

Carriere Scientifiche

highlights sulle iniziative ESF, Science Europe e MIUR

L. Catani - CUG - 27 Novembre 2013

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MO Fora sulle Carriere Scientifiche



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Working Group Research Careers

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MIUR e l'*empowerment* dei ricercatori



2007-10

EUROPEAN SCIENCE FOUNDATION
SETTING SCIENCE AGENDAS FOR EUROPE

MEMBER ORGANISATION FORUM
Research Careers in Europe Landscape and Horizons
A report by the ESF Member Organisation Forum on Research Careers

2011-13

EUROPEAN SCIENCE FOUNDATION

Developing Research Careers In and Beyond Europe: Enabling – Observing – Guiding and Going Global
A Report by the ESF Member Organisation Forum 'European Alliance on Research Career Development' (EARCD)

EUROPEAN SCIENCE FOUNDATION

European Professional Development Framework for Researchers
ESF MD Forum on European Alliance for Research Career Development

Researcher's Career
A report by the European Alliance for Research Career Development

Concepts of Researcher Mobility
A comprehensive approach including part-time positions

Policy Briefing • April 2013

2013

Ministero dell'Istruzione, dell'Università e della Ricerca
HORIZON 2020 ITALIA

HIt
2020
ricerca & innovazione

Marzo 2013

SCIENCE EUROPE

2013-15

8 INNOVATION

ESF- European Science Foundation

The **European Science Foundation (ESF)** is an association of 67 member organizations devoted to **scientific research** in 29 **European** countries.

It is an independent, non-governmental, non-profit organisation that **facilitates cooperation and collaboration** in European research and development, European science policy and science strategy.

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ESF Today | Serving Science | Hosting Experts | Coordinating Research | Working at ESF | Publications

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- Mission**
- Values
- How we work
- Organisation
- Governing Council 2013
- Member Organisations
- How to reach us

Mission

ESF is committed to achieving the highest quality science in Europe to drive progress in research and innovation. We help our Member Organisations collaborate internationally on research programmes that we coordinate in almost every scientific domain. We provide services to the science community, including peer review, evaluation and conferences, as well as support career tracking. ESF also hosts high-level expert boards and committees to support them in achieving their objectives.

Our science policy activities have been transferred to **Science Europe** which now handles the mainstay of the strategic and policy activities that we initiated and executed in previous years.

ESF Today	Serving Science	Hosting Experts	Coordinating Research	Working at ESF	Publications
Recent Developments	Peer Review	Scientific Review Groups	EUROCORES	Mission and Values	Corporate Publications
Mission	Evaluation Support	Expert Boards and Committees	Exploratory Workshops	European Charter of Researchers and Code of Conduct for the Recruitment of Researchers	Science Policy Briefings
Values	Career Tracking		Forward Looks	Recruitment process	Science Position Papers
How we work	Conferences		Calls and Funding	Current Vacancies	Forward Looks
Organisation	EC Contracts Coordination		MO Fora		Member Organisation Fora
Governing Council 2013	MERIL		Research Networking Programmes		Polar Sciences
Member Organisations			Meetings		Humanities
How to reach us			EURYL		Life, Earth and Environmental Sciences

ESF- European Science Foundation

ESF Member Organisations in 2013

67 Member Organisations in 29 countries

France

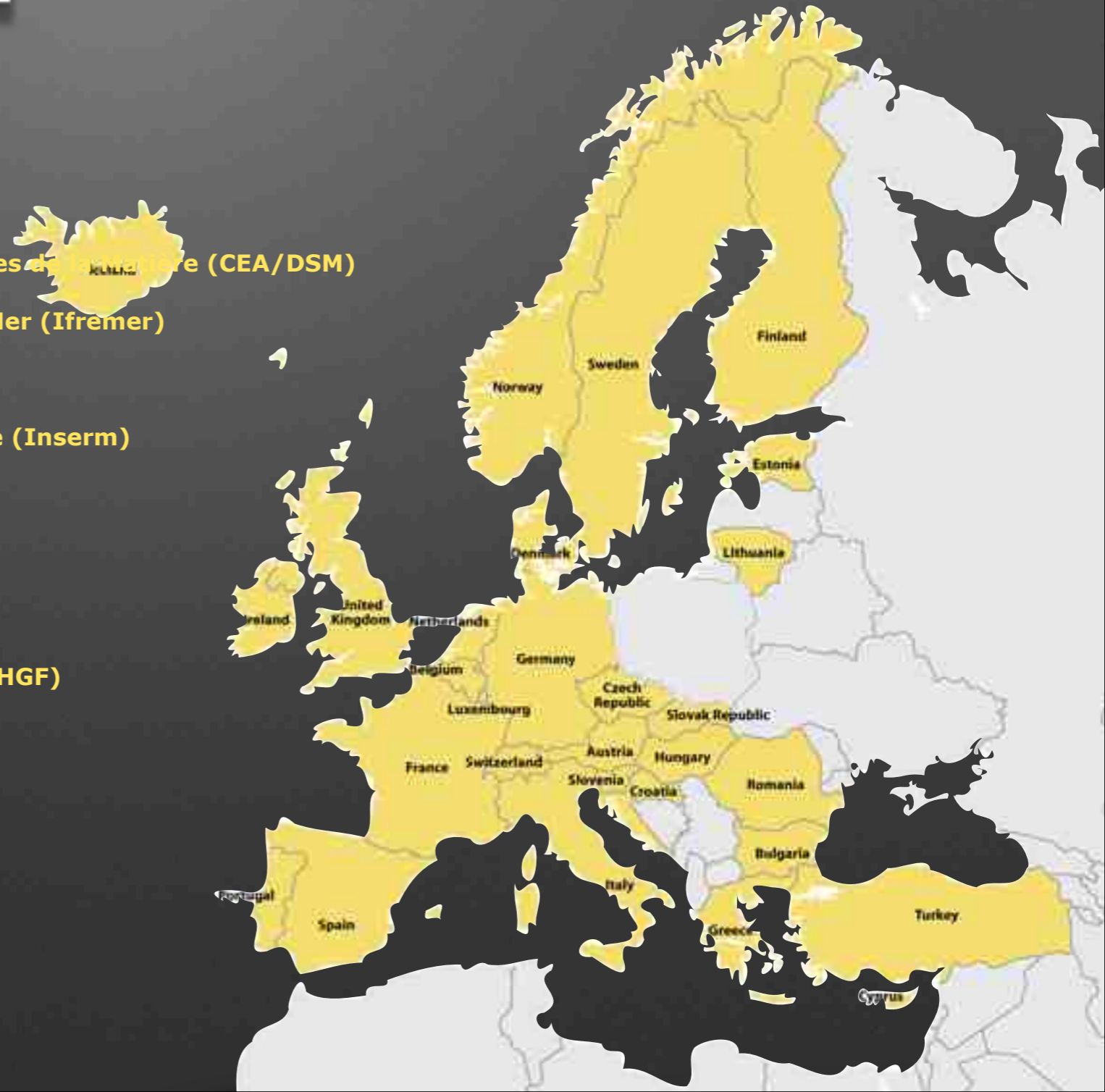
- **Agence Nationale de la Recherche (ANR)**
French National Research Agency
- **Centre National de la Recherche Scientifique (CNRS)**
National Centre for Scientific Research
- **Commissariat à l'Énergie Atomique/Direction des Sciences de la Matière (CEA/DSM)**
Materials Sciences Division of the Atomic Energy Commission
- **Institut Français de Recherche pour l'Exploitation de la Mer (Ifremer)**
French Research Institute for Exploitation of the Sea
- **Institut National de la Recherche Agronomique (INRA)**
National Institute for Agronomic Research
- **Institut National de La Santé et de la Recherche Médicale (Inserm)**
French National Institute of Health and Medical Research
- **Institut de Recherche pour le Développement (IRD)**
National Institute for Development

Germany

- **Deutsche Forschungsgemeinschaft (DFG)**
German Research Foundation
- **Helmholtz-Gemeinschaft Deutscher Forschungszentren (HGF)**
Helmholtz Association of German Research Centres
- **Max-Planck-Gesellschaft (MPG)**
Max Planck Society
- **Union der deutschen Akademien der Wissenschaften**
Union of the German Academies of Sciences and Humanities

Italy

- **Consiglio Nazionale delle Ricerche (CNR)**
National Research Council
- **Istituto Nazionale di Fisica Nucleare (INFN)**
National Institute for Nuclear Physics



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ESF Today | Serving Science | Hosting Experts | Coordinating Research | Working at ESF | Publications

Home > Coordinating Research > MO Fora

Member Organisation Fora

About

An ESF Member Organisation Forum is an output-oriented, issue-related venue for the Member Organisations, involving other organisations as appropriate, to exchange information and experiences and develop joint actions in science policy. (ESF Strategy Plan 2006-2010)

General information

- [MO Fora policy](#)
- [MO Fora Presentation](#)

Current MO Fora:

- [European Alliance on Research Career Development](#)
- [Research Infrastructures](#)
- [Scientific Foresight for Joint Strategy Development](#)
- [Evaluation of Publicly Funded Research](#)
- [Evaluation: Indicators of Internationalisation](#)

Completed MO Fora:

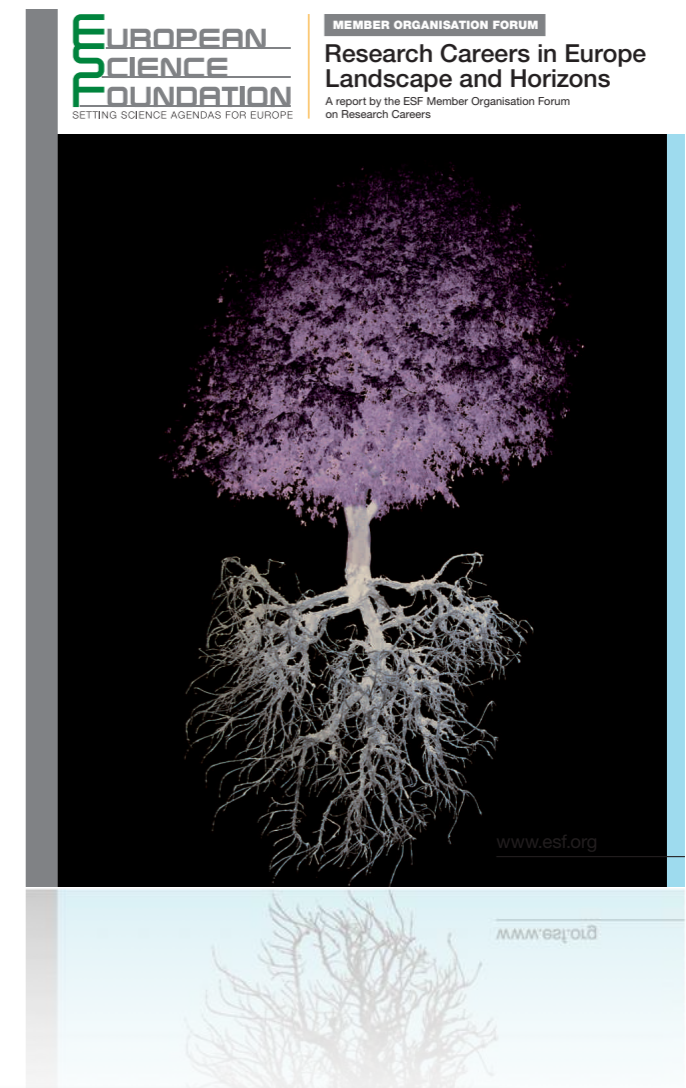
- [Science in Society Relationships](#)
- [Peer Review](#)
- [Research Integrity](#)
- [Research Careers](#)
- [Evaluation of Funding Schemes and Research Programmes](#)
- [Promoting Internationalisation of Social Sciences in Central and Eastern Europe](#)

