



Wolfson College  
Cambridge



2024

WOLFSON  
RESEARCH  
EVENT

# SCHEDULE Thursday, 2 May 2024

## MORNING

- 9:00 – 10:00 Registration and WELCOME COFFEE & TEA  
 10:00 – 10:15 George Han- **Welcome Remarks**  
 10:15 – 10:45 Professor Jane Clarke – **Opening Speech**
- 10:45 – 11:00 Eireann Attridge – **We're all Alone In This Together: Grime As Theoretical Toolkit for Navigating Elite Spaces As A Working-Class Student**
- 11:00 – 11:15 Nathan Magnan – **Asteroid formation in a vortex**
- 11:15 – 11:30 Allison Owen – **Did Christianity change the way early medieval Scandinavians interacted with strangers?**
- 11:30 – 11:45 Noor Hammad – **Bedouin, indigeneity and international law**

## BREAK

11:45 – 13:00 LUNCH\*

## AFTERNOON

- 13:00 – 13:30 Keynote: Eleanor Drage and Federica Frabetti – **AI is Performative, and it Matters!**
- 13:30 – 13:45 Nishtha Gosewade – **Repromasculinity: Populist Narratives, Authoritarian Desires and the Gendered Dynamics of Reproductive Control**
- 13:45 – 14:00 Aden Kumary – **McDonaldization of Cities and Its Effects on Urban Heat and Energy Inequality: Multi-Modal Evaluation of Nairobi, Kenya**
- 14:00 – 14:15 Francisco Javier De Haro Arbona – **How are signals read by genes in development? Uncovering Notch transcription hub properties**
- 14:15 – 14:45 COFFEE & TEA BREAK
- 14:45 – 15:00 Carolyn Smith – **About Time: Rhythms of Indigeneity and Risk**
- 15:00 – 15:15 Mason Rodriguez – **A mechanism by which the brain encodes experience and its relative salience**
- 15:15 – 15:30 Karam Alkatlabe – **Post Disaster Cities: Towards A Digital Participatory Model for Housing Urban Recovery**
- 15:30 – 17:00 Poster Presentations and Drinks



# POSTERS

Thursday, 2 May 2024

Posters will be available throughout the conference, but please join us 15:30 - 17:00 for poster presentations and drinks in the Chancellor's Centre foyer.

**Sami Dubed**

**Decolonising History: the effect of inclusivity, shaping societal transformation**

**Hanzhe Xing**

**Designing the future power system model to find cost-efficient energy flexibility solutions for decarbonized GB power system**

**Belinda Henderson**

**Understanding the experience of belonging among autistic children and young people**

**Tadeusz Ciecierski-Holmes**

**Antenatal Couples' Counselling in Uganda (ACCU): a cost-effectiveness analysis and methodological evaluation of a randomised controlled feasibility study**

**Chenming Gao**

**A Machine learning method to variations in a low-resource language**

**Sarah Woodward**

**Stories hidden in plain hearing: how narrative analysis can help the criminal justice system understand coercive control**

**Dimitrios Kastanas**

**Put Yourself in Someone Else's Shoes: The Case for Autistic and Neurotypical Adult Speakers**

**Anand Rao Tadipatri**

**User interfaces for interactive and automatic theorem proving**

**Gilbert Nkpeniyeng**

**Neoliberalism and Global Poverty Reduction: Lessons From China**

# SCHEDULE

## Friday, 3 May 2024

### MORNING

- 09:00 – 09:45** WELCOME COFFEE & TEA
- 09:45 – 10:00** Daniel Egan – **The role of SARS-CoV-2 Membrane in protective humoral immunity**
- 10:00 – 10:15** Stephen Bulyar – **Inferring Taxic Affinities and Diversity in Hominin Postcrania: A Comparative Morphometrics Study of Fossil Humeri from the Koobi Fora Formation, Kenya**
- 10:15 – 10:30** Michael E. Gasior – **A shortcut to understanding child maltreatment and mental health? An examination of the “toxic trio”**
- 10:30 – 10:45** Trish Muzenda – **Obesogenicity of food in the informal food retail environment of low- and middle-income countries: A systematic review**
- 10:45 – 11:00** BREAK
- 11:00 – 11:15** Carlos Finlay – **Flat building in 1930s London: Expressions of modernity in the architectural practice of George Kay Green**
- 11:15 – 11:30** Keane Farley – **Contemporary Aesthetics and the Neglect of Animals**
- 11:30 – 11:45** Jesse Rop – **Plasmodium falciparum relatedness and transmission biology at single-cell resolution**
- 11:45 – 13:00** LUNCH\*

### AFTERNOON

- 13:00 – 13:15** Scott Wilson – **Freak neurons: developmental errors and connectomic variation within an insect brain**
- 13:15 – 13:30** Konstantinos Tsigaridis – **Executive Functions, Mathematical Skills and Physics Achievement in Secondary Education: Comparing Science and Humanities Curriculum Track Students.**
- 13:30 – 13:45** Anastasios Galanis – **RNA transmission between honeybees and their microbiome**
- 13:45 – 14:00** Apan Trikha – **Nijismrti: An encrypted filesystem for private data**
- 14:00 – 14:30** Keynote: Steve Watson – **The future of knowledge in the generative AI**
- 14:30 – 15:30** Closing remarks and FAREWELL COFFEE



# WELCOME MESSAGE FROM THE CONFERENCE CHAIR

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On behalf of the WRE2024 Committee, it is my pleasure to extend a warm welcome to all attendees of this year's conference.

This event, a highlight of our academic calendar, is a testament to the dedication and intellectual curiosity of our student community. It showcases diverse research endeavours across various disciplines, reflecting the vibrant scholarly environment of Wolfson College.

In these pages, you will find a rich programme of presentations and discussions, each contributing to the tapestry of knowledge and innovation we are proud to uphold. Whether you are presenting your work, engaging in dialogue, or absorbing new ideas, your participation is invaluable.

We hope this event serves not only as a platform for academic exchange but also as an inspiration for future research collaborations. Enjoy the Wolfson Research Event 2024, and may it enrich your scholarly pursuits.

**George Han**

Chair of WRE2024 Committee

## KEYNOTE: ELEANOR DRAGE &amp; FEDERICA FRABETTI

# AI is Performative, and it Matters!



**ELEANOR  
DRAGE**

**Eleanor** is a Senior Research Fellow at the University of Cambridge. She is CO-I on the Desirable Digitalisations project and PI on the Ammagamma project, an AI ethics and regulation project that helps companies respond to the EU AI act. She also uses feminist and anti-racist ideas to improve society's understanding of AI, for example, to demonstrate why AI-powered hiring tools can't de-bias hiring, and why AI can't make neutral predictions about which protests are likely to turn violent. This work has been covered by the BBC, Forbes, The Telegraph, The Guardian, Glamour Magazine and internationally. She has also spoken about her work on the BBC World Service, BBC Radio 3 & 4, and the Irish National Radio. She is the co-host of the award-winning The Good Robot Podcast (top 5% globally), where she interviews top scholars and technologists about AI ethics, and is a TikTokker for Carole Cadwalladr's All The Citizens' data rights channel. She's the author of *An Experience of the Impossible: The Planetary Humanism of European Women's SF* (Oct 2023), and co-editor of *The Good Robot: Feminist Voices on the Future of Technology* (Feb 2024), and *Feminist AI: Critical Perspectives on Algorithms, Data and Intelligent Machines* (Oct 2023). She has also worked with Deepmind, The Financial Times, The United Nations Data Science & Ethics GroupS, CNN, BNP Paribas, The Open Data Institute (ODI), and the Institute of Science & Technology. Eleanor is a Bye-Fellow and Tutor at Gonville & Caius College.

**Federica Frabetti** is an Associate Professor in Digital Media at the University of Roehampton. Her research interests include digital media and technology, cultural studies, software studies, digital humanities, and gender and queer studies. She has published extensively on the social and cultural study of software and digital technologies, including AI/Machine Learning. Before becoming an academic, she has worked for a decade as a Software Engineer in the ICT industry. With Eleanor Drage, she has co-authored several articles on the use of feminist theories of performativity to examine the functioning of AI, with a focus on AI racist and sexist applications in bordering practices and predictive policing. She is the author of *Software Theory* (Rowman and Littlefield, 2016).



**FEDERICA  
FRABETTI**

KEYNOTE: STEVEN WATSON

# THE FUTURE OF KNOWLEDGE IN THE GENERATIVE AI



STEVEN WATSON

**Steven Watson** is an Associate Professor in the Faculty of Education, University of Cambridge. His research uses transdisciplinary approaches, his current focus is on the philosophy and sociology of technology, and in particular the role of generative AI in education and society. While his research is strongly theoretical, he integrates this with contextual empirical research and development. His previous professions include secondary school mathematics teacher and telecommunications engineer. He holds degrees in Engineering from the University of Cambridge, a Masters in Education from the Open University and a PhD Education from the University of Nottingham.





# ORAL PRESENTATIONS

Thursday 2 May 2024



**EIREANN ATTRIDGE**

Éireann Attridge is a current PhD student in the Faculty of Education conducting a mixed-methods project on the ways in which class and mobility are conceptualised in relation to higher education. She is a sociologist of education with a specific interest in class inequality and narratives of (im)mobility. She has published findings from her MSc on the experiences of working-class students in elite institutions in the *Journal of Further and Higher Education*. She was born and raised in South London.

