



Becoming A Lecturer

Monday, 8 October 12

Outline

- **why listen to me?**
- **who am I?**
- **my academic history**
- **the academic pathway**
- **being a lecturer**
- **your application**
- **connections / networking**
- **personal experience and advice**
 - my first grant
 - something about women
 - nightmares & courage
 - you are more than a job
 - you are not alone

Why listen to me?

- **Senior Lecturer at Imperial College London**

- **Research Group**

- 2 Post-docs
- 8 PhD students
- 1 MSci and 1 BSc
- expect 1-2 MRes students
- 1-2 summer students

- **Funding**

- Co-I £1.2 million EU grant
- Co-I £1.8 million industrial grant
- Industrial consulting
- £3/4 million UK funding => EPSRC / Leverhulme / RS / College grants
- part £6 million Doctoral Training Centre

**permanent
position**

**BUT it is not so long ago that I
don't remember what it is like to be
in your position!**

Why listen to me?

- **Insight from all aspects**
 - I have been in your place
 - I have post-docs in your position
 - I participate in the selection process for fellowships / lectureships
- **I am a Panel Member**
 - Imperial Fellowships
 - For The Royal Society
 - URF and Dorothy Hodgkin Fellowships
 - Equipment Grants
- **I want to help!**
 - I mentor and offer advice to people in your position
 - The more women in Physical Sciences the better
 - Chair of the Chemistry Academic Opportunities Committee at Imperial

Why listen to me?

● The Chemistry Academic Opportunities Committee

- help Imperial Post-Doc staff make the transition
- implemented many changes over the last 5 years
 - scrutinise academic staff search/appointment/interview processes
 - changed mentoring framework (above and below)
 - revamped induction process (Academics and PDRAs)
 - revamped personal development plans
 - supporting fellowship applicants: opportunities web-page, advice, mock interviews
 - monitor statistics, run workshops, actively gather feedback from PDRAs and Academics
 - training and conference entitlement, professional skills training
 - created Early Career Development Committee
 - created PostDoc Development Team
 - annual symposium and career development day
 - early career researcher award £1000

helping you with
the next step

● Silver SWAN award

- commitment to advancing women's careers in science



Who am I?

- **Theoretical and Computational Chemist**

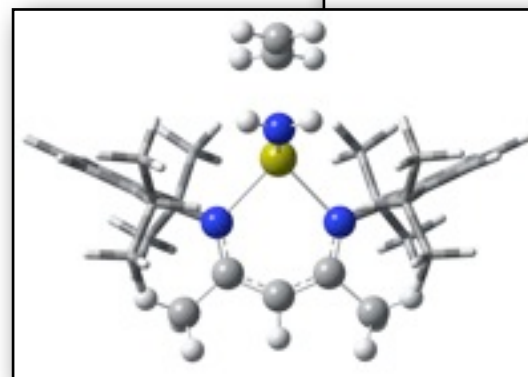
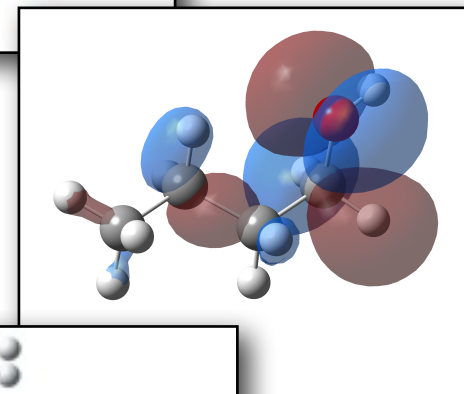
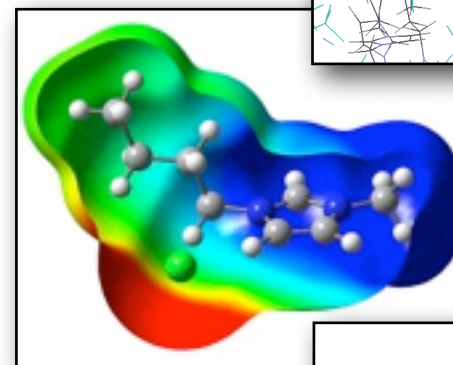
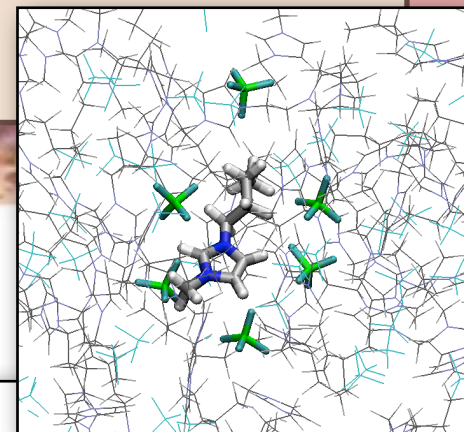
- Ionic Liquids
- Aqueous Solutions and Solvent Systems
- Catalysis
- Combustion
- Bonding

