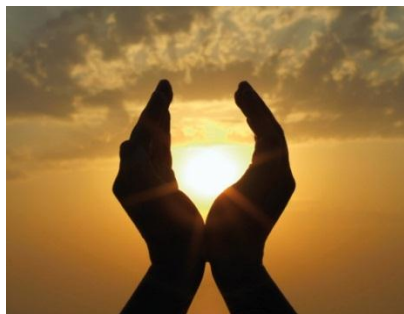


Job Opportunities and Skills Needs – A European Perspective

Dr Iain Cameron,
Head of Research Careers and
Diversity, RCUK Strategy Unit
Chair, ESF MO-Forum Research
Careers



Horizon 2020 – Excellent Science, Industrial Leadership and Societal Challenges

- H2020 - key tool to implement the Innovation Union Flagship Initiative
- EU needs at least one million new research jobs to reach the R&D target of 3% of GDP. (*Innovation Union*)
- The number of researchers required is significantly higher, as many researchers will retire over the next decade. (*Innovation Union*)
- By the end of 2011, Member States should have strategies in place to train enough researchers to meet their national R&D targets and to promote attractive employment conditions in public research institutions. (*Innovation Union Commitment #1*)

Global trends – EUA view*

- CODOC report compared three world regions with developing, emerging and developed countries (East Asia, Latin America and Southern Africa) with Europe.
- Three major convergences can be identified:
 - Producing doctorate holders who can contribute to economic growth and social development.
 - Training doctorate holders for higher education **and** an increasingly knowledge-dependent private sector.
 - An emphasis on collaboration

* CODOC – Cooperation on Doctoral Education between Africa, Asia, Latin America and Europe; EUA 2012 - <http://www.eua.be/codoc.aspx>



So what is the European level picture
for Researchers?

Understanding Researchers: Anticipation of an academic career!

- >75% of PhDs want to work in academia after graduating
(EURODOC Survey 2011)
- *“Most European researchers are trained in universities, and most fundamental research is undertaken in them.”* (LERU – Harvesting Talent 2010)
- *“Researchers frequently assume that an ultimate destination other than that of a permanent university post represents failure.”* (LERU – Harvesting Talent 2010)
- *“No sweet outcome for PhD worker bees – ESOF conference hears that many students are 'mis-sold' an academic career”*
(Times Higher Education 2012)

A European Framework for Research Careers (EFRC)

Four broad profiles for researchers, independent of any particular sector, with the following working titles:

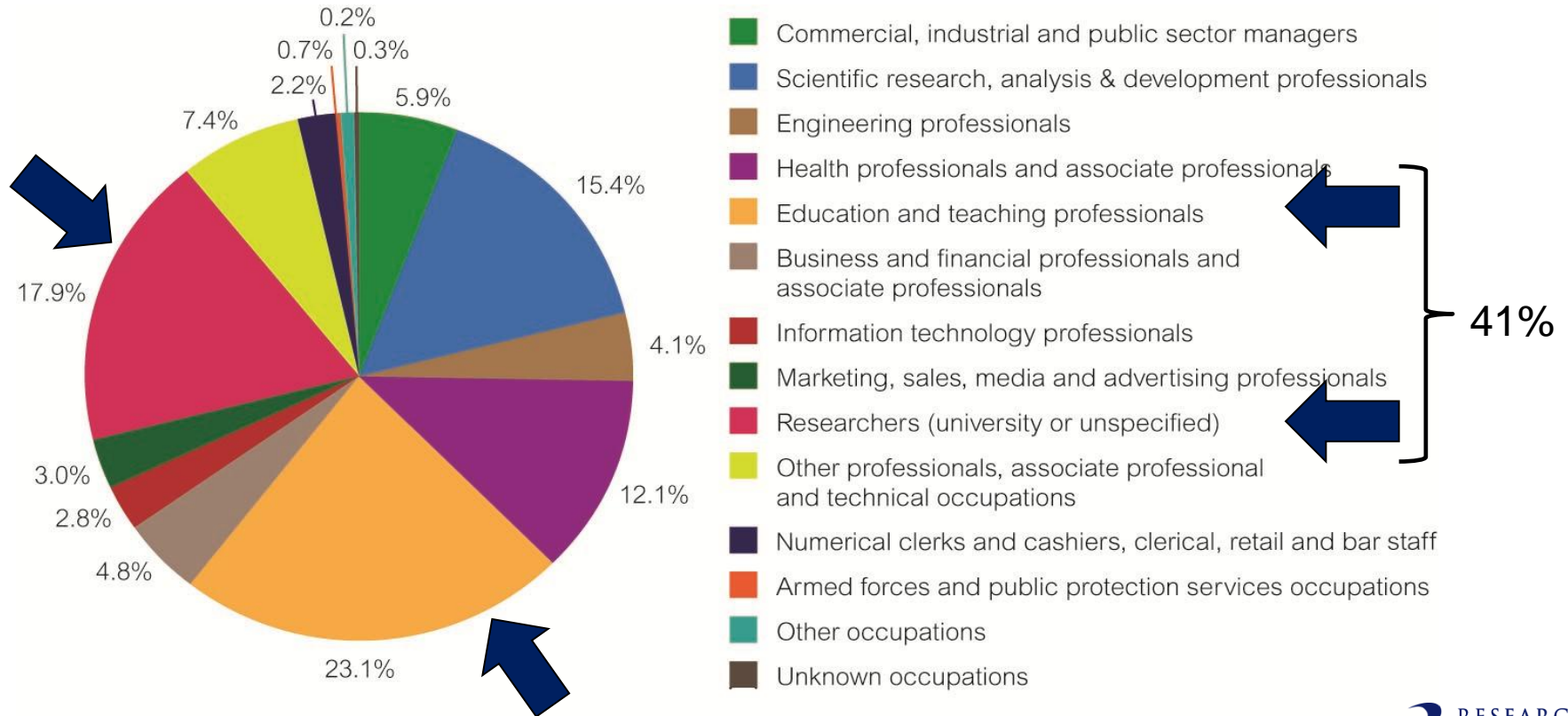
- **R1 First Stage Researcher**
 - *up to the point of PhD*
- **R2 Recognised Researcher**
 - *PhD holders or equivalent who are not yet fully independent*
- **R3 Established Researcher**
 - *researchers who have developed a level of independence.*
- **R4 Leading Researcher**
 - *researchers leading their research area or field*

