

## **Contents**

### 4 The first word

## 6 Building partnerships and artificial limbs that last

**Henry Mafabi Gizamba** describes how the partnership he built up with UK-based charity, Legs4Africa, provides more effective and efficient artificial limbs to more people across sub-Saharan Africa.



**Jessica North** describes how she is helping Australia's landfills generate renewable energy, while simultaneously building a more female friendly workplace, as CEO of LGI.





## 10 Thinking global, acting local

Ali Gohar Qazi combines global perspectives with local approaches to investigate how mobile technologies can transform the educational landscape in Pakistan.







## 13 Solving the health workforce conundrum

Roomi Aziz describes how the global connections made through her Commonwealth Scholarship are equipping her with the tools to solve the health workforce crises confronting Pakistan and other low and middle-income countries.

### 16 Above and beyond Bitcoin

Jemimah Muthoni Maina shares her research into blockchain technology and how it can be applied in humanitarian supply chains to significantly improve emergency preparedness, response, and recovery.

### 19 New research, new knowledge

The CSC Research Impact Awards (RIA) celebrate the research and publication endeavours of doctoral Commonwealth Scholars and Alumni at the early and mid-career researcher stages. The annual awards are offered through two streams, with an annual topical prize also available to entrants.



## 22 The value of networks and collaboration for Commonwealth Alumni

Interpersonal networks are integral to enabling professionals and researchers to build new relationships, gain additional skills and exposure to new perspectives, and engage in collaborations to devise solutions to development issues.

- 24 Alumni news
- 26 Alumni events
- 29 Scholar events
- 30 Get involved

## The first word



## I'm delighted to be writing the opening words for the fourteenth issue of *Common Knowledge*, which explores how Commonwealth Scholars are forging ahead with their development impact through connection and collaboration across geographic borders.

In my role as Executive Secretary of the Commonwealth Scholarship Commission, and throughout my work as Secretary General of the Association of Commonwealth Universities, I see daily the power of international collaboration in higher education to build a fairer, greener future for all. Through teaching, research, and community engagement, higher education makes a vital contribution to achieving all 17 of the Sustainable Development Goals, but we're never stronger than when we work together, exchanging knowledge, ideas, skills, and perspectives.

This is why there will always be a place for international mobility based on equitable partnerships – a mutually beneficial exchange between individuals, their host institutions, and those to which they return. This mutual capacity-strengthening benefit is built into several programmes which the CSC runs, such as the PhD Split-site programme (which enables Scholars to study at both their university in their home country, and 12 months at a UK university), and the Professional Fellowship programme, where post-doctoral researchers spend several months at a UK institution. Through schemes such as these, professionals are provided with the opportunity to enhance knowledge and skills in their given sector, and to have catalytic effects on their workplaces.

When a student comes home after months or years immersed in another country or culture, their ideas and learning are then applied, shared, and multiplied in the country to which they return, meaning that their new knowledge and understanding ripples out into their communities and societies. Our decades of experience in this area have shown us that scholarships have an impact far beyond the individual. Thinking of SDG 4 'Quality Education', for example, evaluation of the Commonwealth Scholarships scheme shows that its alumni are helping to fortify education systems across the world, increasing the supply of qualified academic staff, strengthening doctoral capacity, and enhancing the provision of university teaching and supervision for new generations of students.

Perhaps less tangible, however, is the power of international experience to broaden minds and horizons; to foster a more expansive worldview and a sense of interconnectedness and solidarity. In a world still rife with doubt and division, international education continues to contribute to understanding and respect across cultures and borders, forging connections and conversations that many international diplomats can only dream of.

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Commonwealth Scholars – both past and present – provide inexhaustible inspiration through their great ideas and sheer hard work, researching and then implementing innovations in so many different ways. I encourage you to read this issue cover to cover, so that you do not miss any one of the accounts of Commonwealth Scholars leading change and making development happen across the globe.

The CSC's key purpose is, of course, to enable our alumni to have an impact on development at local, national, and global levels. Collaboration with a range of individuals, partners, institutions, and organisations is key to this impact.

This issue of Common Knowledge features work from alumni such as Henry Mafabi Gizamba, who has developed a partnership with the UK-based charity Legs4Africa during his time as a Professional Fellow at the organisation Knowledge for Change, based at the University of

Salford. A current Split-site
Scholar, Ali Gohar, talks
of the connections and
knowledge base he
has developed within
University College
London's Knowledge Lab,
which brings together academics
from maths, technology,
psychology, design, and more
to focus a multidisciplinary
lens on societal challenges.
As another example,
Commonwealth Scholar

Roomi Aziz describes how the global connections made throughout her scholarship are equipping her with the support, inspiration, and perspectives to tackle the health workforce crises confronting Pakistan and other low and middle-income countries.

I also want to take this opportunity to acknowledge our partners in universities in the UK and throughout the Commonwealth. The CSC – and of course our Scholars and Fellows – are intensely thankful for your support through teaching and supervision, financial assistance, and expert advice. If you do not find an article that references your institution, please do write to us about your work with Commonwealth Scholars and Fellows so that we can include it in a future issue.

