Doctoral Awards
2020-21

Doctoral College | UNIVERSITY OF BATH

Celebrating our doctoral community

"It is my pleasure to congratulate the recipients of the various Doctoral College awards and other award schemes across the University.

The University of Bath has an outstanding reputation for teaching and research. Our reputation is founded in the excellence of our doctoral students who not only conduct significant research but also go out into the wider community as our future ambassadors. The experience that they have at Bath matters for them, for us and for the future of our organisation.

The doctoral journey and the success for the individual is much more than just a research project. It is about training, developing as a researcher, learning independence, discovering talent and overcoming challenges - part of that includes learning how to ask for help and support along the way. We want to celebrate those who have gone above and beyond and really engaged in taking ownership of their own development, as well as improving the experience for others.

I am also impressed by the dedication and care from staff that is put in day-after-day by the whole community across the university, in professional services, the SU and within the academic departments. Each doctoral student has a different individual path from the start to the end of their doctoral degree. As a university we strive to do our best to remove any barriers that come in the way of academic success.

I would like to offer my congratulations to all of the winners; both staff and students. Thank you for your contributions within our valued community. We also recognise that not everyone is awarded for the quiet dedicated work and acts of kindness that they show and we encourage everyone to look out for those people and to nominate them in future years."

Professor Cathryn Mitchell, Academic Director
(Doctoral College)

About the Award

The Doctoral Recognition Awards aim to recognise students and staff who have contributed to enhancing the doctoral student experience.

For the student award, this could be a student who is actively involved in organising events to benefit others, improving equality and diversity, or enhancing the reputation of the University attending conferences and events.

For the staff award, it could be a supportive supervisor, a team within the University who have shown commitment to doctoral students or another member of staff who has improved the student experience.

65 individuals/teams were nominated for the Award in 2021, and 28 were recipients of the Doctoral Recognition Awards.

THE

DOCTORAL

RECOGNITION

AWARDS

Recipients of the Student Award

- **Katy Brown,** *Department of Politics, Languages & International Studies, SWDTP*
- **Annabel Burnley,** *Department of Psychology*
- **Oscar Bryan,** *Department of Computer Science, Art-AI*
- **Russell Davies,** *Department for Health*
- **Fadoua Govaerts,** *Department of Education*
- **Catriona Gray,** *Department of Computer Science, Art-AI*
- **Nahory Hernandez Mancilla,** *Department for Health*
- **Oyinkansola Ige,** *School of Management*

- **Anna Kinsella,** *Department of Chemistry*
- **Noorullah Kuchai,** *Department of Architecture and Civil Engineering, dCarb*
- **Aida Maaz,** *Department of Pharmacy and Pharmacology*
- **Rosie McGuire,** *Department of Psychology, SWDTP*
- **Anneka Mitchell,** *Department of Pharmacy and Pharmacology*
- **Jon Noble,** *Department of Chemical Engineering, CSCT*
- **Katie Phillips,** *Department of Mathematical Sciences, SAMBa*

Recipients of the Staff Award

- **Lorenzo Caggiano,** *Department of Pharmacy and Pharmacology*
- **Lucy Clarkson,** *Department of Psychology*
- **Nikki Coghill,** *Department for Health*
- **Daniel Davies,** *School of Management*
- **Matthew Grayson,** *Department of Chemistry*
- **Nancy Harding,** *School of Management*
- **Sarah Halligan,** *Department of Psychology*

- **Abbie Jordan,** *Department of Psychology*
- **Aurelien Mondon,** *Department of Social & Policy Sciences*
- **Sarah Moore,** *Department of Social & Policy Sciences*
- **Sarah Parry,** *Department of Computer Science*
- **Karin Petrini,** *Department of Psychology*
- **Emma Solomon-Moore,** *Department for Health*

EXCELLENCE IN

DOCTORAL SUPERVISION

PRIZE

About the Prize

Each year this prize is awarded to a supervisor or supervisory team who have demonstrated exceptional performance in doctoral supervision.

36 individuals/teams were nominated across the institution.

8 nominees made it through to the Final Selection Committee. Two nominees were awarded the Prize in 2021.

