



MARIE CURIE ACTIONS

European Industrial Doctorates

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MARIE CURIE ACTIONS for an INNOVATIVE EUROPE

Excellence, mobility and skills for researchers



AGENDA

- Objectives of Marie Curie Actions
- Main achievements so far
- Policy context
- The future...



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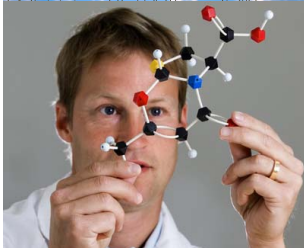
MARIE CURIE ACTIONS for an INNOVATIVE EUROPE

Excellence, mobility and skills for researchers



Towards a smart and knowledge-based society

Marie Curie Actions for attractive research careers in Europe



- Promote **mobility** of researchers
- Strengthen **link** between **academia** and **industry**
- Key **skills** matching both public and private sectors

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Some basic about Marie Curie Actions:

- Addressed to researchers at all stages of their careers
- Open to all domains of research (bottom-up)
- Mobility (international, intersectoral, interdisciplinary)
- Application through competitive calls for proposals
- Selection criteria:
S&T quality, Training/ToK, Implementation, Impact
- Budget covers generally:
salary, mobility and research budget for the researcher



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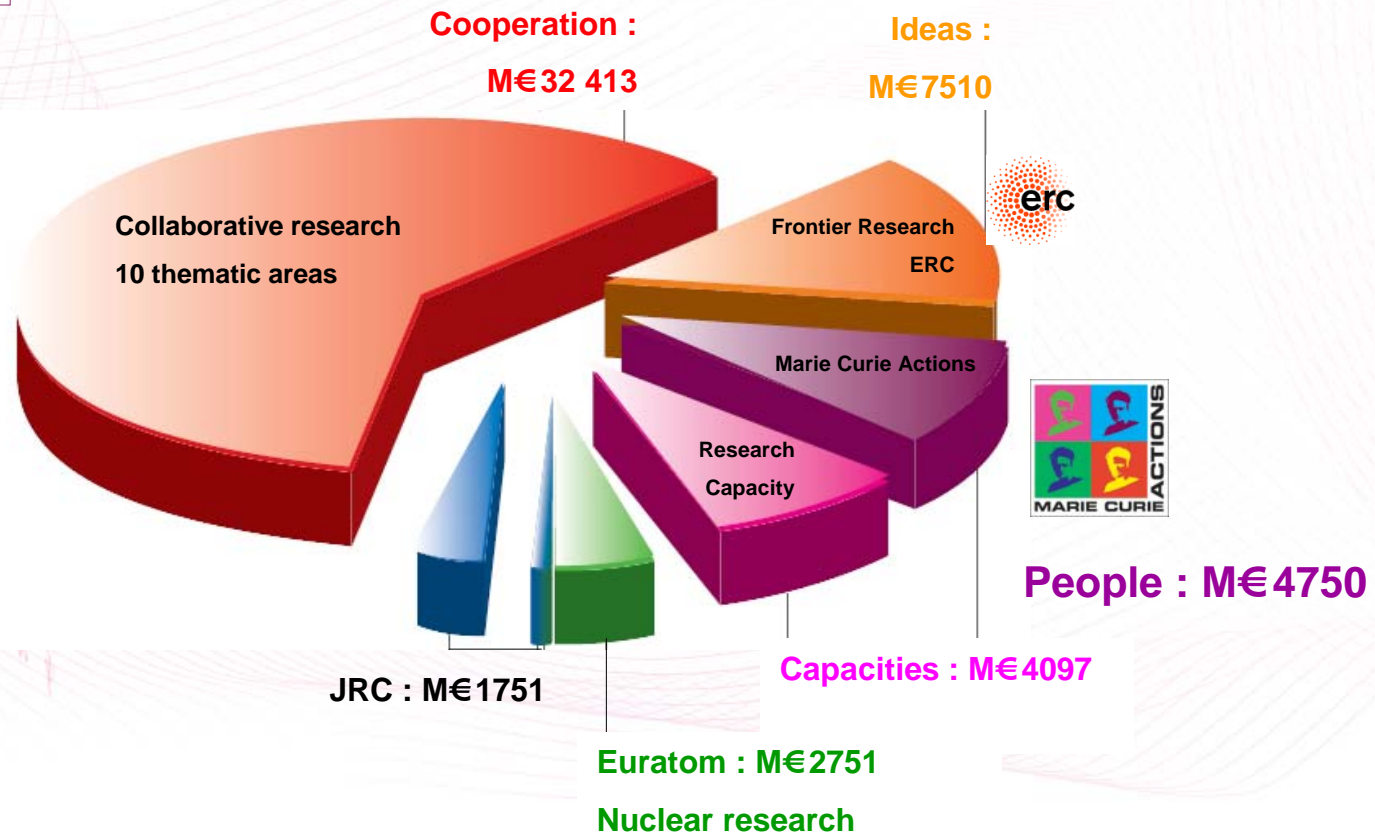
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Where the money comes from?