MO Fora

- European Alliance on Research Careers Development
- Research Infrastructures
- Science Foresight for Joint Strategy Development
- Evaluation of Publicly Funded Research
- Evaluation: Indicators of Internationalisation
- Completed MO Fora
- Publications
- Research Networking Programmes
- Meetings
- EURYI

Forum ESF: “Research Careers in Europe Landscape and Horizons”

‘... the XXIst ... will be the century of science and technology. More than ever, investing in research and technological development offers the most promise for the future. In Europe, however, the situation concerning research is worrying. Without concerted action to rectify this, the current trend could lead to a loss of growth and competitiveness in an increasingly global economy’ (Philippe Busquin, 2001)



Europe has set itself the ambitious goal to become ‘the most dynamic and competitive knowledge economy in the world’ (Lisbon, March 2000)

To achieve this goal, the European Council agreed a spending target approaching 3% of GDP on European research and development (R&D) by 2010.

As a consequence, the European Commission stated that Europe would need to make strong efforts to build additional research capacity in the near future.

Increased investment in research will raise the demand for researchers: about 1.2 million additional research personnel, including 700 000 additional researchers, are deemed necessary to attain the objective.

Participating organisations and nominated representatives

Country	Organisation	Members
Austria	Austrian Academy of Sciences (ÖAW)	Gerhard Leder, Barbara Haberl
Belgium	Research Foundation Flanders (FWO)	Jan De Beule, Benno Hinnekint, Stijn Verleyen
Belgium	National Fund for Scientific Research (FNRS)	Elisabeth Kokkelkoren, Bruno Moraux, Pascal Perrin
Cyprus	Cyprus Research Promotion Foundation	Eleana Gabriel, Ioanna Loizou
Czech Republic	The Czech Science Foundation (GAČR)	Veronika Paleckova
Denmark	Danish National Research Foundation (DG)	Geeske de Witte Vestergaard, Vibeke Schrøder
Finland	Academy of Finland	Maiju Gyran, Tiina Petänen
Finland	Delegation of the Finnish Academies of Science and Letters	Irina Kauhanen, Eero Vuorio
France	National Institute for Agronomic Research (INRA)	Thierry Boujard
France	The ELSO Gazette	Carol Featherstone
France	Ministry of National Education, Advanced Instruction, and Research	Alain Lichniewsky
Germany	German Research Foundation (DFG)	Anjana Buckow, Anke Reinhardt, Beate Scholz
Greece	National Hellenic Research Foundation (NHRF)	Loula Sigala
Hungary	Hungarian Academy of Sciences	Zsolt Kajcsos
Ireland	Irish Research Council for Sciences, Engineering and Technology (IRCSET)	Martin Hynes, Jennifer Brennan
Ireland	Health Research Board (HRB)	Annalisa Montesanti
Italy	National Research Council (CNR)	Marta Caradonna, Anna D'Amato, Andrea Lapicciarella
Italy	National Institute for Nuclear Physics (INFN)	Luciano Catani
Luxembourg	National Research Fund (FNR)	Marie-Claude Marx, Ulrike Kohl
The Netherlands	Netherlands Organisation for Scientific Research (NWO)	Anko Wiegel
Norway	The Research Council of Norway (RCN)	Tone Vislie
Poland	Foundation for Polish Science (FNP)	Marta Lazarowicz-Kowalik, Magdalena Zuberek
Romania	Ministry of Education and Research	Monica Cruceru
Spain	Council for Scientific Research (CSIC)	Margarita Martin Munoz, Jose J. Sanchez Serrano
Sweden	Swedish Research Council (VR)	Ana Beramendi, Håkan Billig, Carl Jacobsson, Anna Sjöström Douagi
Sweden	Swedish Council for Working Life and Social Research (FAS)	Cecilia Grevby
Switzerland	Swiss National Science Foundation (SNSF)	Susanne Matuschek
United Kingdom	Research Councils UK	Iain Cameron
United Kingdom	Medical Research Council (MRC)	Kevin Moreton
United Kingdom	Skillset	Charlynn Pullen

Observers

Organisation	Contact Person(s)
League of European Research Universities (LERU)	Katrien Maes
EURODOC	Karoline Hollaender, Koen van Dam
EURYI Awardee	Svetlana Berdyugina
European University Association (EUA)	John H. Smith, Lidia Borrell-Damian, Thomas Ekman Jørgensen, Alexandra Bitusikova
European Commission	Massimo Serpieri
European Commission	Cees Vis
European Molecular Biology Organization (EMBO)	Anne-Marie Glynn, Gerlind Wallon
European Platform of Women Scientists (EPWS)	Maren Jochimsen
Contact Office for European Research, Innovation and Education (SwissCore)	Maryline Maillard

Coordinators

Organisation	Contact Person(s)
European Science Foundation	Laura Marin, Neil Williams

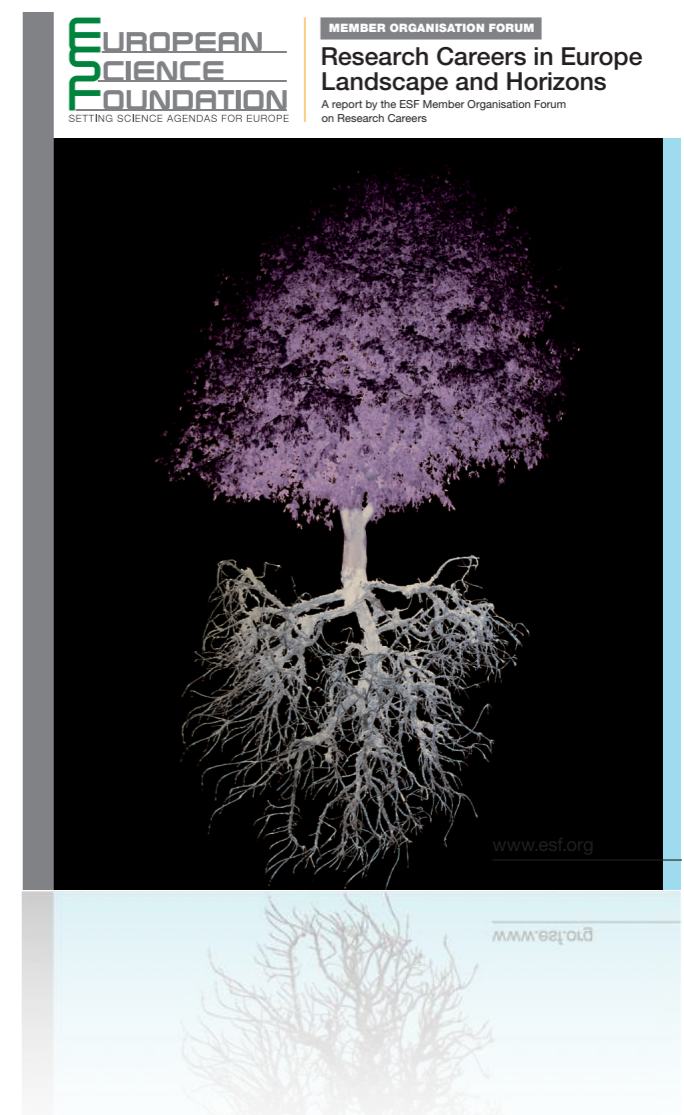
Aims: Launched in November 2007, the ESF Member Organisation Forum on Research Careers serves as a joint platform for the exchange of views and experience and for the development of strategy concepts to be applied at national and supranational level. It provides an interface for ESF Member Organisations, the European Commission and universities in Europe represented by the European University Association and the League of European Research universities.

Objectives: The ESF Member Organisation Forum on Research Careers seeks:

- to develop a road map for research career development in Europe and by this means
- to create new and improve existing European-level, including coordinated national, policies and programmes aimed at promoting different career stages, and
- eventually to raise the international visibility of the ERA as a common labour market for researchers.

Actions: The outcomes of the mapping exercises and identification of good practices are built around those subgroups. The Forum has worked out an implementation plan which will form the backbone of its future activities. We have identified five fields in which we think joint actions have to be taken:

- structuring of research careers;
- improving the attractiveness and competitiveness of European research careers;
- providing 'equal playing fields' for researchers of all backgrounds;
- supporting the development of 'portfolio careers';
- developing and implementing European policies for research career development.



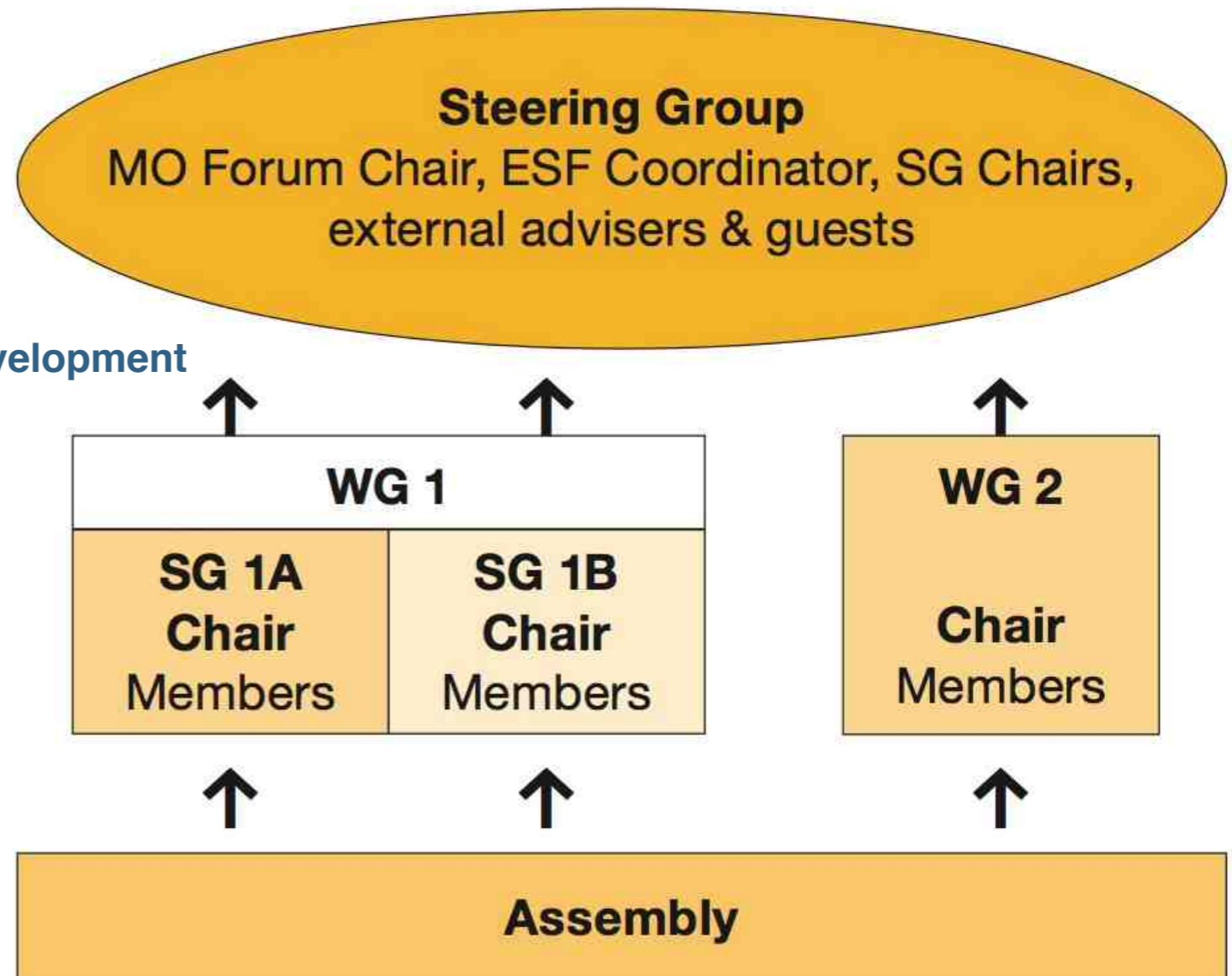
Working Group 1:
Conditions of a Research Career in Europe