- **Collaborate**

- Synthetic / Physical / Inorganic Chemists
- Mechanical Engineering
- Chemical Engineering
- Civil and Environmental Engineering

- **Industry**

- Rio-Tinto
- BASF
- GlaxoSmithKline



My History

- **Auckland University, New Zealand**
 - BSc, MSc, BA, PhD
- **EPSRC Post Doc, King's College, London**
- **Leverhulme Post Doc, Cambridge**

- **Royal Society URF**
- **Senior Lecturer at Imperial**



Auckland University



Cambridge University



Imperial College



My History

- **Auckland University, New Zealand**
 - BSc, MSc, BA, PhD
- **EPSRC Post Doc, King's College, London**
 - applied for Dorothy Hodgkins at Oxford (unsuccessful)
- **Leverhulme Post Doc, Cambridge**
 - applied for position at York University (unsuccessful)
 - applied for position at Auckland University (successful)
 - applied for position at Imperial College (successful)
- **Royal Society URF**
- **Senior Lecturer at Imperial**



Auckland University



Cambridge University



Imperial College



My History

- **Auckland University, New Zealand**

- BSc, MSc, BA, PhD

- **EPSRC Post Doc, King's College London**

- applied for Dorothy Hodgkin Fellowship

- **Leverhulme Fellowship, Cambridge University**

- applied for position at Cambridge University (unsuccessful)
- applied for position at Auckland University (successful)
- applied for position at Imperial College (successful)

- **Royal Society URF**

- **Senior Lecturer at Imperial**

keep trying!



Auckland University



Cambridge University



Imperial College



My History

- **Dorothy Hodgkins**

- applied for in Oxford
- failed
- BUT great preparation for the next time around

**start thinking
early!**

- **Took position at Cambridge**

- followed from a suggestion from my supervisor
- after 2 years looked for and found fellowships
- didn't apply for an EPSRC because I didn't know it existed!

**do YOU have
PostDoc
Development
Centre, they
can help!**

- **Royal Society 2003-2011**

- applied for with a great deal of help from my supervisor
- phone-call invited by Head of Department to come to Imperial