Dr Joanna Newman
Executive Secretary of the
Commonwealth Scholarship Commission in the UK









# Building partnerships and artificial limbs that last

Commonwealth Alumnus **Henry Mafabi Gizamba** describes how the partnership he built up with UK-based charity, Legs4Africa, during his Commonwealth Professional Fellowship has helped him and his team provide more effective and efficient artificial limbs to more people across sub-Saharan Africa.



## Henry Mafabi Gizamba 2018 Commonwealth Professional Fellow Uganda

University of Salford, Knowledge for Change

I am an orthopaedic technologist at the Mulago National Referral Hospital (MNRH) in Uganda, supervising a team of 9 technologists. My work involves the fabrication of artificial limbs to support patients who have lost limbs due to road traffic accidents, snake bites, cancer, and diabetes, to name a few common reasons for limb loss.

The artificial limb workshop in MNRH was one of the first to open in Uganda. There, we create a range of services, including wheelchairs, orthopaedic shoes, and timber crutches. Importantly, the workshop includes a school where most of the technologists working in these units have been trained under my supervision.

In sub-Saharan Africa, 1.7 million people need an artificial limb to help them live independent lives. However, access to orthotic and prosthetic services in Uganda is limited and people living in rural areas often rely on the delivery of free outreach clinics and workshops, which cannot always provide high-quality services due to capacity issues. My team offers an additional route for patients to receive consultation and access first-class prosthetics.

An important factor in the success of the MNRH workshop is the partnership I developed with Legs4Africa during my time as a Commonwealth Professional Fellow with the organisation, Knowledge for Change, based at the University of Salford.

## **Building our partnership with Legs4Africa**

Legs4Africa is a UK-based charity which seeks to improve access to recycled prosthetic legs by collecting, servicing, and shipping unused prosthetics to centres across sub-Saharan Africa where they can be used to build or repair prosthetic limbs.

I embarked on the Commonwealth Professional Fellowship programme together with colleagues from MNRH and

while we were in the UK, we met with managers at Legs4Africa to discuss future partnership opportunities. Legs4Africa agreed to initially send us artificial limb components to test out with 10 patients. The components received comprised the basic parts needed to make an artificial limb, such as socket connectors and solid ankle, cushion heel (SACH) feet, and were made of high-quality rust-free aluminium, which is light, durable, and a better fit for patients.

I reported back to Legs4Africa weekly on the use of the components and patient data and I am pleased to share that in 2022, representatives from Legs4Africa visited our workshop to meet with the team and learn more about our work. Based on our performance, Legs4Africa have agreed to send further components to continue our work. The partnership with Legs4Africa is significant as it critically impacts the quality of prosthetics we can develop and the level of patient care we can provide.

Prior to the partnership, we would make components from wood or recycled plastics. Wooden components are heavy, cannot be exposed to large amounts of water due to rot, and are susceptible to rat attacks. For patients such as farmers, who are required to work outside in all weathers, wooden limbs are particularly impractical and limit their ability to perform tasks.

Creating components from wood is also a long process as fittings need to be attached using glue which can take days to set, meaning patients could sometimes wait up to three weeks or a month to be discharged. The components sent by Legs4Africa have significantly reduced the time

## In sub-Saharan Africa 1.7 million people are in need of an artificial limb to help them live independent lives."

technologists require to create prosthetics for patients as they provide a better fit. This means we can discharge patients in two to three days and provide services to a greater number of patients. The finished prosthetic is also cosmetically more appealing as they reflect the true contours and shape of what a limb looks like. For example, the recycled SACH feet have toes. These finishing touches are important for patients to identify and recognise their prosthesis as a limb.

The partnership with Legs4Africa has been a blessing after we had gone through the hardship of using locally made components. We are now using components that can be recognised on an international level.

## Passing on cutting-edge techniques

The partnership has also enabled me to train students in cutting-edge techniques in prosthetics and orthotics technology. Most importantly, this includes bubble draping. I was introduced to this technique during my Professional Fellowship and was given the opportunity to learn more through practical training sessions.



Jose, one of Henry's patients, received a knee prosthetic limb after being involved in a road traffic accident



Henry together with the other Professional Fellows at the University of Salford

Bubble draping is a technique used to make sockets for the lower limb using plastic. The plastic is heated, moulded, and cooled, and then cut to make the socket shape fit to the patient's stump. Bubble draping is a clean and smart technique and takes approximately 1-2 hours to create and fit to a patient. To conduct bubble draping, we require a consistent supply of the appropriate plastic and equipment, which Legs4Africa also provides.

### Receiving international recognition

The workshop at MNRH is now recognised for training and prosthetic limb fitting at a national, regional, and international level. As a result, the workshop facilitates placements for international students to learn how our work is managed and how we produce and fit high-quality prosthetics. This includes an ongoing student exchange programme with Knowledge for Change.

Of course, challenges remain. As a unit, we have some machines and buildings that are now wearing out, however we hope to receive support from MNRH to address these. We would also like to conduct more outreach programmes for those who cannot travel to the workshop, as we do not have adequate accommodation or transportation for these patients to stay at MNRH whilst their prosthetics are fabricated and fitted. We have, however, obtained a small room for patients who can travel but require accommodation.