Total FP7 budget :
M€50 521

FP7 breakdown (€million) – 2007-2013



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Marie Curie Action		Objective
Initial training of researchers <i>(1900 M€)</i>	Initial Training Networks (ITN)	Improve career perspectives of early stage researchers in both public & private sector
Life-long training and career development <i>(1170–1400 M€)</i>	Intra-European Fellowships (IEF)	Career development of experienced researchers by e.g.: diversification skills/competencies; integrate a stable position after mobility
	Career Integration Grants (CIG)	
	Co-funding of regional, national, international programmes (COFUND)	
Industry dimension <i>(250-450 M€)</i>	Industry-Academia Partnerships and Pathways (IAPP)	Open and foster dynamic pathways between public research organisations and private commercial enterprises
International dimension "<i>World fellowships</i>" <i>(1170–1400 M€)</i>	International Outgoing Fellowships (IOF)	Reinforce extra-European dimension of the ERA through mobility through training, knowledge transfer and cooperation
	International Incoming Fellowships (IIF)	
	International Research Staff Exchange Scheme (IRSES)	

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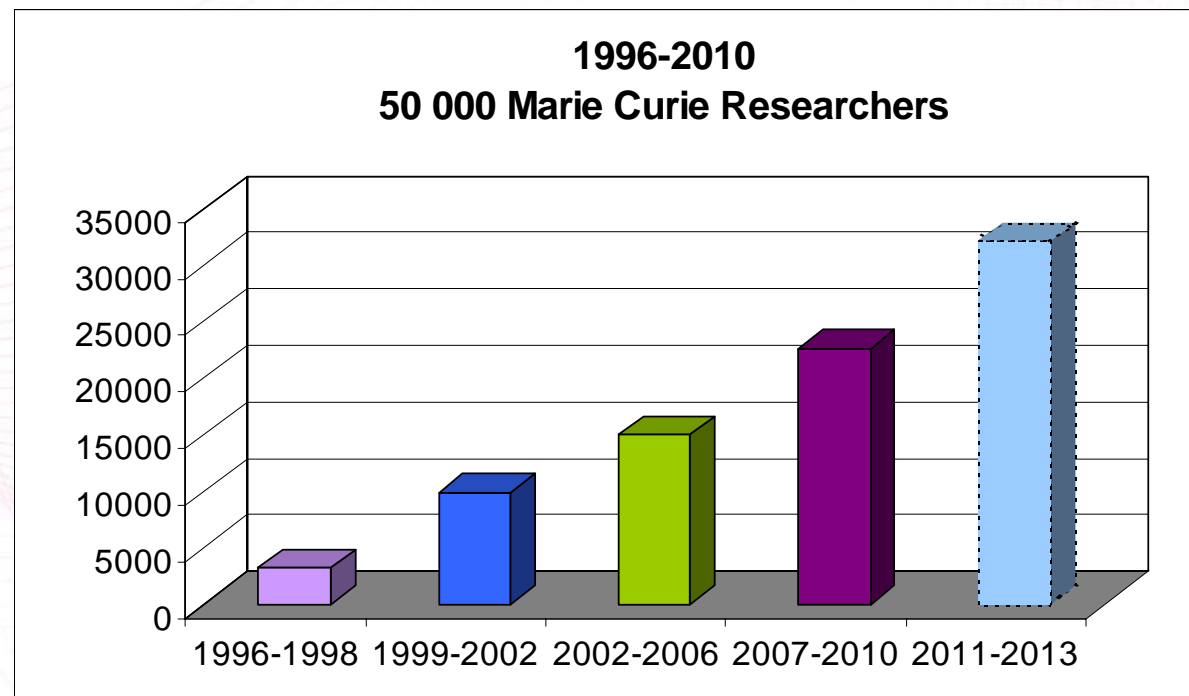
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Researchers On the Move