Final shortlist 2021

- **Prof James Betts,** *Department for Health*

- **Dr Rob Branston,** *School of Management*

- **Dr Emma Emanuelsson-Paterson,** *Department of Chemical Engineering*

- **Prof Sarah Halligan,** *Department of Psychology*

- **Prof Toby Jenkins,** *Department of Chemistry*

- **Dr Simon Lewis,** *Department of Chemistry*

- **Dr Paul Shepherd,** *Department of Architecture and Civil Engineering*

- **Dr Ru Xie,** *School of Management*

Dr Simon Lewis, Department of Chemistry
Recipient of the Excellence in Doctoral Supervision Prize 2021

"Simon places student wellbeing at the centre of his research group. He is incredibly understanding, easy to talk to, and down to earth about such issues and has always been happy to help in anyway he can. Simon ensures that each of his students get the most out of their PhD research – not just in developing science within the group - but helping people to develop themselves."

Extract from student statement

Prof Toby Jenkins, Department of Chemistry
Recipient of the Excellence in Doctoral Supervision Prize 2021

"Professor Jenkins has gone above and beyond the role of PhD supervisor, he has supported my every endeavour this has included enabling me to attend courses to learn new skills, supporting the formation and submission of multiple research papers, giving me confidence in myself as a scientist… Without his support and confidence I would not have achieved all that I have at Bath."

Extract from student statement

Godfrey and Sue Hall Postgraduate Research Student Prize

Bas Lodewijks
Department of Mathematical Sciences

The Godfrey and Sue Hall Postgraduate Research Student Prize, previously known as the Ede and Ravenscroft Postgraduate Research Student Prize, is an annual award for the best postgraduate research student.

Bas's research 'Improving random graph models for complex networks' focuses on better understanding the behaviour of networks in our ever changing and complex world. Networks are all around, for example social (online) networks, transportation networks, electrical networks, computer networks. Their sparse and volatile properties make it hard to understand the structure and properties of such networks as well as how processes on these networks behave. As a result, for example, different countries have tried to tackle the current pandemic based on very different ideas. Bas's research studies generalisations and extensions to existing models that yield more flexibility in the properties of the models, to allow for a wider range of applications in which the models can be used. As a result, these findings will enable more detailed research to be undertaken and other properties to be proved, eventually leading to a better understanding of real world networks and how to interact with them, adjust policy and decision-making and optimise the knowledge of their structure.
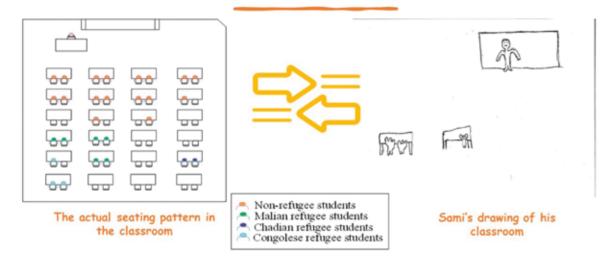
Three Minute Thesis

Three Minute Thesis (3MT®) is a research communication competition developed by The University of Queensland (UQ). PhD students have three minutes to present a compelling oration on their thesis and its significance. 3MT challenges students to consolidate their ideas and research discoveries so they can be presented concisely to a non-specialist audience. Developed by The University of Queensland (UQ) in 2008, enthusiasm for the 3MT concept and its adoption in numerous universities led to the development of an international competition.

Children's Integration in a Host Country: Existing Challenges and Educational Interventions.

The actual seating pattern in the classroom

- ● Non-refugee students
- ● Malian refugee students
- ● Chadian refugee students
- ● Congolese refugee students

Sami's drawing of his classroom

© Sarra Boukhari.

Sarra Boukhari
Department of Education

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Children's integration in a host country: Existing challenges and educational interventions

Biography
Sarra is a final year PhD student from Algeria. Coming from a country considered a destination for refugees her research explores the education experiences provided for refugee children.

Abstract
Sarra's research explores the challenges refugee children face in their education in a host country (Algeria). It focuses on children's own perception of these challenges as opposed to what is assumed generally by adults in the host society. This research study has provided space for refugees to construct narratives on their integration and education experiences. It uses storytelling activities as a way to help researchers, policy makers, teachers…etc. to accurately understand children's struggles so that they can be addressed. Although the research has collected many stories and explored many challenges, this 3MT presentation highlights Sami's experiences.