SG 1A: **Research Career Structure and Development**
(Chair: Eero Vuorio)

SG 1B: **Gender Issues**
(Chair: Susanne Matuschek)

Working Group 2:
Human Resources Development

Transferable skills
(Chair: Iain Cameron)



SG 1A on Research Career Structure and Development focused on six topics:

- Attractiveness of a research career;
- Harmonisation of career steps;
- Job status (fellowships versus salaries, open-ended versus fixed-term contracts);
- Career breaks due to **intersectoral mobility** (academia ↔ industry ↔ public sector);
- Predictability of research career (tenure track system) and
- Independency/autonomy.

survey among the member organisations represented in the subgroup

identified common trends and examples of good practice

Subgroup 1B on Gender Issues identified four topics:

- Leaky pipeline;
- Maternity/paternity/**parental leave**;
- Career breaks due to family reasons;
- Equal playing fields.

analysed gender policies and measures in 19 countries

six countries (DE, IE, NW, ES, CH and UK) of special interest were identified for a deeper analysis

Working Group 2 on Human Resources Development elaborated the following key points with a special **focus on the provision of transferable skills**:

- Government or other policy makers in each country, when it started, what is expected and how it is implemented;
- Which **aspects** of transferable skills are included;
- Which **organisations are responsible** for delivering the agenda in each country and how they interact with each other and the research base (universities, research organisations etc.);
- The **particular policy** and role of the research councils or other ESF Member Organisation.


survey addressing all ESF Member Organisations represented in the Research Careers Forum

answers did not necessarily represent only the Member Organisation's view, but allowed for a broader national perspective

Conclusioni WGs

Subgroup 1A on Research Career Structure and Development “..would like to draw the attention of all parties involved in improving European research careers to the following areas, where **European research careers need development throughout the member organisations and ministries in their home countries**”;

- Taxonomy of research career steps and degrees throughout Europe;
- Increased transparency of career paths;
- Need for a better knowledge-base of research careers;
- Networks of junior investigators;
- Handbook for researchers.



non ci interessa
direttamente (forse)

Subgroup 1B on Gender Issues “...recommendations to ESF and its Member Organisations to”:

- introduce gender equality targets and measures in their **peer-review criteria**;
- implement measures for an **increase of applications** from women researchers;
- establish permanent and **public monitoring**...;
- offer better **predictability and security** especially for women and single parents...



inoltrato a Comitato Pari
Opportunità

Conclusioni WGs

Working Group 2 on Human Resources Development “...provided a snapshot of European opinion on the state of policy with respect to transferable skills within doctoral programmes. It offers a definition of transferable skills and an agreed list of the transferable skills important to funding organisations and, through the comments of respondents, offers an insight into the state of policy in Europe.”

catalizzatori per sostenere
la mobilità e lo sviluppo di
portfolio careers

Definition of transferable skills in a research context

“Transferable skills are skills learned in one context (for example research) that are useful in another (for example future employment whether that is in research, business etc). They enable subject- and research- related skills to be applied and developed effectively. Transferable skills may be acquired through training or through work experience”

Conclusioni. Raccomandazioni. Azioni

“...given the global competition for talent, Europe needs to remain competitive in attracting the brightest and most creative researchers as well as in training and developing the next generation of researchers”

“...we see an urgent need to adopt a common strategy to ensure the attractiveness of research careers in Europe as a whole”

Structuring of research careers with the help of a joint taxonomy

- ➔ formation of a working group by the Research Careers Forum incorporating representatives from universities, the European Commission and businesses to work out a joint taxonomy for research careers in the public and the private research sector
- ➔ invite the EURAXESS network under the auspices of the European Commission to produce the proposed ‘Handbook for Researchers’

Improving the attractiveness and competitiveness of European research careers

- ➔ we propose that the EC include experts from the Research Careers Forum in order to benefit from the joint knowledge and experience of research organisations in Europe
- ➔ we suggest the formation of a working group (...) with the aim of analysing and advancing ESF Member Organisations’ programmes for research career development

Providing ‘equal playing fields’ for researchers of all backgrounds

- ➔ we propose the formation of a working group by the Research Careers Forum in cooperation with the ESF MO Fora on Peer Review and Evaluation of Funding Schemes with the aim of preparing a new scientific quality approach (integrating a gender equality strategy) to be built on firm scientific quality standards.

Supporting the development of ‘portfolio careers’ by introducing a joint skills statement

- ➔ invite the ESF and its MO to adopt the joint skills statement and to provide the (financial) means for continuous professional development addressing researchers at all career stages
- ➔ we stipulate the formation of a working group by the Research Careers Forum in cooperation with the Forum on Evaluation of Funding Schemes and Research Programmes with the twofold aim of conducting a training-needs analysis and to study the impact of transferable skills on researchers’ career development in the public and the private sector
- ➔ we encourage ESF and EUROHORCs to establish and take ownership of the European Alliance for Research Career Development which should build on the competence and experience of the ESF Member Organisation Forum on Research Careers.

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ESF Member Organisation Forum “European Alliance on Research Career Development”

Forum’s Mission

To make sound and implementable recommendations in order to make Europe an attractive place to work as a researcher

Forum’s Strategic Context

This Forum addresses the implementation of Action Number 2 of the “EUROHORCs and ESF Vision on a Globally Competitive ERA and their Road Map for Actions” on Promoting European Research Careers.

WG1: Taxonomy

- **Way to proceed:**
 - Joint statement concerning EC Taxonomy
 - Validation of existing taxonomies: purpose of taxonomies (December 2011)
 - 2012: Mapping of career tracking survey
 - Workshop on career tracking experiences (early 2012)
 - Product: commented bibliography
 - Dissemination (end 2012): Joint activity with EURAXESS & EC SGHRM

WG2: Skills

- **Way to proceed:**
 - Validate the skills list by Vitae within the Forum (mid March)
 - Proposal on how to proceed, incl. budget
 - Presentation to EUROHORCs Assembly (April 2011)
 - Pilot project: 6 countries on basis of Vitae Researcher Development Tool
 - Involving universities & RPOs (including links with the private sector)
 - **Products:** guidance on provision of professional development opportunities covering all career stages
 - **Vision:** European Researcher Development Framework

WG3: Mobility

- **Way to proceed:**
 - Policy recommendations:
 - Successful policies to facilitate different types of mobilities
 - Scientific visa: survey on good practice on how to bring in researchers from 3rd countries
 - Peer review & portfolio careers
 - Link with Peer Review Forum (Stijn)