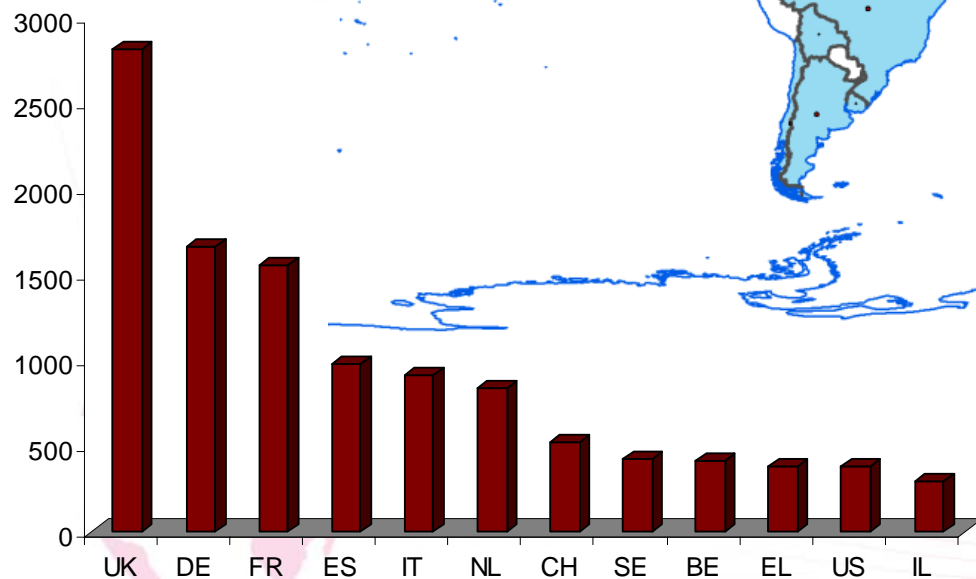
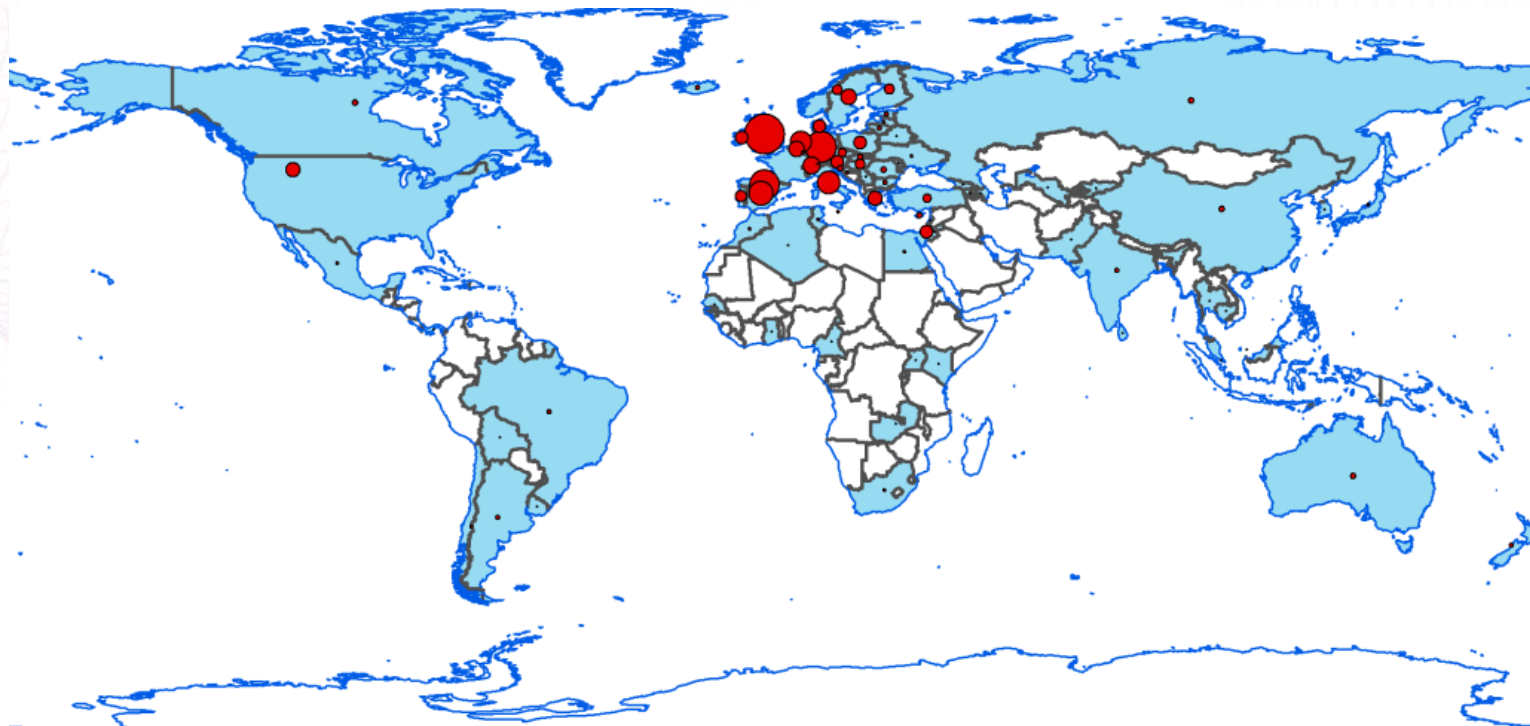
Pierre and Marie Curie honeymoon, 1895



