

# **Finding, choosing and applying for PhD places**

*(with insights into applying for in career avenues)*



*Where do you want to do/go with your MSc degree?*

- PhD and then Academic Reserach
- PhD and then Academic Teaching
- The “Industry”
- NGO
- Something else

[govote.at](http://govote.at) !

# General suggestions

- There are many opportunities out there
- You have to “make it happen” for many or most
- Consider the full range of possibilities, regardless of
  - Country
  - Department
  - Funding
- Dedicate some time to it
- Be flexible
- Be persistent (*but don't stalk*)
- Be open to possibilities you might not have considered
- Don't get discouraged
- Try to enjoy the process - it's an exploration of what you can do!
- We can help put you in touch with past students and staff who have done what you want to do



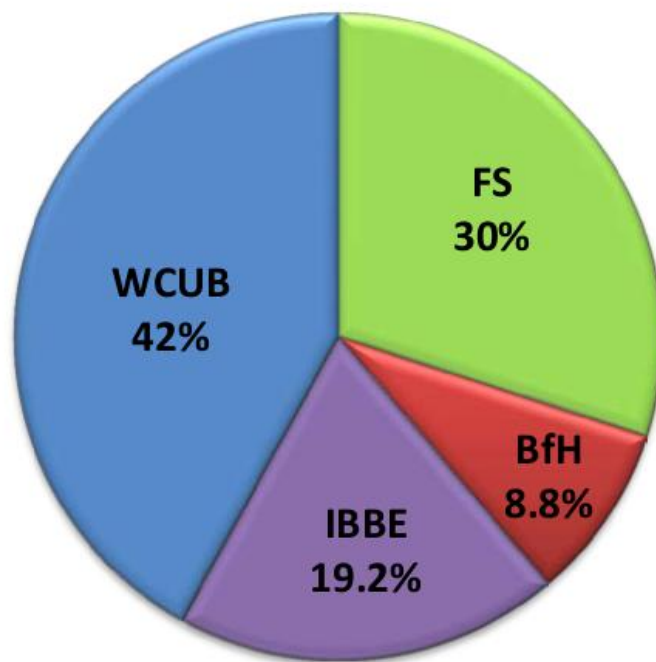
# Finding them

- Where do PhD studentships come from?
  - BBSRC (Home/EU only – mostly Home)
  - NERC (Home/EU only – mostly Home)
  - Other routes
- Where & when are they advertised?
- Making one happen specially



# What areas do BBSRC fund?

## Total Recommended Allocation of DTP Studentships (2015-19) by BBSRC Strategic Research Area



- Agriculture and food security (FS)
- Bioscience for health (BfH)
- Industrial biotechnology and bioenergy (IBBE)
- World-class underpinning bioscience (WCUB)

# BBSRC: Doctoral Training Partnerships

Lead research organisation	Partner research organisation(s)	Associate partner(s)	Nominal total number of studentship awards per year
University of Bristol	Cardiff University, Rothamsted Research, University of Bath, University of Exeter,	None	16
University of Cambridge	Animal Health Trust, Babraham Institute, EMBL-EBI, National Institute of Agricultural Botany, Wellcome Trust Sanger Institute	None	30
University of Edinburgh	Scotland's Rural College, University of Aberdeen, University of Dundee, University of St Andrews	Scottish Universities Life Sciences Alliance, The James Hutton Institute	15
Imperial College London	Natural History Museum, Royal Botanical Gardens at Kew, Royal Holloway University of London	Research Complex at Harwell	16
John Innes Centre	Institute of Food Research, Sainsbury Laboratory, The Genome Analysis Centre, University of East Anglia	Plant Bioscience Ltd, The Norfolk and Norwich University Hospital, The SAW Trust	25
University of Leeds	University of Sheffield, University of York	Food and Environment Research Agency, Research Complex at Harwell	22
University of Manchester	None	None	12
Newcastle University	Durham University, University of Liverpool	None	8
University of Nottingham	Diamond Light Source, East Malling Research, Rothamsted Research	Research Complex at Harwell, Centre for Process Innovation's (CPI's) National Industrial Biotechnology Facility, Crops for the Future Research Centre (Kuala Lumpur)	25
University of Oxford	Diamond Light Source, ISIS Neutron Source, Oxford Brookes University, STFC Central Laser Facility, The Pirbright Institute	Research Complex at Harwell	25
University College London	Birkbeck College, King's College London, Royal Veterinary College, London School of Hygiene and Tropical Medicine, Queen Mary University of London	None	30
University of Warwick	University of Birmingham, University of Leicester	None	26
Total			250