## **We're all Alone In This Together: Grime As Theoretical Toolkit for Navigating Elite Spaces As A Working-Class Student**

My love for Grime and UK rap, along with my dedication to access and widening participation, appeared to find a perfect union when artists Stormzy and AJ Tracey created scholarships to support Black students at the Universities of Oxford and Cambridge. However, this music and educational work had already been perfectly paired in my mind throughout my time navigating these elite institutions as they guided me and enabled me to make sense of what was going on around and within me. This presentation reflects on how my personal journey through academia, as a mixed-Black woman from a working-class background, intersects with key themes in Grime and UK Rap. Considering the discography of artists such as Little Simz, Dave and Stormzy, I outline how themes from the genre have guided and comforted me as I navigate the elite and exclusionary space of academia. Key experiences such as disillusionment and disappointment, navigating a split habitus are explored alongside lyrical analysis. Furthermore, drawing from bell hooks' concept of 'Theory as Liberatory Practice', I find that the accessibility and relatability of Grime and UK Rap resonates with me far more than any traditional academic theory. It is this genre, with its working-class history and the experience of artists, that has provided me with the greatest comfort



NATHAN MAGNAN

Nathan is a third-year PhD student in the centre for mathematical sciences. He studies fluid mechanics, and applies his findings to astrophysics. For his PhD, he tries to understand how planets form. In parallel, he studies the ice shell of Enceladus, a moon of Saturn. On his free time, Nathan plays badminton, volleyball and board games. In his life before Cambridge, Nathan studied engineering and designed a satellite.

## Asteroid formation in a vortex

We need to understand how planets form before we can estimate how likely it is that life appeared elsewhere. After decades of research, we know that planets form in the discs of gas and dust surrounding young stars. We also know that planet formation is a sequential process where grains become pebbles, then asteroids, then planets. What we do not know, however, is how cm-small pebbles become km-big asteroids. The streaming instability (SI) can gather the pebbles into clumps so dense that they collapse under their own gravity and become asteroids. As such, it is a promising way to bridge the cm-to-km gap. Unfortunately, the SI is only active in regions with a lot of pebbles that are all similar in size. One of the only places that meet both conditions is a large-scale vortex. The encouraging thing is that vortices are common in discs. The problem is that no one knows if the SI can develop in a vortex, because each instability can only grow in certain flows, and a priori the SI is active in disc flows – not vortex flows. Here we prove that a form of SI is indeed active in vortices. First, we build a pen-and-paper model of a pebble-laden vortex. Then, we show analytically that perturbations to that vortex grow exponentially in time, highlighting an instability. Finally, we demonstrate that this instability relies on the same resonance as the SI. This marks an important step towards validating the vortex pathway to asteroid (and planet) formation.

## ORAL PRESENTATIONS



ALISON OWEN

Alison Owen is halfway through her PhD in the department of Anglo-Saxon, Norse and Celtic, after studying an MPhil in Theology and a BA in ASNaC, all at the University of Cambridge. She is studying the inter-ethnic and inter-faith relations between medieval Scandinavia and the rest of the world, especially the impact of Christianity on those relations. She supervises in Scandinavian history and with the Cambridge Higher Aspirations Scheme. Her work has been published in *The Post Hole* archaeology journal and the history magazine *Epoch*.

## Did Christianity change the way early medieval Scandinavians interacted with strangers?

When the Scandinavian nations officially converted to Christianity in around the tenth century, scholars assume that this changed the way they interacted with strangers – at the extreme, Diamond’s assertion that they ‘despised pagans’ (Collapse, 2005). Scandinavia is a particularly rich place to study medieval inter-faith relations because of its late conversion, extraordinary mobility which led to inter-ethnic contacts from Byzantium to North America, and the ordinary voices preserved by the tradition of saga-writing. My research attempts to nuance stereotypical or monolithic ideas of how Scandinavian Christians must have thought of or behaved towards non-Scandinavians. I use literary sources alongside historical ones to gain insight into what Scandinavians said about pagans as well as what they did, in key contexts such as warfare, slavery, and the slimmer evidence for peaceful interactions at the elite level. My findings so far indicate that medieval Scandinavians did not prioritise Christian commands to ‘love your neighbour’, turning instead to outward shows of conformity to a Christian identity while maintaining their pre-existing cultural priorities. In practice, this led to similar behaviour towards strangers both before and after the conversion. An exception is that Christian teaching did contribute to the decline of slavery. The other most noticeable change was Scandinavia’s entry into the European Christian group identity, which led them to increasingly distance themselves from pagans as the medieval period progressed.



NOOR HAMMAD

Noor Hammad is reading a Masters in Law at Wolfson College, University of Cambridge, where she is researching indigeneity in the Middle East - focusing on the experiences of bedouins. Previously, she was a Research Assistant at the IISS-Middle East office in Bahrain. Her other research interests include the geopolitics and geo-economics of the Middle East and North Africa, with a particular focus on geopolitical developments in the Gulf region.

## Bedouin, indigeneity and international law

This dissertation will problematise the difficulties that modern states face in conceptualising the legal status of Bedouin from an international law perspective. The Bedouin are a historically nomadic Arab population that face both social and legal discrimination across the Middle East. Arguing that the Bedouin are an indigenous population, this dissertation will assess the emerging legal activism calling for enhanced legal protections for Bedouin, such as reform of land law, in the context of international law protecting the rights of indigenous people. I will take a comparative approach and using the legal systems of Israel and Kuwait as case-studies and compare national legal systems against the international law protections with a specific focus on the rights of indigenous people and the question of statelessness. This will involve assessing the applicability of nationality laws to the Bedouin as a nomadic population, the intersection of the Bedouin and bidoon (a multi-generational stateless population) populations in Kuwait, and the expropriation of Bedouin land and their loss of traditional territory to the Kuwaiti and Israeli states. In the Israeli context, this will involve discussion of the historical origins of terra nullius under British Mandate. Questions of territory and nationality will be assessed as the products of particular cultural, social and political practices, and as such, relevant laws will be contextualised by the sociopolitical context in which they were developed and applied, relying on archival material, newspaper reporting, and academic literature.

## ORAL PRESENTATIONS



## NISHTHA GOSEWADE

Nishtha Gosewade (she/her) is a Masters student at the Centre for Gender Studies, University of Cambridge. Her work is placed at the intersection of gender and International Relations, particularly the trends of rising populism and regressing reproductive rights. Prior to joining the MPhil programme in Multidisciplinary Gender Studies, she was at Ashoka University in India, pursuing a Postgraduate Diploma in International Relations, as a part of which she worked on queer migration, particularly the movement of queer migrants from Muslim countries in Global South to the United States of America.

### Repromasculinity: Populist Narratives, Authoritarian Desires and the Gendered Dynamics of Reproductive Control

As fertility rates fall across many parts of the world, populist movements, particularly in the West, are increasingly embodying a dangerous mixture of authoritarianism, misogyny, homophobia and racism. Instead of analyzing these dissatisfactions in isolation, I propose the concept of 'repro-masculinity' to interrogate these precarious intersections. I conceptualize repro-masculinity as a populist performance by individuals, parties or movements that are ideologically located on the far-right, rooted in gendered tropes of a masculine savior who will protect 'the people' from a demographic crisis that is imminent. This 'crisis' is fantastical in nature, barely grounded in demographic data but fuelled by popular anxieties surrounding the reproduction of the 'wrong' kind of bodies - whether those of religious/cultural others or those of sexual others. While there is a tendency to analyze the anti-immigration rhetoric of the Populist Radical Right and its veneration of the traditional heteronormative family separately, a gendered analysis highlights how they are deeply intertwined. Repro-masculinity as a conceptual tool illuminates the role of affect (particularly fear and hate) in creating a consensual move towards white patriarchal rule. I analyze how repro-masculinity manifests itself in the rhetoric of Alternative for Germany (AfD), a radical right populist party in Germany. Given the evocative nature of images, I center visual material for carrying out my analysis, in particular focusing on campaign posters circulated by the party. Crucially, repro-masculinity demarcates bodies that deserve protection, from those that deserve punishment which relates to fundamental questions of how bodies are leveraged in the production of ideology.

## ORAL PRESENTATIONS



## ADEN KUMARY

Aden Kumary is a Kenyan architect currently pursuing an MPhil in Architecture and Urban Studies here at Cambridge. He did his undergraduate degree in architecture at the University of Nairobi. Before moving to Cambridge, he worked as an architect across East Africa. His main area of interest lies in the energy efficiency of buildings and urban areas. Presently, he is conducting research on the phenomenon of the McDonaldization of cities, examining its impact on urban heat and energy inequality through a multi-modal evaluation of Nairobi, Kenya.

### **McDonaldization of Cities and Its Effects on Urban Heat and Energy Inequality: Multi-Modal Evaluation of Nairobi, Kenya.**

Globally, urban areas are increasingly experiencing intensified heat, which presents notable risks to the health and well-being of city residents. The prevalence of heat waves, coupled with the consequential rise in heat-related illnesses, is becoming a grave concern across nations (Reid et al., 2009). In the global south, this issue is compounded due to the rapid pace of urbanization, unregulated development, and the adoption of standardized modern architectural styles due to the McDonaldization of architecture. McDonaldization involves the incorporation of fast-food industry principles, such as control and standardization, into architectural practices, resulting in a homogeneous architectural style. These lead to a loss of local identity, increased heat intensity, CO<sub>2</sub> emissions, and heightened energy use and demand. This study uses urban energy modeling, remote sensing techniques, and Landsat satellite imagery to examine how the density of five Nairobi neighborhoods has changed over the last two decades and the associated effects on heat intensity and energy demand. We will quantify the increase in built-up areas versus the decline in green spaces, calculate land surface temperatures, and explore their correlation. Additionally, we will evaluate operational and embodied energy use, daylight access, and district-level energy supply using Urban Modelling Interface simulations. The findings of this study will provide policymakers in Nairobi and across Africa with critical insights into the relationship between urban form, heat intensity, and energy demand, highlighting the risks associated with unregulated urban expansion and the reduction of green spaces. Moreover, the data gathered will contribute to efforts aimed at decarbonizing these neighborhoods.