© Fatma Korkmaz. Image sourced from adobe.com
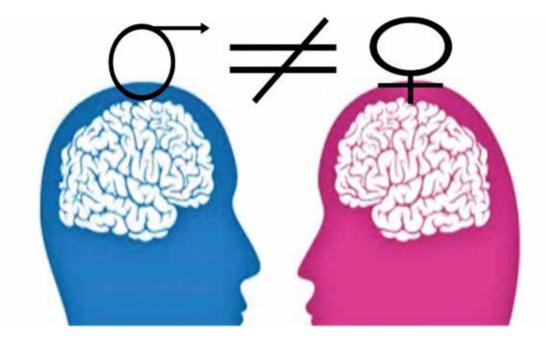
Fatma Korkmaz
Department of Education

Being a bilingual dyslexic: Not a priority?

Biography
Fatma is a fourth year PhD student in the Department of Education at the University of Bath. She is interested in how dyslexia is experienced in marginalised communities.

Abstract
This research aims to explore the experience of children with dyslexia within culturally and linguistically diverse environments. In a typical UK classroom, between 9% and 12% of the students are seriously affected by dyslexia. Although dyslexia occurs worldwide regardless of culture or language, only limited number of bilingual students are identified as being dyslexic. Identification is essential for effective educational provision. Increased time spent without dyslexia screening is associated with the high risk of school exclusion. This exploratory research demonstrates that practitioners' and parents' understanding of dyslexia and linguistic acquisition plays a significant role in assessment processes. In order to challenge inequalities experienced, a school should be a place where parents and practitioners collaborate successfully to break down the barriers to learning by fostering understanding and awareness. These findings highlight the importance of developing a holistic, empathetic, approach to dyslexia and bilingualism.

© Hasnain Lalji. Images adapted from labmanager.com

Hasnain Lalji
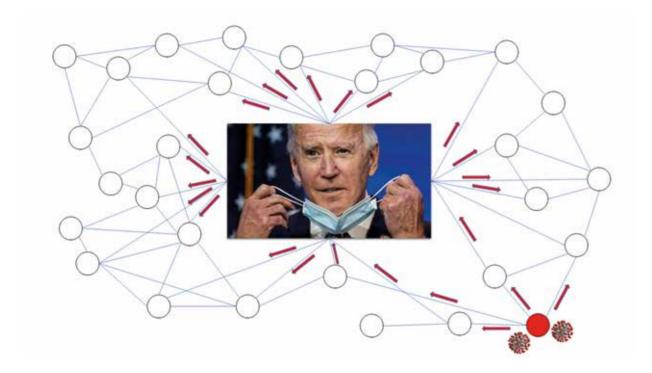## Department of Pharmacy and Pharmacology

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Is it necessary to take gender into account when developing treatments for depression and anxiety?

Biography

Hasnain is a final year PhD student at the University of Bath. His research focuses on sex differences in anxiety and depression with the aim of developing targeted, individualised, gender-specific treatments.

Abstract

According to the World Health Organisation, depression affects more than 264 million people globally and is the top cause of disability. The incidence of depression is higher in females and the prevalence of depression, resistant to treatment, is increasing within England and globally. This is because treatments are not targeted enough and females and males with depression and anxiety disorders receive similar treatments. Gender is a vital variable to consider in research when developing treatments for all disorders, depression in particular. Hasnain's research focuses on investigating sex differences in anxiety and depression, using a mouse model of depression. The research has demonstrated important and significant sex differences. The research will be used to develop targeted, personalised and sex-specific treatments for depression, anxiety and other mental health disorders which in turn will reduce the incidence of treatment resistance to depression and other mental health disorders.

© *Bas Lodewijks. Image by Kevin Lamarque.*

Bas Lodewijks
Department of Mathematical Sciences
Centre for Doctoral Training in Statistical Applied Mathematics

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Six degrees of COVID: Improving models for complex networks

Biography

Bas Lodewijks is a PhD student within the Prob-L@b of the Department of Mathematical Sciences. He completed his bachelor and master of science at the University of Technology Eindhoven, The Netherlands.

Abstract

Bas studies models for real-world complex networks. Due to the abstract nature of mathematics, these models can be applied to understand connectivity in a wide variety of applications and systems, for example when studying the spread of viruses like COVID. His research investigates the appearance of hubs in evolving networks. Hubs are nodes in the network with an unusually large number of connections and empirical research has shown that hubs play a crucial role in the structure and performance of many real-world networks. Hence, it is important for models to be able to match the behaviour of hubs as observed empirically. The models build on well-known existing models but allow for more precise control of the behaviour of hubs. Using probabilistic methods, the research has mathematically proved what modelling assumptions lead to what kind of behaviour for these networks, and their hubs in particular.