A framework for: Jobs, competencies and skills, training, funding instruments, presenting workforce statistics and data

Employability outside HE

- 45% of PhDs want to work in non-academic research and 22% in a private non-research job after graduating (*EURODOC Survey 2011*)
- “It is estimated that around 50% of current doctorate holders are employed outside academia holding both research and non-research positions.” (*EUA DOC-CAREERS 2009*)
- “Collaborative doctoral programmes ... are seen as an excellent way to improve candidates’ ability to relate abstract thinking to practical applications.” (*EUA DOC-CAREERS 2009*)
- Employers appreciate the scientific/technical knowledge of PhDs including: formal approach to evidence-based arguments, analytical skills, ability to integrate knowledge from different sources and their ability to work at the frontiers of knowledge. (*EUA DOC-CAREERS 2009*)

What do researchers do? - occupations all disciplines



Towards a European Professional Development Framework for Researchers

EC (DG Research) WG report on Skills – Professional Development of Researchers – Provisions for the Future. (2012)

ESF Pilot study – a pan-European Researcher Development Framework for Researchers. (2012)

- Both reports refer to Vitae's Researcher Development Framework (Vitae 2012).
- Both reports recommend institutional level provision for researcher development.
- Together the reports recommend increased provision across career stages and a European Framework for Professional Development.

Researcher Development Framework (RDF) - 2011



vitae
realising
the potential
of researchers

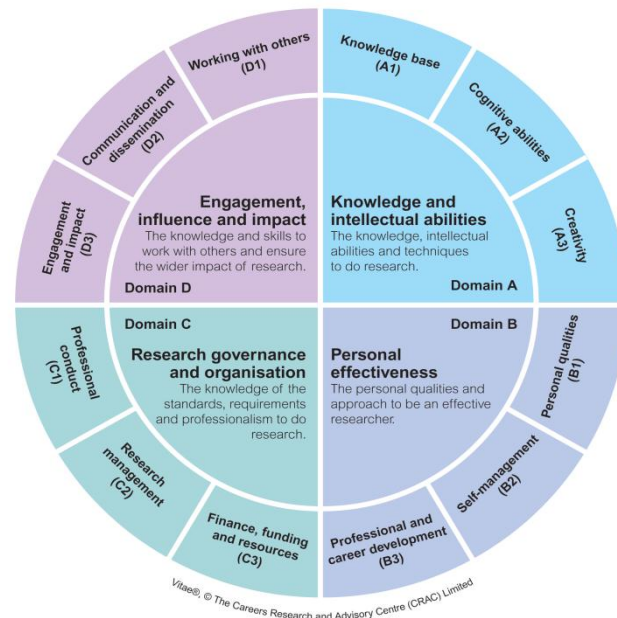
Incorporating the UK GRAD Programme and UKHERD

