

# JAMES MCCUNE SMITH ANNUAL CONFERENCE 2023

# WELCOME FROM THE JMS SCHOLARS CONFERENCE ORGANISERS

On behalf of the Organising Team, we are delighted to welcome you to the inaugural James McCune Smith Annual Conference.

We have an exciting programme, bolstered by a series of amazing talks delivered by some of the UK's top academic voices. This conference will serve as a much-needed platform for Black academics to address and highlight their distinct experiences in navigating higher education in the UK, considering their positionalities, and research backgrounds.

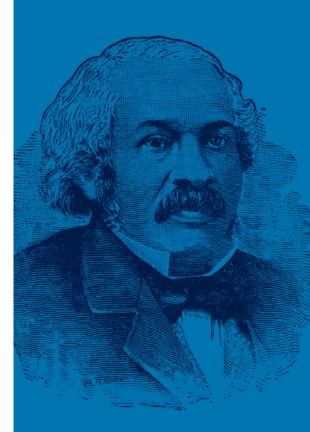
Considering the thematic overview and overall focus of the conference, in conjunction with the University of Glasgow's call to decolonisation, the 8th of June will be an 'unconference'. The purpose of the 'unconference' is to move away from traditional conference formats, to provide a space where different exhibitions will be showcased, to highlight the importance of sharing knowledge through various methods.

In organising this ground-breaking conference, it is important to remember the pioneering spirit of James McCune Smith, whose name this conference bears. As America's first Black physician, and alumnus of the University of Glasgow, James McCune Smith broke many barriers in his professional life. It is our hope that this conference will embody the principles by which James McCune Smith was able to accomplish so much in his lifetime.

As you will hear soon, we also plan to launch the James McCune Smith Network which will feature a regular programme of talks from Black academics, creative practitioners and industry representatives. If you would like to be added to our mailing list to receive updates on this please contact **JMSPhD@glasgow.ac.uk** 

Thank you for joining us! We very much hope that you enjoy the first ever James McCune Smith Annual Conference.

James McCune Smith broke many barriers in his professional life



# WELCOME FROM THE CHAIR OF THE JAMES MCCUNE SMITH STEERING BOARD

I am delighted to welcome you all to the very first James McCune Smith (JMS) Annual Conference which has been developed and led by our wonderful JMS Scholars and is inspired by the Beniba Centre for Slavery Studies' Unconference.

The University established the JMS Scholarships in 2021, with the first intake of students in October 2022. As you might be aware, the University has taken significant work in terms of reparations and in terms of ensuring that it is an anti-racist university. The JMS Scholarships and Development Programme are a hugely important part of our work to take positive action to address structural racism and to ensure positive outcomes for Black UK PhD students.

The conference involves not only an opportunity for our Scholars to present their work, some for the first time (and here we showcase the huge diversity of research being undertaken across all four of the University's Colleges) but also seeks to inspire through shared stories from other Black voices about their pathways through and within academia. We acknowledge that these paths will not have been easy and we seek open dialogue about the changes that are necessary as we move to become a different type of University and as we seek to ensure that our Scholars are fully supported and given all the tools to ensure their success. We also acknowledge that this journey is inherently a process of radical self-reflection that allows for continuous critical (re)assessment as we look to transform society through intellectual activism and social justice.

So, welcome, I very much hope that you enjoy the Conference and that it provokes dialogue and thought. In the spirit of ensuring its continuation and expansion over coming years, please do get in touch with us if you would like to be involved in supporting the JMS Scholarship and Development Programme!

Thank you,

**Dr Peggy Brunache** Chair of the JMS Scholarship and Development Programme Steering Board Director of the Beniba Centre for Slavery Studies

# SCHEDULE

### Day 1 – Wednesday 7 June

9.30	REGISTRATION
10.00	WELCOME ADDRESS - DR PEGGY BRUNACHE
10.15	GUEST SPEAKER - DR ADDY ADELAINE
10.45	JMS SCHOLAR PRESENTATIONS
11.05	BREAK
11.25	GUEST SPEAKER - DR MARIA AUGUSTA ARRUDA
11.55	JMS SCHOLAR PRESENTATIONS
12.15	GUEST SPEAKER - DR MYKAELL RILEY
12.45	LUNCH & POSTERS
13.45	JMS SCHOLAR PRESENTATIONS
14.00	GUEST SPEAKER - PROFESSOR RICHARD OREFFO
14.30	BREAK
14.50	JMS SCHOLAR PRESENTATIONS
15.10	GUEST SPEAKER - DR RUBY ZELZER
15.40	BREAK
16.00	GUEST SPEAKER - DR SHANTEL GEORGE
16.30	INTRO TO JMS NETWORK
16.35	PANEL EVENT
17.35	DRINKS RECEPTION & BUFFET