Looking to the future, I hope to share further knowledge and training with the next generation of technologists at MNRH and for the workshop to continue to provide new and advanced technology and services through our partnerships with Legs4Africa and Knowledge for Change.





## When life gives you landfils

Commonwealth Alumnus Jessica North describes how she is helping Australia's landfills generate renewable energy, while simultaneously building a more femalefriendly workplace, as CEO of LGI.



Jessica North

1999 Commonwealth Scholar

Canada

MSc Environmental Science

University of Otago, New Zealand

LGI Limited was founded in 2009 as a private business providing landfill gas management services. We build, own, and operate renewable power stations on landfills, utilising the biogas extracted from landfills to generate renewable energy.

LGI operates eight power stations, delivers 26 landfill gas management projects, and designs and manufactures equipment. Through our work, we participate in the Australian Government's Emissions Reduction Fund (carbon abatement programme). Biogas from landfills is approximately 50% methane, a greenhouse gas (GHG) recognised as a major contributor to global warming. Through the combustion of the biogas, LGI achieves carbon abatement credits (financial credits awarded to carbon abatement and sequestration projects) that are tradable in Australia's carbon market.

### **Dealing with the legacy** of landfills

80% of rubbish generated in Australia is distributed to over 30 large metropolitan-based landfills, but there are over 1,000 landfills throughout the country, and many do not actively manage their gas emissions.



"We are not a pro-landfill company, but we deal with the legacy of landfills. None of us want to see landfills in our future, but its dealing with an issue and turning something that is contributing to climate change into an opportunity that can help us move away from damaging greenhouse gases. And it's such a low hanging fruit."

# There's a huge untapped resource of exceptional professional women who simply cannot find a workplace where they can achieve that flexibility."

Most landfills are owned by local councils. Through the expansion of regional areas in Australia, smaller councils have also developed smaller regional landfill sites, which can be considered as marginal for a landfill gas-to-power project.

LGI seeks to provide that opportunity through the design and engineering of suitably scaled solutions. This includes providing engineering equipment that is sensitive to extreme weather conditions that may impact operations in different regions, and providing long-term, alliance-type contracts. These contracts are transparent agreements that enable councils to work collaboratively with LGI, with both parties profiting from renewable energy generation and experiencing and responding to unexpected challenges together.

In Australia, most regional landfills have no regulatory obligation to manage their gas emissions. It is therefore important when approaching councils to make clear that they are not required to make significant investment upfront to develop on-site power stations, but they have an incredible opportunity to produce renewable power in their region and contribute to carbon abatement.

It is important to note that we are not a pro-landfill company, but we deal with the legacy of landfills. None of us want to see landfills in our future, but we are dealing with an issue and turning something that is contributing to climate change into an opportunity that can help us move away from damaging GHGs. And it's such a low hanging fruit. For me, the joy is in getting these solutions that have all these co-benefits and dealing with this legacy issue.

## Becoming the female CEO of a listed company

I joined LGI in 2012 specifically to grow the carbon portfolio. Between 2013-2017, I chaired the company Board of Directors, working effectively as an Executive Director. During this period, I supported different portfolios and provided technical assistance, drawing on my background in environmental chemistry, landfill gas processes, and management. Following this period, in 2017, I was invited to take on the CEO role as an Executive Director, supporting the existing Founder and Managing Director.

In 2022, due to our rate of growth, we decided to list the company, enabling LGI as a private company to sell shares and stocks on the public market. In my role, I oversaw the company through the Initial Public Offering (IPO) route. It was never the objective of the company to become publicly listed, however due to uncertain policies around renewable products and environmental services, listing was the best option to enable LGI to pursue projects that would support the greater penetration of renewable energy into Australia's energy market.

In listing the company, I became one of a very small number of female CEOs of a listed company in Australia.

### Supporting women in the workplace

When I first started as CEO, it felt lonely. I joined a CEO mentor group and out of 14 members only 3 were women. I found the personal and professional challenges shared interesting – not once did male members mention family matters as a challenge. Typically, women take on the majority of household and childcare responsibilities, which can include time to collect children from school, as well as responding to unexpected challenges, such as taking leave to look after a sick child.

There is a real lack of recognition of the challenges faced by women and the ways in which workplaces need to be flexible to enable a supportive work environment. At LGI, I'm lucky to work with a sympathetic board and be in a position to raise these issues and suggest solutions. Our Managing Director has been an exceptional leader in promoting a more gender-diverse workplace.

Since 2013, we have ensured that as roles emerge in the company, if there is the possibility for them to be fulfilled in a part-time or flexible capacity, we promote them through careful wording in advertisements, and mum's networks. There's a huge untapped resource of exceptional professional women who simply cannot find a workplace where they can achieve that flexibility. Now, almost 40% of our staff across all levels are women and the majority have part-time or flexible working arrangements.

Without women in leadership and executive management roles, achieving change to support women in the workplace will not be possible. I'm so proud of LGI for embracing this.