- **50.000** researchers from over 120 nationalities since 1996
- **40% women**

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Marie Curie host organisations in 67 countries

12 MAIN DESTINATIONS

FP6 and FP7 Marie Curie host organisations

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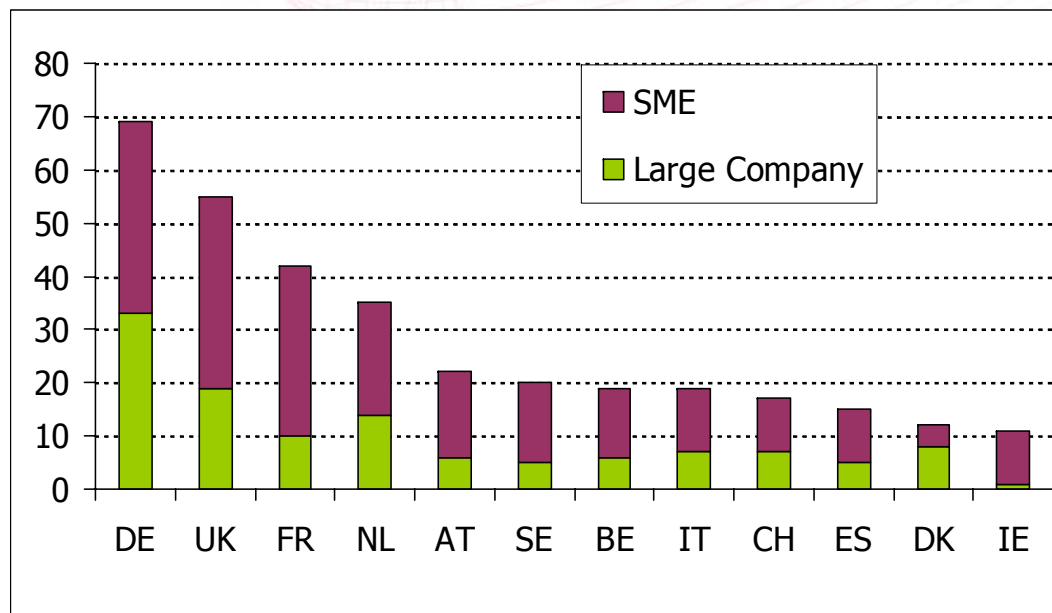
Enhancing Excellence in Science & Training