My History

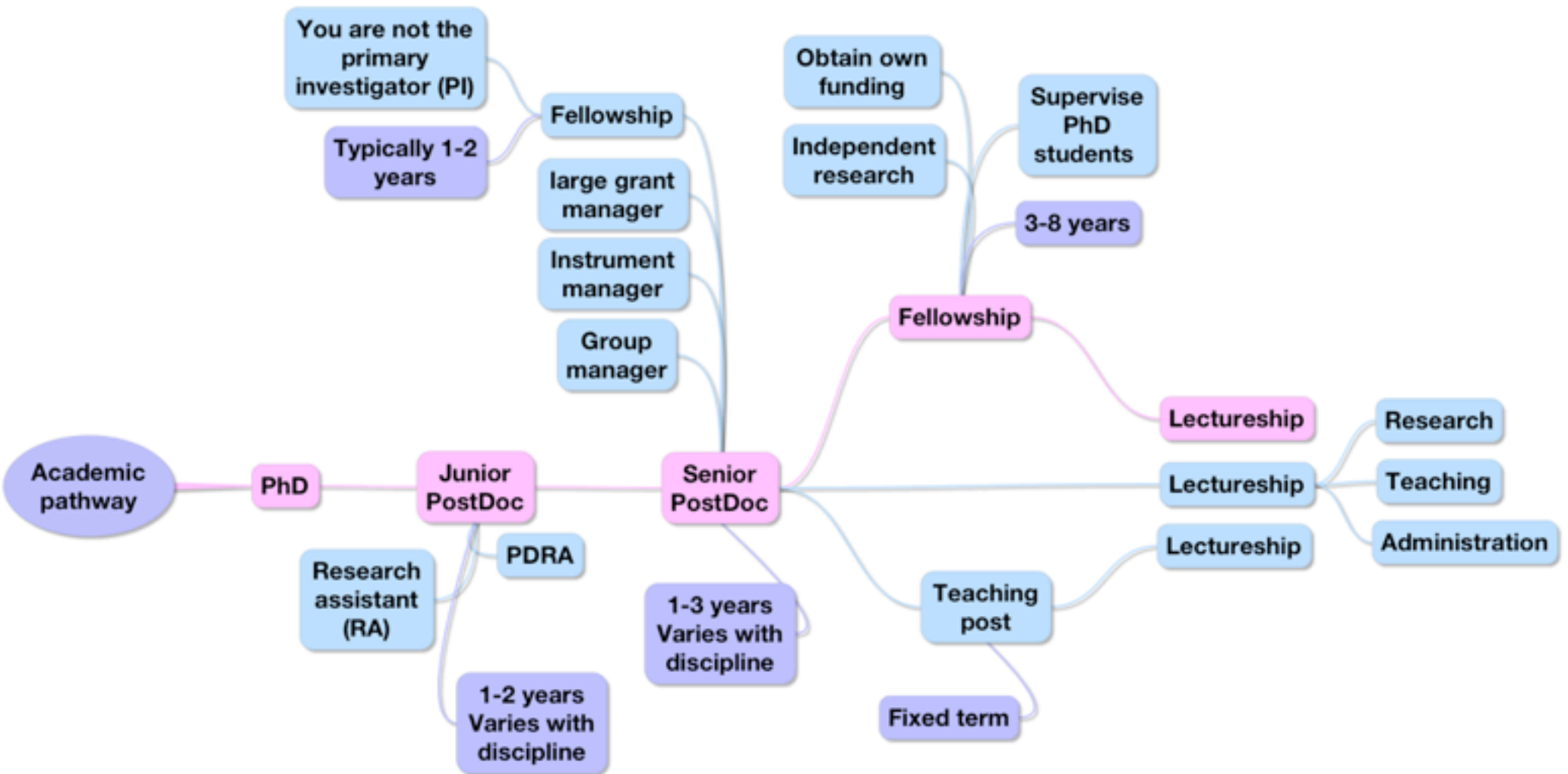
- **At same time I was applying for Lectureships**
- **York position (not offered)**
 - too nervous giving research seminar
 - wrong clothes
 - great experience for what to expect
- **Imperial position (offered)**
 - talk impressed
 - right clothes
 - had good interview I was confident
 - I had prepared answers
- **Auckland University position (offered)**

use first one to gain “experience”

MUST have interview practice

MUST write a good research summary

The Academic Pathway



The Academic Pathway

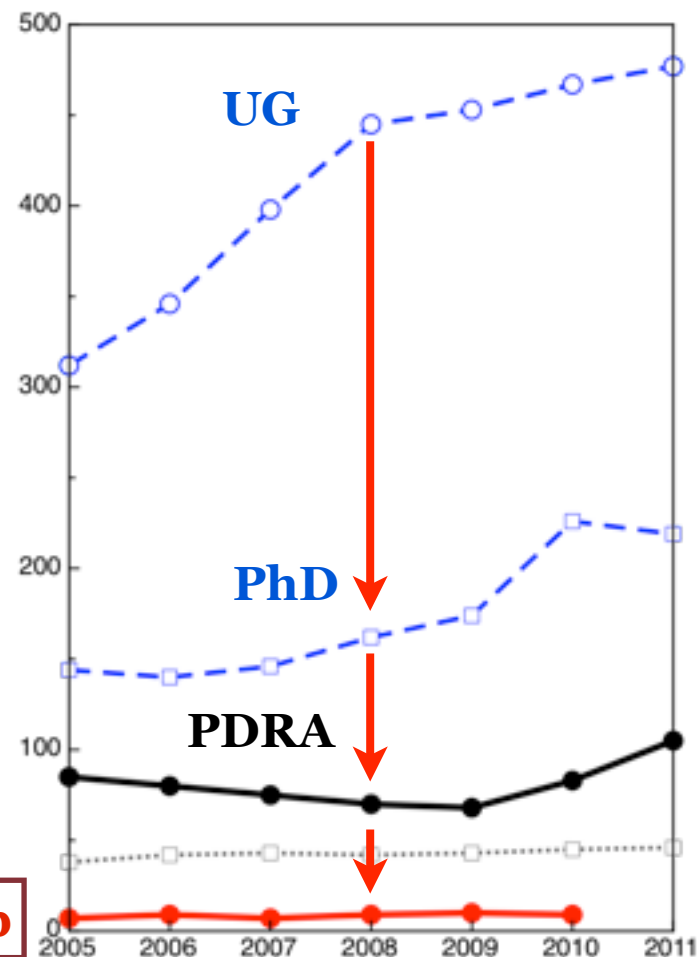
- UG ≈ 500
- PhD ≈ 200
- PDRA ≈ 100
- Lecturer & Fellowship ≈ 10