**250 studentships/year in UK; 4-year (1 + 3)**

<http://www.bbsrc.ac.uk/documents/dtp-allocations-2015-19-pdf>

**Generally advertised in January/February**



- Industrial CASE\* studentships
  - 3-year
  - Collaboration between University and an external organization, *usually a company*
  - 125 in 2015/2016; Universities apply for individual studentships.  
Allocations: <http://www.bbsrc.ac.uk/documents/industrial-case-studentship-allocations-pdf>
  - Potential supervisors then compete for these
    - **Having a strong student lined up helps no end, so approach supervisors early!**  
(Interviews in ~March/April)
- Industrial CASE partnerships
  - 3-year, Companies apply for blocks
  - 71 studentships studentships starting 2014/15, 2015/16 and 2016/17.
  - Allocations: <http://www.bbsrc.ac.uk/skills/investing-doctoral-training/case-partnerships/>

\* CASE = Collaborative Awards in Science & Engineering

# NERC DTPs

<http://www.nerc.ac.uk/funding/available/postgrad/responsive/dtp>

- Doctoral Training Partnerships
  - 240 studentships per year
  - 3.5-year awards (**not** 1+3) (you will normally be expected to have a MSc/MRes)
  - Blocks of 12-24, usually to consortia (next slide)
    - 30% are expected to be CASE
  - Consortia are likely to be of two basic sorts:
    - Geographic – multidisciplinary among nearby places
    - Thematic – narrower focus, may be more spread out
  - A lot like BBSRC



# Current NERC DTPs

DTP No.	DTP Name	DTP Administrative Lead Organisation	Page No.
1	The Oxford DTP in Environmental Research	University of Oxford	2
2	SCENARIO. Postgraduate centre in the SCience of the Environment: Natural and Anthropogenic pRocesses, Impacts and Opportunities	University of Reading	4
3	ENVISION: Developing next generation leaders in environmental science	University of Lancaster	6
4	The London NERC Doctoral Training Partnership	UCL	8
5	NERC Science @ Leeds and York - Site for PhD Training in Environmental Research (SPHERES)	Universities of Leeds	10
6	Central England NERC Training Alliance (CENTA)	University of Birmingham	12
7	Training the next generation of environmental scientists	University of Manchester	14
8	IAPETUS : Postgraduate Environmental Training NexUS: transforming doctoral students into the next generation leaders in science, industry and policy	Durham University	16
9	Environment East (EnvEast) Doctoral Training Partnership	University of East Anglia	17
10	The Cambridge Earth System Science DTP: Multi-disciplinary studies of the solid Earth, its atmosphere, oceans, cryosphere and biosphere.	University of Cambridge	19
11	GW4+ - a consortium of excellence in innovative research training	University of Bristol	21
12	Science and Solutions for a Changing Planet	Imperial College London	23
13	E3 - Edinburgh Earth and Environment - Doctoral Training Partnership	University of Edinburgh	24
14	SPITFIRE - the Southampton Partnership for Innovative Training of Future Investigators Researching the Environment	University of Southampton	26
15	Adapting to the Challenges of a Changing Environment (ACCE)	University of Sheffield	28

