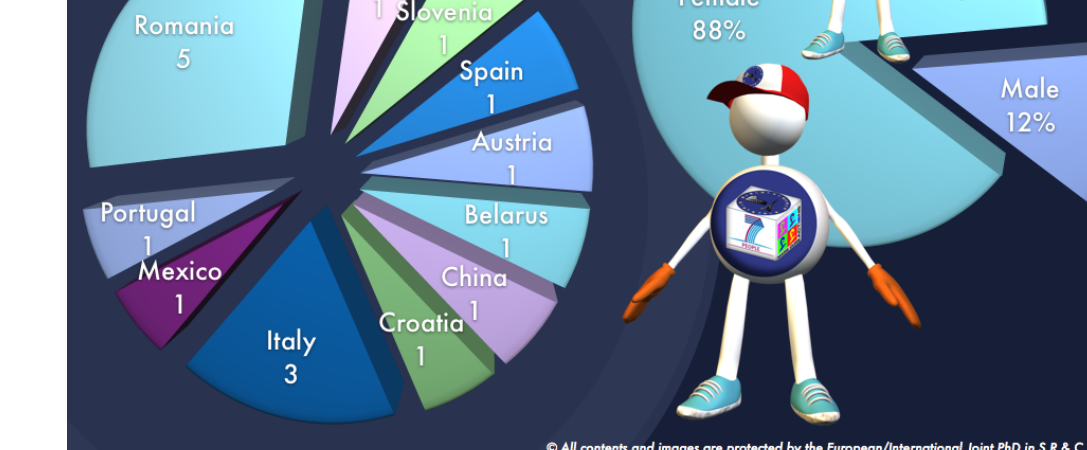
### Degree holders by gender

Total = 29



### International Participants

18 research trainees from 12 countries in 4 continents currently enrolled in the European/International Joint doctorates for the a.y. 2014-15



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