## Thinking global, acting local

Ali Gohar Qazi combines global perspectives with local approaches to investigate how mobile technologies can transform the educational landscape in Pakistan.



Ali Gohar

2022 Commonwealth Split-site

Pakistan

PhD Education

University College London and Aga Khan University

The connections and knowledge base I have developed here will be vital in ensuring that the interventions I implement remain up to date within our changing world."

Ongoing or continuous professional development is essential for teachers to develop and maintain the knowledge base required to produce more powerful learning outcomes among their students. Research has shown that professional development is more effective and meaningful to teachers when it is content focused, involves active learning and collective participation, and when it is sustained in duration, instead of being top-down, episodic, or delivered as 'one-shot' training workshops.

In Pakistan, teacher training is still predominantly based on traditional modes of 'on-off' and top-down training. This is despite ongoing concerns about the quality of students' performance. When it comes to mathematics, for example, various research studies have identified 'low teacher quality' as the primary factor responsible for low levels of student performance. While many techniques and reforms have been introduced in Pakistan to uplift the quality of teaching, due to various reasons, they have not yet been successful. What is lacking is the provision of continual, on-the-job professional support available to teachers across Pakistan, including in its most rural areas.

My doctoral research is centred around exploring ways to provide professional development to primary-level teachers in rural areas using mobile technologies. As a Split-site Scholar enrolled at the Aga Khan University in Pakistan and at University College London (UCL) in the UK, I hope to combine my IT background and the local expertise collected in liaison with Pakistani education experts and rural primary school teachers with the global perspectives and research offered by UCL's world-leading education department.

I came across the issues surrounding teacher-training in Pakistan first-hand while working for the education NGO, Development in Literacy, as the officer responsible for teacher training and education projects involving ICT. This exposed me to the costs of in-person training, as well as the limitations it posed. Limitations included issues in reaching out to teachers living in rural areas who often did not have the means or capacity to travel to central training centres. This was particularly true for women teachers. When I thought about employing our teaching methods to improve the quality of teaching in Pakistan at scale, I could see that it just would not be possible to reach out to the thousands and thousands of teachers that make up our educational landscape. This is when I started to explore the idea of using mobile technologies for this purpose. Mobile technologies have become almost ubiquitous, so why not use them to transform educational delivery?

Upon starting my PhD at Aga Khan University, Institute for Educational

### Thinking global, acting local



Development (AKU-IED), I collaborated with a US-based software company to design a cloud-based mobile delivery system and implemented it among 328 randomly selected primary school teachers at public and private schools in the Sindh province of Pakistan.

As a next step, to deepen my research around ICT-related teacher development and develop an even stronger foundation for my data-related work, I arrived at UCL's Institute of Education in March 2022. At this stage, I had just finished collecting data from the field and was ready to start processing it and writing up my PhD.

### Widening my research base

Since arriving at UCL, I have had the opportunity to access high-quality, research-based education, cutting-edge facilities, a vibrant social life, and a global community of researchers and thinkers. UCL is known as London's 'Global University', which means that I have been able to integrate global perspectives into my research that span across the developed and developing world. These perspectives have allowed me to deepen the theoretical understanding and concepts that underpin my PhD research, as well as the recommendations that will come out of it. I feel like I have become a different person with an expanded worldview, enhanced scholarly development, and nurtured leadership qualities.

I have also had the privilege of joining UCL's Knowledge Lab which brings together academics from the fields of mathematics, technology, psychology, design and more, to employ a multidisciplinary lens to solve societal challenges using media and technology. Working with this diverse group of minds has helped me to unpack and further develop my research base, as well as grow more familiar with the most up to date technological interventions out there, such as artificial intelligence mediated professional development. The connections and knowledge base I have developed here will be vital in ensuring that the interventions I implement remain up to date within our changing world.

### **Building bridges**

The linkages that exist between my home university in Pakistan and UCL are what brought me here to the UK. However, since being here, these connections have stretched and expanded.

The Scholarship has helped me to build bridges with other universities in Pakistan, who have since invited me to contribute to their journals as a reviewer, thanks in large part to the international reputation that UCL holds. This has enabled me to expand my network within the education domain in Pakistan, which I believe will be important when implementing my research. These universities also often ask me about the Commonwealth Split-site Scholarship programme and have since promoted it among their students, thereby laying the groundwork for future collaborations between more universities in Pakistan and the UK.

At the supervisor level, linkages between my home and host university did not exist before my Scholarship, but now all five of my current supervisors in Karachi and London are pulling me in the same direction and collectively helping me to successfully complete my PhD.

## Mobile technologies have become almost ubiquitous, so why not use them to transform educational delivery?"

### **Delivering impact**

The contacts I have now built up across UCL and at other UK and Pakistani universities mean that I have more knowledge sources to draw upon once I take my research forward and start implementing it.

My plan is to exit the NGO world and enter government as an advisor on the policy and strategy of Pakistan's digital innovations in the field of education. I believe that this is where I will be able to make an impact at scale and that the local and global perspectives I have now gained will be key to helping the government make informed policy decisions.