### Day 2 – Thursday 8 June

10.00	REGISTRATION/COFFEE
10.30	WELCOME ADDRESS
10.45	ACTIVITY 1 – THE BLACK BRITISH EXPERIENCE THROUGH MUSIC
11.15	ACTIVITY 2 - ENGAGING WITH THE NATURAL ENVIRONMENT
12.00	BREAK
12.20	ACTIVITY 3 - VODOU DRUMMING CEREMONY
13.20	PICNIC LUNCH
14.20	ACTIVITY 4– FASHION: OBAA SIMA DRESS
15.00	ACTIVITY 5 – SOIL SCIENCE
15.20	ACTIVITY 6 – THE SCIENCE OF SOUND
15.40	CLOSING ADDRESS



# **GUEST SPEAKERS** 7 JUNE 2023

### Dr Addy Adelaine CEO of Ladders4Action

Dr Addy Adelaine is an international social worker and CEO of the non-profit organisation Ladders4Action. Dr Addy is a methodological expert on inclusive research and accountability. Working in the UK and internationally, her specialist areas of work include: inclusive organisational development; action research; gender, race and youth equality; humanitarian practice; collaborative knowledge creation and ethical social research practices in challenging environments.

In 2020, Dr Addy co-authored an open letter to UKRI which challenged inequity in higher education and research. Whilst the open letter was signed by almost 3,000 individuals and arguably led to heightened awareness in the sector it took over a year for UKRI to respond publicly. In her role as CEO, Dr Addy continues to advocate for inclusion, accountability and knowledge equity in a wide range of sectors and disciplines.

### Dr Maria Augusta Arruda

#### Head of Researcher Development at the University of Nottingham

Dr Maria Augusta Arruda is Head of Researcher Development and Chair of the BAME Staff Network at the University of Nottingham until July 2023 when she joins the Brazilian Centre for Research for Energy and Materials as Director of the National Biosciences Laboratory (cnpem.br/en). She has led and managed large-scale international research and training programmes and has implemented Research Culture interventions for high performance in Science. Maria holds a BSc. and PhD. in Pharmacology, is a Fellow of the British Pharmacology Society, and is a L'Oreal Women in Science Awardee. She is also Advisor for the Black Women in Science Network and Trustee of the Nottingham Counselling Service.

### **Dr Mykaell Riley**

### Reader/Associate Professor, the University of Westminster

Mykaell's career started as a founder member of the British roots Reggae band Steel Pulse who went onto receive a Grammy. As a writer/producer, Mykaell's work has encompassed TV, Film and Theatre, resulting in over eleven UK top twenty positions, and three UK number ones. He also formed Britain's first black pop string section, the Reggae Philharmonic Orchestra, and composed extensively for television including the BBC, ITV, SKY and Endemol.

Mykaell is Director of the Black Music Research Unit (BMRU) which he established at the University of Westminster in 2012. In 2016 he landed the first major award for Black British music from the Arts and Humanities Research Council (AHRC). Titled bass Culture it focused on the history and impact of reggae music in London. The first output in 2017 was the Grime Report which in partnership with Ticketmaster and Live Nation, resulted in a change in London Metropolitan policing. In 2018 he staged the Bass Culture Exhibition, the UK's largest exhibit on the impact of Jamaican music, and in 2019 he released the 'Bass Culture' documentary. An intergenerational explanation of Soundsystem culture and it's connection to Grime music. The overall project was shortlisted for The Times Award 2021, and was recognised by the Research Excellent Framework (REF) 2022 as a significant contribution to the subject area.