How can we make pharmaceutical drugs more efficient in the body?

Sandra McHugh
Department of Chemistry
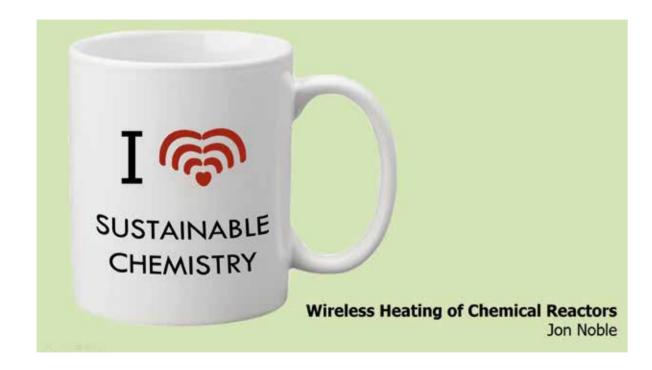### Centre for Sustainable and Circular Technologies

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How can we make pharmaceutical drugs more efficient in the body?

Biography

Sandra McHugh is a second year chemistry Ph.D. student with the Centre for Sustainable and Circular Technologies at the University of Bath.

Abstract

Sandra's research involves investigating ways of making pharmaceutical drug delivery in the body more sustainable and more efficient. She hopes to do this by trapping the drugs in a material known as 'zeolites' which are essentially sponges. The drug within the zeolite sponge would ideally perform better than the drug does currently and could potentially lead to less side effects for patients and less waste of drugs. As part of the Centre for Sustainable and Circular Technologies, sustainability is a key concept in Sandra's research and as such zeolites are easy to make, safe for use in humans and are easily recyclable. Sandra's presentation highlights the problem currently with drug wastage in the body and how we can attempt to fix this.

© Jon Noble. Creative Commons license.

Jon Noble
Department of Chemical Engineering
Centre for Sustainable and Circular Technologies

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Wireless Heating of Chemical Reactors

Biography
Jon Noble is a chartered engineer. After many years in industry, he has returned to university as a mature student. Jon enjoys endurance running, acting, comedy writing and improvisation.

Abstract
The chemical industry accounts for nearly 10% of global energy use, and most of this comes from fossil fuels. Renewable electricity offers a sustainable alternative as a source of heat, but the technologies to implement this have several challenges that currently prevent them being used at an industrial scale. Jon's PhD is focussed on finding solutions to these problems for one particular type of electrical heating called magnetic induction heating. This can wirelessly transfer energy to catalysts to drive chemical reactions and is excellent at heating a large volume very quickly. However strong electromagnetic fields make it difficult to accurately measure temperature and other key properties within the reactor. Jon has developed new techniques and models for measuring and predicting key design properties for wirelessly-heated reactors. He is applying these methods to flow-chemistry to demonstrate that the technology could be viable at an industrial scale.

© *Kate Precious. Creative Commons license.*

Kate Precious

Department of Politics, Languages & International Studies
South West Doctoral Training Partnership

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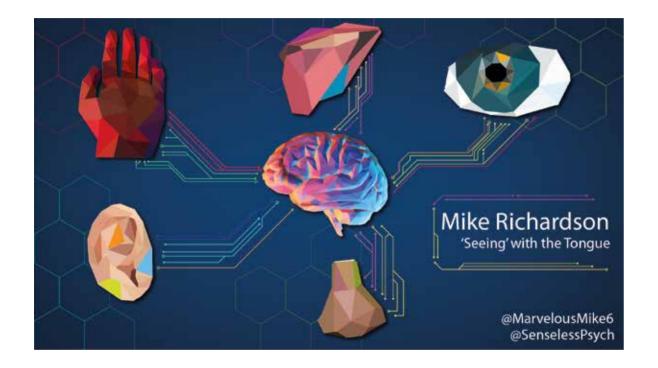## The Underdog Empowered

Biography
Kate is a final year ESRC-funded PhD student at the University of Bath. Her research focuses on critiquing the characterisation of marginalised groups as disempowered. By reconsidering how governments design policies, how researchers measure policy influence and how marginalised groups can maximise their lobbying success, she aims to chip away at the democratic deficit that characterises social policy. Kate is an active member of the Centre for Applied Social Policy at Bath..

