

Academia is the alternative career: a career journey from performing research to supporting research

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Overview

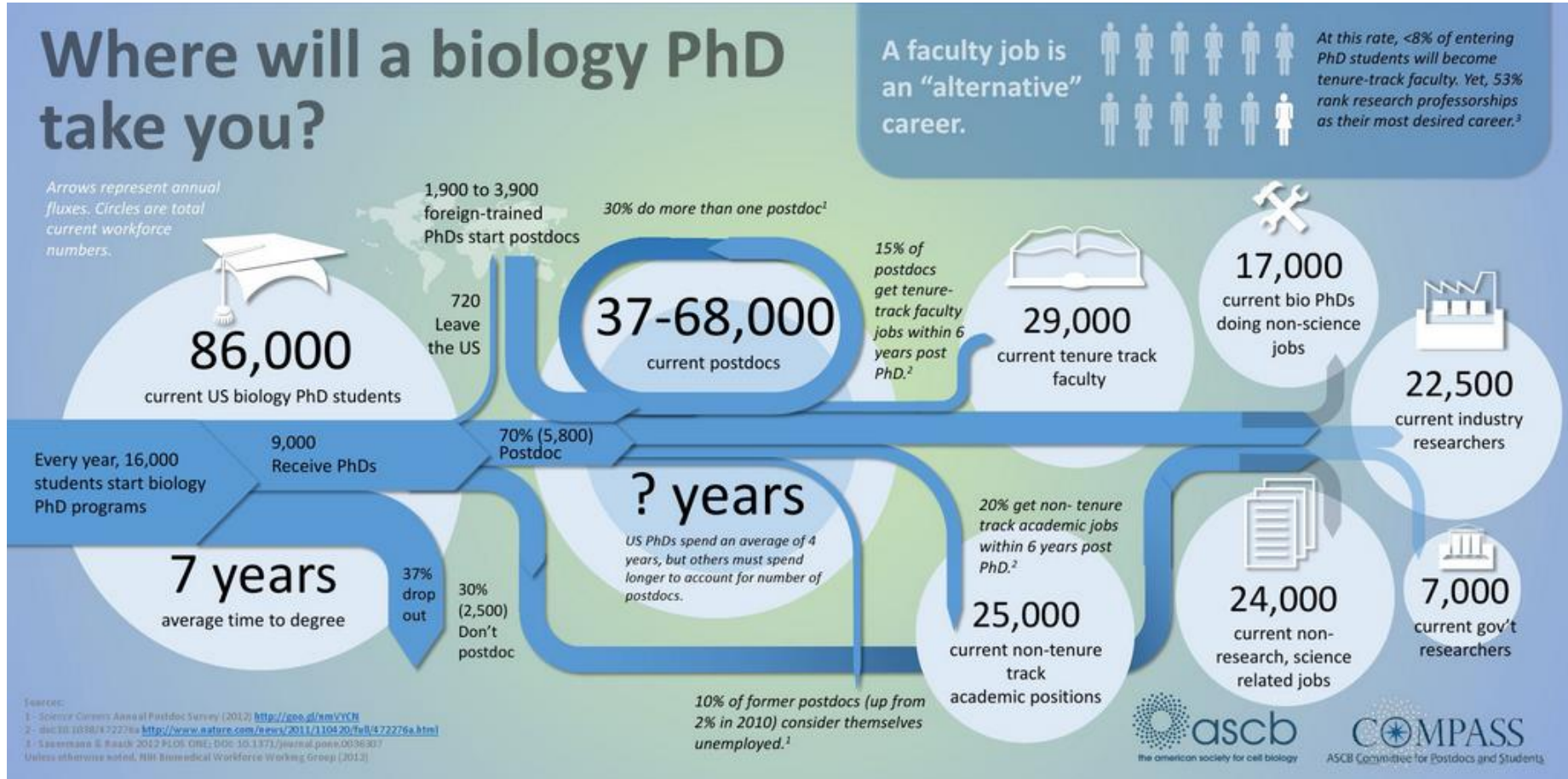
1. Facts and figures about non-academic careers
2. A personal reflection on my career path
3. Some thoughts on skills for non-academic careers

Facts and Figures

Destinations of PhD Graduates

Where will a biology PhD take you?