### **Professor Richard Oreffo** Chair of Musculoskeletal Science and Founder of the Cowrie Foundation

Professor Richard OC Oreffo holds the chair of Musculoskeletal Science and co-founder of the Centre for Human Development, Stem Cells and Regeneration. Richard is internationally recognised for his work on skeletal biology, skeletal stem cell differentiation and bone regeneration. Richard has trained 54 MD and PhD interdisciplinary scientists since 2002 and published widely (>370 papers) with breakthrough publications on skeletal stem cells, osteoarthritis and bone regeneration and holds 8 patents. In 2015, he was awarded a Doctor of Science by the University of Oxford in bone regenerative medicine. He founded The Cowrie Scholarship Foundation, a partnership with universities, business, and donors to enable 100 disadvantaged talented Black British students attend UK universities. He is founder / CSO of Renovos Biologics Limited, a Fellow of the Royal Society.

### **Dr Ruby Zelzer**

### Knowledge and Research Consultant at Reimagine Redefine

Dr Ruby Zelzer is a knowledge and research consultant at Reimagine Redefine. She holds a PhD in Material Science and works as a data analyst. She is interested in developing solutions to the exclusion and under-representation of Black and other marginalised people in academia, NHS and schools.

### **Dr Shantel George**

### Lecturer in History at the University of Glasgow

Shantel George is a lecturer in history at the University of Glasgow. She works on trans-Atlantic slavery and emancipation, with a particular focus on the British Caribbean. Shantel received her PhD from SOAS, University of London, and is currently finishing her first book, "The Yoruba are on A Rock": Recaptured Africans and the Orisas of Grenada (under contract with Cambridge University Press). She is also working on a second project examining the global history of the African kola nut.

# JAMES MCCUNE SMITH SCHOLARS RESEARCH DESCRIPTIONS

### **Meshach Lee**

## The effect of the urban-rural gradient on potential vector-borne disease risk in Scotland

Environmental change in the coming decades allows for the potential emergence of mosquito-borne diseases in the UK. The UK is currently home to 34 native mosquito species, with 12 readily feeding on both human and bird populations. Currently, there is no surveillance on Scottish mosquitos, with almost all surveillance has been limited to England and Wales. Scotland is presently experiencing warmer and wetter summers, favouring mosquito populations. Urban areas in Scotland account for 2% of Scottish land use, whilst rural areas represent 98%. Across the urban-rural gradient, the spatial overlap between human, vector and reservoir bird populations may vary drastically. My project aims to assess the abundance and diversity of mosquito-borne disease spillover.

### **Amina Lawal Agoro**

## Trace Elements: a curatorial approach to the reconstitution of late 19th Century 'vernacular' architecture in Lagos, Nigeria

A process of refracting space through a Yoruba philosophical, speculative lens, grounded in curatorial praxis.

Specifically, this social inquiry is concerned with the history of forms of precolonial residential buildings located in Lagos Nigeria. These are forms that have been described as housing communities of both the living and the dead. The study is both reconstruction and departure, as its also concerned with the future of these architectural forms, specifically their mediation or reconstitution in the contemporary using curatorial methods.

As an inquiry into the process of seeing, moving through, and re-moulding space, I am paying particular attention to the following: epistemic decolonisation, the subjective, the civic, and the speculative.

### **Prudence Mhlophe**

## An investigation on the potential use of spent coffee ground biochar in the remediation of heavy metal-contaminated urban soils in Glasgow

Mining and industrial activities have resulted in excessive levels of heavy metals in soils and water around the world (Ahsan et al., 2018) Coffee is one of the most common beverages consumed worldwide, it is consumed in very large quantities. An estimated 11 billion tonnes of coffee is consumed worldwide every year and about a billion tonnes of coffee waste produced (Jagdale et al., 2019) My project looks to use this abundant waste product to solve one of the major threats to soil.

My project will look at using spent coffee grounds both raw and as Biochar collected from around Glasgow to immobilise heavy metals such as Zinc(Zn), Lead(Pb), Cadmium(Cd), Nickel(Ni), Chromium(Cr) and Mercury(Hg) from soils. The soils will be mixed with spent coffee grounds and biochar and incubated for 30 days then tested for heavy metal concentrations before and after treatment to determine effectiveness. This combines carbon sequestration through biochar waste reduction and resource remediation in line with the circular economy concept.

#### **Russell Smith**

#### Black Caribbean and West African Wartime Service Volunteers and Legacies

The RAF saw numerous loyal volunteers fight for them from West African and Caribbean colonies, who frequently when asked about their service speak fondly of their time within the service and camaraderie with their peers as a whole. This thesis asks how much of the RAF experience was a result of the RAF attempting to nurture loyal subjects to the Empire, and to what extent their own home culture influenced their time in the service.' This research also measures the balance between any RAF institutional intention and the willingness of the available volunteer force.