obiettivi del Forum - WG2

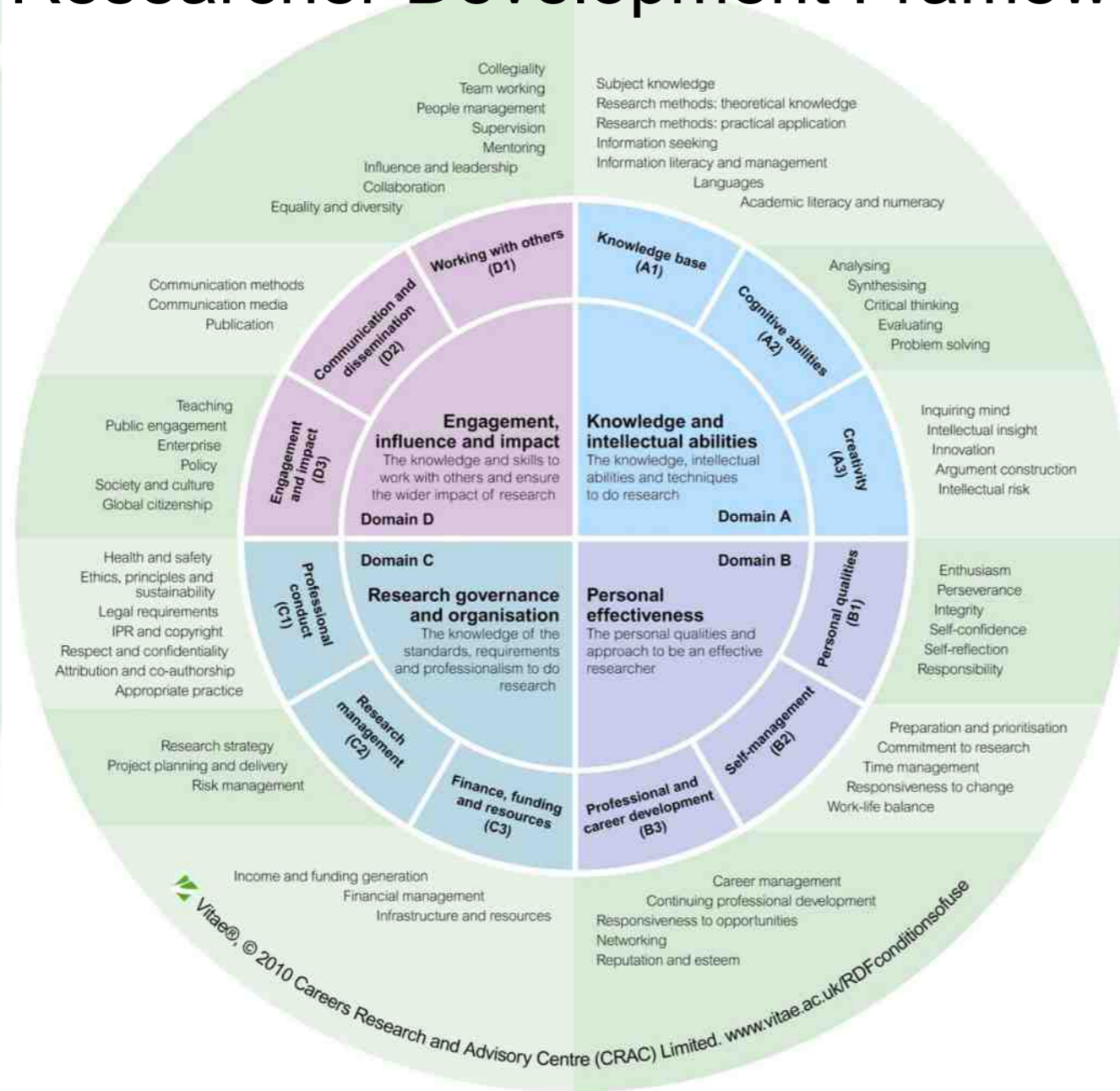


Reminder

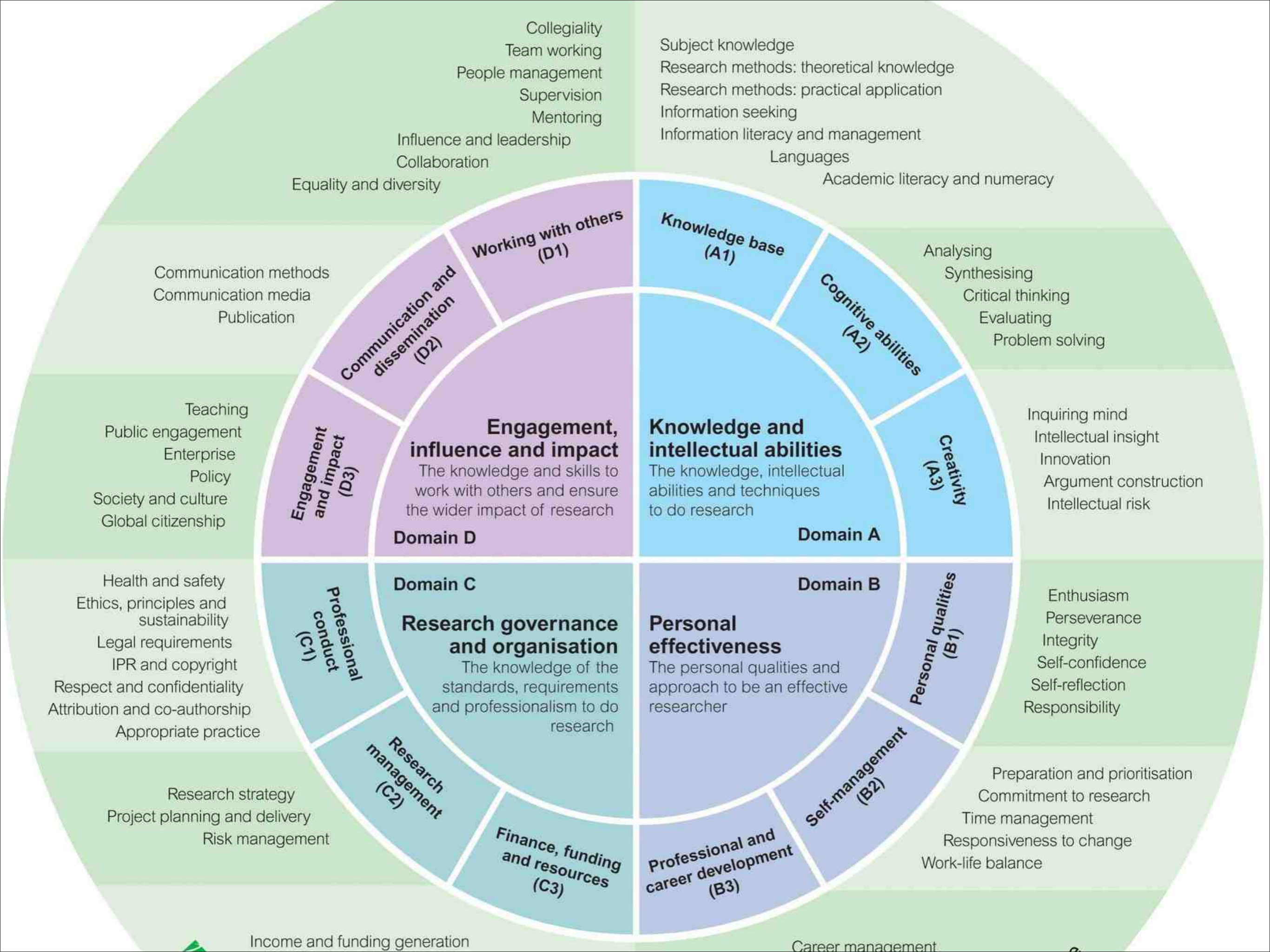
- **Overall objective of WG 2**
- Foster better researchers through encouraging continuous professional development for all researchers and through associated guidance to research organisations and funders.
- **Actions**
- Assess the feasibility of a pan-European professional development framework for researchers
- Produce guidance for research organisations and funders on good practice in policy and practice in enhancing researcher skills
- Raise awareness of the importance of continuous professional development for researchers at all career stages

il modello di sviluppo delle carriere scientifiche

Researcher Development Framework



- ▣ Framework of the knowledge, behaviour and attributes of successful researchers
- ▣ Enables self-assessment of strengths and areas for further development
- ▣ Common language for researchers capabilities



il modello di sviluppo delle carriere scientifiche

Draft recommendations Researchers



- ✔ Use the RDF to assess your capabilities and expertise as a researcher
- ✔ Use the RDF to set realistic achievable career goals
- ✔ Reflect on the broader aspects of being a researcher
- ✔ Use the RDF to articulate your expertise to others
- ✔ Validate / benchmark yourself against other researchers

Researcher Development Framework: CPD tool

HOMEPAGE

Several researchers used the tool to create development plans. Here are some of their thoughts...



"Set aside a lot of time, read it carefully and be honest about where you are. Don't worry about the phases – you don't always have to aim for phase 5 but maybe take a look at the other phases and identify shorter term goals that are more achievable than always aiming for the top."

Margaret Delett, early career researcher, Centre for Cancer Research and Cell Biology, Queen's University Belfast



"I now have a path that I would like to follow"

Maria Sharmina, PhD student, Sustainable Consumption Institute (SCI), University of Manchester



The RDF "...identified areas for me that I needed to hone and really made me think about my career development. I've highlighted things now that I know I need to do."

Lynn McCallum, senior postdoctoral research fellow, School of Pharmacy, Queen's University Belfast



"The RDF will encourage me to be more proactive about my career development as it provides me with a framework (list of milestones) that I can judge my current progress in relation to what I want to achieve with my career."

Joe Viena, PhD student in the School of Management, University of Southampton



"I would see this [RDF] as a barometer...to give me a bit more clarity about what areas I could develop and what might be most important. It's something I could keep returning to."

Anja Dalton, PhD student, Centre for Transport & Society, University of the West of England



"I have a good idea of what's involved with the job I do so it was quite easy mapping that to the descriptors. What we've always tried to do with the postdocs here is say 'look this is your career and it's your responsibility'. As a new postdoc your emphasis is on working in the lab and getting results and it's easy for career and personal development to fall by the wayside."

Paddy Hadoko, tenure-tracked Senior Academic Fellow in Pharmacology, University of Edinburgh

DESCRIPTOR SELECTION

Select where you are

Select where you would like to be

PHASE SELECTION

Record evidence of your current phase

Complete an action plan

REPORT

Save and print your report

RDF personal CPD tool

The RDF personal CPD tool is a fully downloadable and portable self reflection tool to support the continuing professional development of researchers. It uses Microsoft Excel as a platform and provides guidance notes and useful resources so that researchers can use it flexibly. Users can save their individual versions at different timepoints to track their own progress and development.

Please use post-it notes to add your comments about the RDF CPD tool:



Record where you currently are

Record your target for the next planning period

Report

Home

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

Vitae to support your current phase

DC: Working with others							
1	Collaborate	Shows consideration to others. Listens, gives and receives feedback and records performance of others	Is courteous, respectful, responsive, sensitive. Shows awareness for a shared understanding	Helps people overcome or enter contentious issues. Promotes collegiality, openness of status. Engages in constructive peer review with colleagues	Develops for collegial behaviour in department/institution. Creates knowledge. Builds awareness of feedback from colleagues at all levels		
2	Team working	Understands own role and that of others when working in and contributing to the success of formal and informal teams. Appreciates contributions of other team members resulting in positive outcomes. Thanks people for their contribution	Understands teamwork in their environment, recognises the structure of team members and works effectively to achieve shared goals. Creates and equips team members and coaches. Creates trust to build for their contribution. Builds support and resilience to other goals	Leads, manages and supports teams. Is sensitive to concerns, needs and opinions of team members, acts accordingly to achieve success. Manages expectations and resolves conflict. Coaches team members, helps team members clarify their roles and responsibilities. Acknowledges the results of the work achieved across cross-departmental contexts	Helps, leads and builds sustainable team activities self and outside institution. Coordinates with key stakeholders nationally		
3	People management	Progresses activities and resolves with supervisory support	Develops own management style. Supervises/mentors and develops less experienced researchers and students with potential. Makes clear expectations, outlines goals and negotiates realistic objectives so that people know what is expected of them. Sets an example in relation to equality and diversity policies, strategies and practices. Promotes behaviour, attitudes and encourages others	Has additional management/personal management skills. Develops good performance and team efficiency with underperformance. Explains the rationale behind decisions and the importance of issues. Ensures appropriate equality and diversity policies and procedures are implemented. Implements others	Creates future/innovative future for others. Ensures the representation of equality and diversity policies. Leads by example, inspires others, communicates vision		
4	Supervision	Engages in peer support, advice/mentorship and participates in appraisal and assessment	Provides support and advice to peers and less experienced researchers. Takes on a supervisory role. Welcomes feedback on own supervisory skills	Encourages the development of autonomy in others. Takes on a supervisory role. Supports the development of supervisory skills in others. Keeps up to date with supervisory policy and practices. Actively seeks feedback on own supervisory skills and techniques, promotes feedback by way of peer review of colleagues			
5	Mentoring	Effectively supports the working of others when involved in teaching, mentoring, demonstrating to other research students. Recognises the importance of research and learning networks	Develops skills as a mentor and uses own teaching effectively. Encourages peers and less experienced researchers to present professional, safe and challenging in research papers. Acts as a mentor to others	Acts as mentor to less experienced colleagues. Leads, manages and offers people to see opportunities and take of new challenges. Identifies potential in others, promotes growth. Sets challenges but builds and develops confidence, manages the environment	Is a role model. Shares networks, creates opportunities for others. Shapes the working strategy of own institution. Promotes people in decision taking and leadership roles, promoting their learning. Future leads, develops others, researches		
6	Influence and leadership	Engages in debate and makes strategic decisions. Develops awareness of need to get support. Recognises implications of own research for real life contexts. Leads in the wider community or engaging in dialogue with those who use the outputs of research to achieve influence and impact	Influences and leads less experienced researchers and students. Leads activity and communicates confidently. Presents a convincing case. Engages with stakeholders and leads research to affect influence and impact of research within and beyond academia. Develops awareness of different research roles	Takes responsibility for key areas of work within the institution. Develops academic staff. Manages resources and encourages the contribution of others and uses them to best effect. Offers peer-to-peer support, leads equitably, leads as a role model. Develops own leadership style. Promotes and empowers researchers in an academic context. Demonstrates initiative and competence in leading people, leading organisations, leading in externally. Influences and provides evidence in committees and in external organisations	Highly effective in academic and non-academic spheres. Presents and defends using an issue-based approach. Is recognised as making significant contributions to a policy-making bodies and academic committees. Can communicate research to a wide range of audiences through argument, debate, direct or indirect. Promotes the value of own staff and department/institution	Has exceptional influence, internationally recognised. Good design by strategies, funding bodies, etc.	
7	Collaborator	Works to the value of working collaboratively to benefit research and to developing the capacity for research. To produce research outputs with supervisory research students. Recognises collaborative research across within own and adjacent department/research areas	Builds collaborative relationships with a range of colleagues within own unit, adjacent department/research areas and with stakeholders and users of research to co-produce research outputs. Actively participates in and contributes to collaborations and external relationships	Manages any negative relationships and external relationships, contributes to development of department/research areas. Works in multi-disciplinary/interdisciplinary teams, takes responsibility	Builds collaborative relationships with a range of external organisations and bodies. Negotiates at national and international level. Actively builds capacity in collaborations and external relationships nationally and internationally, contributes to reputation and strategy of department/institution		
8	Equality and diversity	Is proactive in and respectful in reducing differences. Develops awareness of equality and difference within working environment. Understands equality and diversity requirements of institution	Appreciates and works with diversity and difference in education/research	Acts as role model for personal conduct when dealing with diversity and difference, creates, guides and guides less experienced researchers. Values positive use of diversity and difference to which research projects and outputs	Sets example locally, nationally and internationally. Helps create department/institutional policy and implementation		