- **Excellence in Science:**
 - **All top 100 European universities** participate (Shanghai ranking)
 - **Nobel prize** and other laureates involved in training Marie Curie researchers
- **Excellence in Training:**
 - Focused on creative and innovative **skills** development
 - Entrepreneurship, business management, language, communication
- **Excellent environment:**
 - Attractive salaries and employment conditions



Strengthening Innovation

- Focus on university, research organisation and business cooperation
 - 2007-2013: Businesses involved in the training of **10.000 PhDs**



- Mobility of **~6000** researchers between industry and academia through **staff exchange**
- Small and Medium enterprises to benefit from about **€ 300 million**

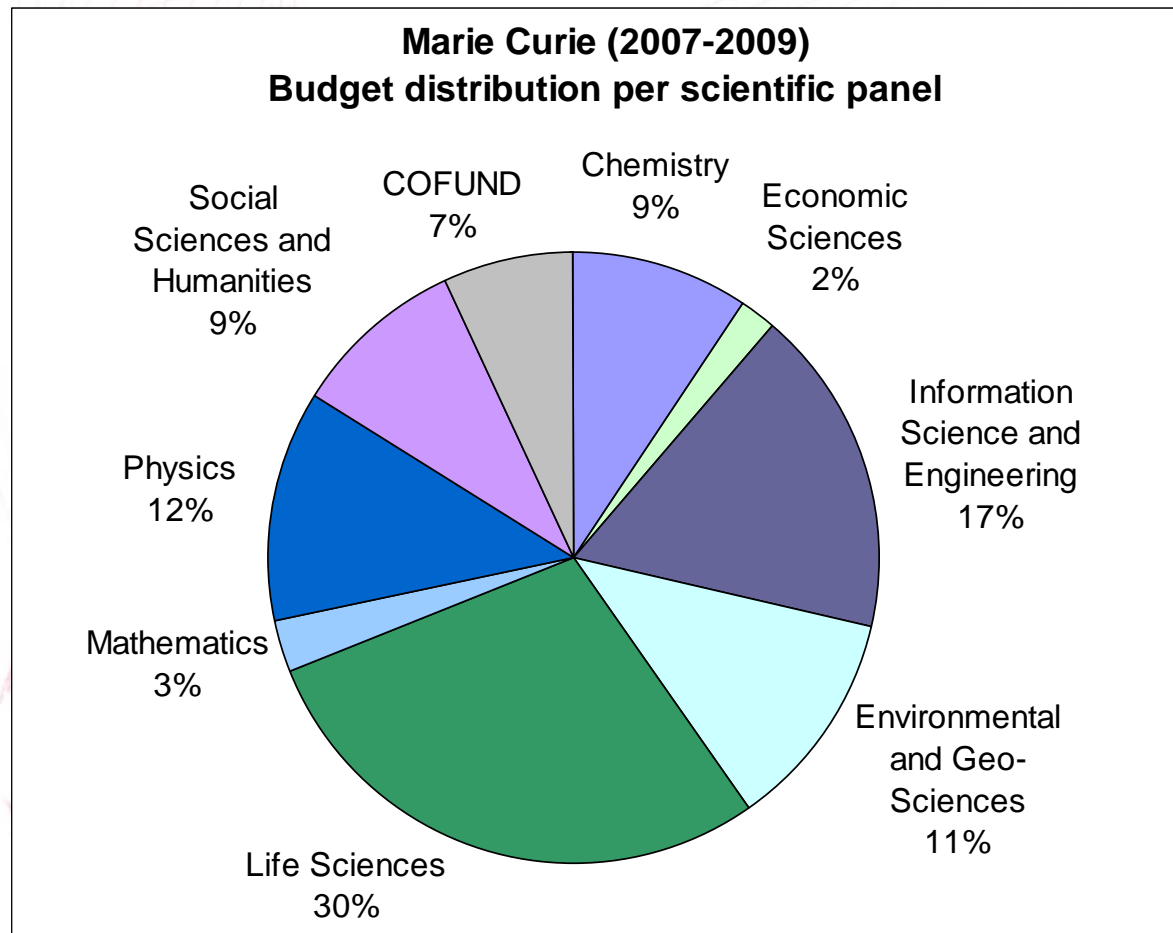
2007-2009: top 12 country distribution of participating enterprises

