Women in science
A glass half full

Ottoline Leyser
Sainsbury Laboratory
University of Cambridge
ol235@cam.ac.uk
The academic career path

Years

1 PhD
4 Post-doc 1
7 Post-doc 2
12 Independent Research Fellowship
15 Lecturer
15 Senior lecturer
20 Reader
20 Professor
Many career paths in science

Teacher
Museum director
TV/radio researcher
Policy maker
Publisher
Charity/NGO worker
Think tank member
Lecturer etc
Industrial researcher
Journalist
Venture capitalist
Science administrator
Civil servant
Analyst
Writer
Patent lawyer
Women on the academic science career path

% women in bioscience (2006)
Many career paths in science

Years: 1, 4

Post-doc 1
Post-doc 2

PhD

Teacher
Museum director
TV/radio researcher
Policy maker
Publisher
Charity/NGO worker
Think tank member
Lecturer etc
Industrial researcher
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Where do they go?
A qualitative study for the Wellcome Trust

• Based on interviews with 60 PhD students from Wellcome Trust PhD programmes
• Approx 50:50 men and women

Why did they start a PhD?

• Most said: They were passionate about science

• Some said: They wanted an academic research career

Who left academia?

• Disproportionately: Those passionate about science

  Women
Top three pressures driving alternative career choices

• Funding and instability
• Pressure to publish
• Long working hours culture
The publish or perish pressure cooker

• Publish your interesting results, enriching the sum of scientific knowledge, and incidentally demonstrating your productivity as a scientist; AND develop your career in a way that works for you

• Publish 10 papers in high impact journals per week, raise £Ms in research funding and abandon all thought of having a life or perish like the miserable failure that you are
The publish or perish pressure cooker

- Constant trial by metrics (££££, h scores, Impact Factors)
- If you step off the academic career path you will be branded a failure forever
- Walking along the academic career path is harder than walking on water

- Women are too scared to stay in
- Men are too scared to get out
Taking the lid off the pressure cooker

• Scientific careers should be about science in all its glory

• Diverse and flexible career paths for all should be enthusiastically supported

• Myths about the requirements to walk on water should be debunked

Culture Change
What women are told

“Many early career researchers…occupy a competitive and precarious career environment”

The Thrift Review, 2008

“Academic success depends on constant delivery. If you pause to have children, you get put back to the beginning”

Terry Marsh, Director of the WISE campaign

“The big problem is for women in their late 20s, when they have to make a choice. Do they choose not to have children…Or do they choose to have children..but run the risk they won’t come back to a job at all because they don’t yet have tenure”

Baroness Greenfield
Mothers in Science - 64 ways to have it all

http://royalsociety.org/Content.aspx?id=3228
Myth 1: You can’t have a career break

Carol Robinson

PhD

8 year career break
Myth 2: You can’t be a part time academic

Clare Elwell

Research
I’m a Medical Physicist developing non invasive optical systems for measuring blood and oxygen levels in the human body. I lead a number of interdisciplinary teams using these systems to monitor brain damage in infants and adults undergoing intensive care, to characterise neurodevelopment in young children and to measure muscle oxygenation levels in exercising athletes.

Career
Whilst my career has always been very important to me, I never wanted to pursue it at the expense of time with my young family. For this reason I have worked part time since Julia was born. My husband has a demanding job and so we have always appreciated the need for good childcare, family support and regular holidays. I’m a firm believer that, with hard work and focus, a career in academia can provide for a rewarding work-life balance.
Myth 3: You can’t have children as a post-doc.
Failure is a normal part of science.

1986-1990: PhD
1990-1994: Post-doc (with fellowship)
1994-1999: Lecturer
1999-2002: Reader
2002-: Professor

More papers and grants rejected than I can remember.

Rejected for lots of PhDs.
Rejected for lots of post-docs.
Rejected for lots of fellowships.
Rejected for lots of lectureships.
Taking the lid off the pressure cooker

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Culture Change
The Meaning of Success

http://www.cam.ac.uk/women-at-cambridge

NB Not just science
How big is yours?
How good is ours?
Taking the lid off the pressure cooker

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Culture Change