- **Major new approach** to researcher development
 - evolution of the **Joint Skills Statement** for PGRs and research staff
 - describes **knowledge, behaviours and attributes** of researchers at different stages of development
 - providing a **language for communicating** researcher qualities

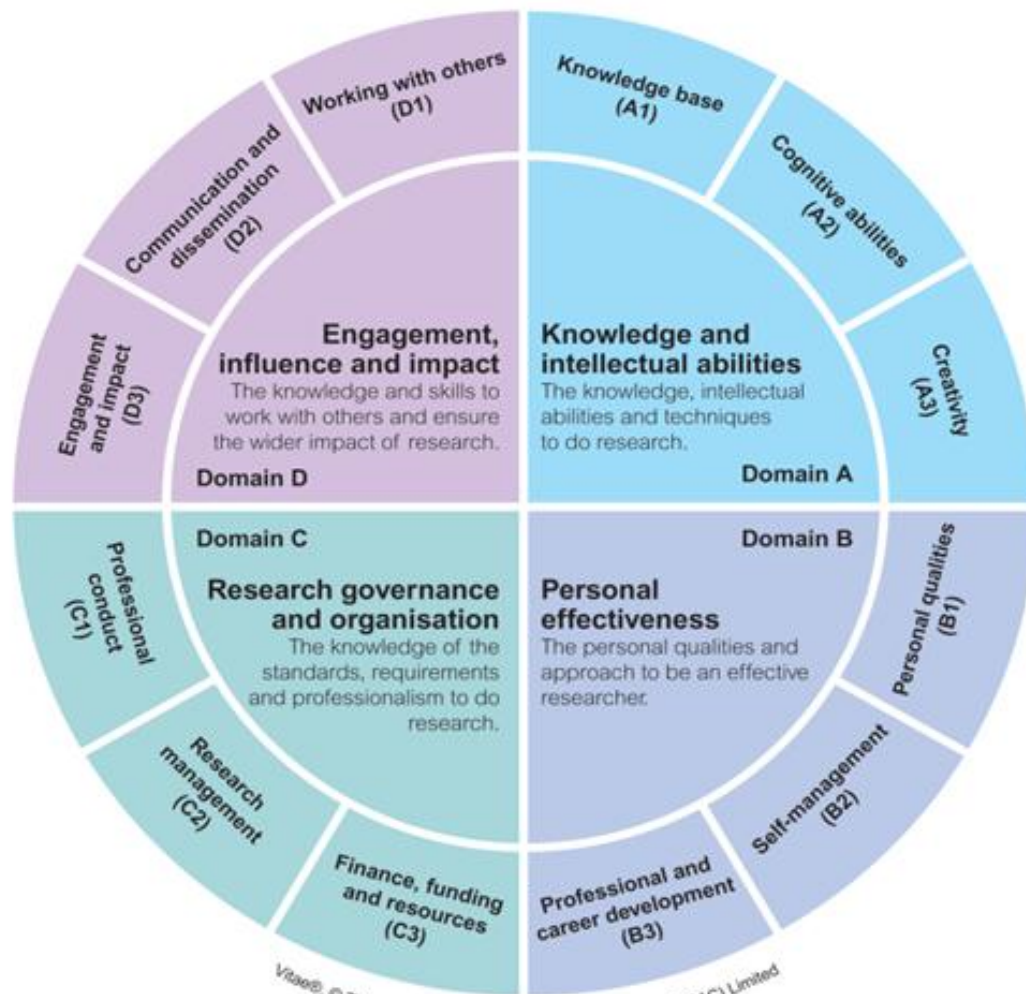
- **Researcher Development Statement endorsed by key stakeholders**