**240**

**studentships/year in UK; 4-year (1 + 3)**

<http://www.nerc.ac.uk/funding/available/postgrad/responsive/dtp/dtp-awards.pdf>

**Generally advertised from Nov/Dec onwards**  
- check individual websites



# Other routes

- Grants to supervisors from non-RC sources
  - Not all are restricted to home/EU, but most are
- Scholarships (esp. non-home/EU)
  - Universities/supervisors can help with your application for funding
    - <http://www.imperial.ac.uk/fees-and-funding/>
    - <http://www.scholarships-links.com/> - has field-specific pages, worldwide
  - Toughest route but, with a scholarship, you can pretty much choose your project
- Self funding always available, but requires ££, £££, or ££££

# Where are they advertised?



- [www.FindAPhD.com](http://www.FindAPhD.com)
  - Check funding status! (nationality restrictions etc)
  - Beware “Self-funded PhD students only”
    - Almost anyone will take you if you are self-funded
    - In that case you should choose what you want, pretty much
- [www.jobs.ac.uk](http://www.jobs.ac.uk)
- <http://www.scholarships-links.com/> - has field-specific pages, worldwide
- EvolDir (evolution listserv; has a studentship sub-list; global)
  - [http://evol.mcmaster.ca/cgi-bin/my\\_wrap/brian/evoldir/GradStudentPositions/](http://evol.mcmaster.ca/cgi-bin/my_wrap/brian/evoldir/GradStudentPositions/)
- Ecolog (ESA listserv; global)
  - <https://listserv.umd.edu/archives/ecolog-l.html>
- Special interest groups on Facebook etc
  - e.g., macroecology: “BES Macroecology SIG”
- Universities’ websites
  - e.g., <http://www3.imperial.ac.uk/employment/phdstudentships>
- Supervisors’ webpages

**If you find other useful sites, please let us know!**

# Choosing



*Which one tops your choosing criteria list (govote.at):*

- Research topic – *Climate change? Genomics?*
- Study system – *Bioluminescent shrimp? Tardigrades?*
- Nature of the work – *Theory? Data Analysis? Fieldwork? Experiments?*
- Supervisor(s) / Research group – *Superstar? Young? Old?*
- Institutional reputation – *Oxford or Cambridge or bust?*
- Department and/or Institution type – *University? Research Centre?*
- Location, Location, Location! – *Beach n' surfboard?*

***Score each studentship with these criteria – is it worth pursuing?***



# How to apply (typically)

- CV – two pages. Could be longer but only in exceptional circumstances at your stage
- Cover letter, one page
- References
  - Two who will **say you're great** and who **know your work**
    - After the first 2 or 3 letters, you'll get a generic letter
    - Precise, focused praise is much more convincing than warm blather
  - If they know the supervisor, fantastic
  - Approach them early: are they happy to act?
    - If not, **get someone else**
    - If you detect reticence to act, get someone else
  - Help them to write your reference
    - What are the points you'd like them to emphasize?
    - Send them CV and mention a couple specific points in email
  - **Remind them** as deadlines approach



# Making it happen!

- Being proactive is not a bad idea (but *stalking is not a good idea*)
- Potential supervisors are always keen to identify really strong potential students
  - Supervisors are in competition with each other to get studentships; having a top student helps no end
  - They may not at this stage have any firm idea what topic they'd like to supervise
  - Be prepared to invest time in discussions with a small number of supervisors



# If you get multiple offers...

- Asymmetric consequences
  - Much bigger deal for you than for supervisors
  - So be prepared to be selfish
    - Just do it nicely!
- Take your time (if possible)
  - It's mean to demand quick decisions
  - Take advice from somebody
- You can ask for later interviews to be brought forward
  - If you're sitting on an offer with a deadline



## Who can help

- Many or most supervisors here did their PhDs in the UK
- Even those that did not know the system from recruiting their own PhDs
- Your project supervisor will almost certainly be a letter writer for you if you apply after starting your project (*damn it, I spilled some beans there!*)
- He/she can also offer advice