I am of course aware that lots of (technology-mediated) professional development programmes fail. I am also aware that one of the key factors affecting the impact of these technologies and programmes is the design of the interventions. It may be that there is money behind a certain intervention but without the right theoretical principles and research behind it, these technologies are unlikely to create an impact. This means we must be very vigilant while designing the intervention so that the solution is contextually relevant, demand-driven, needbased, collaborative and available anytime, anywhere. This is why I have chosen to focus my PhD research on creating a solution that is underpinned by an expansive knowledge base.

If successful, my research and the resulting mobile learning intervention could be applied far beyond Pakistan's teachers and beyond the country's borders itself. This is especially relevant in a post-COVID world, alongside the other challenges which require students to learn online – from Pakistan's floods to global conflicts. Developing effective ways for teachers and students to continue to learn using technology-driven environments and modalities will be essential to achieving Sustainable Development Goal 4: Quality Education.



## Solving the health workforce conundrum







Roomi Aziz describes how the global connections made through her Commonwealth Scholarship are equipping her with the tools to solve the health workforce crises confronting Pakistan and other low and middle-income countries.

Universal health coverage (UHC) means that all individuals and communities receive the health services they need without suffering financial hardship. It is one of the targets that countries across the world adopted as part of the Sustainable Development Goals (SDGs). The World Health Organisation (WHO) stipulates that countries need at least 4.45 physicians, nurses, and midwives per 1000 people to be able to achieve UHC. In a 2017 Pakistan Ministry of National Health Services report, it was estimated that Pakistan barely had one doctor per 1000 inhabitants. This shortage is mirrored in many African and Asian countries.

I first experienced the consequences of the health workforce crisis in Pakistan when I started working as a doctor in the public sector. Later, I experienced and dealt with its system-wide ramifications while working at the provincial and federal government level and with WHO Pakistan and related UN partners at the policy level. Confronting the realities of this issue, and the lack of evidence surrounding it, propelled me to apply for a PhD in Public Health with a focus on the health workforce crisis. Today, it is the network and connections that I have built since starting my Commonwealth Scholarship that are influencing the shape of my PhD research and postgraduate experience.



### Roomi Aziz

Pakistan

PhD Public Health

2021 Commonwealth Scholar

University of Essex

women physicians were working. On top of this, Pakistan continues to face one of the highest maternal and neonatal mortality burdens globally a fact which researchers have recently started connecting to the lack of women in health leadership positions or inside policy circles.

Since starting my PhD, however, the focus of my research has expanded with the help and influence of my two supervisors; one of whom has a background in sociology and human rights, and the other having worked in WHO regional offices before joining academia. Together, they give me a very wholesome coverage of the issue at hand.

Beyond examining the health workforce crisis as just a supply and demand issue, I am now looking at it as a multi-layered situation that includes the shortages and their contributing factors, but also the inadequate skill mixes and their determinants. My research answers questions like: Why is labour maldistributed? How are external factors influencing this? Why are staff members from certain ethnic or socioeconomic backgrounds clustering in particular healthcare specialties or regions/localities? How can we change work patterns and processes to ensure we make the most of the workforce that we have?

### **Expanding my** perspective

In the beginning, I was looking at the health workforce challenges primarily from a gender lens. Perhaps my own lived experience as a woman working in health or my work with the Women in Global Health movement factored into this, but the numbers also speak for themselves. Of the 271,560 doctors registered in Pakistan since 1952, 47 percent are female. But until 2014, only half of these registered

### Solving the health workforce conundrum



Long and lasting work relationships are like long and lasting friendships. It takes a lot of trust to build up that relationship. But once you've invested that time, it pays off personally as well as professionally."

### People make systems

Coming to study at the University of Essex was driven by my belief that there are systems (or institutions in this case) that make people, but there are also people who make systems.

I first applied for my PhD at Queen Mary University of London (QMUL). However, once accepted, I was informed that my proposed supervisor had moved to the University of Essex and that I had the option to move with her or continue with my original choice of institution. Despite QMUL being viewed as a higher-ranking university for my subject at the time, I decided to opt for the University of Essex and I am so glad that I did. Ever since I have been here, I have been part of so many exciting projects – and much of that is down

to my supervisor and the professional network she nurtures.

Thanks to this network at the University of Essex, I have had the opportunity to teach Master's classes as an assistant lecturer for the health systems and globalisation module. I have also become actively involved in a National Institute for Health and Care Research (NIHR) funded global health research project on migration, mental health, and gender-based violence. This multidisciplinary project has exposed me to a wealth of global networks, from the Tata Institute of Social Sciences in India and the University of the Witwatersrand in South Africa to the University of Oxford in the UK, alongside critical non-state policy actors like Health Poverty Action.