You have a $<10\%$ chance of getting a Fellowship or Lecturing position

- $\approx 30\%$ PDRA are women
- $\approx 10\%$ Academic Staff are women

Lecturer or Fellowship

Chemistry Department



A decorative header image featuring a close-up of pink flowers with yellow stamens, set against a light pink background. The title text is overlaid on a light beige rectangular box with a dark border.

The Academic Pathway

**You have a <10% chance of
getting a Fellowship or
Lecturing position**

The Academic Pathway



**you need to
SHINE!**

**You have a <10% chance of
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is this what
you **WANT?**

The Academic Pathway

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is this what
you **WANT?**

you have
CHOICES!

Being a Lecturer

● Research

- much less time personally
- give your ideas away for others to work on (your group!)

● Teaching / Group

- takes bulk of your effort & time
- important to get right
- lecturing / tutorials / labs
- mentoring PhDs and PDRAs
- exams, problem sheets, labs, workshops

● Administration

- proposals for grants
- managing large funds
- manage day-to-day purchasing
- reports, safety
- hire staff (PDRAs)
- departmental responsibility



**Job changes
dramatically**

**Lecturing is NOT
like a PostDoc**

**ask your PI about
these things, get
involved!
(I wish I had)**

Being a Lecturer

● Do you like

- travelling?
- speaking to experts / industry?
- writing papers / grants?

● Can you

- take robust criticism
 - from students!!
 - for your papers and grant applications
- can you remain cool
- can you take in the larger picture

● Are you good at

 time management 

- being clear and concise
- managing staff & students
 - giving staff their yearly review
 - appointing candidates (legal obligations)
 - manage group dynamics

job changes dramatically

● Admin time spent

- at meetings
- write reports / grants
- administrative duties
 - pay forms
 - run a course / programme
 - manage finances
 - organise travel

● For students

- prepare / invigilate / mark exams
- problems classes / tutorials / labs
- reading literature reports / thesis
- oral assessment
- requests at all hours

Being a Lecturer

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- travelling?
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- take robust criticism
 - from students!!
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- ★ time management ★
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job changes dramatically

● Admin time spent

- at meetings
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Management skills:
-people -projects -courses -money

● For students

- prepare / invigilate / mark exams
- problems classes / tutorials / labs
- reading literature reports / thesis
- oral assessment
- requests at all hours

Your Application

● Job / Fellowship Applications

- good short “academic” CV
- research direction well defined
- good publications: quality NOT quantity
- research fits the department
- friendly personality / fit in socially
- research independence / research collaboration strong
- good research seminar
- good interview
- teaching / tutoring / lab experience
- nice to have a prize or award
- grant writing experience (success)
- think beyond your own area / appreciation of national and international
- willingness to undertake some administrative duties
- **MUST** have good references ...

start thinking early!

**8-12 months
in advance**

Your Application

● Research Vision

● What are your ideas?