# Main features

- Visas and country of origin typically not an issue if you get a PhD offer – a bit different than UK/Europe!
- A large number of world-class universities and labs
- The PhD is generally free (*but with strings attached, e.g., TA-ships*) if you get one and they pay you a small but comfortable salary
- Will probably take around 5-6 years, length flexible
- Project typically more self-selected and self-driven than in UK
- Can be a good career move to spend some time in a good US lab



# The GRE

- Graduate Records Exam
  - General test
  - Subject exam
- Usually required – check based on where you want to go, do now as testing dates are limited in Europe
- Costs \$130-210 for general test
- General test has
  - Verbal section
  - Quantitative section
  - Analytical writing section
- There are many books and test prep services available
- In spite of their claims, you ought to prepare



# The supervisor's viewpoint

- Most PhDs funded from flexible grant funds of supervisor
  - In UK, supervisor gets a grant for a PhD studentship and must hire within a time-frame
  - In USA, funding is more flexible, they hire when someone they want comes along
- You will contact supervisors and get support
  - They will probably ask for a “statement of purpose” or a description of what you want to do
  - If your academic record is not top notch, you will have to shine here



# What to do if interested

- Speak to your nearest knowledgeable gringo
- Start looking for labs ASAP – deadlines approach already
- Get a book on the GRE, consider a prep course, study, book a test – these are few in Europe



# When considering labs

- Big or small lab?
- Young or senior supervisor? Superstar?
- Reputation of university?
- Reputation of lab?
- Part of the country (*Do you like corn? Do you like lobsters? Do you like tacos? Do you like to smoke weed (not good for the brain on the long run)?*)



## Who can help

- Me, Lauren Cator, Jason Hodgson, Brian Hollis, Arkhat Abzhanov, Jamie Jones, Ben Halpern, Walter Jetz
- A few other people (Postdocs, Fellows etc)
- Anybody with a *certain* US accent and looks scholarly (yikes, *I can't believe I put this in a slide*)

# Aus



## Some main features

- 3.5 yrs funding, have to finish by 4 or visa issues come in
- Most funding through Australian Research Council
- Student applies, equal footing regardless of country of origin
- But very competitive
- Should be working with a supervisor
- A bit like the “make your own pizza” version of the UK studentships
- Funding covers fees, living expenses, research
- Top-up money also available if doing well

Aus



# What to do if you want this

- Start looking for labs
- Get ideas of possible projects or project areas
- Come talk to someone here about how to approach someone there
  - Andrew Knight, Jon Lloyd, Hugh Possingham
  - Anybody who has an Aussie accent and looks... *You know the drill*
- Do it soon!



# South Africa

- Small academia, but good research field in ecology/conservation and related areas
- Government funding aimed at locals
- But tuition and cost of living only about £6K/yr, if you want to self-fund
- There are many ways to arrange this
- Andrew Knight, Simon Pooley
- Anybody else with a South African accent and looks... *You know the drill*

# Other countries

- Europe – lots of possibilities here, I just don't know about them!
  - Martin Brazeau, Netherlands; Julia Schoreder, Germany; Carsten Rahbek, Denmark
- Canada
  - Austin Burt, Tom Bell, Martin Brazeau
  - Anybody who says “Aboot” and... *You know the drill*
- New Zealand
  - Rob Ewers, Jason Tylianakis
- Hong Kong
  - Tin-Yu Hui
- Brazil
  - Cris Banks-Leite

# Yet more advice

- If you want to start one in Autumn 2016, start looking now!
- Make some regular time for it
- Speak to people!
- If you are applying to SA, Aus, USA, perhaps elsewhere, you need to drive toward contacting supervisors in potential labs soon!
- If at first you don't succeed... Robert the Bruce (King of Scots) and the spider (*neither was applying for a PhD though*)

**Have I missed anything?**