### **Steveen Ulysse** Rethinking Haitian Vodou: Everyday religiosity, modernity and decolonisation

My research project will explore the everyday aspects of Haitian Vodou and their relationship with modernity.

This research project seeks to challenge stereotypical visions of Vodou by tracing the genealogy of western representations of Vodou steeped in the history of colonialism, and imperialism.

My exploration of Vodou is about rethinking Haiti and its relationship with Vodou and highlighting its particular role in anti-colonial struggle to a global call to decolonise knowledge.

### **Shaun Eganda Jones**

## Design covalent inhibitors to validate PfCLK1 as a new therapeutic target against malaria

With 220 million cases and 409,000 deaths globally malaria continues to be a global health issue. Traditional anti-malaria drugs like artemisinin and chloroquine are proving less effective due to a build up in resistance within malaria parasites. Previous work by the Tobin group identified 36 protein kinases essential for the survival of the blood stage of the virulent malaria parasite species plasmodium falciparum. Of these 36 protein kinases PfCLK3 was validated as a new therapeutic target against malaria. This project aims to validate the sister kinase within the same family; PfCLK1. This will be done by applying cutting-edge molecular design to design suitable covalent inhibitors for PfCLK1.

### **Pelumi Odubanjo** Fragmenting the Archive- Encounters, Memory and Futurity

My research involves investigating the ways that Black women's independent photographic archives may be able to question the role of archival knowledge in our visual cultures. Looking at transnational independent archives of the West African diaspora from the 1980s onwards, the research will focus on archival collections not yet fully collected or obtained by an institution, for example located in 'informal' conditions i.e in homes, and family photo albums. Bringing to the fore wider questions around black transfeminism, histories of sociality and migration, the role of memory in knowledge production, and questions of time, space, and preservation in relation to the photographic image, this research will explore the possibilities and limitations of the photographic archive as a theoretical concept as well as a material site.

### **Tasmin Alexander** Why is culling of dogs still used as a method of rabies control?

In my PhD I am investigating the motivations behind the continued use of culling dogs as a rabies control strategy in Tanzania, a rabies endemic country. This will be conducted through interviews with key stakeholders who organise and carry out culling and those who are impacted by culling. We will also be calculating the financial costs of culling dogs, comparing this figure to the cost of vaccinating, and then using a model to compare the impact on rabies transmission that result from both methods, under different financial inputs. We aim to create a tool which will allow stakeholders to calculate the most financially beneficial control strategy with the greatest reduction in rabies transmission.

### **Montel Gordon**

## The Miseducation of Black Youth: How Schools Have Become a Pipeline to the Prison Industry for Inner-City Black Caribbean Youth in Birmingham

This is the first interdisciplinary empirical exploration of the relationships between Black young people, school exclusions and prison incarceration in Birmingham.

It shows that in the 1970s and 1980s schools 'pipelined' these young people into low-paid work and unemployment, Black youth are constructed as a social problem in need of exclusion and imprisonment rather than education and employment.

This thesis is a case study of Birmingham, Britain's second city in terms of population size and diversity, with its trends in excluding Black Caribbean schoolchildren. The research offers a place-based understanding of the practices, and experiences of the education and criminal justice systems.

### **Roselyn Nmaju**

### Quantum algorithms for gravitational-wave data analysis

Quantum computing is a rapidly emerging technology that has generated a lot of interest in the science world. Taking advantage of quantum physics could solve computational problems faster than classical computers. In addition, this speed-up in computation could take a calculation that may have been almost impossible to solve on even the most powerful computer. There is a struggle with some computations because of how the complexity of the problems scales with time or resources, meaning some problems may take years or require more computational power than what we currently have! These same problems may be made possible to compute with a quantum computer. My research focuses on developing algorithms for quantum computers that may be used to tackle these poorly scaling or data-intensive problems. In my case, it is a problem of analysing gravitational-wave data.

### **Chima Erondu**

# Using co-production to develop Recovery-Oriented Practice's (RoP) toolkit to improve its implementation and adoption in community-based mental health services in the UK.