- not your PI's!
- but do discuss with your PI
- build on your skills and prior associations

● How do they fit into the larger context

- what is the potential impact on “real world”
- what is the potential impact at a fundamental level
- how do they link into other research (collaborators / competitors)
- is it “fashionable” (check out EPSRC web-site! -digital economy/energy/engineering/healthcare)

● Clear, meaningful and concise presentation

- a common stumbling block!
- don't just ask a friend to read your application
- ask for **real hard-hitting critical feedback** on the content
- include information for the non-specialist




start thinking early!

8-12 months
in advance

Your Application

● What is a Lecturer judged on?



● RESEARCH

- Papers published (**quality** and quantity) 
- H-index (who reads your papers!) 
- Recognition (presentations, awards, reviewer etc) 



start thinking early!

8-12 months
in advance

● FUNDING

- Fellowships 
- Research grants
- Small grants 

● TEACHING


- Undergraduate teaching 
- Postgraduate supervision 
- Educational scholarship/awards

● ADMINISTRATION

- Teaching administration
- Student and Staff welfare
- Departmental responsibilities

● PERSONAL CIRCUMSTANCES

Do you show potential?

 areas you can already work on to show you have potential

Your Application

- **Panel Member for RS**

- score it on a scale of 1-7
- best go for review
- second panel meeting / interview

start thinking early!

- **Preparation fellowship grant**

- start at least 8 months early
- prepare your project
- get senior academics to review it
- university “submission” before RS

**8-12 months
in advance**

- **What I look for in an application**

- original creative science
- clarity of presentation of the science
- clear direction
- links with other techniques / groups
- publications: quality over quantity
- don't use overly technical language

**MUST write a well
constructed research
proposal**

Connections/Networking

- **people matter**

- referee papers
- review funding applications
- for job applications
- referees for promotion
- support (mentoring)