## Making collaborations work

Through this NIHR research group project and other networks that I have been a part of, I have tried to decipher the tips and tricks that are key to making these kinds of knowledge collaborations work. I think it comes down to three anchors. First, you need someone who is the driving force behind a shared goal and leads with that kind of infectious and energising aura. Secondly, engaging organisational partners in different contexts/countries requires a 'hub-and-spoke' approach, whereby partners are linked and simultaneously empowered to lead their relevant subdomains/sub-partners. Thirdly and finally, long and lasting work relationships are like long and lasting

### Solving the health workforce conundrum



▲ Roomi facilitating a high-level forum on gender equity in health workforce, Lahore, Pakistan

■ Opposite: Roomi laughing at stories shared during community interviews for a UNICEF funded study on maternal health, Gujranwala, Pakistan ➤ Roomi facilitating a high-level forum on gender equity in health workforce, Lahore. Pakistan



# The more I meet these learned professionals from different walks and backgrounds, the broader my horizon grows"

friendships. It takes a lot of trust to build up that relationship. But once you've invested that time, it pays off personally as well as professionally.

I do feel that on this journey so far I have made friends for life, who will champion me and open doors for me.

## Realising what is possible

Learning about the different journeys of my fellow Commonwealth Scholars, other PhD fellows, university faculty members, and research fellows internationally has made me realise that the decisions I face regarding the shaping of my professional trajectory are not unique, and that I am not alone. This exposure has allowed me to see how people navigate their work challenges, maintain their moral

compass, stay true to their purpose in the face of changing times, and the ways in which these experiences have both tested and rewarded them. The more I meet these learned professionals from different walks and backgrounds, the broader my horizon grows. Most importantly, this experience is helping me understand the kind of work ethics and practices I want to adopt, and the kind of priorities I want to set for the rest of my life.

Although I am still figuring out my next steps, I know that I don't want to simply return to work in a similar capacity to before and risk being pulled into lots of different directions. Instead, I want to remain in my research niche, but in multi-functional ways by offering technical expertise on the topics I am deeply familiar with and passionate about, in an attempt to

bridge the chasm between academia and policymaking.

I strongly feel that in addition to my PhD, my association with the Commonwealth Scholarship will immensely help me in this direction. By virtue of selecting me, the Scholarship endorsed my professional and academic profile, and I have already started seeing how this is opening doors for me and changing the attitudes of people I have worked with in the past. This acknowledgement and endorsement will help me get into critical policy spaces. I daringly hope that this will allow my research to contribute to Pakistan's health policies and help us take the necessary leaps towards developing a robust, sustainable, diverse, and well-distributed health workforce.





# Above and beyond Bitcoin



Commonwealth Scholar **Jemimah Muthoni Maina** shares her research into blockchain technology and how it can be applied in humanitarian supply chains to significantly improve emergency preparedness, response, and recovery.



Jemimah Muthoni Maina

2015 and 2021 Commonwealth Scholar

Kenya

PhD Robotics

Sheffield Hallam University

According to the UN (2019), humanitarian crises currently affect more people globally and last longer on average than ever before. These crises call for adequate emergency preparedness systems as threats such as climate change, food insecurity, and urbanisation continue to grow. A report by the United Nations Office for the Coordination of Humanitarian Affairs (2019) asserts that at least one individual out of every 70 worldwide is currently trapped in a humanitarian crisis.

My home country of Kenya has a history of severe and repeated crises and a recurrent record of humanitarian intervention.
In 2021, with the support of a Commonwealth Scholarship, I embarked on a PhD in humanitarian supply chain management at Sheffield Hallam University to help me improve how my home country responds to these repeated crises.

## Studying humanitarian supply chains

My PhD focuses on how we can improve emergency preparedness and response and strengthen countries' resilience to disasters by coordinating various actors in the humanitarian supply chain through blockchain technology. Ultimately, this can help us to achieve the



# Research on the acceptance of blockchain technology is required to address the perceived risks before scaling up."

Sustainable Development Goals of zero hunger and access to clean water. Humanitarian supply chain management entails the planning and management of sourcing, procurement, storage, and logistics activities and it involves coordinating different actors such as suppliers, governments, logistics providers, donors, and beneficiaries.

Although collaboration in humanitarian supply chains is well represented in academic literature, very few papers have focused upon Kenya's needs. Moreover, we lack studies which broadly and methodically address relief chain coordination through blockchain technology integration. According to the Government of Kenya (2019), disaster response in Kenya is inhibited by an inadequate policy, legal, and institutional framework for coordination that can reduce disasters and crises. My research asserts that blockchain technology can help improve Kenya's humanitarian supply chain coordination, as well as the flow of information and finances.

There are many stakeholders who must coordinate in a humanitarian supply chain. This includes the affected local population, the government, and non-government organisations (plus their suppliers and logistical service providers of medical resources and food items). To coordinate effectively, each stakeholder must trust that they are working towards a common goal. This is where blockchain is particularly helpful. By making information about disasters accessible to all stakeholders instantly, blockchain improves the visibility, accountability, and security of the humanitarian supply chain. It therefore has the potential to improve the structural efficiency issues faced by the humanitarian aid sector.

### Aid through blockchain

Blockchain technology has the potential to be applied in far more industries than just the cryptocurrency industry it is best known for through Bitcoin. I am particularly interested in how it can be applied to increase the visibility of humanitarian aid items such as food, medical supplies, and funds, and ensure that they reach those most in need during a crisis.