## ORAL PRESENTATIONS



## FRANCISCO JAVIER

Javier is a final year PhD student in the Bray Lab, in the department of Physiology, Development and Neuroscience. He did his undergraduate studies in Biology at the Universidad Autonoma in Madrid, Spain, where he is from. During his undergrad he became interested in developmental biology, which studies how a single cell, the embryo, becomes an organism, with billions of differentiated cells. He is now studying how the information in the nucleus of cells is decoded in order to make decisions, which is not easy if you consider how many cells the embryo needs to make!

## How are signals read by genes in development? Uncovering Notch transcription hub properties

Precise decoding of the information contained in the DNA is required for the development of an organism. The embryo relies on this information to orchestrate cell division and differentiation, forming specialised tissues. While the genetic code remains largely unchanged, specific signals come into play to activate certain regions at precise times. These signals are mediated by proteins known as transcription factors, which interact with DNA, lending specificity to signalling pathways. Our lab focuses on understanding the mechanisms through which the Notch pathway activates its targets. This pathway activates through cell-to-cell contact, leading to the translocation of a transmembrane protein to the nucleus. Within the nucleus, this protein forms an activation complex that binds to DNA, initiating the activation of specific genetic regions. By using live imaging techniques on *Drosophila melanogaster* tissues, a model organism, we explore the dynamic processes governing Notch activation complexes in the nucleus. The findings uncovered during my PhD expand our understanding of the Notch signalling pathway. One of the key discoveries involves how these activation complexes form a transcription hub, which, we theorise, increases the efficiency of activation. Better understanding of the Notch signalling is key, not only because of its role in healthy development but also in developmental syndromes and cancers caused when dysregulated.

## ORAL PRESENTATIONS



CAROLYN SMITH

Carolyn is an interdisciplinary researcher in the Department of Geography, funded by the ERC's IMAGINE project. Her study uses ethnography to understand how semi-nomadic Indigenous communities live-with with the persistent activity of Copahue volcano. Employing a feminist, decolonial lens, Carolyn works across critical geography, social volcanology, and the emerging field of political ontology. Her doctoral thesis investigates how Copahue serves as a common coordinate between knowledges and ways of life; she critiques current scientific practice amidst power imbalances and environmental risks, and seeks to foster dialogue and collaboration. Carolyn's background in Architecture and Urban Design informs her interest in the connections between people, place, and the political negotiations that shape our world(s)

### About Time: Rhythms of Indigeneity and Risk

Time is central to managing environmental change and risk, but explicit discussions of time – as an object of study in and of itself – remain relatively peripheral in the social sciences; while there have been moves to formulate theories for complexity and change (c.f. ANT, Assemblage Theory), their reach has been limited by the density of their explanation. The talk examines rhythm as a form of knowledge, through data derived during 10 months of fieldwork and a highly situated ethnographic study on the border between Chile and Argentina. The PhD project centres on the Indigenous communities who live-with Copahue volcano – in the context of complex colonial legacies, extreme inequalities of power and significant environmental and volcanic risk. When a Mapuche elder explained that he doesn't need science because he can communicate with the animals, he was speaking of his ability to read subtle changes in the living world. This rhythmic understanding of the territory allows him to interpret the patterns that indicate changing weather long before the storm clouds gather, or the volcano erupts. Rhythm allows us to move beyond traditional, exclusive epistemologies; to instead understand how different elements interact, co-exist and co-adapt – while the simplicity and ubiquity of rhythm creates space for intercultural (even inter-species) communication. As such, rhythm represents an epistemological 'turn' that moves from investigating what we know, beyond interrogating how we know it, to understanding that 'knowing when' is just as important: time is part of knowledge. The thesis argues not only for further examination of time as an apparently uniform metric, but for the value of rhythm as a common coordinate to enable more equitable decision-making in the future.



## ORAL PRESENTATIONS



MASON RODRIGUEZ

Mason is a first year PhD student out of Nashville, Tennessee studying the fundamental properties of memory and learning in the department of Physiology, Development, and Neuroscience. In Cambridge, Mason enjoys basketball, jujitsu, and CO-OP frozen pizzas.

### **A mechanism by which the brain encodes experience and its relative salience**

Current dogma in neuroscience posits that memory arises from electrical impulses among groups of neurons within the brain. The interaction between groups of neurons, commonly known as networks, are the basis for memories and experiences. Learning is the process of taking experiences and encoding them into networks, where they can be reassessed. Different experiences register with varying levels of salience and as such, are encoded accordingly. Experiences occur under dynamic network states that can be characterized by myriad different traits. Until recently, it was unknown how the brain encoded these experiences and their relative salience. Interestingly, the type of neurotransmitter released and relevant behaviors are predominant characteristics associated with network states. Our lab hypothesizes that spatiotemporal specific electrical activity and a third-factor neuromodulator, concomitantly, produce a biologically viable mechanism by which this process can occur. Using whole-cell patch clamp electrophysiology in mice, a technique where we record the electrical activity of individual neurons, our lab has shown that temporally and spatially ordered neuronal activity paired with the neurotransmitter dopamine elicits a physiological change in neural activity, consistent with an increase in salience of the information encoded. Because the neurotransmitter acetylcholine is also implicated in experience-related network states, we hypothesize it may have a similar or inverse effect, eliciting a physiological change in neuronal activity consistent with a change in salience of the information encoded. If our findings support our hypothesis, this would provide evidence for a biological mechanism by which the brain encodes and assigns salience to given experiences.

## ORAL PRESENTATIONS



## KARAM ALKATLABE

Karam, a Syrian architect with an MPhil in Architecture and Urban Studies, is a Cambridge Trust scholar and recipient of the Institute of Ismaili Studies doctoral scholarship. His research focuses on post-disaster urban recovery, sustainable housing, informal settlements upgrading and the role of Architecture and Digital Urban Planning in destroyed cities. Karam's PhD research investigates how to engage the local population, displaced people, refugees and architects to collectively envision the future of their destroyed neighbourhoods using digital tools of architecture. Karam supervised architecture students at the University of Cambridge and Al-Baath University. Before his doctoral studies, he worked for the Aga Khan Development Network and World Food Programme and designed the new humanitarian aid distribution site in the city of Salamiyah in Syria.

## Post Disaster Cities: Towards A Digital Participatory Model for Housing Urban Recovery

Housing reconstruction is a critical topic in conflict and natural disaster-affected cities like Damascus in Syria. Urban recovery is becoming more complicated in light of the climate change crisis, the ongoing global political unrest and the substantial displacement caused by conflicts and disasters. The conventional modernist top-down framework for housing reconstruction has proven to be inefficient and unsustainable because it does not prioritise civic society's interests and does not focus on displaced people and refugees which makes it critical to consider a shift toward a participatory approach to steer the recovery of devastated cities. This research aims to investigate how using digital participation tools and platforms of architecture and urban planning can create a bottom-up participatory system for housing based on civic participation and engagement. This research tested various digital tools and platforms among 49 Syrians living in 4 countries by conducting in-person and digital workshops and interviews. The findings showed that a digital participatory approach for housing recovery is applicable and beneficial as it helps in creating housing models based on people's needs and aspirations. It was also evident that participation has positive effects on citizens' sense of ownership, refugees' integration, community building and trauma healing practices. This is the first attempt to investigate how civil society, including displaced people and refugees, can meaningfully participate in rebuilding their destroyed cities remotely using digital tools. This research presents a basis for building a large-scale bottom-up digital participation system to be used in cities emerging from conflicts and disasters.



# POSTER PRESENTATIONS

Thursday 2 May 2024

Anand Rao Tadipatri is a first-year PhD student at the Department of Pure Mathematics and Mathematics Statistics (DPMMS) working on automatic theorem proving.

**ANAND RAO TADIPATRI**



## User interfaces for interactive and automatic theorem proving

It has been known for over a century that all of mathematics can, in principle, be encoded in a mathematical foundation, i.e., a formal language with a set of rules for logical deduction. Softwares known as proof assistants or interactive theorem provers have been developed since that make it feasible to encode and automatically verify mathematics in practice. Proof assistants have been used in the recent decades to formalise several important results of modern mathematics. However, they remain challenging to use, requiring extensive knowledge of the proof-generating commands defined in the software and the details of the underlying mathematical foundation. An eventual dream is to get computers to the stage where they can contribute to the mathematical research process, acting as "digital collaborators" that mathematicians can interact with to arrive at new results. Realising this dream requires major advances in automation, interaction and usability of proof assistants. The focus of the work presented here is towards a "point-and-click" graphical user interface for discovering mathematical proofs built on top of the Lean proof assistant. The overall aim is to use this to answer questions in human-oriented automatic theorem proving research, which is an approach to automatic theorem proving that is complementary to neural network and language model based methods. Apart from its intended uses in interactive and automatic theorem proving, this work could also have educational utility by providing a way to understand or construct formal proofs and receive instant feedback without having to grapple with the intricacies of the underlying system.



# POSTER PRESENTATIONS

THURSDAY

Belinda Henderson, from Bermuda and a Ph.D. candidate at the University of Cambridge, leverages her diverse experience in music and psychology, especially in Autism, ADHD, and anxiety disorders, to enhance group intervention models in Bermuda.

Her research, motivated by liberation psychology and her real-life experiences, delves into the phenomena of Belonging and Identity among autistic youths, aiming to reshape conventional paradigms for greater inclusivity and diversity in social models. Through her work, Belinda seeks to remove societal barriers and empower marginalised communities towards a more equitable society.