Research on the implementation of mental health recovery is still in its infancy, despite the fact that mental illness is the primary cause of disability worldwide. Consequently, this research is essential and pressing. Each year, one in four British adults experience mental illness. In addition to the individual with mental illness, their families, communities, and society at large are also affected by the illness. This annually costs the United Kingdom £117.9 billion, or approximately 5% of its Gross Domestic Product.

In the World Health Organization's (WHO) Mental Health Action Plan for 2013–2020, mental health literature, and UK policy, the significance of community-based mental health services in promoting recovery is highlighted. Despite their role in promoting personal recovery, there is a paucity of research on how their processes can be shaped to facilitate barrier-free implementation of recovery-oriented practice. Hence, the aim of this research is to address this gap and to develop a "Toolkit" to bolster its adoption, implementation, and assessment in practice.

#### **Richard Duke**

## The dynamics of leaderless organising in Social Movements: The curious case of Black Lives Matter

This research proposal seeks to investigate how leaderless social movements organise, mobilise, inspire, and coordinate their members in order to achieve their organisational goals through leaderless organising. By conducting an ethnographic study of Black Lives Matter UK's operations, the researcher intends to investigate the dynamics of how social movements with a leaderless organising structure can successfully mobilise themselves through collective action. This study will investigate, from an organisational leadership perspective, how leaderless organising in social movements can be used as a leadership framework to advance their social justice and social change agenda based on collective action and high levels of trust.

#### **Temitope Abraham**

### Enantioselective Synthesis of Cyclic Ethers by Use of Asymmetric Carbenoid and Tsuji-Trost Allylation Reactions

This project involves the asymmetric synthesis of cyclic ethers by a combination of catalytic reactions. The synthetic functionality of the method is illustrated by its application to the total synthesis of the bioactive oxepane natural product (+)-zoapatanol. Levine and coworkers isolated (+)-zoapatanol in 1970 by and it was initially synthesised by Chen and Rowand in 1980. To date, only two enantioselective syntheses of this natural product have been reported and our proposed synthesis involves a shorter and efficient route. A combination of the carbenoid OH-insertion and Tsuji-Trost allylation reactions would offer a powerful general approach to the synthesis of a variety of natural products.

### Fara van der Schans

## Breaking into the Powerhouse: A peptide-based strategy to target mitochondrial biogenesis and fight cancer therapy resistance

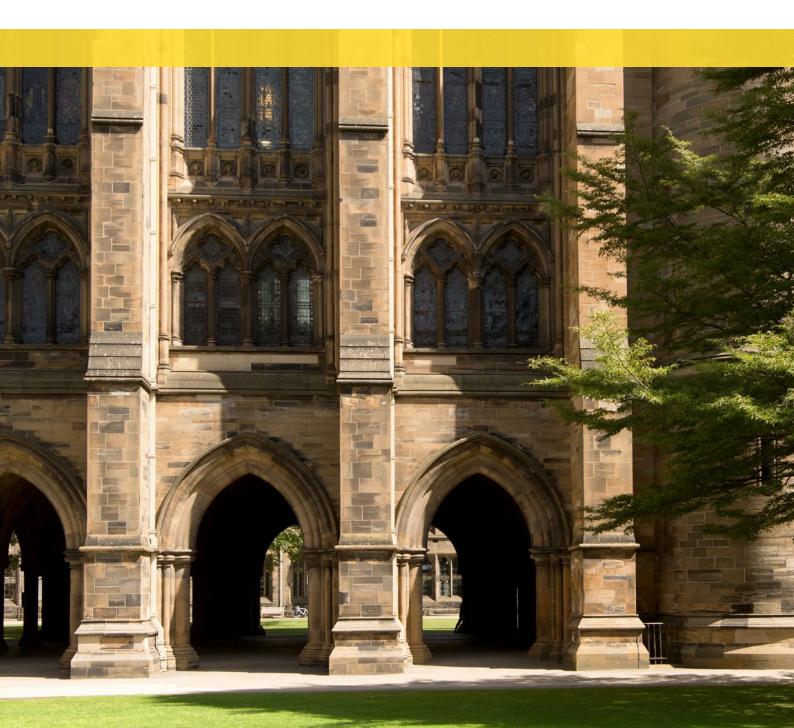
My research examines mitochondria in cancer therapy-resistance. Mitochondria are membrane-bound compartments found in all our cells and are essential to cell metabolism and homeostasis. Cancer cells can hijack mitochondrial function to sustain their rapid growth and evade anti-cancer therapies – although the exact mechanism that drives these transformations are still unclear. Specifically, my research investigates a pathway in mitochondria that is upregulated and hyperactive in certain types of cancers that are also therapy-resistant. By understanding why and how this mitochondrial pathway functions in these cancer cell populations, we aim to exploit this dependency by targeting this pathway using a peptide-based strategy and eradicating cancer therapy-resistant cells.