Blockchain technology is a distributed, decentralised ledger which stores information chronologically in real-time within electronic groups, or 'blocks', which are cryptographically linked together. It guarantees security

without the need for a trusted third party. Blocks have certain storage capacities which close once filled and link to the previously filled block, forming a chain of data. This is known as the blockchain.

Several studies have already demonstrated the potential of blockchain to transform the humanitarian aid sector. In 2018, Kenya Red Cross conducted a pilot study on how blockchain could be integrated with existing digital cash transfer services, such as the mobile money transfer system M-Pesa. Digital cash has already been established as an effective way to meet the needs of beneficiaries by giving them freedom of choice in terms of how they spend aid money. By integrating this digital cash into a blockchain, Kenya Red Cross found that transaction costs could be reduced, the security of the beneficiary and their transaction records could be enhanced, and NGOs could receive more visibility over which beneficiaries have already received funds. Integrating blockchain into digital cash services could also help individuals who do not have a registered mobile number or bank account, such as refugees. By collecting the biometric information of such individuals and giving them smart cards, which are linked to the blockchain, they could bypass the need to provide NGOs or governments with a mobile number or bank account in order to receive aid. In certain circumstances, such information could also be shared with governments to reconnect missing people with their relatives.

### Assessing the validity of blockchain

My PhD thesis will design a framework, or road map, that will guide the implementation decision of blockchain in the Kenyan humanitarian supply chain so that we can reduce the impacts of disasters. This framework involves five stages from conducting a feasibility study to performance measurement after the actual implementation. Prior to blockchain implementation, it is crucial for stakeholders to conduct a feasibility study to identify why they need it, how the technology works, and how it can help.

My research will employ a mixed method approach, which involves the use of both quantitative and qualitative methods of data collection and analysis. To validate my framework, I will involve a sample of the key stakeholders of the Kenyan humanitarian supply chain

### **Above and beyond Bitcoin**



who are the key actors of the proposed humanitarian blockchain network that I have designed (NGOs; the government, both national and county government; and development partners).

The sample participants will be asked questions about the five stages in my framework to test its overall validity. In my research, I have provided critical dimensions for a blockchain readiness assessment (such as having an appropriate strategy and resources in place), gauged across four levels ranging from beginners who have very little awareness about blockchain, to experts who are already adopting blockchain extensively in their organisations. Through structured interviews, I aim to gain a deeper understanding of how blockchain is currently being used in organisations through the assessment of the above dimensions and how organisations perceive the risks involved in implementing it. I will also explore how previous technologies were evaluated for adoption as a comparison. I have also categorised key drivers such as trust and security that would influence the adoption of blockchain by humanitarian stakeholders and these will be tested through the surveys.

Blockchain technology has great potential for transforming the humanitarian supply chain sector. Research on the acceptance of this technology is required, however, to address its perceived risks before scaling up its use. Humanitarian stakeholders also need a blockchain maturity tool to gauge which requirements they should meet before fully adopting the technology. My PhD promises to reveal all of this and more. Once the framework is finetuned and possibly implemented, I believe that it will bring more efficiency, transparency, and visibility to Kenya's humanitarian operations.

## Connections made through my Commonwealth Scholarship

During my Scholarship I have interacted with and learned from other students from many different countries including India, Brazil, Dubai, Kenya, Canada, Nigeria, and Australia. I also value the close relationship I have with my supervisors from Sheffield Hallam and the mental health support of my community, including my UK university course friends and my local church, all of whom help me avoid the sense of isolation that often accompanies a PhD.

I remain in close contact with my university contacts in Kenya with whom I am helping develop a Master's in Logistics and Supply Chain Management curriculum. Thanks to the software programmes available at Sheffield Hallam but not in my home country, I am currently also training university staff in Kenya through seminars on how to polish their digital skills.

Attaining a Commonwealth Shared Scholarship in 2015 was a personal turnaround point for me. This was significant as I am currently the only holder of a Master's degree and the only candidate who has studied abroad from within my village. I have since become an ambassador for Commonwealth Scholarships by raising awareness of the programme among university students in Kenya and the UK and helping them with the application process. I am proud that several have since submitted their own applications and a few have been successful.

After my Scholarship, I will continue lecturing and conducting research. I will also offer consultancy services to the government and industry practitioners to help the under-served communities in Kenya and improve the quality of life of countless families.

# New research, new knowledge

The CSC Research Impact Awards (RIA) celebrate the research and publication endeavours of doctoral Commonwealth Scholars and Alumni at the early and mid-career researcher stages. The annual awards are offered through two streams, with an annual topical prize also available to entrants.

In this article, the winners of the 2022 CSC Research Impact Awards and two fellow finalists summarise their pioneering research.

## The Taylor & Francis CSC Research implementation and uptake stream

Olajide Olusola is the winner of the 2022 Taylor & Francis CSC Research implementation and uptake stream for his article 'Investigating the effect of GaCl3 incorporation into the usual CdCl2 treatment on CdTe-based solar cell device structures', published in *Current Applied Physics*.