**BELINDA HENDERSON**

## **Understanding the experience of belonging among autistic children and young people**

Autistic individuals often experience a profound lack of Belonging, linked to disproportionately high rates of suicide and mental health issues. This study explores the concept of Belonging from autistic children and young people's (CYP) perspectives, aiming to gain epistemological insight and alleviate socio-psychological trauma. Using an intra-paradigm approach, we investigated the experiences of Belonging within a neurodiverse group programme designed to mitigate social isolation. The ethnographic phase engaged 63 CYP, 45% of whom were autistic. Interpretative Phenomenological Analysis involved in-depth interviews with 12 autistic CYP and 7 neurodivergent Facilitators. Key findings reveal the profound implications of Belonging at the level of Autistic Identity, encompassing a tripartite motif: 1. Autistic Identity and Belonging, shaped by unique sensory experiences, passions, and values, intricately linked to genuine Belonging; 2. Framework for Belonging, integrating Diversity, Inclusion, Equity, Safety, and Identity as the synthesis of core components of Belonging; 3. Actionable Pathways to Belonging, this framework gave rise to dynamic themes of Neurodiversity, Multi-sensory Experience, Self-Directed Choice, Attuned Attention Distribution, and Authentic Self-Literacy, corresponding to innovative concepts and multi-faceted constructs, illuminating and honouring a shared humanity to which we all truly Belong. Moreover, the introduction of 'The Pentagon of Belonging' model vividly encapsulates the complexity of the data corpus, providing a pathway for practical applications that aim to nurture a sense of Belonging for autistic children and young people in group settings, ultimately enriching the mental health and well-being of the neurodivergent community.



# POSTER PRESENTATIONS

THURSDAY

Chenming Gao completed her Bachelors in University of Manchester and Beijing Normal University. She completed her MPhil in Theoretical and Applied Linguistics at Cambridge before continuing as a PhD student. She works on approaches for documenting under-resourced languages and the systematicity of idiosyncratic features developed by speakers under the background of language shift.



CHENMING GAO

## A Machine learning method to variations in a low-resource language

While speech is full of variations, the extent of variability might be more radical in low-resource languages, especially for languages which are lack of prescriptive grammars. Given that limited data can be obtained from each speaker, this poses a non-trivial challenge to linguistic researches. This study illustrates how this can be tackled with random forest classification, a machine learning method.

With around 7,000 speakers, Shira Yugur is the least spoken Mongolic language (Zhou 2023). Its most recent grammar reference was Bulucilagu & Jalson (1990), which describes a structurally complex grammar pattern. This pattern is preserved by certain speakers, whereas grammatical simplification, lexical variations, and acoustic overlap have been observed among other speakers. Although it is possible to manually code vowels in words with inter-speaker variations, the judgement of an outsider may not justify the group responses of native speakers.

In the current study, a random forest classifier was trained by following Villarreal et. al (2020) to automate coding. This avoids the use of subjective or inconsistent criteria for transcriptions. The classifier gives rise to relative importance of acoustic variables and assigns a classification probability score to each token. The probability scores are indicative to lexical variations, grammatical change, and acoustic overlap observed in the earlier coarse analysis. Nevertheless, misclassifications have been attested. This might be because the exact acoustic boundary between two vowels can vary across different speakers (Renwick & Ladd 2016), hence a speaker-general best cutoff point may not be applicable to all the participants. This highlights the limitations of speaker-general training.



# POSTER PRESENTATIONS

THURSDAY

I am a first-year PhD student in Linguistics at Wolfson College, University of Cambridge. My primary research interest lies in experimental psycholinguistics, specifically focused on understanding how neurodiverse (specifically autistic) speakers/listeners coordinate and interact with one another. I am interested in investigating whether there are differences in this process compared to that of neurotypical speakers/listeners. For this purpose, I am utilizing multi-player web games and, hopefully, computational models. Additionally, I am passionate about the application of AI/NLP in mental health disorders, particularly for detecting language abnormalities in patients with schizophrenia and its potential use for early diagnosis.

**DIMITRIOS KASTANAS**



## **Put Yourself in Someone Else's Shoes: The Case for Autistic and Neurotypical Adult Speakers**

Visual Perspective-Taking (VPT) is the ability to view the world from the perspective of another person. Quantity Implicatures (QIs) are a form of indirect speech in which the speaker implies an interpretation beyond the literal meaning of the sentence. For example, the utterance I ate one cookie commonly implicates that the speaker ate only one cookie, not two or more. What happens when VPT contrasts with the implications that arise from QIs, particularly in cases where there are asymmetries in the speaker's and listener's visual perspectives? Katsos et al. conducted a novel referential communication task in which listeners had to select the card the speaker was referring to. They found that neurotypical listeners produced implicatures 22-25% of the time, leading them to select a card that was hidden from the speaker but visible to themselves, with similar findings in autistic adult listeners. Crucially, the speaker's utterances in the study by Katsos et al. were scripted and not produced by a naïve speaker. Hence, the question of how speakers' descriptions, influenced by the presence or absence of occlusions, prompt listeners to derive implicatures remains open. Using a novel interactive web-based referential communication task tailored for QIs, we hypothesize that when there is one type of shape on the target card (e.g., only squares), speakers will make the implied meaning explicit by using exhaustification markers, thereby not eliciting the derivation of an implicature by listeners in the presence of occlusion, compared to its absence. Overall, this study has significant implications regarding the ways VPT influences the use of indirect speech by speakers and the derivation of QIs by listeners in language communication among both neurotypical and autistic adults.

**Dimitrios is unable to present in person, but a QR code will be available on his poster linking to a video presentation alongside his email where he welcomes all questions.**

Gilbert, an advocate for development with extensive experience in NGO efforts, is dedicated to universal knowledge access for positive societal change. Pursuing an MPhil in Development Studies at the University of Cambridge, he also serves as Deputy Director of WaSH for the Cambridge Development Initiative. His work and research focus on global poverty reduction, education, rural development, and the role of NGOs, aligning with a key development research trend that highlights the importance of knowledge generation and application by local actors for sustainable development.



**GILBERT NKPENIYENG**

## **Neoliberalism and Global Poverty Reduction: Lessons from China**

Neoliberalism gained global traction as both an economic doctrine and a political project advocating free markets, limited government intervention, and privatization since the 1970s. According to critical theorists like Harvey (2005), strong private property rights and unfettered market operations free from government interference are the hallmarks of neoliberalism. Theorists view neoliberalism as an effective economic and political imaginary guaranteeing effectiveness and economic freedoms which alleviates global poverty (Moreira & Crespo, 2012). However, how does the current global poverty reduction efforts align to the principles of neoliberalism? What lessons can be derived from this relationship and their implications on the future of neoliberalism in the context of global poverty alleviation? The relationship between neoliberalism and global poverty reduction initiatives is obscure. Drawing on World Bank data and academic articles on poverty reduction over the past four decades, I argue against neoliberal claims. I examine a country that demonstrate significant achievements in global poverty reduction which challenge neoliberal imaginaries. Specifically, I investigate the experiences of China, analysing its poverty reduction strategies within the framework of neoliberal principles to gain insights into the impact of neoliberalism on poverty reduction progress. China has the highest poverty reduction rates contributing to over 75% global reduction (World Bank, 2022). Existing literature overlook this lens. Departing from contemporary neoliberal approaches to development practice, I argue that countries should prioritise tailored, context-specific strategies that go beyond conventional paradigms of theories in fighting poverty and inequality.





# POSTER PRESENTATIONS

THURSDAY

Hanzhe Xing is a Ph.D. candidate at the Energy Group, Department of Engineering, University of Cambridge. He previously took a Mphil of Energy Technologies at University of Cambridge. He is looking at designing energy system model with high temporal, spatial and technical resolution and use it to find the optimal energy flexibility solution including energy storage, interconnection and low-carbon generation for the system. He is currently working on designing mechanism to dispatch different energy flexibility providers for power system and expanding this research to the whole energy sector by analyzing hydrogen in the future energy sector. The goal is to quantify the energy flexibility gap, choose proper technologies and improve dispatching mechanism for the future power system.



**HANZHE XING**

## **Designing the future power system model to find cost-efficient energy flexibility solutions for decarbonized GB power system**

The design of future power system model requires a trade-offs among different flexibility choices including thermal generators, different energy storage technologies, interconnectors and curtailment from variable renewable energy(VRE). This research builds a power model with agent-based structure and design a mechanism for all power sources including multiple energy storage operators to compete with each other. A novel flexibility cost is invented to evaluate the performance of each flexibility solution in current power system together with carbon intensity of the system. Applying this methodology to GB power system in 2022 and future scenario, suggests that energy storage is the most efficient flexibility provider either when mitigating the severe flexibility gap(blackouts) or reduce the system flexibility cost. It is found that energy storage is more efficient to response to short-term flexibility demand as carbon intensity and flexibility will be higher when hydrogen holds higher share of storage. It is also found that GB needs to retire some gas-fired power plants to reach its carbon target even when large-scale VRE and energy storage is employed. By testing different level of storage, this research suggests a 25GW storage capacity for future GB power system to reach a optima in carbon intensity and flexibility cost.



# POSTER PRESENTATIONS

THURSDAY

Sami Dubed is a final year History and Politics student, who has previously worked closely with Save the Children UK to bring the voices of diaspora communities into its campaigning and advocacy.

**SAMI DUBED**



## **Decolonising History: the effect of inclusivity, shaping societal transformation**

If we don't teach history, we are doomed to repeat it. By recognising the significant role education plays in shaping collective viewpoints, this research seeks to do this by reevaluating historical narratives, this research will empathise on promotion of marginalised voices. This research will lay out the effects of decolonising primary and secondary history curriculum, how this then shapes societal and political discussion. By using secondary data analysis, this research will compare class demographics and current history curriculum, including to highlight the biases and gaps that contribute to Eurocentric narratives and the marginalisation of perspectives that does not fit the norm. However, this research will consider the rise of home schooling and the dissatisfaction with the education system. Overall, this research will conclude the crucial role educators play in re shaping the lives of young people and how they see themselves. Thus, this involves incorporating diverse viewpoints, indigenous knowledge, and oral histories to present a more accurate and nuanced depiction of historical events. The presentation concludes by discussing potential policy implications that may arise from the findings of this study and providing recommendations for policymakers and educational institutions to facilitate the transition towards a more inclusive society.