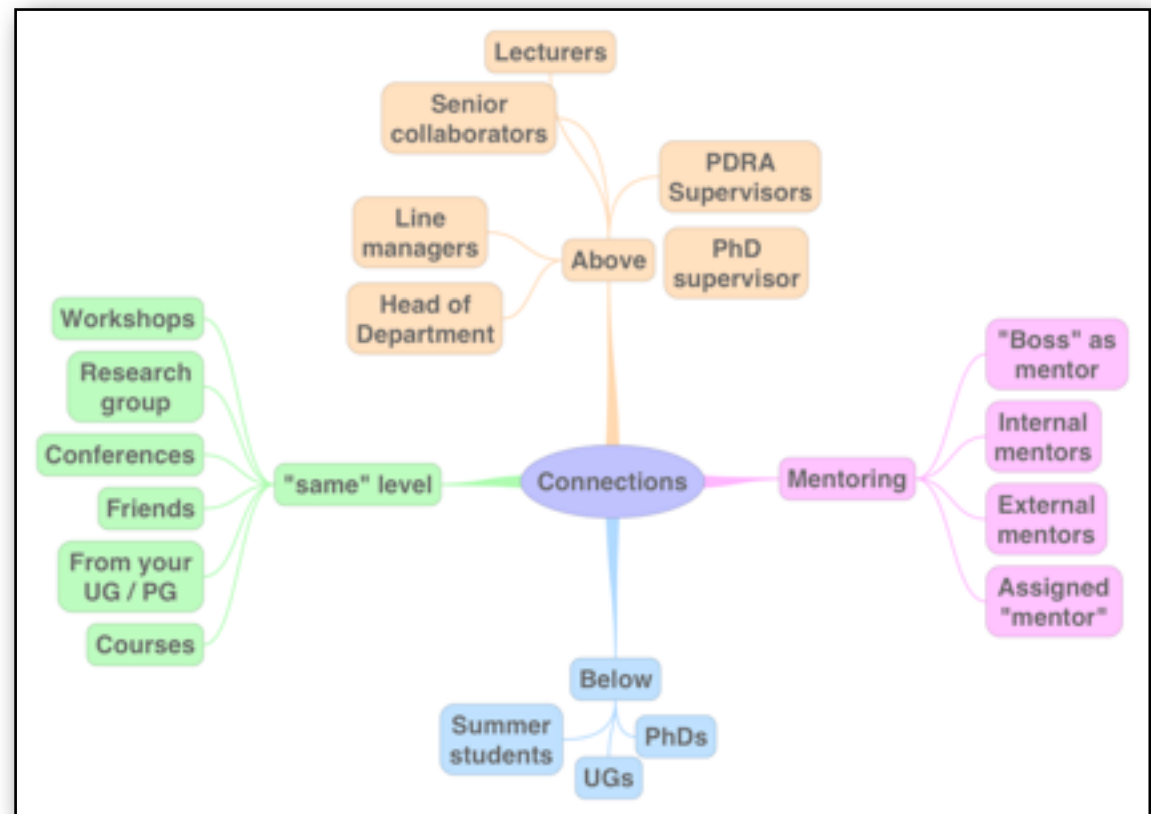
- **collaborators**

- needed for grants
- national AND international

- **colleagues**

- friends when life is tough
- tell you the unwritten rules
- share experiences
- offer advice
- help you out when something goes wrong

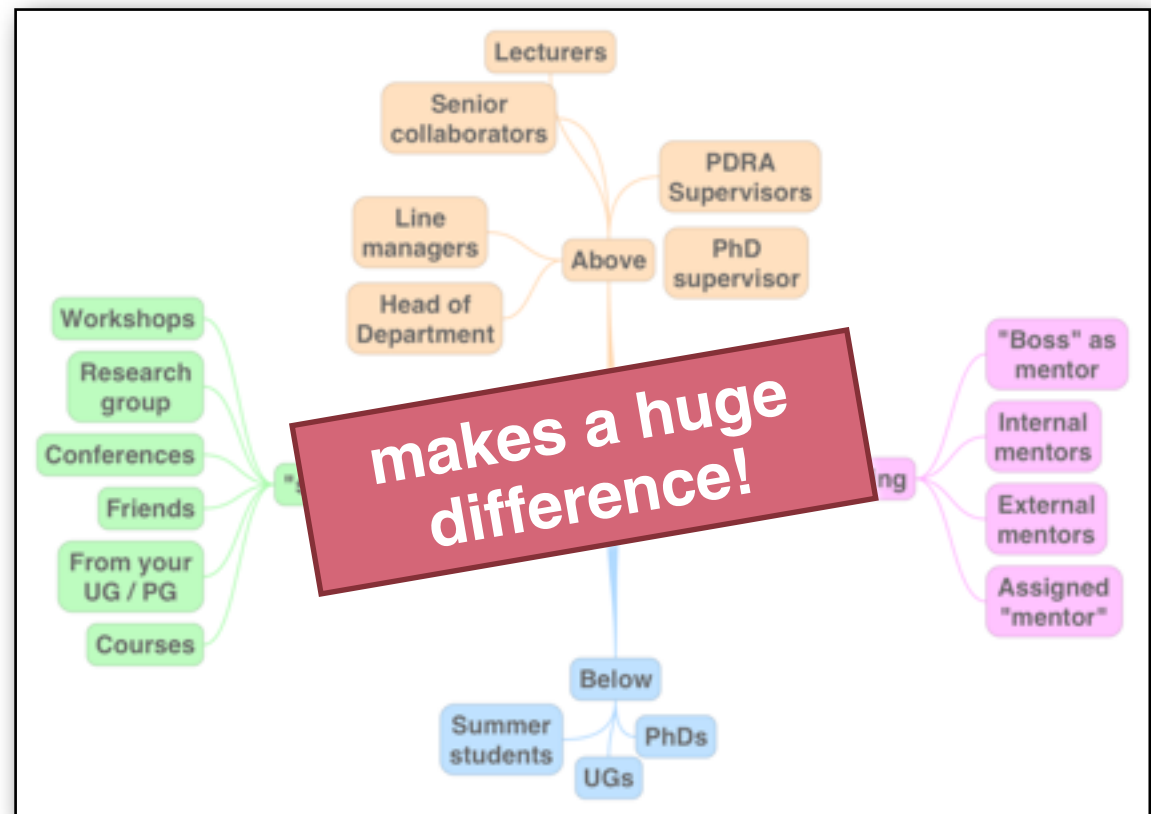
worth working at



Connections/Networking

- your responsibility
- be 3D
 - those above you
 - those with you
 - those below you
- be pro-active
 - goto conferences
 - go on courses/workshops
 - goto seminars
 - goto department events
 - meet more people
- find your mentors
 - different people
 - “gel” with you
- without this you will suffer!

worth working at



My First Grant

● A Nightmare!

