



## Somerville Supporters' Day - Saturday 8th February 2025

### Junior Research Fellow's Showcase



#### **Dr Sarah Woodward - Postdoctoral Researcher at the Sir William Dunn School of Pathology and a Fulford Junior Research Fellow at Somerville College**

Dr Woodward is a Postdoctoral Researcher at the Sir William Dunn School of Pathology and a Fulford Junior Research Fellow at Somerville College.

Vaccination is a critical tool to leverage our body's natural immune responses to fight bacterial infections. Oral vaccines typically induce protective antibody responses which recognize sugars commonly found on the surface of gut bacteria. Sarah's research at the Dunn School involves studying the interaction between vaccine-induced antibodies and these sugar structures to understand how the immune system can recognize harmful pathogenic microbes and distinguish them from the 'good' gut-resident microbes which promote human health. Understanding this interaction is vital to inform the design of effective vaccines.

In November 2023 Sarah joined the group of Dr. Emma Slack at the University of Oxford as a Postdoctoral Researcher to investigate vaccine-induced antibody responses. Emma's active research collaborations investigate the role of microbes in enteric disease, childhood malnutrition, and asthma development. In addition to research, I am a skilled science communicator, writer, and mentor, and have extensive experience with public engagement in science from working with the organization Let's Talk Science in Canada where I organized outreach programs to better communicate science to the public.



#### **Dr Raffaele Sarnataro: Fulford Junior Research Fellow & Postdoctoral Research Scientist in Neuroscience** *Metabolic origins of the pressure to sleep*

Dr Raffaele Sarnataro is a Junior Research Fellow at Somerville College and postdoctoral scientist at the University of Oxford. His research focuses on understanding how the need for sleep is controlled and encoded in the brain. Dr Sarnataro holds a Bachelor's degree in Biotechnologies and a Master's degree in Molecular and Cell Biology both from the University of Pisa, Italy, a Diploma di Licenza in Biology from Scuola Normale Superiore, Italy, and a Master's degree and a DPhil in Neuroscience both from the University of Oxford, UK. Before his doctoral studies, he did research at the University of Oxford, Harvard Medical School and Scuola Normale Superiore.

During his time in Oxford, Raffaele obtained a Jesus College Graduate Scholarship, gaining Oxford Scholar status in 2019, and received several academic awards by the Physiological Society, the British Neuroscience Association, the Guarantors of Brain, and Gordon Research Conferences.

Raffaele was President of the Oxford University Cortex Club, the neuroscience student forum, is a long-term collaborator of Italian National Association of Natural Sciences Teachers and Amgen Biotech Experience Italy, and was jury member at the 29th International Biology Olympiad, contributing to science communications and public engagement at various educational levels.



#### **Dr Emma Soneson - Fulford Junior Research Fellow** *The 'dream school' for good mental health: A(n achievable) way forward*

Emma will be sharing insights from her work on supporting schools to be places that promote good mental health and prevent poor mental health. As part of her presentation, she will share findings from her project on 'The Dream School for Good Mental Health', which brought together a wide range of stakeholders to learn how to make tangible progress in achieving this goal.

More broadly, Emma's research focuses on developing, evaluating, and scaling-up new interventions and approaches to improve child and adolescent mental health and well-being, with a focus on those who have traditionally been overlooked or excluded.



**Dr Juan Neves-Sarriegui: Fulford Junior Research Fellow**

*Democratisation and Free Speech in 19th-Century Latin America*

Juan Neves-Sarriegui completed his doctorate in history at the University of Oxford and is currently a Fulford Junior Research Fellow at Somerville College, funded by the Gerda Henkel Foundation. Juan is a global historian focusing on democracy, revolutionary movements and free speech in Latin America and Atlantic world during the long 19th-century. He is currently working on a comparative history of democracy and freedom of expression in Europe and the Americas.



**Dr Joshua Booth, 2020 DPhil Linguistics, Philology and Phonetics**

Joshua is a linguist with a particular interest in Phonology and Historical Linguistics.

After graduating from Oxford in 2014 with a BA in German and Linguistics, he completed a PGCE and spent time in teaching. He returned to academia and Oxford in 2018 for an MPhil in General Linguistics and Comparative Philology. Joshua's MPhil thesis focused on the impact of Romance loan words on the Middle High German stress system, reflecting his interest in Germanic languages and Metrical Phonology. In 2020–21, Joshua began a DPhil in Linguistics, Philology and Phonetics at Somerville, in which Joshua hopes to build on his earlier research and provide a diachronic account of the changes to the word prosodic system of German between the mediaeval and modern periods.