

Doctoral researchers: the bridge between universities and society Dr Janet Metcalfe, Vitae

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The way research is done is changing



- Interdisciplinary research / multidisciplinary research teams
- International / intercultural experience
- Intersectoral readiness
- Open access / publication
- Open data / reproducibility
- Open science / innovation engaging society

Being an excellent researcher is not enough...

Employers' views of doctoral graduates Vitae realising the potential



- Value their critical thinking, problem solving, bring fresh perspectives and systematic approach
- Value their self confidence, dedication, resilience and motivation
- 75% say loss of doctoral graduates would have a major impact on operations
- Over 20% report that doctoral graduates are mission critical and loss would be catastrophic
- Enhances organisation's profile and credibility
- 40% state that work experience is as important as doctorate take less time to adapt to pace and demands of work
- Could invest more in interpersonal skills, leading and working with others

Employers' expectation of researchers' performance (high and very high)



	Group 1	Group 2	Group 3	Group 4
Data analysis	100%	100%	91%	91%
Problem Solving	100%	88%	89%	83%
Drive and Motivation	100%	84%	59%	74%
Project Management	83%	36%	70%	39%
Interpersonal Skills	67%	56%	39%	26%
Leadership	67%	28%	24%	17%
Commercial awareness	50%	20%	28%	22%
Overall	81%	59%	57%	50%

Employer categories

Group 1: actively target doctorates

Group 2: strong interest

Group 3: some interest, occasionally recruit

Group 4: no interest

vitae
realising
the potential
of researchers Common competencies for employability Subject knowledge **Team working Research methods People management** Languages Research methods: theoretical knowledge Influence and leadership Research methods: practical application Information seaking Collaboration Information Iteracy and management Languages Academic literacy and numeracy **Analysing** Equality and diversit **Critical thinking Problem solving** Critical thinking **Communication** Problem solving Inquiring mind **Enterprise** Knowledge and Intellectual abilities Intellectual insight **Inquiring mind** Influence and Impact The knowledge and skills to Policy Argument construction work with others and ensure Intellectual insight Society and culture the wider impact of research. Global etizorship **Innovation** Health and safety Domain C Ethics, principles and **Enthusiasm** Perseverance sustainability Integrity Logal requirements effectiveness Self-confidence **Time management** IPR and copyright The personal qualities and Respect and confidentiality approach to be an effective Attribution and co-authorship Responsiveness to Appropriate practice change Research stralegy Commitment to research Project planning and delivery Time management **Project planning** Risk management Responsiveness to change and delivery **Enthusiasm** Income and funding generation Career management Financial management **Perseverance** Continuing professional development Infrastructure and resources Networking **Self confidence** Reputation and esteen Responsibility Financial management **Continuing professional development Networking**

Creating effective bridges









Open doors
Actively engage







Value all careers Reward openness

Preparing researchers for a more open research environment



- Increase their emotional intelligence self awareness / working with others / leadership
- Provide more exposure to other environments
- Enable them to be more intellectually 'mobile' and to promote their abilities
- Foster their agility to adapt to unknown future research environment