Record where you currently are

Record your target for the next planning period

Report

Phase 1

Phase 2

Phase 3

Phase 4

D1 - Working with others

Collegiality

Shows consideration to others. Listens, gives and receives feedback and responds perceptively to others.

Is approachable, demonstrates interpersonal sensitivity. Ensures everyone has a shared understanding.

Keeps people informed of wider institutional issues. Promotes collegiality, regardless of status. Engages in supportive peer review with colleagues.

Exemplar for collegial behaviour in
Cascades knowledge.
Solicits and attends to feedback from

Team working

Understands own behaviours and impact on others when working in and contributing to the success of formal and informal teams. Appreciates contributions of other team members including non-academic members. Thanks people for their contribution.

Understands leadership in team environments; recognises the strengths of team members and works effectively to achieve mutual goals. Coaches less experienced researchers and students. Gives credit to people for their contribution. Builds support and coalitions to attain goals.

Leads, manages and delegates impartially. Is sensitive to intentions, needs and positions of team members; acts accordingly to achieve success. Manages expectations and resolves conflict. Coaches team members; helps team members clarify their roles and responsibilities. Acknowledges the results of the team. Actively seeks collaborative partners.

Recruits, trains and builds sustainable relationships.
Collaborates with key figures/teams

lo strumento di valutazione (report)

Domain D

1. Working with others	Current phase	Target phase	Evidence to support your current phase	How will you achieve your objectives?	How will you measure progress?
Collegiality	Is approachable, demonstrates interpersonal sensitivity. Ensures everyone has a shared understanding.	Keeps people informed of wider institutional issues. Promotes collegiality, regardless of status. Engages in supportive peer review with colleagues.			
Team working	Understands leadership in team environments; recognises the strengths of team members and works effectively to achieve mutual goals. Coaches less experienced researchers and students. Gives credit to people for their contribution. Builds support and coalitions to attain goals.	Recruits, trains and builds sustainable team; develops staff and facilitates relationships. Collaborates with key figures/teams internationally.			
People management	Develops own management style. Supervises/manages and develops less experienced researchers and students with sensitivity. States clear expectations, clarifies goals and negotiates realistic deadlines so that people know what is expected of them. Sets an example in relation to equality and diversity matters; challenges inappropriate behaviour. Motivates and encourages others.				
Supervision	Provides support and advice to peers and less experienced researchers. Takes on co-supervision role. Welcomes feedback on own supervisory skills.	Encourages the development of autonomy in others. Takes on lead supervisor role. Supports the development of supervision skills in others. Keeps up to date with supervision policy and procedure. Actively seeks feedback on own supervisory skills and techniques; provides feedback for less experienced colleagues.			
Mentoring	Acts as mentor to less experienced colleagues. Helps mentees and other people to see opportunities and take up new challenges. Identifies potential in others; empowers people. Sets challenges but builds and develops confidence; manages the over-confident.				

working group on skills development of researchers - pilot study

- “..with the purpose to better define researchers’ professional profiles and to develop guidance for the continuous professional development of researchers..”
- “..the RDF, offered a promising basis for a common and structured approach towards researchers’ skills development...”
- “..the suitability of the RDF was tested in 6 European countries (Estonia, France, Germany, **Italy**, Luxembourg, Norway) with different research/cultural/socio-economic settings..”

working group on skills development of researchers - pilot study

A standard process was followed for each country participating in the study:

- Participating countries were asked to sign a licensing agreement regarding use of the RDF
- Institutions identified relevant researchers to participate in the study
- Participating researchers were asked to explore the RDF in advance of the workshop.

Suggested preparative steps included:

1. Read the background and instructions on a website private page
2. Watch the RDF Professional Development Planner screen cast
3. Download the RDF Professional Development Planner (PDP) and use it to:
 - A. Explore the content of the RDF
 - B. Identify strengths and areas for professional development (they could chose to complete the whole RDF or just a few areas)
 - C. Create a personal action plan for your professional development
4. Explore the additional the RDF resources on the Vitae website

Semi-structured focus groups were then held in each participating country to gather feedback on the overall content of the RDF and value of professional development planning

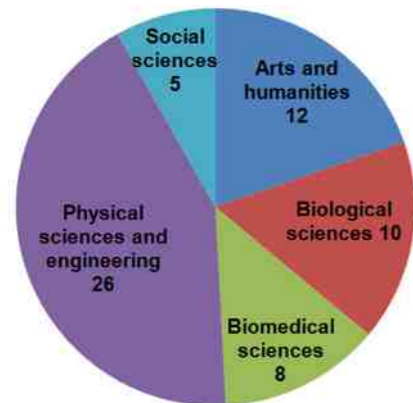
Appendix 4: Focus group participants

Summary of participants:

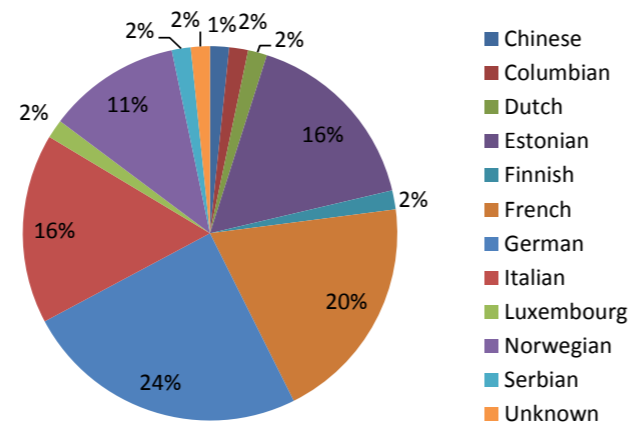
Number of participants: 61

Number of institutions: 19

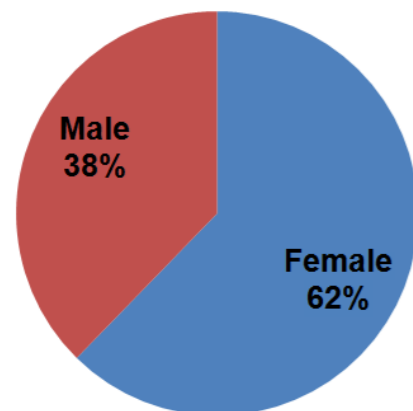
Discipline:



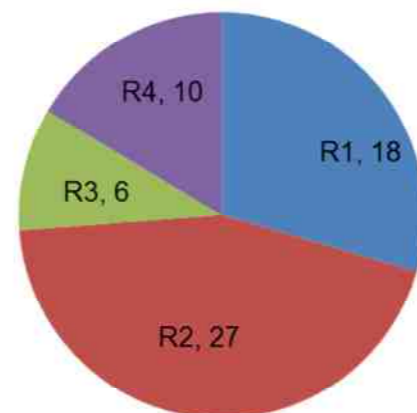
Nationality:



Gender:



Stage of research career:



European Framework of Research Careers

Participants' career stages have been categorised by the European Framework of Research Careers:

R1 First Stage Researcher (*up to the point of PhD*)

R2 Recognised Researcher (*PhD holders or equivalent who are not yet fully independent*)

R3 Established Researcher (*researchers who have developed a level of independence.*)

R4 Leading Researcher (*researchers leading their research area or field*)

Italian “focus group”

Institution	Gender	Nationality	Discipline	Stage of research
INFN	Female	Italian	Physics	recognised researcher
INFN	Female	Italian	Physics	recognised researcher
INFN	Male	Italian	Physics	recognised researcher
INFN	Male	Italian	Physics	established researcher
INFN	Female	Italian	Physics	established researcher
INFN	Female	Italian	Physics	leading researcher
CNR	Female	Italian	Mathematics	leading researcher
CNR	Female	Italian	Anthropology	first stage researcher (PhD Student)
CNR	Male	Italian	Physics	recognised researcher (postdoc)
CNR	Female	Italian	Philosophy	recognised researcher (postdoc)

Recommendations

There are **big differences between countries** in their overall awareness and readiness to engage and invest into the general development and career development of researchers. Furthermore, there is a real demand among researchers for a more structured approach towards researcher's professional development and active career planning.

Recommendation 1 (overall)

Concerted efforts must be made by policymakers, governments, funders and research performing organisations **to promote the concept and importance of researchers' professional development** targeted at all levels of the hierarchy of research management, from political leaders, heads of research organisations, academics to the researchers themselves.

The creation of a **European Researcher Development Framework would provide a single European language** describing researchers' skills and attributes and thereby facilitate mobility. A European Researcher Development Framework would contribute to the concept of the European Researcher, meet the objectives of the European Charter for researchers and to the build-up of the ERA. A European Researcher Development Framework could be implemented by already existing channels at a European level such as the EURAXESS.