- college finance systems
- submission to EPSRC
- proposal outline
- finding PhD student
- college procedures

● Get experience now!

- ask your PI
- use PostDoc Resources
- write a trial or small grant

● Get Help!

- ask for help
- use your colleagues
- use university resources

Imperial College London

Return to the Imperial homepage

For: Prospective Students | Students | Alumni | Staff | Business | Media | Search: LONDON | Go | People

Department of Chemistry

Home | About | Admissions | Teaching | Research | Academic Opportunities | Fellowships | Safety | Contacts/Getting Here | For Staff

Departmental Procedures

- Direct PhD Registration
- Absences During Term Time
- Academic Leavers
- Expenses Claim Process for Chemistry
- HR
- Space Allocation
- Visiting Research
- Visiting Students

Other useful information

- Chemistry Fellowship Opportunities 2010-11
- Chemistry Research Procedures and Information
- Departmental Postgraduate Administration

Departmental Contact Lists

- Chemistry Staff Contact List Nov 2010
- Management and Administration
- Heads of Sections, PAs and Section Secretaries
- Faculty Support Teams
- Faculty of Natural Science Contact List

Back to Chemistry

For Staff

- Chemistry Fellowship Opportunities 2010-11
- Chemistry Research Procedures and Information
- Departmental Contact Lists
- Departmental Meetings
- Departmental Postgraduate Administration
- Departmental Seminars
- Departmental Committees and Reports on the Staff

use the resources available

Funder	Scheme	Further Details	Funder Deadline	RSC Assessment	Submitted prior to RSC/eGAP
EPSRC	Postdoctoral Fellowship	http://www.epsrc.ac.uk/funding/fellowships/Postdoctoral.aspx	Awaiting information	No	4 working days before deadline
	Leadership Fellowship	http://www.epsrc.ac.uk/funding/fellowships/Leadership.aspx	Awaiting information	Yes - Date TBC	4 working days before deadline
	Career Acceleration Fellowships	http://www.epsrc.ac.uk/funding/fellowships/career-acceleration.aspx	Awaiting information	Yes - Date TBC	4 working days before deadline
Royal Society	University Research Fellowship	http://royalsociety.org/University-Research-Fellowships/	TBA	Yes - Date TBC	4 working days before deadline
	Donorship Fellowship	http://royalsociety.org/Donorship-Fellowships/	TBA	No	4 working days before deadline
	Newton International Fellowship	http://royalsociety.org/newton-international-fellowships/	TBA	No	4 working days before deadline
BBSRC	David Phillips Fellowship	http://www.bbsrc.ac.uk/funding/fellowships/david-phillips.aspx	6 September 2011	Yes - Date TBC	1 September 2011
Leverhulme Trust	Research Fellowship	http://www.leverhulme.ac.uk/funding/RF/RF.cfm	Various	No	4 working days before deadline
NERC	Postdoctoral Research Fellowship	http://www.nerc.ac.uk/funding/available/fellowships/	1 November 2011	No	26 September 2011
	Advanced Research Fellowship	http://www.nerc.ac.uk/funding/available/fellowships/	1 November 2011	Yes - Date TBC	26 September 2011

Application Process for Fellowships: In ALL cases applicants should inform their Head of Section and Eileen Boyce of their intent to apply. Where applications are assessed by the Research Strategy Committee, an outline application (comprising of CV and letter of support from academic sponsor) should be sent to Eileen Boyce (copied to Section Head) before the RSC Committee deadline (TBC).

Mapping Imperial's global reach

Record your international links

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Something about Women

- **My Opinion**

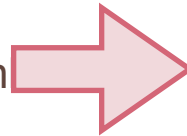
- soft-subject: opinions vary widely

- **Very few women experience overt sexism**

- very subtle and effects build up over time
- women are sexist as well

- **Confidence**

- **over-confidence in men**
 - they are 10-20% worse than they think
- **lack of confidence in women**
 - you are 10-20% better than you think!
- **push yourself a little**



- take a course: the moment it hit me (the card experiment!)
- talking with other women, sharing experiences (professors are scared too!)
- “feels hard” but it is the right thing to do

know your worth

find an internal compass

- **Want feedback and rewards**

- often not provided
- we don't ask for it!
- feel impact of negative comments more intensely

Courage!