Abstract
There is a democratic deficit in social policy, with those most in need of policy support assumed to be the least able to influence policy decisions. Kate's research demonstrates that this assumption is false: the policy influence of marginalised groups is greater than we or they believe. Her 'underdog theory' harnesses the power of the underdog to demonstrate the disconnect between what is expected and what can actually happen. Underdogs can defy expectations and use a strengths-focused approach to achieve influence at all stages of the policy process. This research has implications for researchers and governments but also for marginalised groups everywhere, who can use the theory to exert an influence they never knew they had.

© Mike Richardson 2021. Image of the brain sourced from ShutterStock

Mike Richardson
Department of Psychology
South West Doctoral Training Partnership

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Seeing with the tongue

Biography
Mike is a PhD student in Psychology, researching assistive technology and human-computer interaction. Mike also contributes to a pop-science psychology blog, www.senselesspsych.com, and tweets as @MarvelousMike6 and @SenselessPsych.

Abstract
Imagine yourself being blind. Our world and societies are structured by, and for, the visual. Without sight, access to even basic environmental information is incredibly reduced. Through the inventions of the White Cane, Braille, or the computer, assistive technology has been attempting to restore some of the lost sensory information. Mike's research involves testing 'Sensory Substitution Devices', which convert one type of sensory information into another. One such device is the 'BrainPort' which translates visual information into sensation of touch on the tongue. The tongue is more sensitive than even the fingertips, opening new avenues for sensory interactions, all while leaving the hands free. Later this year he plans to help teach rock climbing to people with visual impairments, as they 'feel' the location of the next hand hold on the surface of their tongue!

Early diagnosis of Parkinson's disease could greatly benefit:

Their carers

Parkinson's patients

NHS and social care services

© Kathryn Watt. Images sourced from freesvg.com, Wikimedia.org and pngtree.com.

Kathryn Watt
Department of Biology & Biochemistry
Centre for Sustainable and Circular Technologies

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Developing chemical tools for the early diagnosis of Parkinson's Disease

Biography
Kathryn in a final year PhD student from the Centre for Sustainable and Circular Technologies (CSCT), based in the Department of Biology and Biochemistry.

Abstract
Despite being the second most common neurodegenerative disease, we currently have no definitive methods to diagnose Parkinson's Disease. Currently, diagnosis is based on the observation of symptoms, but this is not always accurate and is only possible in the later stages of the disease. Kathryn's research is looking to develop chemical tools that could be used to detect signs of Parkinson's disease in patients before symptoms begin. These tools are designed to be sensitive to a misbehaving protein, thought to be responsible for the onset of the disease. If successful, this could lead to an earlier method of diagnosis, which in turn would lead to greatly improved clinical trials with a higher likelihood of success in the identification of treatments that aim to slow or halt disease progression.

Vice-Chancellor's Engage Awards

Established in 2013, the Vice-Chancellor's Engage Awards recognises and celebrates the outstanding achievements of colleagues who engage people beyond the University. For 2021 the Engage Awards also includes engagement by all staff and doctoral students in the local area and across the civic realm.

The following doctoral students were shortlisted in these Awards this year:

Informing Category

Naomi Heffer and Mike Richardson – shortlisted, *Department of Psychology*

Working Together Category

Alice Chadwick El-Ali – shortlisted, *Department of Social & Policy Sciences*

SU and University Education Awards

Doctoral Academic Rep of the Year

Fadoua Govaerts, *Dept of Education*

Doctoral Academic Rep of the Year is awarded to Doctoral Reps who achieve the highest standard of representation, ensuring that the concerns of their doctoral peers are voiced and working with the department to resolve issues and further the interest of the doctoral community.

PGWT of the Year

Naomi Heffer, *Dept of Psychology*

PGWT of the Year is for doctoral students who have carried out exceptional teaching or other work in their capacity as a PGWT.

Outstanding Contribution to Peer Support (Staff Award)

Nominee - Claire Tanner, *Doctoral College*

This award is for a staff member who organises and supports Peer Support within the University and provides support for volunteers in such a scheme.