Recommendation 2 (EU level)

The **European Commission should consider investing** in making available a pan-European Researcher Development Framework to promote the importance of the professional development of European researchers, to guide them in their reflections on their skills and attributes, their developmental needs and on their role as a researcher in general.

Recommendation 3

As a first step, the **European Commission should support a wider independent trial of the RDF** at European/institution/national level that includes research performing organisation directors, human resources specialists etc. as well as researchers and consider any possible country/institution-specific constraints towards researchers' professional development (e.g. national legislative barriers, etc.).

Recommendation 4 (national and institution level)

Governments, research funders and research performing organisations should work together to offer researchers at all career levels adequate training and development means to actively expand their profile and progress in their career. Numerous countries/institutions do not have appropriate supporting structures regarding researchers' development i.e. adequate training opportunities, career advice services, etc.

Recommendation 5 (individual researcher)

Researchers across Europe should take responsibility for their own professional development and reflect how to improve their own career possibility by using for example using a tool like the suggested European Research Development Framework for a more in depth analysis of their own competences and expertise as a researcher and their specific career development needs.

parole chiave

- uniformare i modelli di carriera scientifica
- sostenere uno sviluppo continuo con
 - strumenti di supporto
 - iniziative di formazione
 - mobilità (tra nazioni e/o discipline)
 - competenze trasversali (o trasferibili)
- valutazione
 - complessiva (e.g. dei programmi di formazione)
 - del singolo (autovalutazione)

About Us

Science Europe is an association of European Research Funding Organisations (RFO) and Research Performing Organisations (RPO), based in Brussels. Its [Founding General Assembly](#) took place in Berlin in October 2011.

Mission

Science Europe promotes the collective interests of the Research Funding and Research Performing Organisations of Europe. It supports its [Member Organisations](#) in their efforts to foster European research. It will strengthen the [European Research Area \(ERA\)](#) through its direct engagement with key partners. In doing so it will be informed by direct representation of all scientific communities in its reflections on policies, priorities and strategies.

It works and partners with other entities such as the European Universities, the European Academies, the European Scientific Intergovernmental Organisations and the European Commission to develop a coherent and inclusive ERA. In its structures and actions it ensures that it takes into consideration the interests and opinions of researchers in all European research systems.

Science Europe will:

- Support the work of its Member Organisations and promote co-operation between them both at policy and activity level;
- Establish the scientific community as a third voice in the ERA, together with national government and the European Commission;
- Act, with the interests and expert views of researchers as a guide, to maximise the input of the Member Organisations in the development of the ERA in conjunction with the European Commission;
- Work with other European organisations to ensure that a broad based forum is established to inform discussions on ERA and related policy matters;
- Provide a platform for dialogue with national ministers of research;
- Co-operate with non-European research organisations; and
- Deliver a coherent plan of action to ensure that publicly funded research and innovation in Europe has the maximum impact, contributing to the development of the economy and providing solutions to deliver societal benefit.

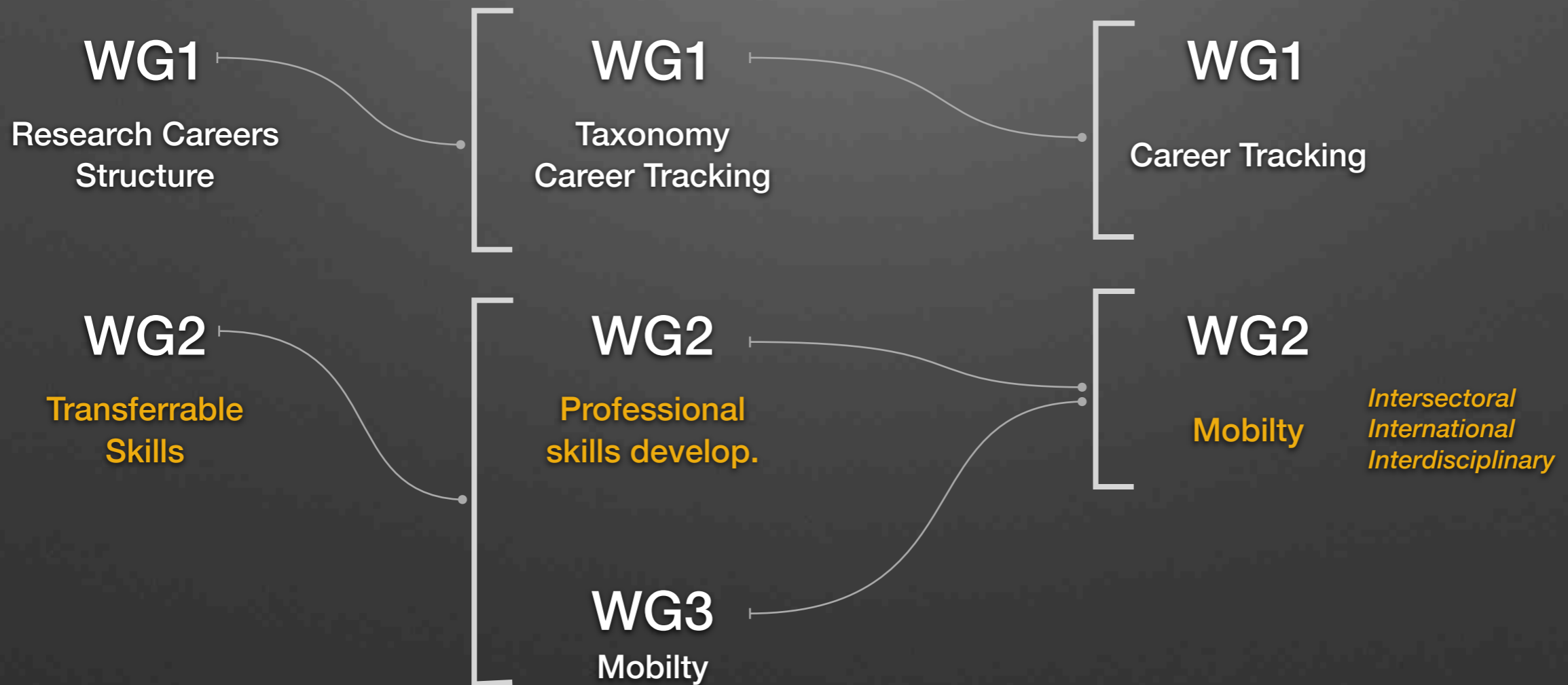
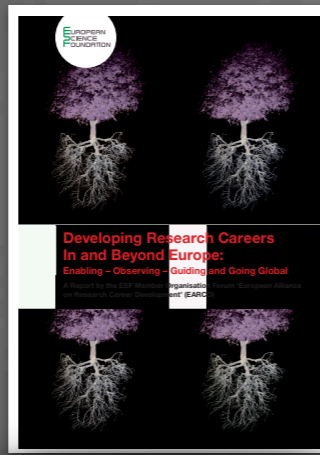
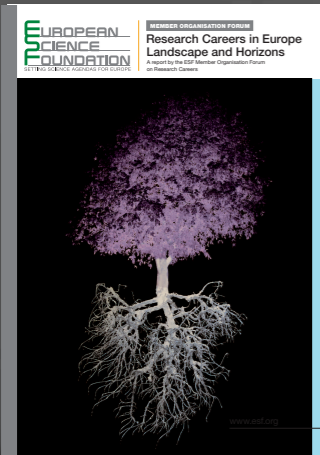
Member Organisations

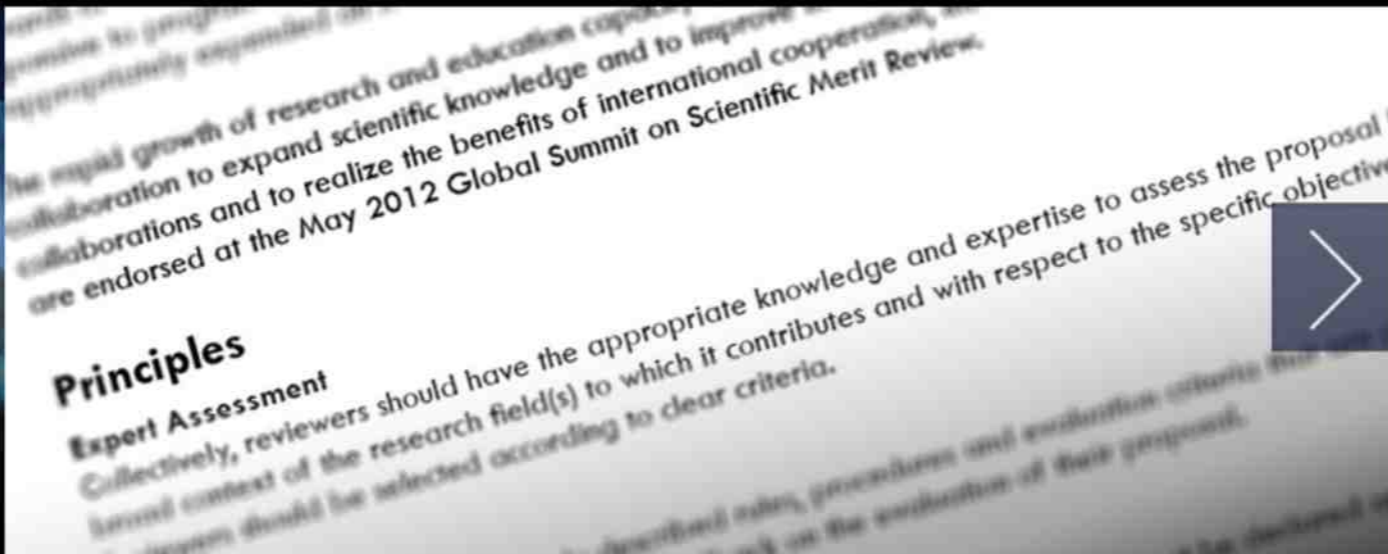
Membership

Science Europe is fully funded by its Member Organisations. Member Organisations are Research Funding and Research Performing Organisations within European countries. Members should have substantial and significant impact on their national research system and budget. They should be primarily funded through national public funding, but should also have substantial operating independence from their National Government.

Seven organisations acted as founding members of Science Europe in September 2011 (DFG, the German Research Foundation; ESRC, Economic and Social Research Council; ETAG, Estonian Research Council; FWO, Research Foundation Flanders; FNRS, Fund for Scientific Research; ARRS, the Slovenian Research Agency; and SNSF, the Swiss National Science Foundation).

At present Science Europe comprises **53 Research Funding and Research Performing Organisations** from **27 countries**, representing around **€30 billion per annum**.





The Global Research Council has a long-term objective of fostering multilateral research and collaboration across continents to benefit both developing and developed nations.

Learn More



GRC Annual Global Meeting 2013

The second Annual Global Meeting was hosted jointly by Brazil and Germany on 27-28 May 2012 in



The French National Research Agency
Projects for science



Meetings > Presentation

Meetings

European regional meeting of the Global Research Council (GRC) on 30 October 2013

Science Europe and the French National Research Agency (ANR) are organising the European regional meeting of the Global Research Council (GRC) on 30 October 2013.