Arrows represent annual fluxes. Circles are total current workforce numbers.



Source:
1 - Science Careers Annual Postdoc Survey (2012) <http://goo.gl/nmVYCH>
2 - doi:10.1038/472276a <http://www.nature.com/news/2011/110420/fall/472276a.html>
3 - Sauerbren & Raacke 2012 PLOS ONE; doi: 10.1371/journal.pone.0036307
Unless otherwise noted, NIH Biomedical Workforce Working Group (2013)

VITAE Study 2016

“What do research staff do next?”

- Survey of ~850 respondents who had taken a non-academic career path
- Covered 24 MS & 55 nationalities
- Majority had aspired to academic career during PhD studies
- 75% satisfied with current employment
- Just 18% expressed a desire to return to academia

VITAE 2016

Four-fifths of respondents were employed in one of nine occupations:

1. Research and Development Manager 17%
2. Researcher 13%
3. Function Manager 11%, i.e. working in functions such as marketing and production
4. Research Policy and Administration Manager 8%
5. Vocational or Industrial Trainer/Instructor 7%, including researcher developers and careers advisers/coaches
6. IT and Technology Professional 7%
7. Public/Science Engagement Professional 5%
8. Teaching Professional 5%
9. Journalist/Editor 4%

Other professions reported include: engineering professionals; health professionals; senior manager and officials; and management consultants and analysts.

My journey to and through a “non-academic” career

A brief CV

Position	Employer	From - To
Director RDI	Technological Higher Education Association	Apr 2017 - Present
Marie S-Curie NCP & ND	Irish Universities Association	Jan 2012 – Mar 2017
Scientific Officer	Irish Research Council for Science, Engineering and Technology	Oct 2007 to Dec 2011
Researcher	<ul style="list-style-type: none">• Dublin City University• University of Liverpool, UK• University of North Carolina, USA	Oct 2002 to Sep 2007
Doctoral Student	Dublin City University	Oct 1998 to Sep 2002
Undergraduate	Dublin City University	Oct 1994 to Jun 1998

In the beginning.....

- Dublin City University
- B.Sc. Analytical Science, 1998
- PhD in Chemistry, 2002
- Supervisor: Prof. Robert Forster
- “Traditional” PhD



Motivation:

- Interested in research
- Didn't want to work in a QC lab!

Chapel Hill, NC

- 2002 – 2003
- Postdoc at The University of North Carolina at Chapel Hill
- Tier One US Research University
- Prof. Royce Murray (top 10 in my field)



Motivation:

- A good postdoc position and international mobility -> academic career
- To live in the USA

Liverpool, UK

- 2004 – 2006
- Research Associate at The University of Liverpool
- Prof. Mathias Brust
(top 10 in my new field)
- Post funded by FP6
- Research work and grant management/administration
- Teaching experience



SIXTH FRAMEWORK
PROGRAMME

Motivation:

- Gaining research skills and admin skills
- More international mobility
-> academic career (?)
- Personal reasons

The road home.....

- 2006: returned to Ireland
- Temporary research position
- 2007: Awarded a personal fellowship

Motivation:

- Moving home: Personal Reasons
- Fellowship: First steps towards an independent academic career

Everything changes.....

- July 2007: Decided to leave academia
– started a job search
- October 2007: Found a non-academic position

Motivation:

- Lack of research career path
- Concerns about work/life balance
- Just a feeling.....

Making the transition

- Open-minded (applied for many different jobs)
- Realistic (salary, entry level)
- Curriculum Vitae
 - Changed from 6-page “academic” to 2-page “commercial” format
 - Presented research experience, including publications and conference presentations as:
 - Evidence of skills e.g. communication, project management, problem solving, statistics, analytical ability, IT etc.
 - “Achievements” e.g. grant funding won, papers published etc.
 - Unless it was a technical job, removed the technical details of the research
 - Detailed lists of publications and conference presentations removed (non-research people are not interested in the details)
- A little bit of luck – position required a PhD in Chemistry

A new beginning.....