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Marie Curie Actions Freedom of research



2007-2009:

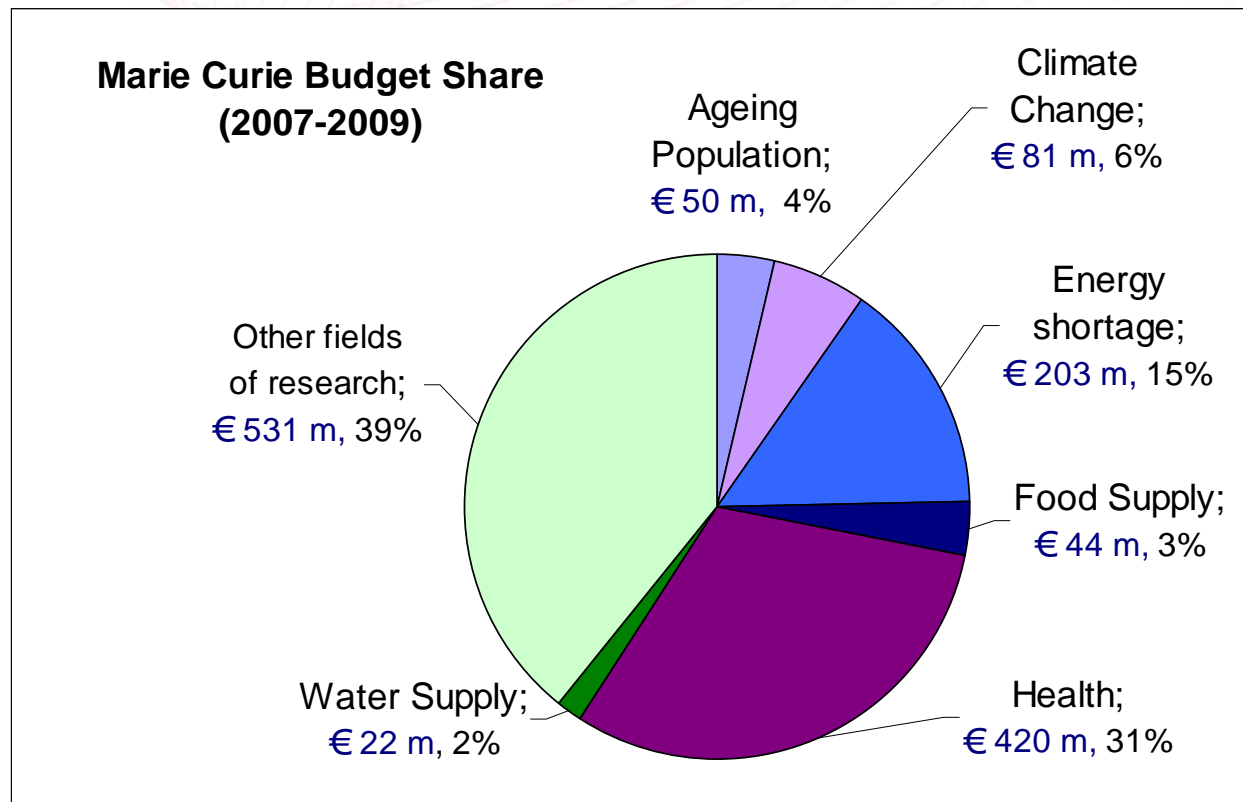
- EU contribution of **€1350 million**
- **3705** research projects funded
- Research topics freely chosen by applicants