### **Awo Agnes Isangedighi** Modelling, control and optimization of high efficiency Hydrogen Evolution Reaction (HER) using MoTe2 as electrocatalyst

Climate change is one of the greatest challenges of the 21st century, and global Net Zero 2050 targets have identified green hydrogen as one of the pathways for achieving this goal

because of its potential for carbon-free combustion with by-product of only water. Widespread hydrogen production is currently from fossil fuels and only a small proportion is from water electrolysis powered by renewable energy, with the latter being fraught with problems of inefficiency, energy losses and high cost of noble metal catalysts.

The focus of this research is on the design, modelling, and optimization of electrolytic cells for economical and efficient hydrogen production. The study aims to use computational tools such as Multiphysics modelling and machine learning to study, simulate and optimize the input, cell and output parameters that affect the cell efficiency. Furthermore, Proton Exchange Membrane (PEM) electrolytic cells will be used as case study to analyse performance using non-precious electrocatalysts like MoTe2 in the Membrane Electrode Assembly (MEA).



# ACTIVITIES 8 JUNE 2023

### NOSTALGIA'99 ISSUE 002: THE BLACK BRITISH EXPERIENCE THROUGH MUSIC

Nostalgia'99 was founded by Montel Gordon in 2020. In his own words, nostalgia 'is the drug we all crave at times – to transport us to that moment or period in life when we were happy.' The Nostalgia'99 brand articulates this wish for a better today by looking back and began as a generic music blog and developed into an annual music magazine. Following the success of Nostalgia'99 Issue 001 in 2021, Issue 002 explores themes around Black Britain through its music. The 75 years of Black music since the SS Windrush's docking are explored, discussed, and celebrated. It includes episodes that touch on Jungle, Garage, Reggae, Lovers Rock, Jazz, Sound System Culture and Grime. Some of this magazine's proceeds will be building an IT suite for a school in Senegal.

Copies will be available to purchase for £20 on the day.

### **About Montel Gordon**

Montel Gordon's academic background is in history and literature where he completed his undergraduate and masters at The University of Nottingham and The University of Warwick where he founded the Nostalgia'99 music and culture magazine series. Professionally, Montel has worked as a qualitative and quantitative research in the 'What Works Centre' and is also a freelance opinion writer. His credits include: The Voice, The Jamaican Gleaner, The Independent, The Metro, Vice, The iPaper, and more.

### ENGAGING WITH THE NATURAL ENVIRONMENT

Dr Ebany Dohle will reflect on her trajectory as a linguist working with indigenous languages and knowledges and how her positionality as a Latin American of indigenous background has shaped her experience of UK academia and helped morph a practice that orients itself through connection with the land and with nature. There will be time allocated for participants to explore their own relationship to nature.

### **Event format**

This will be a relaxed event with space alone to create a connection with nature and time together in conversation as a group.

#### **About Ebany Dohle**

Ebany Dohle is a linguist, researcher, and community gardener. She currently works with residents in Castlemilk, Glasgow to raise awareness of our relationship with the land, the environment and food growing systems.

She has a PhD in Linguistics from SOAS, University of London. She has over 10 years of experience working with Indigenous communities around the world, including supporting and coordinating events for and with the Indigenous delegates from the Americas visiting Glasgow during COP26. Her main research interests include investigating how knowledge of the natural world is encoded in the Náhuat-Pipil language of El Salvador and how this shapes semantic, lexical and cognitive categorization processes.

Ebany has taught Field Studies and Language Documentation at SOAS, the University of Tübingen, the University of Göttingen, and the Universidad Tecnologica in El Salvador, as well as at summer field schools around the world such as Mahidol University in Thailand, University of Lyon in France, and in Tlaxcala, Mexico as hosted by the University of Warsaw. In 2022, Ebany released a children's book titled "The Land of the Elders" which narrates the process of reconnecting with ancestral languages and cultures.