# POSTER PRESENTATIONS

THURSDAY

Sarah is currently pursuing a PhD in the Faculty of English and holds a MA in Critical and Cultural Theory from the University of Warwick and a BA Hons in English Language and Literature from the University of Oxford. Her PhD examines narratives of coercive and controlling behaviour across contemporary culture, exploring the characteristics of these narratives, and their relationships with definitions of, and policy on, coercive control in existing and developing legislation across the world. The research particularly considers the implications for evidence gathering, and for understanding victim/survivor testimony within the criminal justice system.



**SARAH WOODWARD**

## **Stories hidden in plain hearing: how narrative analysis can help the criminal justice system understand coercive control**

Section 76 of the Serious Crime Act 2015 created the offence of coercive or controlling behaviour (CCB) in England and Wales. CCB is a crime which is only substantiable by its narrative context, and, despite amendments in the Domestic Abuse Act 2021, the legislation does not yet provide the clear, consistent guidance necessary to encapsulate the crime's core narrative characteristics. Behind this difficulty lies the complication that victim/survivors often tell multiple, incommensurate, fragmented, and unstable stories about their experiences; yet this does not mean that these victim/survivors are not engaged in a process of attempting to tell the truth. Dillon and Craig's four-function model of 'storylistening' (2021) evidences the value that academic narrative expertise can bring to public reasoning. Using storylistening principles, this presentation takes two examples from narrative accounts of CCB, drawn from contemporary literature in autobiography and fiction, and use these as models to exemplify how the developments in legislation can work counterproductively to disable understanding of the crime and silence its victim/survivors. The analysis will make the case for the contribution literary research brings, as part of a pluralistic evidence base, to improve understanding of constituent features of the crime of CCB and help drive reform.



# POSTER PRESENTATIONS

THURSDAY

Tads is a graduate-entry medical student and Economics graduate from the University of Cambridge. His research focuses on evaluating the efficacy and cost-effectiveness of health-related programmes, including AI use-cases in low- and middle-income countries, social health insurance enrolment in India, and antenatal couples counselling in primary-care settings in Uganda. He is interested in the barriers and facilitators to accessing healthcare in low-resource settings globally, and the use of predictive tools to better target behavioural interventions that aim to change health-related behaviours such as exercise habits and medication adherence.



**TADEUSZ CIECIERSKI-HOLMES**

## **Antenatal Couples' Counselling in Uganda (ACCU): a cost-effectiveness analysis and methodological evaluation of a randomised controlled feasibility study**

Common avoidable factors contributing to maternal and neonatal deaths include lack of birth planning and contraception. The ACCU trial tested the feasibility of providing tailored community-based counselling to antenatal couples, aiming to increase the proportion of women delivering in an appropriate healthcare setting given their identified risk of complications, the uptake of Postpartum Family Planning (PPFP), and to reduce maternal and neonatal morbidity and mortality.

The trial was a two-group non-blinded cluster randomised controlled feasibility trial with 1,121 participating couples from four sub-counties of Mbarara. The intervention included couples' counselling provision and the use of family planning films by trained Village Health Teams and health workers in homes and clinics. The cost-effectiveness analysis compared the differences in outcomes observed, intervention costs, and participant Out-Of-Pocket expenditure (OOP), between groups. Women in the intervention groups had a greater uptake of PPFP (88.6% vs 55.5%) and proportion delivering in an appropriate healthcare setting (83.6% vs 75.3%). Rates of maternal and neonatal complications were lower in the intervention group (1.8% vs 2.6% and 4.3% vs 6.2% respectively). The intervention costs £27.45 per couple. Couples in the intervention group experienced greater OOP expenditures, driven by clinic attendance costs.

Antenatal couples' counselling has demonstrated promise in improving birth planning and uptake of PPFP at low cost, though the causal link to reducing mortality is uncertain. Further analysis is required on OOPs and social costs, requiring improved survey design eliciting OOPs, and capturing the cost of increasing the number of deliveries in hospitals.



# PRESENTATIONS

Friday 3 May 2024

**DANIEL EGAN**

Daniel is a second-year PhD student in the Heeney group where he is studying immune correlates of protection to SARS-CoV-2, focused particularly on the Membrane and Envelope proteins of this virus. His research aims to explore the role of these proteins in protective immunity following infection, and their potential to contribute to the development of future broadly-protective coronavirus vaccines. Daniel has a background in clinical medicine, public health, infectious disease, and immunology, and his academic interests lie at the intersection of these fields.

## **The role of SARS-CoV-2 Membrane in protective humoral immunity**

Betacoronaviruses (Beta-CoVs) have been implicated in some of the largest epidemics in recent times (SARS, MERS, COVID-19) and pose a major ongoing threat to global health. Humans tend to have insufficient effective immunological memory to call upon to prevent or clear these infections, allowing for outbreaks of existing and novel viruses to spread rapidly, with potentially devastating effect. As illustrated by SARS-CoV-2, efforts to develop lasting, effective vaccines are undermined by the rapid evolution of new viral variants which evade prior immunity. The SARS-CoV-2 Membrane protein is a potential target for the generation of lasting broadly protective immunity as it is well-conserved within and between Beta-CoVs, is prevalent on the surface of viral particles, and performs key roles in the viral replication and transmission cycle. The vast majority of work in the field to date has focused on Spike protein. The Membrane protein thus represents an under-researched area in the field which has the potential to contribute to our understanding of lasting immune responses to these viruses. The cohort studied comprised of healthcare workers, patients, and immunocompromised individuals, providing a range of different immunological 'scenarios' to compare. Using immunoassays such as ELISA, flow cytometry, and reporter cell assays, we investigated how antibodies directed towards the SARS-CoV-2 Membrane protein correlate with protection, and potential mechanisms through which they may mediate protective immunity. These findings have implications for the development of next-generation vaccines which aim to induce broad, long-lasting immunity in a bid to ameliorate the effects of future viral pandemics.

**STEPHEN BULYAR**

Stephen Bulyar is pursuing an MPhil in Human Evolutionary Studies at the department of archaeology. He holds an undergraduate degree in anthropology from the University of Nairobi, Kenya. He has prior experience working with fossil collections and conducting paleontological field research in Kenya. He is interested in researching the evolution of hominin limbs based on data from the fossil record. His current work explores species morphological diversity during the Plio-Pleistocene epoch (3–1 million years ago) by focusing on the distal humerus, the lower portion of the upper limb, using quantitative methodologies.

### **Inferring Taxic Affinities and Diversity in Hominin Postcrania: A Comparative Morphometrics Study of Fossil Humeri from the Koobi Fora Formation, Kenya.**

The Koobi Fora formation in Kenya is one of the major geological units that are found at the Omo-Turkana depression. Tectonic activity resulting from the rifting has exposed sedimentary rocks dated from approximately 4.4 to 1.1 million years ago preserving a rich record of fossil biota. The past 50 years of fieldwork in this formation have yielded four hominin species representing two genera (Homo and Paranthropus) identified exclusively from craniodental elements. The hominin postcranial assemblage is also rich; however, lack of associated skeletons and the contemporaneity of multiple hominin species at Koobi Fora have historically impeded our knowledge of postcranial evolution. This arises due to the challenge of securely attributing the isolated postcrania to either Homo or Paranthropus in the absence of associations. Fortunately, recent comparative studies have expanded this record. Furthermore, studies suggest that the distal humerus is suited for studies of postcranial variation within primates and has been used to justify generic distinctions at Swatkrans, and a sample of Koobi Fora postcrania suggesting existence of three distinct shapes representing (Paranthropus, Homo erectus, and non-Homo erectus) (Lague, 2015). To test the hypothesis that distinct morphotypes exist in Koobi Fora hominin humeri and expand on the existing sample, this study analyses the distal humerus cross-sectional shape variation in a sample of 12 distal humeri 3D scans. The sample includes 3D comparative specimens of humeri from associated hominin skeletons, humans, and living apes. Analysis will be carried out using quantitative methods of geo-morphometrics. We will discuss the implications of the results with regard to postcranial evolution and the paleobiology of Homo and Paranthropus.

**MICHAEL E. GASIOR**

Michael Elizabeth Gasior is a graduate research assistant at the University of Lausanne and a visiting researcher at the Department of Public Health and Primary Care in Cambridge. She recently graduated with distinction from the Department of History and Philosophy of Science's master of philosophy program in Health, Medicine & Society; her dissertation project examined the relationships between parental mental illness, domestic violence, and children's mental health and safeguarding outcomes. Before Cambridge, she lived and studied in Amsterdam, where she contributed to several WHO- and EU-funded projects centering on the mental health of vulnerable populations during COVID-19. Her greatest interests are childhood adversity and what families, teachers, and clinicians can do to protect children's mental wellbeing.

## **A shortcut to understanding child maltreatment and mental health? An examination of the “toxic trio”**

The “toxic trio” (domestic violence, parental mental illness, and parental substance abuse) has become a central focus of child protection policy and practice in England, but a recent review found the evidence supporting the trio to be weak. Critics argue the toxic trio lays too much emphasis on parental factors and neglects the sociological context of maltreatment and mental health outcomes. This project compares three approaches to predicting child maltreatment and poor mental health in children: 1) cumulative risk, the total number of risk factors experienced by a child; 2) the toxic trio; and 3) socioeconomic status in a moderating role between risk factors and child outcomes. Data from 21,695 Child and Adolescent Mental Health Services users in the South London and Maudsley NHS Trust were analyzed. Both cumulative risk and the toxic trio were significantly associated with two indicators of child maltreatment: children's protection plan status and looked after status. SES moderated the relationships between cumulative risk and looked after status and between cumulative risk and mental illness, but SES did not moderate associations between the toxic trio and any child outcomes. These findings suggest the toxic trio is not necessarily a shortcut to understanding child maltreatment and mental illness. While SES may moderate some relationships between risk factors and child outcomes, the associations between SES and outcomes for children must be further explored.