The meeting will be hosted by the French National Research Agency (ANR) in Paris.

The meeting will serve as preparation of the 3rd GRC Annual Meeting in 2014 in China (www.globalresearchcouncil.org/meetings/2014-meeting) and will address the two following topics:

- Open Access – follow up to the approval of the [GRC Action Plan towards Open Access to Publications](#) at the 2nd GRC Annual Meeting in Berlin last May
- "Funding the future of science" – support towards early stage researchers

The meeting is **upon invitation only** and intended for working level experts from Science Europe Member Organisations and partner organisations in Europe dealing with Open Access to Publications and Research Careers.



- The Global Research Council is a virtual organization, comprised of the heads of science and engineering funding agencies from around the world, dedicated to **promoting the sharing of data and best practices for high-quality collaboration among funding agencies worldwide.**
- The worldwide growth of public support for research has presented an opportunity for countries large and small to work in concert across national borders. Cooperation and collaboration can enhance the quality of science, avoid unnecessary duplication, provide economies of scale, and address issues that can only be solved by working together. Heads of research funding agencies have a responsibility to meet these objectives on behalf of the research community.
- The Purposes of the Global Research Council are:
 - 1. To improve communication and cooperation among funding agencies;
 - 2. To promote the sharing of data and best practices for high-quality research cooperation;
 - 3. To provide a forum for regular meetings of the Heads of Research Councils;
 - 4. To respond to opportunities and to address issues of common concern in the support of research and education;
 - 5. To be a resource for those institutions wishing to build a world-class research landscape; and
 - 6. To explore mechanisms that support the global science enterprise and the worldwide research community.



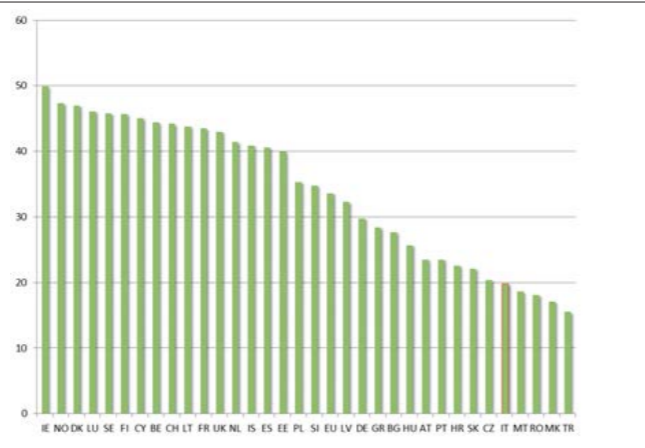
Le risorse umane

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approfondita sul rapporto tra i tre cicli ed in particolare sul ruolo del titolo di I ciclo (laurea). In molti casi, occorre procedere ad una rivisitazione di quest'ultimo, (ri)definendone i saperi minimi essenziali per una robusta formazione di base e chiarendone obiettivi formativi e sbocchi professionali.

Grafico 9
Frazione della popolazione tra 30 e 34 anni in possesso di un titolo di formazione terziario

Fonte:
Commissione Europea,
Innovation Union
Scoreboard, 2011



Se uno degli indicatori di successo nella costruzione della 'Unione dell'innovazione' è la percentuale della popolazione di età compresa fra 30 e 34 anni con un livello d'istruzione terziario,⁶³ le università italiane non possono ignorare che la situazione corrente (Grafico 9) è del tutto insoddisfacente.⁶⁴ Un'azione da intraprendere celermente è quella di **incrementare l'indipendenza e la discontinuità tra lauree e lauree magistrali**, consentendo quella 'mobilità verticale' (prevista peraltro dal D.M. 270/2004, ma poco attuata dalle università) nel passaggio tra I e II ciclo, che sola rende possibile una formazione più aperta e interdisciplinare, ma al tempo stesso restituisce al I ciclo una sua **autoconsistenza di percorso**, con sbocchi lavorativi chiari.

Proprio per questo, la capacità delle università di assicurare carattere non formale agli organismi di **consultazione con il tessuto produttivo**, previsti già dal D.M. 509/1999 e poi dal D.M. 270/2004, ma che risultano talora addirittura non costituiti o, dove lo sono, comunque circoscritti a mera ritualità, costituirà parte integrante dei parametri di valutazione della *performance* a partire dal 2013. Questo perché i potenziali datori di lavoro, di già nel settore privato ed in maniera crescente in quello pubblico, determi-

⁶³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Europe 2020 Flagship Initiative Innovation Union', SEC(2010) 1161.

⁶⁴ Ad oggi, in Italia, i laureati costituiscono appena il 20% della popolazione con età compresa tra i 25 e i 34 anni (contro il 43% della Francia ed il 45% del Regno Unito). Scendono ad appena il 10% nella fascia di età compresa tra 55 e 64 anni (contro il 25% della Germania e il 29% del Regno Unito).

4.2 Un dottorato di ricerca innovativo per un Paese innovativo

L'obiettivo fondamentale dei Principi che si declinano a seguire è quello di favorire l'acquisizione di una precoce autonomia e dell'indipendenza scientifica da parte da parte dei ricercatori in formazione, quali devono essere considerati i dottorandi di ricerca, così da non penalizzare i nostri dottorandi nella competizione con i colleghi di altri paesi europei ed extra-europei.

genere e di quella dottorale in particolare, non si è valorizzato a sufficienza il conseguimento di **competenze complementari e trasferibili** agli ambiti più diversi. Questa attitudine risente dell'impostazione prevalentemente o esclusivamente accademica della formazione, spesso limitata ai micro-ambiti definiti da anacronistici settori scientifico-disciplinari, del tutto inadeguata al contesto attuale. **I cosiddetti transferable skills** (per fare alcuni esempi: abilità comunicative e divulgative, capacità imprenditoriale, gestione di progetti, proprietà intellettuale, etc.) **devono essere parte integrante dei programmi formativi e devono essere formalmente certificati al termine del percorso, in un apposito diploma supplement.**

- Come accennato in precedenza, la **qualità del prodotto** viene garantita attraverso procedure di *peer review*, che devono essere adottate sia *ex ante* nelle procedure di reclutamento dei candidati, che *ex post* in quelle per il rilascio del titolo.

Da quanto dettagliato sopra, discende l'esigenza di una **evoluzione del sistema delle 'borse ministeriali' per il dottorato di ricerca**. L'esistenza infatti, nelle istituzioni che si candidano ad essere sede di formazione dottorale, delle condizioni 'ambientali' necessarie e sufficienti a garantire la qualità del processo e del prodotto è testimoniata nella maniera più efficace anche dalla presenza di ricercatori capaci di assicurarsi competitivamente le risorse necessarie a svolgere qualificate attività di ricerca e dunque a sostenere il finanziamento di posizioni dottorali. Inoltre, la 'percezione' dell'importanza della formazione dottorale per lo sviluppo e la **specializzazione intelligente** dei territori da parte delle regioni è dimostrata in maniera concreta dall'impiego delle apposite risorse comunitarie per sostenerla finanziariamente.

Ciò premesso, si prevede comunque che parte delle risorse di HIT 2020 vengano destinate al **sostegno di programmi di formazione dottorale** di particolare ed originale significato, identificati come tali attraverso bandi nazionali, congiunti o comunitari.

Il rispetto puntuale dei Principi qui ricordati faciliterà l'integrazione della formazione dottorale svolta nel nostro Paese con quella degli altri Paesi dell'Unione e contribuirà in tal modo alla realizzazione dello Spazio Euro-

4.3 Un quadro unico delle carriere della ricerca per favorire la mobilità intersettoriale

turali) tra università, enti di ricerca ed imprese ha un impatto positivo sull'efficienza del sistema nel suo complesso, con il risultato finale di **ridurre considerevolmente i tempi di transizione fra l'idea, il risultato scientifico e l'applicazione di mercato** (*from bench to retail*).

Al contrario, la reciproca 'chiusura' e l'irreversibilità delle scelte di carriera, una volta compiute, hanno pesanti ripercussioni negative sullo sfasamento tra domanda e offerta di ricerca e di competenze, sulle opportunità occupazionali dei giovani ricercatori, sulla perdita di talenti (*brain drain*) e sulla competitività del sistema produttivo e del Paese nel suo complesso. Del resto, anche il Trattato sul funzionamento dell'Unione Europea (Art. 179), assume l'obiettivo di assicurare la **libera circolazione dei ricercatori tra i diversi settori**.

Tra gli ostacoli di varia natura che si frappongono alla mobilità intersettoriale, un ruolo non secondario (oltre alla iperframmentazione dei settori scientifico-disciplinari in ambito universitario) è esercitato dalla **disomogeneità delle carriere e dei profili**. Le indesiderabili conseguenze di questa barriera sono state messe in luce da organizzazioni quali la *European Science Foundation* (ESF), la *League of European Research Universities* (LERU), la *European University Association* (EUA), il *Coimbra Group*, l'*European Council of Doctoral Candidates and Junior Researchers* (EURODOC) e la *European Industrial Research Management Association* (EIRMA).

Da qui la necessità di sviluppare una classificazione dei diversi 'profili' di carriera che sia **totalmente indipendente da discipline e settori** e possa indifferentemente applicarsi all'alta formazione come alla ricerca, al pubblico come al privato e l'opportunità d'introdurre, anche in Italia, un **Quadro Comune di Riferimento per le Carriere della Ricerca** (QRCR), che consenta la massima 'interoperabilità' fra settori e discipline, sul modello di quello recentemente sviluppato a livello europeo,⁷³ così da abilitare il sistema nazionale ad interfacciarsi senza cesure sia all'interno, sia con quello degli altri paesi dell'Unione.

In coerenza con il Quadro definito a livello europeo (*European Framework for Research Careers*) e con il criterio della sua 'applicabilità universale', il QRCR identifica 4 soli profili per le carriere della ricerca, così definiti:⁷⁴

- **R1 (First Stage Researchers**, fino al completamento del dottorato);

73
http://ec.europa.eu/euraxess/pdf/research_policies/Towards_a_European_Framework_for_Research_Careers_final.pdf

74
Allo scopo di consentire la massima riconoscibilità a livello europeo, si mantiene la formulazione in lingua inglese del documento della Commissione Europea citato in precedenza

Da qui la necessità di sviluppare una classificazione dei diversi 'profili' di carriera che sia totalmente indipendente da discipline e settori e possa indifferentemente applicarsi all'alta formazione come alla ricerca, al pubblico come al privato e l'opportunità d'introdurre, anche in Italia, un Quadro Comune di Riferimento per le Carriere della Ricerca (QRCR)

- **R2 (Recognised Researchers**, dottori di ricerca o equivalenti, che non hanno ancora conseguito la piena indipendenza ed autonomia);
- **R3 (Established Researchers**, che hanno conseguito autonomia ed indipendenza);
- **R4 (Leading Researchers**, che sono punti di riferimento nel rispettivo ambito).