- **We follow science because it is a key force in our lives**
- **Face your fears ... what is the worst that can happen?**
- **Find an internal compass**
- **Keep trying!**
- **Do your best, and offer help to those around you**

Henry Fuseli The Nightmare

Macbeth:

If we should fail?

Lady Macbeth:

We fail?

**But screw your courage
to the sticking place,
And we'll not fail.**

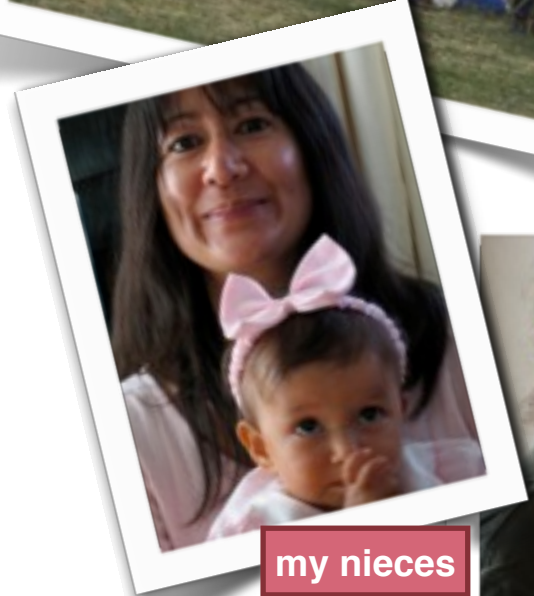
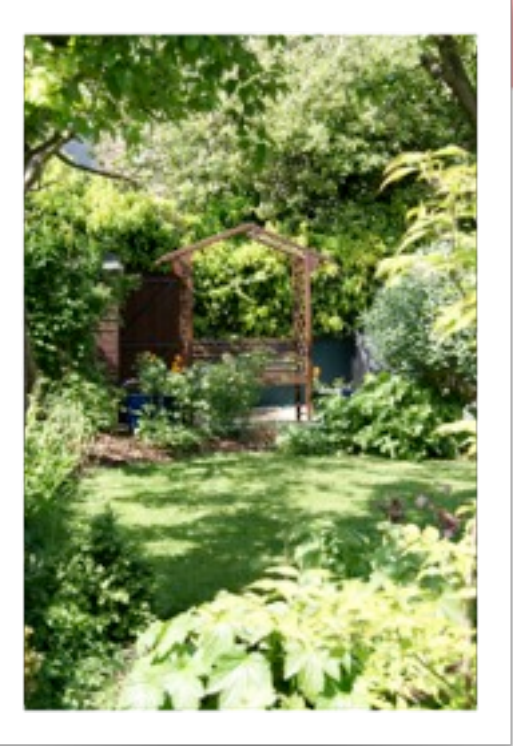
You are more than a job



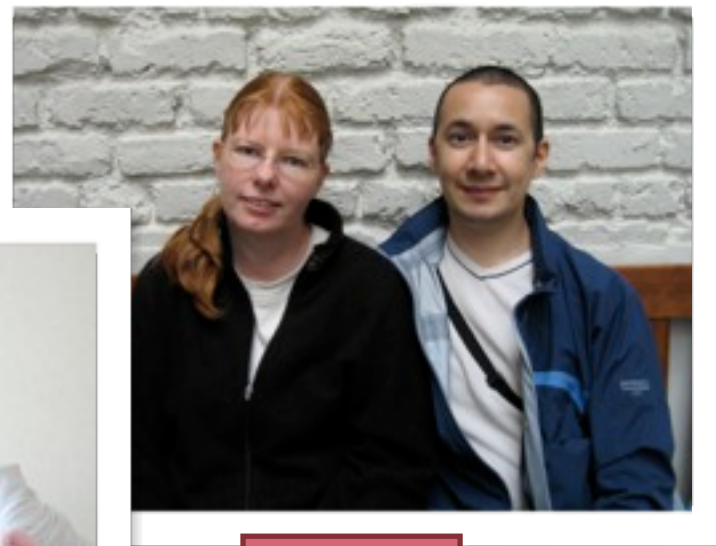
me



my hobbies



my nieces



my partner



my cats