### VODOU DRUMMING CEREMONY

Drumming has and continues to play an important role in Vodou, as a mean of communication, a spiritual practice which binds adherents to the Vodou tradition, as well as a crucial element in the shaping of Haitian identity, and music.

This demonstration seeks to highlight the socio-cultural importance of drumming in Vodou spaces, as well as in the Haitian Sociological Imagination. In this context, drumming tells a story of Haiti's history, through carefully curated rhythmic beats. In essence, this performance aims to position drumming as a form of knowledge dissemination, and to bring to light an understanding of Vodou traditions.

#### **About Franck Louis Desire**

In a way, in the Vodou tradition, drummers are those charged with safeguarding Vodou traditions, and Franck Louis Desire is one of such guardians. Franck was born and educated in Haiti, he left Haiti at the age of 19, and travelled Europe, the Caribbean extensively, before moving to Miami, Florida, where he worked as a Community Involvements Specialist. True to his passion, Franck embarked on a personal journey to explore Vodou, which led to the creation of ASAKIVLE, a Haitian dance and drumming troupe. As part of this troupe, Franck has performed at the Sacred Art of Haitian Vodou Exhibition in Chicago, New Orleans, Baltimore, and Detroit. Independently, Franck has performed in Italy, France, and most recently, in the United Kingdom, sharing the transformative powers of drumming.

### THE OBAA SIMA DRESS

We will take a trip to Kelvingrove Art Gallery and Museum to see this beautiful dress made by fashion designer and PhD student Naa Densua Tordzro using Kente, a very special material made from interwoven cloth strips of silk and cotton.

This design is a fusion of modern and traditional patterns and would only be worn on special occasions. The dress is so special it even has its own name! "Obaa Sima" means "Virtuous Woman". This refers to the traditional "Niata" pattern, a diamond-like shape you can see on the dress. This shape reminds us of a double-edged sword. A sword that is blunt on one side and sharp on the other can be a good and a bad thing, depending on what side you are facing! So in this dress the pattern is used to show the power of a woman – both positive and negative sides are being balanced out; making her a virtuous person.

### About Naa Densua Tordzro

Naa Densua Tordzro currently works at the University of Glasgow as Research Assistant on MIDEQ (Migration for Equality and Development), School of Education. She was awarded her MPhil from the School of Education, University of Glasgow in 2021. She holds a BA in Fashion Technology from Heriot Watt University.

She is a fashion designer, dressmaker and African (Ga) music composer and singer with knowledge and research interest in ancient West African Adinkra symbols that were printed on traditional fabrics. Her current research focus is on decolonising textiles and fashion education in the contexts of the global south.

### DIGGING DEEP: WHY WE SHOULD CARE ABOUT THE GROUND BENEATH OUR FEET

In this talk, PhD student Prudence Mhlophe will tell us about something to which most people never give a second thought. Soil! Pru will seek to convince us all of why soil health is so important and why it is vital to protect our soils from a variety of different threats.

We will also look at the results from a month-long scientific experiment using buried cotton underpants (!) as a measure of soil health. You too can recreate this important work in your back garden (just make sure any cats and foxes don't attempt to steal your pants)...

### **About Prudence Mhlope**

Prudence is a PhD student in Geographical and Earth Sciences working on the GALLANT project (GALLANT uses Glasgow as a living laboratory to develop climate resilience).

## THE SCIENCE OF SOUND

It is possible to see with sound. Ultrasound, defined as sound waves with frequencies above the audible range of human hearing, is used in medicine to obtain images of the inside of human bodies without the need for invasive procedures. Ultrasound probes are used to obtain these images during medical scanning procedures. In this talk, PhD student Bunmi Onanuga will explain how sound is used to create a picture of 'hidden' things, and as a participant, your assistance may be needed during scanning to help identify the embedded items in a human tissue mimicking material.

### About Olubunmi Onanuga

Bunmi Onanuga is an Ultrasonic Engineering PhD student. In collaboration with CTS Ferroperm Piezoceramics, her project focuses on incorporating lead-free piezoelectric material in a high-power ultrasonic device for surgery.

### **ACKNOWLEDGEMENTS**

Thank you to the James McCune Smith Scholars for their hard work on delivering the conference. We are privileged to work with such a fantastic group of students. We would also like to thank GSK for their support and all the mentors and companies who contribute to our programme. Thank you too to the Royal Society for Chemistry who kindly sponsored the conference.



🕑 @uofgjmsphd