- **RDF website**
 - resources, FAQs
 - researcher profiles
 - JSS mapping

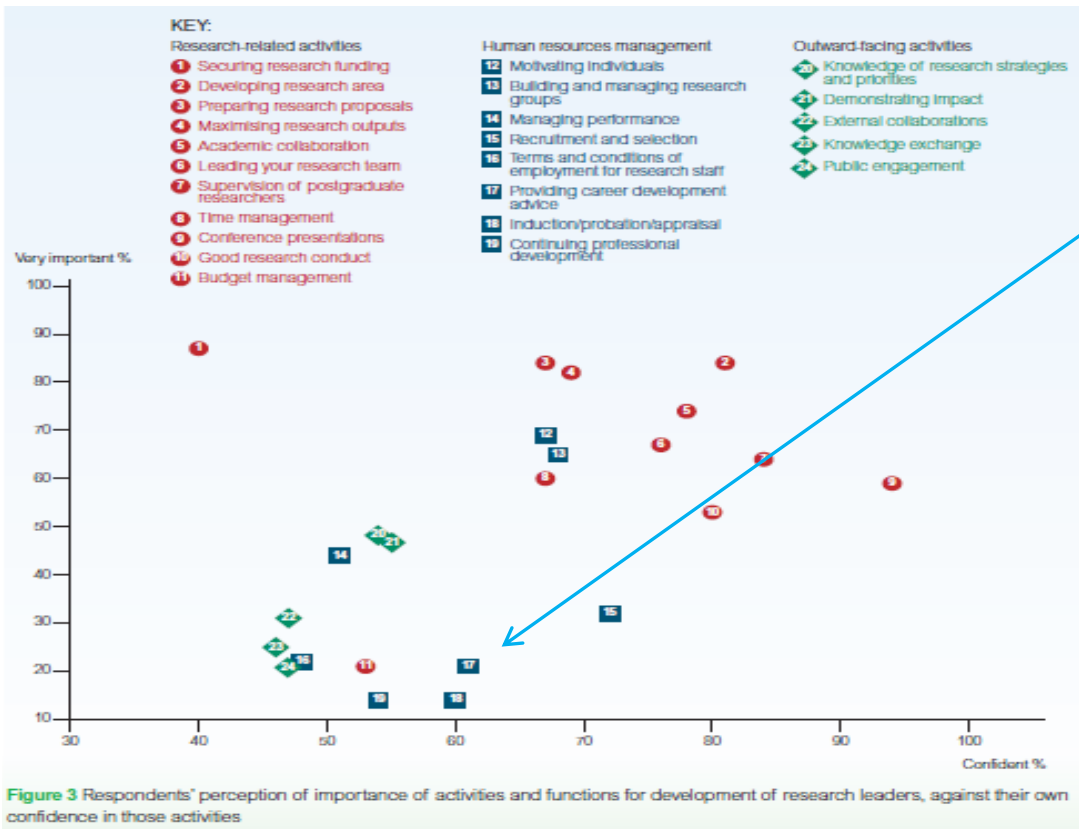
- **Professional development tool**
- **RDF lenses**



www.vitae.ac.uk/rdf



UK Survey of Principal Investigators and Research Leaders (PIRLS-2011)



Only 21% of academics surveyed see providing career advice as important.

Key

- Research Related activities
- HR and management issues
- Outward facing activities

Routes to improving employability

- Understanding career options – e.g. What do Researchers do? (Vitae UK)
 - First destinations by subject
 - Career profiles
 - Career profiles of doctoral entrepreneurs
 - Doctoral graduate destinations and impact three years on
- Recognising and acquiring competencies and skills – a Researcher Development Framework.
- Sources of help – some caveats

References

- LERU – Harvesting Talent: http://www.leru.org/files/publications/LERU_paper_Harvesting_talent.pdf
- EURODOC survey: <http://www.eurodoc.net/projects/completed-projects/eurodoc-survey-i/>
- EUA CODOC: <http://www.eua.be/codoc.aspx> ;
- EUA DOC-CAREERS: <http://www.eua.be/eua-work-and-policy-area/research-and-innovation/doctoral-education/doc-careers/>
- Vitae - What do Researchers do?: <http://www.vitae.ac.uk/policy-practice/513201/What-do-researchers-do.html>
- Vitae - Researcher Development Framework: <http://www.vitae.ac.uk/researchers/428241/Vitae-Researcher-Development-Framework.html>
- Vitae - PIRLS survey: <http://www.vitae.ac.uk/policy-practice/448681/Principal-Investigators-and-Research-Leaders-Survey-PIRLS.html>
- ESF - Professional Development report: <http://www.esf.org/coordinating-research/mo-fora/european-alliance-on-research-careers-development.html>
- DG Research - Professional Development <http://ec.europa.eu/euraxess/index.cfm/general/researchPolicies>
- DG Research – EFCR: <http://ec.europa.eu/euraxess/index.cfm/general/researchPolicies>

Thank you for your attention

