Wellcome Doctoral Training Centre in Public Health Economics and Decision Science

Professor Alan BRENNAN

www.sheffield.ac.uk/scharr/prospective_students/researchdegrees/wellcometrustphds
Or https://pheds-dtc.ac.uk/
Introduction to the Wellcome Doctoral Training Centre in Public Health Economics and Decision Science

“We seek to train the next generation of researchers in conducting high-quality research on the effectiveness and cost-effectiveness of complex multi-component public health interventions & policies to reduce non-communicable/chronic diseases. Funding is available for five cohorts of seven top-calibre PhD students to work on some of the most pressing public health challenges.”
Scientific Area

The topic: Effectiveness & cost-effectiveness of complex public health policies and interventions to reduce chronic disease burden and health inequalities

The challenge: public health decision-making is complex:

• Many determinants of health which often interact in unknown ways
• Diverse stakeholder priorities and political needs
• Multi-component strategies
• Financial considerations drive choice & implementation

The key question:

How should public health policies and interventions be co-ordinated, targeted and prioritised for health and wellbeing gain?
A few examples to consider

**Determinants of health:** Understanding the dynamic interactions between social, political, environmental and individual determinants of health over the lifecourse

**Mechanisms:** *How* and *why* might a policy intervention have led to the observed changes? *Why* has an intervention not produced expected results in a given population subgroup?

**Interactions between interventions:** Understanding what works (and what doesn’t) in multi-component strategies. Methods for evaluating the effect of interventions introduced “on top” of existing interventions

**Valuation:** How should we value outcomes of public health interventions, given the diversity and long timescales of effects?

**Policy process:** How do economic & effectiveness considerations drive choice & implementation?
Our vision: A vibrant, diverse community of graduates with:

- in-depth public health subject knowledge
- advanced quantitative and modelling skills
- interdisciplinary and collaborative skills
- broad networks within and beyond academia
- ethical approaches to research and leadership
- creativity in questioning established truths and
- ability to adapt to fast-changing research & policy landscapes
The programme

Out of around 150-200 applicants, we select 3 Wellcome-funded + 2 matched University-funded studentships (2016-9)

5 Wellcome-funded + 2 matched funded studentships (2020-4)
So 55 studentships over 8 years

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<td>Sarah Bates</td>
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<td>Jennifer Boyd</td>
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<td>Thomas Bayley</td>
<td>Sundus Mahdi</td>
<td>Amy (Jen-Yu) Chang</td>
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<td>Simon McNamara</td>
<td>Colette Kearney</td>
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<td>Robert Smith</td>
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<td>Genevieve David</td>
<td>Joseph Kwon</td>
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Your PhD

Pre-admission

- Application deadline (1 Jan 2020)
- Shortlist & interviews (Feb 2020)
- Wellcome award letters
- Applications open again
- Sep 2020 – Induction
- Oct 2020 onwards - Research attachments, taught modules
- May/June 2021 - PhD supervisor & topic confirmation
- July 2021 – formal proposal

Y1

Y2-4

- August 2021 - Thesis research
- May 2022 - Confirmation review
- August 2024 - Submit thesis
- Throughout - Cohort & PGR training activities, Research visits / internships, conferences, papers...
Year 1 (Training year)

• Induction & meeting supervisor pool
• Training Needs Analysis (Programme Directors)
• 4-5 modules (60 credits must be assessed and passed)
  ▪ Strong experience in public health→ maths/economics/modelling
  ▪ Strong experience in health economics→ public health
• 3 Research Attachments of around 8 weeks
• Meet the decision maker (self-organised, monthly)
• Research proposal & confirmed supervisors by end Y1
Textbooks – self-directed

We set two textbooks

- Selected chapters from The Oxford Handbook of Global Public Health
- Methods for the Economic Evaluation of Health Care Programmes – Drummond and colleagues

Group learning/book club approach - decide on a schedule for discussing chapters, resolve bits you do not understand, quiz each other about content.

By May 2021, you should have a sound theoretical background for your PhD, be used to talking about public health and economics and have developed a common terminology.
Mentors for Y1

• Until you have supervisors (from Y2), you are assigned two programme team members as mentors
• You should set up meetings roughly once a month, and no less than quarterly, to discuss

- module choice and progress
- research attachments
- training needs
- conferences and other activities
- proposal development
- academic and personal problems
Criteria for PhD supervisors and Topics

- One supervisor from public health/psychology/social sciences and one supervisor from a quantitative discipline (modelling, stats, economics).
- First and second supervisor must be from co-applicant pool, optional third panel members (from any organisation)
- Supervisors can only take 1 WDTC student per year, and 2 in total
- The topic needs to be interdisciplinary and apply methods from health economics, decision modelling or advanced statistics to a public health-relevant topic.
Course team

Petra MEIER

Penny BREEZE
(Academic coordinator)

Alan BRENNAN

Liddy GOYDER

Mark STRONG

Tracey YOUNG

Tessa PEASGOOD

and our
Course Administrator:
Matthew HUNT
Eligibility 1

- be **highly motivated** to make a significant scientific contribution to tackling chronic disease burden through research that can inform well-evidenced, cost-effective public health strategies
- be able to demonstrate your enthusiasm to **work collaboratively in an interdisciplinary environment**
- have completed an **undergraduate degree (equivalent to 2.1 or above)** in a relevant discipline (e.g. mathematics, statistics, epidemiology, public health, psychology, nutrition, quantitative sociology, politics, economics, systems engineering, business studies, geography).
- have completed a **master’s degree at merit or distinction** (or a non-UK equivalent) in a relevant subject, or more than one year of formal employment in either a relevant scientific environment or in public health decision making
- have **quantitative maths skills equivalent to A at A-Level** (may also be evidenced through university modules or work)
- have **excellent verbal and written communication skills**
Eligibility 2

- meet **English language requirements** (IELTS 7.5).
- We particularly encourage applications from disadvantaged or under-represented groups, and will ensure that at least one out of our 7 annual scholarships is awarded to a UK candidate who meets one or more of our Widening Participation Criteria.
- The programme is open to UK/EU applicants, and to non UK/EU applicant nationals of Low- and Middle-income countries (as defined by the OECD – see list here). Non-EU candidates must be able to comply with UK immigration regulations.
- The scheme is not open to clinicians, or those who have recently completed medical training, as these candidates can apply to alternative Wellcome funding schemes, unless you can demonstrate that you have already left clinical careers and have been working in academia, policy, or other areas for a significant period of time are eligible. Explain this carefully in your personal statement.
Wel(l)come to ScHARR collaborations
Any questions?
Any comments?