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Supporting researchers in key areas for the future



- 2007-2009: 1550 training research projects addressing directly major societal challenges

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- Europe 2020 strategy: smart/sustainable/inclusive growth
- Marie Curie Actions support 3 flagship initiatives:

✓ "Innovation Union":

- 1 million new research jobs needed
- to attract and train young people to become researchers
- quality of doctoral training, with businesses involvement
- offer internationally competitive research careers
- attractive employment conditions, gender balance



✓ "Youth on the move":

mobility of researchers across countries, disciplines and sectors



✓ "An agenda for new skills and jobs":

better skills for better jobs



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**Doctoral
Training**

Intersectoral

Excellence

International

Inter-
disciplinary



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2 Implementation Modes

2011

Multi-ITNs

Mono-ITNs

**MC Initial
Training Networks**

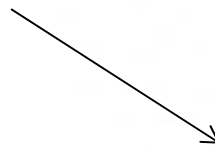
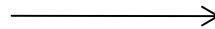
3 Implementation Modes

2012

Multi-ITNs

European
Industrial
Doctorates

Innovative
Doctoral
Programmes

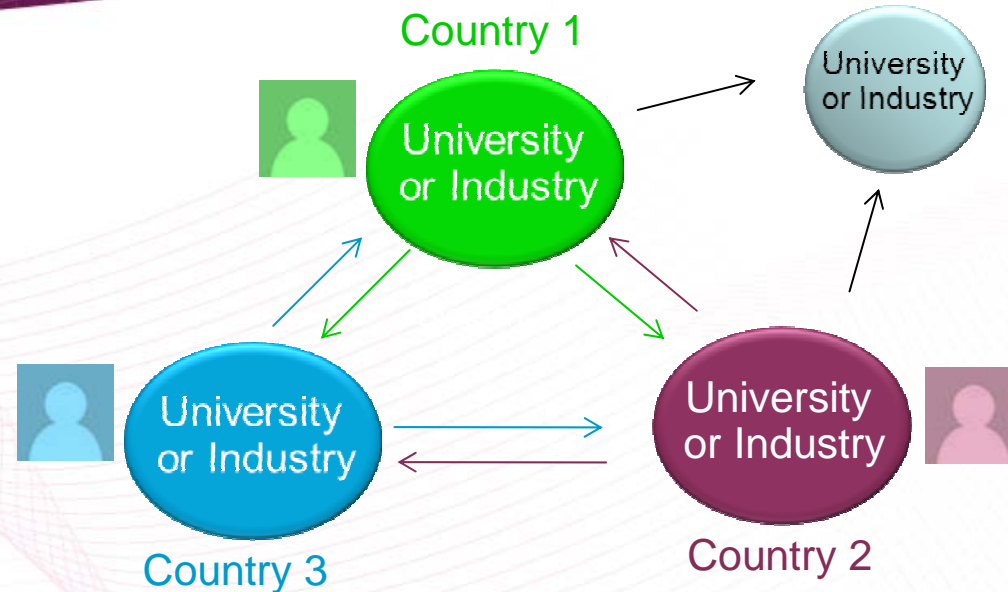


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Multi-ITNs



- > 3 participants + possible associated partners
- Short-term secondments
- Network activities
- Innovative skills