## TRISH MUZENDA



Trish is a PhD Candidate in the MRC Epidemiology Unit and a Vital Strategies Healthy Food Policy Fellow. Her research focuses on understanding the intricate interplay of governance, environmental, and consumer factors shaping the obesogenicity of informal food retail in urban low- and middle-income country contexts. Prior to her PhD studies, Trish served as a Junior Research Fellow at the University of Cape Town's Research Initiative for Cities Health and Equity. During this time, she led and contributed to various projects aimed at enhancing access to physical activity opportunities and promoting healthy dietary habits as strategies for preventing non-communicable diseases in LMICs. With a passion for transdisciplinary health initiatives, Trish seeks to bridge the gap between research and policy, advocating for the integration of health considerations into LMIC urban policies.

### **Obesogenicity of the informal food retail environment in low- and middle-income countries: A systematic review**

The prevailing evidence on food environment obesogenicity, primarily derived from high-income countries, has predominantly focused on formal characteristics, overlooking the significance of the informal food retail environment in low- and middle-income countries (LMICs). To address this gap, we conducted a systematic review aiming to synthesise current evidence regarding the association of the informal food retail sector with overweight and obesity in LMICs. Employing a systematic literature search across four academic databases—Scopus, Web of Science, EBSCOhost (Global Health), and EMBASE—we identified 27 studies meeting our inclusion and exclusion criteria. In 24 studies, quantitative food environment audits were utilised to document the types of foods sold by informal food outlets, while the remaining four studies exclusively employed qualitative methods to capture the nuanced aspects of the sector. Obesogenicity of the informal food sector offering was assessed using three methods: evaluating food preparation methods linked to overweight and obesity, employing the NOVA classification system, and conducting laboratory assessments of the nutrient profile of food items. Our review reveals an increasing availability of obesogenic food items within the informal food retail sector, akin to the formal retail sector. However, it also highlights the duality within informal food retail outlets, serving as sources for both healthy and unhealthy food items, with the prevalence of each category varying based on specific contextual factors. Therefore, understanding food environments in LMICs is crucial for guiding the development of contextual strategies and interventions to improve healthy food offerings in the retail sector and address overweight and obesity.

**CARLOS FINLAY**

Carlos is a final-year MSt Building History student at Cambridge University and works full-time as a heritage consultant at Alan Baxter, based in London. Carlos specialises in the study of twentieth-century architecture, both in Britain and in Spain, and is a tour guide and events volunteer for the Twentieth Century Society. His current research focusses on the construction of flats in 1930s London.

**Flat building in 1930s London: Expressions of modernity in the architectural practice of George Kay Green**

The completion of Sloane Avenue Mansions in Chelsea, London, spurred the architectural press to assert that 'we are slowly becoming Americanised' (Architect & Building News, 1934, p. 129). The building, breaking away from models of housing that had come before it, contained only one-bedroom flats and bed-sitting rooms. These were designed for a new urban middle class of single dwellers or childless couples seeking fashionable and efficient accommodation in the city centre. Designed by George Kay Green, Sloane Avenue Mansions launched his short, but salient, career in flat construction, terminating with the colossal Du Cane Court in Balham with its self-contained ballroom, restaurant, club, and café for residents' use. Despite the flat-building boom of 1930s London, their popularity, commerciality, style, and plan form, have been given little academic attention. Yet, the architectural press was enthralled with the avant-garde radicalism of the 'minimum flat'. The interwar drive to minimise the dwelling to its essential form, and to standardise spaces and appliances, dominated modernist thought both in Britain and abroad. This research uses George Kay Green's buildings as a basis on which to examine expressions of modernity in interwar flats through three main themes: construction, plan form, and style. The 1930s press, newspaper adverts, drainage plans, and consultation of local studies archives have formed this research, in addition to first-hand site visits to Green's buildings. For the first time, this research gives a comprehensive account of his career, and how his flats represented broader trends in modern living.



## KEANE FARLEY

Keane Farley is a first-year Philosophy PhD student researching the aesthetic appreciation of nonhuman animals. Having grown up in South Africa, where his interest and love for animals came from, Keane moved to the U.K. and received his BSc in Philosophy, Logic and Scientific Method from the LSE before moving to Cambridge for an MPhil in the History and Philosophy of Science. His work seeks to open up a new programme of research in contemporary aesthetics about how we engage with the aesthetic qualities of animals and how those aesthetic qualities affect ethical and environmental decision-making. Keane is the grateful recipient of the Vice Chancellor's and Mary Hesse Scholarship here at Wolfson College. He also moonlights as a writer.

### Contemporary Aesthetics and the Neglect of Animals

The aesthetic appreciation of animals is a familiar part of everyday life. The robin perching on a branch is beautiful, spiders are creepy, we find comfort in the loveable look of the family dog. We marvel at the stately elephant marching across the savannah, turn our noses up at odorous skunks, and find harmony listening to a chorus of birdsong in the morning. The aesthetic qualities of animals inform our ethical, cultural, and political lives too: aesthetic beauty has been shown to influence public perceptions of conservational value, while our most recognisable cultural and political symbols are drawn from the animal kingdom—the resilient polar bear has become the poster child for climate change, black cats spell bad luck, and the bald eagle is said to represent ideals of freedom and courage in the United States. Nevertheless, despite the ubiquity of animal aesthetics, philosophers have remained unusually silent on the subject, and there exists no well-defined programme of research in animal aesthetics. Drawing on concepts in phenomenology and animal consciousness, I suggest one explanation for this lacuna. I argue that, unlike traditional objects of aesthetic appreciation like say, works of art and natural landscapes, animals are active participants in our aesthetic appreciation of them. As such, they represent a new kind of aesthetic experience for philosophers to wrestle with but an important one if we are to understand the human and nonhuman world around us.

**JESSE ROP**

Jesse is a Kenyan 4th year PhD student in the Lawniczak lab at the Wellcome Sanger Institute and also a member of Wolfson College. He studies the transmission biology of malaria parasites in natural infections from Mali. Specifically, he uses single-cell RNA sequencing to understand strain distribution within malaria infections, the gene expression differences between these strains and implications on transmission. Having spent the initial years of his research career studying the relationship between host factors and infectious diseases in Kenyan children, he is also interested in how host clinical and genetic factors can affect the transcriptomic profiles of transmissible malaria parasites.

**Plasmodium falciparum relatedness and transmission biology at single-cell resolution**

Plasmodium falciparum malaria is still a major global health problem killing half a million children annually, most of whom are from sub-Saharan Africa. Transmission through the mosquito is indispensable for malaria persistence and interventions targeting this step have the potential to greatly reduce disease burden. Within an infected individual, only specific forms of malaria parasites called gametocytes are capable of being transmitted to mosquitoes. The factors mediating key transmission events in infections, such as the formation of gametocytes and their biology are not fully understood. A major hindrance is that an infection in highly endemic areas will often comprise several strains, and characterising which strains contribute to transmission has been technically challenging. Using single-cell RNA sequencing (scRNAseq), a technology that profiles the gene expression of each parasite independently, we have been able to deeply characterise thousands of malaria parasites circulating within infected individuals from Mali at an unprecedented resolution. Through this, we find that different parasite strains have different capacities to produce gametocytes. Additionally, we see that some genes are expressed at different levels by gametocytes of different strains. Interestingly, some of these genes such as pfs16 and zip1 are involved in the biology that underlies the transmission process and are already being studied as candidates for vaccine development. Our study is therefore uncovering the transmission dynamics of strains in human infections and will lead to a better understanding of targets for transmission-blocking interventions.



SCOTT WILSON

Scott is a 3rd year PhD student at the MRC Laboratory of Molecular Biology, Neurobiology division. His group works in 'connectomics': the mapping of neuronal circuits and their synaptic connections at nanometre resolution. He applies these techniques to answer questions of development (how does the brain self-assemble and encode innate information?) and memory (where and how is learnt information stored in the brain?) in the fruit fly larva. As an undergraduate, he studied Genetics at UCL and then pursued a Master's at the Francis Crick Institute – working on patient stem cell models of motor neuron disease. Alongside his PhD, Scott holds a visiting student position at the Santa Fe Institute in the US, exploring 'complexity science' and investigating how biological and artificial intelligences represent information and simulate reality.

## Freak neurons: developmental errors and connectomic variation within an insect brain

Under the guidance of a genome, brains self-assemble via a process known as neurodevelopment. The end-point of neurodevelopment can be mapped as a 'connectome' – a comprehensive wiring diagram of how every neuron in the brain connects via synapses. Whilst these neuronal networks are typically reported as absolute or consensus, this fails to account for natural variation across individuals. Neurodevelopment is non-deterministic, and thus multiple iterations of the same circuits – even across clonal animals raised in an identical environment – will show stochastic differences to an identified neuron's morphology and connectivity. Occasionally, 'freak neurons' can be observed: catastrophic developmental errors which would evidently break a circuit. Each connectome is thus a snowflake, and these abnormal mistakes can give insight into normal neurodevelopment and the principles and mechanisms with which it functions. Taking the complete synaptic-resolution connectome of the *Drosophila* larval brain, we develop an algorithm to systematically compare the left and right hemispheres for aberrant connectivity and morphologies. Out of 3280 neurons, we identify 27 freaks and estimate an error rate of 1%. Using graph-theory, we further assess the network-level consequences of each error and then simulate neuronal firing. *In-silico* correction of the connectome and production of artificial freaks gives insight into robustness and evolvability of the brain. This work highlights the extent of natural variation within a brain and the effects of neurodevelopmental errors to its function. Understanding this is critical for comparing connectomes – e.g. to explain how neural connectivity is related to genetics, disease, development, learning, and behaviour.

