CATO Masterclass

Maximising the success of a PhD

Iain McNeish
Professor of Oncology
Imperial College, London
One (slightly atypical) academic career path

- 1986 – 92 Not terribly distinguished undergraduate career
- 1993 – 95 SHO in Glasgow
- 1995 – 98 PhD as MRC Clinical Research Training Fellow, Birmingham
- 1998 SpR Medical Oncology, Charing X/Hammersmith
- 1999 ICRF Clinician Scientist Fellowship, Imperial College
- 2003 CCT in Medical Oncology
- 2003 CRUK Clinician Scientist Fellowship, Barts Cancer Institute
- 2007 MRC Senior Clinical Fellowship, Barts Cancer Institute
- 2012 Professor of Gynae Oncology, University of Glasgow
- 2017 Professor of Oncology, Imperial College
Standard clinical (non-GP) training pathway

Undergraduate  |  Foundation  |  CMT  |  ST  |  Endless chasm of being NHS consultant

- BSc
- MD/PhD

CCT
Potential academic training pathways - 1

Endless chasm of being NHS consultant

Undergraduate Foundation CMT ST

CCT

Undergraduate Academic Foundation ACF PhD Clinical lecturer Clinician Scientist Senior Fellow Professor Dementia

Clinical Senior Lecturer

NHS Consultant

Dementia
Potential academic training pathways - 2

Undergraduate  Foundation  CMT  ST  Endless chasm of being NHS consultant

Undergraduate with BSc  PhD  Academic Foundation  ACF  Clinical lecturer  Clinician Scientist  Senior Fellow  Professor  Dementia

CCT

Clinical Senior Lecturer

NHS Consultant
Funding opportunities for clinical academics

Pre-doctoral Research Bursaries
Postdoctoral Research Bursaries
Career Establishment Award
Programme Foundation Award

Pre-PhD
PhD
Postdoctoral - junior
Postdoctoral - senior
Senior

Clinical Research Training Fellowship
Clinician Scientist Fellowship
Advanced Clinician Scientist Fellowship
Senior Cancer Research Fellowship

University salary support
CRUK personal salary support

Clinical Careers Committee
New Investigators Committee: clinical and non-clinical researchers eligible
CRUK Centres and Institutes
Pre-doctoral Research Bursary

Short term funding for clinicians and other health professionals to undertake research
  • Gain research experience and technical skills
  • Generate prelim data for CRTF applications
  • Demonstrate grantsmanship

Up to £25,000 for salary and/or research expenses
Up to 12 months

Single stage written application
Next application deadline: Mar 2019 (for May 2019 funding decision)
Pre-doctoral Research Bursary
Joint CRUK – Pathological Society Research Bursary

Short term funding for clinicians and other health professionals to undertake research
• Gain research experience and technical skills
• Generate prelim data for CRTF applications
• Demonstrate grantsmanship

Applicants must be a member of the Pathological Society and a medical trainee in a Pathology specialism

Up to £45,000 for salary and/or research expenses
Up to 12 months

Single stage written application
Next application deadline: Mar 2019 (for May 2019 funding decision)
Clinical Research Training Fellowships

- PhD funding for clinical academics
- Training within a research group of CRUK Centre or Institute
- Academic supervisor and mentorship

- 3 year PhD training
- Fellow’s salary
- Research expenses and fees

- Awarded through CRUK Centres and CRUK Institutes
- 1 application round per year – contact Centre for dates
Postdoctoral Research Bursary

Funding to enable clinicians with PhD to pursue research interests alongside specialty training

- Maintain research activity after PhD
- Generate prelim data for fellowship application
- CL or any post with protected research time

£
Up to £35,000 for running expenses (but not salary)
Up to 2 years

Single stage written application

Next application deadline: Mar 2019 (for May 2019 funding decision)
Clinician Scientist Fellowship

- Develop clinical academic research experience through postdoctoral training
  - Period of research outside the UK
  - 20-40% clinical commitments
  - Can be pre- or post-CCT

- 5 year fellowship
- Fellow's salary, research assistance, running expenses

- 2 funding calls per year
- Next application deadline: Nov 2018 (for May 2019 funding decision)
Advanced Clinician Scientist Fellowship

Fellowship to establish independence/develop leadership in the field
- 20% clinical commitments
- > 3 years postdoctoral experience

5 year fellowship
Fellow’s salary, 1 technician, running expenses, equipment

2 funding calls per year
Next application deadline: Nov 2018 (for May 2019 funding decision)
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## Clinician Scientist Fellowship success rates

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How to choose your PhD

Rule 1: Broaden your horizons
Rule 2: Talk to lots of people
Rule 3: Ask difficult questions
Rule 4: Don’t automatically say yes to the first offer
Rule 5: GO FOR IT
1. Project
2. Person
3. Place
4. Pounds, shillings and pence
I. Project

- What is the project? And what is the hypothesis?
- Are you excited by the idea?
- What skills and techniques will you learn?
- Can it be done by one clinical research fellow?
- Does it have clinical relevance? And does that matter to you?
- Is it dependent upon a clinical trial?
- Are you expected to do ‘routine’ clinical work?
2. **Person**
   - Who will supervise you day-to-day?
   - Who will teach you specific techniques?
   - What is your supervisor’s track record?
   - How many previous PhD students?
   - Any other clinical research fellows in the lab?

   - **Go and talk to lab members about the Boss**
3. **Place**
   - Where is the lab?
   - What space (lab and office) will you have?
   - Is all the required kit available?
   - Will you have to go elsewhere for key experiments?
   - Opportunities to travel?
4. Pounds, shillings and pence (i.e. funding)
   • Who is funding the PhD?
   • Is funding guaranteed for all 3 years?
   • Do you have to apply for grants?
   • Does funding cover all consumables?
   • Does funding cover PhD tuition fees?
A word on mentors

- Mentor ≠ your boss
  - Impartial, no agenda
  - Not conflicted
  - Preferably external
  - Someone whose advice you trust
  - Works best when you choose your own
  - Find one now
Things that I have observed over the years

1. Nature
2. Acknowledge and be humble
3. Work hard
4. Things will go wrong
5. Year 3
6. Enjoy

And I wouldn’t do anything else…