Volendo perseguire l'obiettivo della perfetta neutralità rispetto ai settori (università, enti di ricerca, privato) ed alle discipline, è possibile delineare in maniera ampia, ma non generica, le competenze dei ricercatori nei 4 profili indicati.⁷⁵ Tanto i ricercatori che i potenziali loro datori di lavoro avranno modo di apprezzare i vantaggi di un quadro di riferimento così concepito.

- I primi avranno, attraverso di esso, l'opportunità di commisurare l'adeguatezza del proprio profilo rispetto alle offerte di lavoro da qualunque settore provengano (università, ente di ricerca, impresa, etc.), di presentarsi con un **profilo univocamente determinato ed universalmente decifrabile**, di aver chiaro l'insieme delle competenze da acquisire ai fini di una progressione di carriera finalmente svincolata dall'obbligo di proseguire nel settore dove essa ha avuto inizio;
- I secondi potranno, dal loro punto di vista, valutare l'adeguatezza dei candidati rispetto alle proprie esigenze, indipendentemente dal settore nel quale i candidati hanno fino ad allora operato (università, ente di ricerca, impresa, etc.), pianificare razionalmente i percorsi formativi per colmare eventuali *gap* di competenze, mettere a punto in maniera razionale una **strategia efficace ed efficiente per la gestione, il potenziamento e lo sviluppo delle risorse umane**, conoscendo il portafoglio delle competenze disponibili e di quelle eventualmente da acquisire.

Il QRCR sarà utile anche alle Autorità che esercitano funzioni d'indirizzo e controllo sul sistema della ricerca e dell'innovazione: a livello centrale, il MIUR e il MISE, senza escludere, in prospettiva, una partecipazione ed un concerto con le Regioni, nel quadro della strategia di *smart specialisation*. Esse potranno così programmare meglio le **strategie volte alla formazione dei ricercatori**, conseguire gli obiettivi di R&I nazionali e regionali e sintonizzare domanda ed offerta, ottimizzando i livelli occupazionali, sia in assoluto, sia rispetto agli altri paesi dell'Unione.

Il QRCR infine avrà un impatto positivo anche sugli studenti che hanno

75
I descrittori, le competenze richieste e quelle auspiccate per i 4 profili sono consultabili nell'allegato del citato documento.

4.3.1 Strumenti per lo sviluppo professionale dei ricercatori

intenzione d'intraprendere il percorso delle carriere della ricerca, permettendo, attraverso un panorama comprensibile e trasparente delle competenze richieste ai vari livelli, una **critica autovalutazione dei talenti e delle inclinazioni**. Adeguatamente promosso e comunicato, il QRQR diventerà uno strumento per diffondere nella società nazionale un messaggio chiaro sul **ruolo dei ricercatori nello sviluppo intelligente del Paese** e per attrarre verso il sistema italiano i talenti disponibili sul 'mercato' internazionale della ricerca che, attualmente, come si è visto (Cfr. Par. 1.1) in misura molto modesta prendono in considerazione il nostro Paese per intraprendere una carriera nella ricerca o progredire nella stessa.

In conclusione, nell'ambito di HIT 2020 ci si attende che tutte le organizzazioni private e pubbliche che impiegano ricercatori (imprese, amministrazioni, enti di ricerca, università) e gli enti, privati e pubblici, che finanziano attività di ricerca, **adottino il QRQR** e ad esso facciano riferimento nelle rispettive attività, in particolare in quelle legate alle procedure di reclutamento e di progressione nella carriera.

La Commissione Europea ha 'dato il buon esempio', introducendo i profili del QRQR nella piattaforma **EURAXESS Jobs**, dove vengono pubblicate le offerte di lavoro ed i bandi per progetti. È probabile che, dal 2014, al QRQR si faccia riferimento anche negli strumenti di finanziamento collegati al programma europeo Horizon 2020.

4.3.1

Strumenti per lo sviluppo professionale dei ricercatori

L'auspicata omogeneità delle carriere e dei profili nelle varie discipline, e trasversalmente nel settore pubblico e privato, porterà, come anticipato all'inizio del paragrafo, a **dinamiche più ampie e flessibili nello sviluppo delle carriere, che si caratterizzeranno sempre più come 'carriere portfolio', collezioni di esperienze professionali e formative, eventualmente disomogenee, ma auspicabilmente complementari, che daranno vita a profili di competenze non più necessariamente riconducibili a modelli predefiniti.**

Significativamente, la recente **Consultazione Pubblica** ha confermato come l'interazione e l'integrazione fra discipline diverse siano considerate, dai numerosi ricercatori che hanno partecipato a questo esercizio, tra i fattori **maggiormente decisivi per mantenere e incrementare la competitività del sistema della ricerca (Inserito 2).**

Anche in questo contesto di accentuata flessibilità e nonostante lo sviluppo non più lineare della propria carriera, per il ricercatore deve rimanere possibile **valutare il posizionamento delle sue competenze rispetto ad uno schema di riferimento che riunisca e presenti in maniera organizzata le conoscenze, i comportamenti e le qualità di un ricercatore**, in relazione ai 'profili' citati in precedenza.

Questa necessità è già stata intercettata dalle organizzazioni europee sopra menzionate che si sono attivate con iniziative specifiche. Una proposta interessante è emersa tra i risultati di un gruppo di lavoro⁷⁶ impegnato nella definizione di un **framework pan-Europeo per lo sviluppo professionale dei ricercatori che prende spunto dal Researcher Development Framework (RDF)** proposto dall'organizzazione britannica *Vitae*.

Il RDF è un modello di riferimento pensato per pianificare, promuovere e sostenere lo sviluppo personale, professionale e di carriera dei ricercatori delle università e degli istituti ed enti di ricerca, indipendentemente dalla disciplina scientifica in cui operano. Rappresentati da corrispondenti 'descrittori', il RDF riunisce, organizzati in domini e sotto-domini, le conoscenze, i comportamenti e gli attributi riconoscibili tra le caratteristiche del ricercatore e incoraggia tutti i ricercatori ad aspirare all'eccellenza e alla crescita del loro potenziale, impegnandosi nello sviluppo professionale.

Il RDF è stato concepito per:

- consentire ai ricercatori di valutare e pianificare il loro sviluppo personale, professionale e di carriera;
- guidare i responsabili delle attività di ricerca e i supervisor dei ricercatori nel loro ruolo di sostegno allo sviluppo dei ricercatori;
- 'formare i formatori', cioè i responsabili per le risorse umane nelle istituzioni di ricerca, nella progettazione ed erogazione di opportunità per lo sviluppo professionale dei ricercatori;
- consentire ai giovani interessati a diventare ricercatori di valutare in modo completo le prospettive di una carriera scientifica.

Sono evidenti i punti di contatto (ed anche alcune sovrapposizioni) fra il RDF ed il QRQR, ma nel RDF, il ricercatore dispone di uno strumento specifico, il **Professional Development Planner (PDP)**, **per la pianificazione e lo sviluppo continuo delle proprie competenze nelle varie fasi della carriera.** Lo stesso strumento può eventualmente **essere d'aiuto alle stesse organizza-**

⁷⁶ The European Science Foundation Member Organisation Forum Report 'A pan-European professional development framework for researchers', ESF MO-Forum on Research Careers Development. <http://www.esf.org/activities/mo-fora/european-alliance-on-research-careers-development.html>

zioni (enti di ricerca, università, etc.) come ausilio allo sviluppo delle strategie di formazione, potendolo utilizzare sia per intercettare la domanda formativa, che per valutarne i benefici.

Le iniziative che, in questa direzione, verranno intraprese nell'ambito di HIT 2020 potranno trarre vantaggio da questi risultati, usandoli come riferimento, o facendoli propri qualora la loro applicazione fosse promossa dagli organi Comunitari.

Il *Vitae* RDF⁷⁷ è strutturato in quattro settori che presentano i descrittori della conoscenza, delle capacità intellettuali, tecniche e standard professionali per gli operatori della ricerca, così come le qualità personali, le conoscenze e le competenze per lavorare con gli altri e garantire l'impatto più ampio della ricerca.

A questo proposito la disponibilità continua di opportunità e di adeguati strumenti di formazione assume una notevole importanza.

Mentre la formazione specifica nelle varie discipline è parte integrante dello sviluppo professionale di ogni ricercatore e, come è noto, è prevalentemente su questo aspetto che attualmente si sviluppa il percorso di crescita professionale, **lo sviluppo di competenze complementari ed eventualmente 'trasferibili' consentirà di introdurre nel profilo professionale dei ricercatori un catalizzatore dei processi di mobilità intersettoriale e interdisciplinare e un facilitatore delle iniziative di collaborazione tra ricerca knowledge driven e ricerca technology driven (ESF MO-Forum Research Careers Report).**⁷⁸ Competenze in organizzazione, finanziamento e impatto delle attività di ricerca, *group leadership*, o le già menzionate *communication and dissemination skills* dovranno completare, con il progredire della carriera, il bagaglio culturale di ogni operatore della ricerca.

Il valore di ognuna di queste competenze complementari non sarà in se stessa, ma **potrà essere misurato indirettamente dall'accresciuta capacità del ricercatore di approfittare prontamente delle opportunità che si potranno presentare durante la carriera e con la rapidità con cui queste transizioni raggiungeranno la massima efficacia.**

Altrettanto importanti saranno le esperienze di collaborazione interdisciplinare o intersettoriale che, oltre ad essere uno degli obiettivi del processo di rinnovamento delle carriere scientifiche, rappresenteranno esse stesse un'opportunità formativa per i singoli e di crescita per le loro comunità

⁷⁷ Vitae (2011), Advisory Centre (CRAC), Cambridge, UK www.vitae.ac.uk/rdf/

⁷⁸ Research Careers in Europe Landscape and Horizon, ESF MO - Forum on Research Careers. <http://www.esf.org/activities/mo-fora/completed-mo-fora/research-careers.html>

Commenti finali

- ESF+Science Europe: esperienza interessante/produttiva ? →SI
 - confronto internazionale del nostro (INFN) modo di concepire/supportare la ricerca e i ricercatori
 - (aiutare a) introdurre una visione europea e buone pratiche nel sistema nazionale
- importanza del ruolo dei ricercatori (carriera, formazione, ..)
 - aumentare l'interesse dei migliori ricercatori per il mondo della ricerca
 - creare le basi per favorire e trarre benefici dalla mobilità (discipline, settori, stati)
 - formazione, valutazione, auto-valutazione
- INFN, cosa/come applicare le buone pratiche e come valorizzare quanto già facciamo !
 - iniziative permanenti di tracking e valutazione interna
 - GLV: tracking dottorandi e laureandi
 - supporto e "valutazione" della formazione (dip. + ass. ?)
 - mettere in evidenza le capacità formative dell'INFN (per la valutazione e non solo)
 - supporto alle iniziative di trasferimento tecnologico/competenze dell'Ente
- Italia: Hlt2020, PNR, semestre Italiano di Presidenza UE
 - roadmap verso una ricerca più attenta alle esigenze del Paese