**KONSTANTINOS TSIGARIDIS**

Having recently submitted his thesis at the Faculty of Education, University of Cambridge, Konstantinos is now a Research Fellow in Statistics and Quantitative Social Sciences at the Social Research Institute of University College London (UCL). His PhD research spans a range of areas within cognitive psychology and science education, aiming at creating inclusive learning environments.

**Executive Functions, Mathematical Skills and Physics Achievement in Secondary Education: Comparing Science and Humanities Curriculum Track Students.**

Executive functions –cognitive skills often including working memory, inhibition and switching – seem essential in secondary school achievement. However, it is unclear how their impact applies to different academic domains. We focused on physics because teachers often express concerns about secondary school students' low levels of achievement in physics. There is well-replicated evidence that links executive function with mathematical skills, which links with physics achievement. Therefore, we tested the direct and indirect links among executive functions, mathematical skills, and physics achievement through a robust mediation model. Given the recent suggestions that executive functioning is influenced by related knowledge and experiences that drive goal-directed behaviour in task execution, we decided to compare students from science and humanities curriculum tracks. This integration forms the crux of this investigation, setting it distinctly apart from existing studies. Structural equation modelling in a sample of 15- to 17-year-old students ( $N = 403$ ,  $M_{age} = 15.78$  years,  $SD_{age} = 0.74$  years), evenly split between science and humanities, indicated notable inconsistencies. First, we noticed a non-significant direct link between executive functions and physics achievement for students in both tracks. Second, the direct link between executive functions and mathematical skills was non-significant for the humanities students. These findings highlight the contrast in educational demands and the required cognitive load within each track that may lead to a unique manifestation of executive functions. Further research should examine the causality of these inconsistencies.

**ANASTASIOS GALANIS**

Anastasios holds a BSc (Hons) in Pharmaceutical Sciences from Utrecht University, where he discovered his interest for method development as well as ecology and evolution. During his MSc in Neurosciences at the University of Athens, he became fascinated by honeybees and developed methods for the metagenomic analysis of honey. Prior to his PhD, he worked at Oxford Nanopore Technologies, where he joined a small team to develop protein sequencing using nanopores. Anastasios is currently a 2nd year PhD candidate at the Department of Biochemistry (Maori Lab), where he studies RNA transmission between honeybees and their gut microbiome. To this end, he is developing methods to study RNA communication between species and methods to study the microbiome of insects in three-dimensional space.

## RNA transmission between honeybees and their microbiome

Organisms communicate with each other using multiple signals to establish and maintain interactions, including symbioses. A variety of molecules are used for such communication, including metabolites and proteins. Transmissible RNA has emerged as a means of communication between organisms, both within and across different kingdoms of life. Honeybees possess a transmissible RNA pathway rendering them an ideal model system to study such RNA-based communication. Honeybees can share RNAs between individuals and across generations through the secretion and ingestion of worker and royal jellies. Recently, the gut symbiont *Snodgrassella alvi* (*S. alvi*) was engineered to produce double-stranded RNA that induces silencing of honeybee genes and controls pathogens (e.g. *Varroa* or *Nosema*). However, it is unknown whether natural functional RNA transmission occurs between *S. alvi* and its honeybee host. Here, we provide evidence that endogenous *S. alvi* RNA is detected in worker and royal jellies, through small-RNA sequencing. These *S. alvi* RNAs are also present in systemic larval tissues in the absence of *S. alvi* genomic DNA, indicating jelly-mediated bacterial RNA uptake and systemic spread in the recipient larvae. The transmitted *S. alvi* RNAs constitute small RNAs, primarily rRNA and tRNA fragments. We show that such fragments could potentially be involved in cross-kingdom RNA interference and have the capacity to target honeybee pathogens, such as *Nosema* and viruses. These results highlight a potential cooperative role of the gut microbiome in priming pathogen-specific immunity and regulating the host's physiology through transmissible RNA.



## APAN TRIKHA

Frustrated with his Windows XP desktop in 2013, Apan became eager to start his journey to make computers less obnoxious for people. This led him to pursue BTech in Computer Science and Engineering from SRM University, intern at Amazon and pursue MPhil in Advanced Computer Science at University of Cambridge. His research interests are mainly in OS research and Human Computer Interaction, where he built his intuition from developing games for Aristocrat Technologies as a software engineer and as a solo game developer while pursuing BTech. His first big step to start his journey is by designing a personal file system, Nijismrti meaning "that which is to be remembered privately".

### **Nijismrti: An encrypted filesystem for private data**

Computers are personal, ubiquitous and are more in number than there are people on this planet. However, the recent development in filesystems still cater to the enterprise use cases like cloud computing and the big data. Some filesystems attempted to cater those like eCryptFS and EncFS. However, they are stackable filesystems and are not useful for home servers with irregular uptimes or limited resources with EncFS having a single point of compromise. Nijismrti addresses these issues with selective sharing of files and folders, and provides group key management for other devices where the data owned by the author. Nijismrti means "that which is supposed to be remembered privately" in Sanskrit and describes its purpose laconically. The data that the author can exercise full authorisation is encrypted using a bulk key which controls the access for the recipients. To build further on limited resource usage, Nijismrti is implemented by modifying LittleFS, a filesystem designed for microcontrollers.





# WRE2024 | WORKSHOPS



Our participants had the opportunity to attend workshops for abstract writing with Laura Jeffery, poster design and presentation with Aaron Ralby, and effective presentations with Debbie Pullinger. **We'd like to thank them all for helping to support us and our participants in ensuring a successful research event! We couldn't do it without you!**

Aaron Ralby matriculated at Wolfson in 2005 to read for an MPhil in Anglo-Saxon, Norse, and Celtic, which he completed in 2006. He then received his PhD from Cornell in Medieval Studies in 2010. During his PhD, Aaron spent a year of doctoral research back at Wolfson. Aaron now lives and works in Cambridge as a linguist and voice-over artist. Since 2011, Aaron has run Linguisticator, an online platform for adults to learn languages systematically. Through Linguisticator, Aaron has run large-scale language training programs with the UK Ministry of Defense in Libya and the US State Department throughout Georgia. As a professional voice-over artist, Aaron daily records a wide range of content, from documentaries, character voices for video games, and audiobooks, to advertisements for major international brands.



AARON RALBY



DEBBIE PULLINGER

A Fellow of Wolfson, Debbie joined the College originally as a JRF and was then a College Tutor for over six years. She returned relatively late to academia, following a career in educational publishing and several years as a freelance writer and editor. Following a PhD at the Faculty of Education, she led a three-year research project on the value of learning poetry. She continues to research and write about the memorisation and performance of poetry, and is particularly interested in the ways in which the written and the spoken word are experienced, and in the relationships between text and voice, page and body. She has led workshops on delivering effective presentations for over five years.

Laura is the Librarian and a Fellow of Wolfson College. She joined 7 years ago and now leads on the College's research and academic skills support. She was previously Researcher Training Librarian at Durham University, where she specialised in generic skills support. At Cambridge, she created the content for the transitional CamGuides for New Undergraduates, as well as helping to launch the WolfWorks programme in College. This includes the online Academic Skills LibGuide, providing support to students at point of need. She also delivers workshops on a range of topics from literature searching to more advanced skills such as research data management.



LAURA JEFFREY

# MEET THE 2024 WRE COMMITTEE

## ANGELIKA KWIATKOWSKA



### EDITORIAL OFFICER

Angelika Kwiatkowska is a first-year PhD student in the Department of Clinical Neurosciences. She moved to Cambridge after obtaining a BSc (hons) in Medical Sciences from the University of Edinburgh. Currently, her research focuses on understanding the molecular mechanisms driving axonal degeneration and investigating how programmed axon death contributes to specific human neurological disorders, such as amyotrophic lateral sclerosis (ALS).

## EMMA WALSH



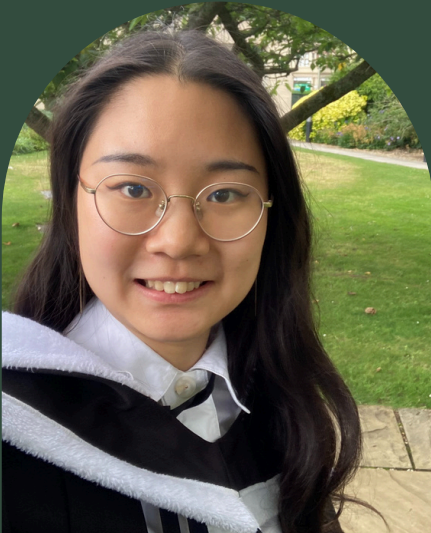
### EDITORIAL OFFICER & DESIGN OFFICER

Emma Walsh is a PhD candidate at the University of Cambridge with a focus on the function of non-coding RNA in disease. Previously she obtained a BSc in molecular biology in Canada and a MSc in genomics and systems biology in Sweden. She is interested in the relationship between structure and function of RNA and how this knowledge can be used to develop novel therapeutics in the treatment of disease.

# MEET THE 2024 WRE COMMITTEE

## YEXUAN ZHU

### EDITORIAL OFFICER



Yexuan Zhu is an MPhil student in stem cell biology at the Cambridge Stem Cell Institute, aiming to further elucidate the role of cholinergic nerve fibres in the regulation of haematopoietic stem cells and acute myeloid leukaemia. Prior to Cambridge, she has obtained BA in cell and systems biology from University of Oxford. She is interested in how stem cells interact with their environments and how this process can be exploited therapeutically.