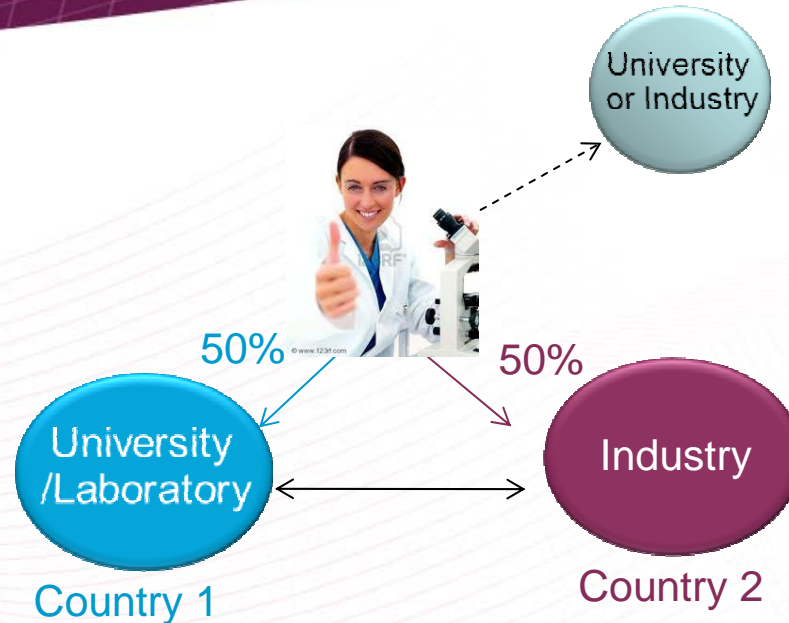
Results
driven

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European Industrial Doctorates



- 2 participants + possible associated partners
- Long-term collaboration
- Innovative skills
- Joint supervision

Market driven

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a win-win for both sectors

Industry:

- Alternative paths to innovation - risk research without the risk
- Actively directing the research towards the need of the company
- Identifying commercial opportunities and developing them within the academic environment
- Acquiring know-how and skilled research staff

Academia:

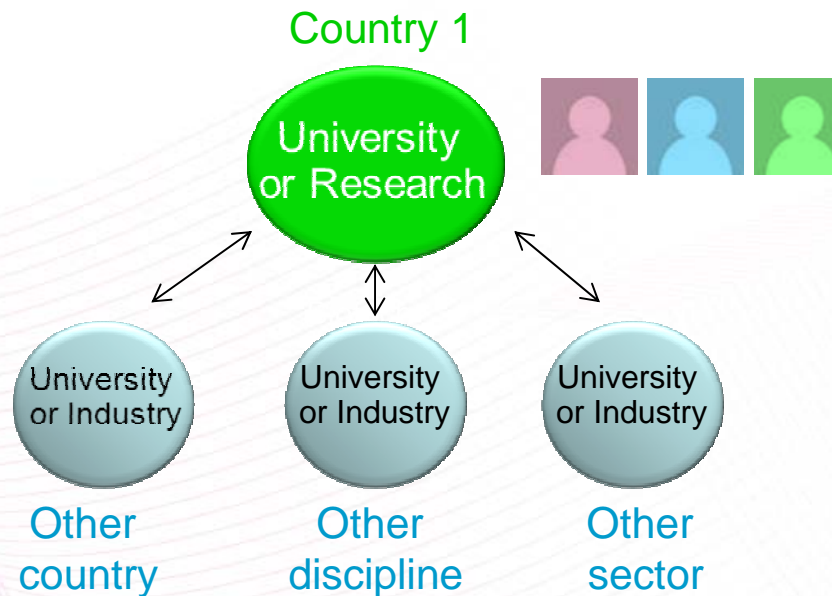
- Alternative career opportunities
- Value new generation of researchers appropriately
- Easier commercialisation of new ideas
- Increased funding potential through new collaborations
- Funded researchers

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Innovative
Doctoral
Programmes



- 1 participant + possibility of associated partners
- Short-term secondments
- Innovative skills

Critical mass

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Shaping the future

- Streamlining MCA actions, further simplification of rules
- Support European Industrial Doctorates
- Support European Innovative Doctoral Programmes
- Extend the co-financing principle to early stage researchers
- New Alumni services



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Shaping the future

- Streamlining MCA actions, further simplification of rules



ITN
IAPP
IEF
IOF
IIF
CIG
COFUND
IRSES



ESR – Doctoral candidates

ER

Staff exchange

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**THANK YOU
FOR YOUR
ATTENTION**



<http://ec.europa.eu/mariecurieactions>