- Small research funding agency
- Recruited as Scientific Officer
 - ERA-NET in Chemistry (~ 1 year)
 - Postdoctoral Fellowships and European Programmes
- Managed funding Calls from start to finish – single handed, lots of independence

Motivation:

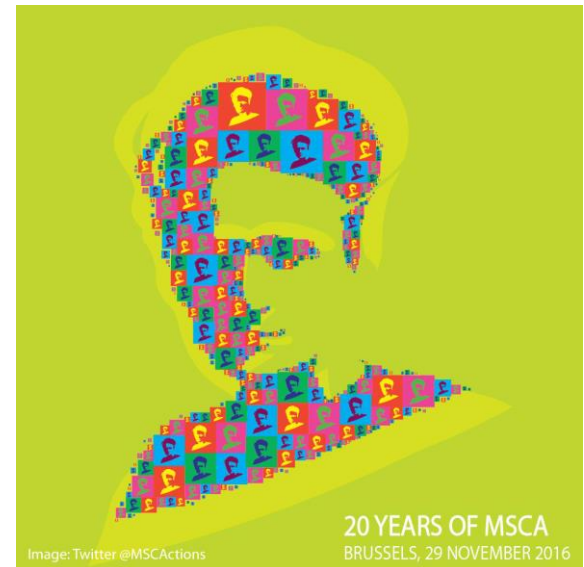
- “Research-related” job
- Build on existing skills, learn new ones

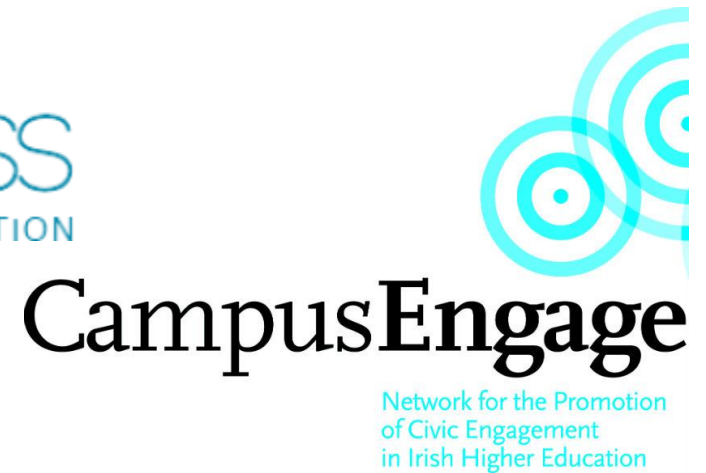
A natural step.....

- Jan 2012- March 2017
- National Contact Point (NCP) & National Delegate for Marie Skłodowska-Curie actions
- From spring 2014, also working with IUA Director of Research (CEO) on sectoral research policy
- By Jan 2016, managing a small team promoting MSCA and supporting applicants

Motivation:

- Career Progression
- “More visible” Role





The next level.....

- Since April 2017
- Director of Research, Development and Innovation
- THEA represents the 14 Institutes of Technology
- My three objectives:
 - Advocate & Promote
 - Facilitate & Support
 - Policy & Agenda

Motivation:

- A new challenge
 - A desire to work more on research policy than research support
-

Skills for non-academic careers

Required Skills

Many skills developed during research career were essential for my career “outside academia”

Communication Skills	Presenting, Influencing, Training, Listening, Writing
Project & Event Management	EU projects, conferences, workshops
Analytical & Critical Thinking	Data analysis, synthesis, critical reviewing
IT Skills	Statistics, MS Office, web & social media
Interpersonal/Supervisory Skills	Team-working, supervising, “self-starter”

VITAE report showcases other examples and has some nice profiles of researchers who transitioned out of academia

Any special training?

- “Unstructured” PhD – no training offered
- No researcher career development programmes at postdoc stage
- Keen to take advantage of what was offered afterwards
e.g. in the US, audited a Grad School course in research admin
- Also looked for teaching and mentoring opportunities and opportunities to “learn on the job” – latter has been more NB in recent years
- 15 short training courses
 - EU Proposal Writing
 - Project Management
 - Critical Thinking
 - Train the Trainer

Final Thoughts

- Academia **is** the alternative career, but it's not the lesser option
- Don't ask your PI for career advice – they only know about academia 😊
- Lots of rewarding, exciting careers out there - inform yourself about the opportunities via LinkedIn, NatureJobs news etc.
- Take advantage of what your institution offers for personal development, training and career advice

Thank You and Good Luck!

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