## ROLAND MASON RODRIGUEZ

### EDITORIAL OFFICER



Mason is a first year PhD student in the department of Physiology, Development, and Neuroscience, investigating the plastic events that occur during information encoding and retrieval in the hippocampus, a structure in the brain known for its role in memory and learning. Mason received his B.S. in Neuroscience at the University of Tennessee before spending a year working in neuroscience labs at both Vanderbilt and Harvard University respectively.

# MEET THE 2024 WRE COMMITTEE



## IOANNA ELEFThERIADES

### COMMUNICATION OFFICER

Ioanna Eleftheriades is a Master of Law student, having relocated to Cambridge after earning her undergraduate degree in Law from the University of Essex. Her dedication to supporting individuals lacking guidance is evident from her two-year volunteer work at the Essex Law Clinic where she offered free initial legal advice primarily on family law and housing matters. Driven by a genuine desire to make a difference, Ioanna aspires to a career as a barrister, motivated by the profound responsibility and the challenges inherent in the role. Outside of work, she keeps herself fit and active as a member of a competitive rowing team.



## BATYA REICH

### EQUITY AND ACCESS OFFICER

Batya Reich is an MPhil student in Arts, Creativity, and Education. Batya holds a Bachelor of Arts in Theatre and Child Development from Tufts University. She has over six years of experience in educational theatre and has held various positions in the American theatre industry over the past few years. At Cambridge, Batya is researching issues of gender identity in educational theatre.

# MEET THE 2024 WRE COMMITTEE

## BLANCHE GONZALES

### LOGISTICS OFFICER



Blanche Gonzales de Linares is a third year PhD student at the Faculty of Education. She has a background in Linguistics, having achieved a BSc in Experimental Linguistics at UCL, and an MPhil in Theoretical and Applied Linguistics. Her research focuses on training pragmatics skills in young children through play-based techniques. Blanche also has a keen interest in event planning: as well as doing Logistics for the Wolfson Research event, she is Wolfson May Ball 2023-2024 President and was the WCSA Entertainments Officer in 2022-2023.

## CEREN CANSE

### LOGISTICS OFFICER



Ceren Canse is an MPhil student in Biological Sciences, focusing on reproduction and embryogenesis. She studied Medicine at Yeditepe University, Istanbul, Turkey before commencing her studies at Cambridge. She is interested in extra-embryonic lineage differentiation and obstetric complications stemming from defective placentation. As part of the Boroviak lab, she will be working on a microfluidic-based human stem cell model to contribute to elucidating the mechanisms of amnion formation.

# MEET THE 2024 WRE COMMITTEE

## APARAJITA NAIK



### WORKSHOPS OFFICER

**Aprajita Naik is a first-year PhD student in the Neuro Optics Lab. Her research interest lies in the non-invasive monitoring of lipid deposits in the brain using Short Wave Infrared (SWIR) imaging techniques, specifically for Alzheimer's Disease. She holds a Master's degree in Bioengineering from the University of California, Berkeley, where she conducted research in Prof. Liwei Lin's lab, developing MEMS-based piezoelectric sensors for healthcare and diagnostic applications inspired by Pulse Auscultation techniques in Traditional Chinese Medicine.**

## YIXUE (DOMINIQUE) JIANG



### WORKSHOPS OFFICER

**Dominique Jiang is an MPhil student in Theoretical and Applied Linguistics. Previously, she obtained an MA in TESOL from the IOE, University College London in 2022 and a Bachelor of Education in English from the University of Macau in 2016. With about eight years' experience in the education industry, she has experience as an EFL teacher, a teacher trainer, Head of English Department, and Co-Founder of a language training centre. Currently, she is working freelance primarily as an IELTS Writing Instructor and Debate Coach.**

# MEET THE 2024 WRE COMMITTEE

## GAYATRI MENDIRATTA



### PROGRAMME OFFICER

Gayatri Mendiratta is currently pursuing her Masters of Law (LL.M), having previously obtained her LL.B degree in India from Amity University and a B.A (Hons) Political Science degree from LSR, Delhi University. She previously worked as a Public Relations specialist and content liaison at Gutenberg for clients in the Education and Social impact space. Having seen the difference that can be brought about through dedicated strategic intervention and legal expertise, her focus lies on the intersection of commercial law and corporate responsibility and she hopes to create long lasting social impact through her work.

## ESTHER WAVINYA



### PROGRAMME OFFICER

Esther Wavinya, MPhil in Development Studies, is a dedicated advocate for positive societal change through education. A devoted volunteer, she passionately supports causes close to her heart. Proudly associated with the Blackboy Foundation, Esther focuses on community empowerment and cultural enrichment. Beyond the track, she envisions leveraging her academic and professional experiences to promote inclusive development and advocate for social justice. Esther is committed to empowering individuals from all walks of life through meaningful initiatives and collaborations, aspiring to make a substantial contribution toward a more equitable and progressive world.

# MEET THE 2024 WRE COMMITTEE

## PETRA MARIARIA



### PROGRAMME OFFICER

Petra Mariaria, an Environmental Health scholar from Kenya, is an MPhil in Population Health Sciences student supported by the prestigious Mastercard Foundation Scholarship. Her research is a testament to her commitment to sustainable healthcare, focusing on developing a decarbonisation framework for East Africa's healthcare sector. This research is part of her broader goal to implement eco-conscious health strategies in Kenya, ensuring health system resilience without sacrificing service quality. Petra's academic excellence is matched by her ambition to drive change through local and global collaboration, aiming to leave a lasting impact on healthcare in Kenya and internationally.

## ARUNITA MITASH



### PUBLICITY OFFICER

Arunita Mitash is currently pursuing her LLM (Master of Law), having previously completed her LLB from the University of Delhi. Prior to her legal studies, she was a part of the Young India Fellowship at Ashoka University, an interdisciplinary postgraduate diploma in liberal arts. She also holds an undergraduate degree in Economics. Arunita is excited to join the publicity team for WRE2024 as the Publicity Officer and hopes to make everyone as enthusiastic about WRE2024 as she is.



# MEET THE 2024 WRE COMMITTEE

## GEORGE HAN

### CHAIR



George Han is currently a PhD student at the Cambridge Institute for Medical Research. He is interested in understanding the molecular linkage between cellular ageing and neurological disorders. Prior to his PhD, he obtained his BSc and MSc in biochemistry in Canada, studying nanoparticle-protein interactions and Alzheimer's disease. George's passion for ageing biology, protein misfolding and neurodegeneration drove him to Cambridge to further his research in these fields.

## LAURA JEFFREY

### LIBRARIAN AND COLLEGE LIAISON



Laura is a chartered, academic librarian. She leads on Wolfson College's research and academic skills programme and collaborates across the collegiate university on information literacy initiatives and projects. In addition, Laura manages the provision of core library services including circulation, collection development, and reader services.



# PRAISE FOR THE WRE2024 COMMITTEE BY THE WRE2024 COMMITTEE

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“I came, I saw, I’m still working on conquering”

– **AJ, Ever the Prospector and on the Workshop Committee**

“Feeling Stressed? Try rock climbing and let the fear of falling be your only worry.”

– **GEORGE HAN, Chair of the WRE Committee and the man who embraced rock climbing precisely once**

“Lorem Ipsum”

– **EMMA WALSH, Editorial Committee and Professional Pumpkin Carver**

“This Programme Booklet is a real page-turner. Unputdownable. A must read.”

– **GAYATRI MENDIRATTA, Programme Committee and Phenomenal at self praise**

“Writing emails is now my passion”

– **ANGELIKA KWIATKOWSKA, Editorial Committee (Applied to judge, forced to communicate)**

“Carpe Diem!”

– **DOMINIQUE JIANG, On the Workshop Committee & Always Open to Possibilities (That’s why I took this role)**

“I beat the 9-5 system by doing work from 5-9 (P.M. of course)”

– **Arunita Mitash, A very anti-social Publicity Officer**

“Keep your inner child alive and kicking, because adulthood is just a playground with more rules!”

– **ESTHER WAVINYA, The Child on the Programme Committee**

“Who better to spend ALL my Tuesday evenings with?”

– **BATYA REICH, A One person Equity & Access ‘Team’**





# A Recipe for Success

Makes 1 Conference – Spread over two days

## INGREDIENTS

### For the Committee

- 1 Proactive Officer ..... each for Publicity, Comms & Equity
- 2 Fine Researchers .....for all the Logistics
- 4 Wonderful People ..... editing this concoction
- 2 Innovative Students ..... to handle workshops
- 3 Smart Scholars ..... to record this recipe
- 1 Enthusiastic Chair .....to make life easier

### For the Conference

- 1 tsp of conflicting opinions
- 1 cup of challenges
- 4 months, finely diced meetings
- 2 large tsps of fresh ideas
- A pinch + some more resilience
- A large chunk of hard work
- Some perspiration
- Lots of laughter
- ¼ tsp complications
- Grate some deadlines

## Directions

1. Carefully select your officers
2. Give them free pizza, while enthusiastically explaining what the conference should be like
3. Add the 'Committee' to a SharePoint
4. Slowly incorporate the ideas and carefully navigate the conflicts
5. Sift the challenges by adding a pinch of resilience, and slowly combine all the hard work- week by week
6. Drizzle the perspiration (liberally!)
7. Fold in the laughter and beat the complications
8. Extend the grated deadlines - once, twice, thrice...
9. Mix them up, shake them down and spread this over 4 months, finely diced meetings
10. Cook it for 2 days, and watch the magic come alive
11. Serve Hot, with a smile (and wine - always wine)



# RING TRUE



Wolfson College  
Cambridge