My research investigates the growth of compound semiconductors as suitable solar cell materials which can be used in clean renewable energy sources.

The materials were developed using a low-cost electrodeposition growth technique. To improve the efficiency, reproducibility, and scalability of these materials for mass utilisation, the semiconductors were subjected to surface treatment using different chemicals to remove defects. Based on my experimental investigations, a chemical combination to treat the top surface layer of the device structure and enhance its efficiency was identified.

Following the publication of my paper, the Federal University of Technology, Akure (FUTA) in Nigeria has created a platform to continue my solar cell research, resulting in the growth of other semiconductor materials which have the potential to be used for solar energy applications. This ongoing research at FUTA has also led to the Condensed Matter Laboratory being equipped with state-of-the-art facilities to ensure the progress of thin films electrodeposition.

Undergraduate and postgraduate students at the university are now trained in the technology to develop thin film semiconductor materials for electronic device fabrication, solar energy generation, and utilisation. As a result of this enhanced training, some graduate students have received research grants for further study in the field of solar energy and material science.

This ongoing research into materials for solar cell applications will contribute to solving current global issues, such as environmental pollution caused by fossil fuels, and support UN Sustainable Development Goal 7 by implementing affordable and accessible clean energy sources.









Olajide Olusola

2012 Commonwealth Scholar

Nigeria

PhD Environmental and Sustainability Systems

Sheffield Hallam University

The 2023 Research Impact Awards will open in June. All those eligible to apply will receive further details via email. For more information on the awards, visit cscuk.fcdo.gov.uk/csc-research-impact-awards



### Mirriam Makungwe

2019 Commonwealth Split-site Scholar

Zambia

PhD Integrated Soil Fertility Management

University of Nottingham and the University of Zambia





### Ikpaya David Ikpaya

2017 Commonwealth Rutherford Fellow

Nigeria

Post Doc. Remote Sensing Instrumentation

University of Surrey







### **CSC Research output stream**

Mirriam Makungwe is the winner of the 2022 CSC Research output stream for her article 'Assessing land suitability for rainfed paddy rice production in Zambia', published in *Geoderma Rejional*.

Rice is one of Zambia's staple food crops and is a profitable smallholder cash crop. It has the potential to contribute significantly to increased incomes and employment amongst rural producers. However, it is the only staple crop in Zambia for which domestic production does not meet or exceed domestic demand.

Low agricultural productivity is one factor contributing to this issue and presents a critical challenge to achieving food security and improving rural livelihoods in Zambia and the broader geographical region situated south of the Sahara.

My research investigates the reasons for low agricultural productivity in Zambia by identifying land with the greatest potential for rice production and land-based limitations which might be overcome by improved management. The aim of my study was to develop a land suitability index for rainfed and irrigated rice production, using expert opinion and published studies based on climatic, topographic, and soil properties.

Land suitability was evaluated using a method which accounts for multiple important factors and considers their joint effect in terms of a hierarchical model of constraints. The suitability classes were ranked according to the Food and Agricultural Organization (FAO) land suitability classification. Four land suitability maps were produced, outlining the suitability of: rainfed paddy rice, rainfed upland rice, irrigated rice, and irrigated paddy rice.

The results of my research showed that there is limited potential to produce rainfed paddy, rainfed upland, and irrigated paddy rice on land classified as highly and moderately suitable for rice production. However, there is great potential for irrigated upland rice production.

My findings have significant implications for the Ministry of Agriculture in Zambia which manages the country's National Rice Development Strategy (NRDS). Further exploration of the irrigation of upland rice production could help expand the production of rice and contribute towards UN Sustainable Development Goal 2 in achieving food security.

## Annual topical prize - clean energy, air and oceans related research

Dr Ikpaya David Ikpaya is the winner of the 2022 RIA topical prize for his clean energy-related research. His article, 'Development of SHACS: Progress on Channel-1 Prototype Demonstrator', is published in *IEEE Transactions on Geoscience and Remote Sensing*. The research was initially funded by the National Space Research and Development Agency (NASRDA), Nigeria.

My research focused on designing and building a spaceborne atmospheric carbon dioxide (CO²) monitoring instrument known as SHACS (Spatial Heterodyne Atmospheric Carbon-dioxide Spectrometer), which is aimed at mitigating the effects of climate change. CO² is the primary atmospheric component of the global carbon cycle and the principal manmade greenhouse gas responsible for the increase in global temperatures.

My research observed the difficulty in determining the extent of carbon fluxes in the tropics, especially in regions around the equatorial zone, due to the sparseness of in-situ CO<sup>2</sup> measurement networks. I identified that knowledge of these regional fluxes and processes could be significantly improved through additional space-based observations and terrestrial observatories.

With various countries seeking to reduce carbon emissions, the SHACS instrument provides a cost-effective means for monitoring atmospheric CO<sup>2</sup> levels globally. The instrument fits into a compact microsatellite platform and can provide high-quality hourly measurements of atmospheric CO<sup>2</sup> concentration. These space-based observations can monitor subtle changes in atmospheric CO<sup>2</sup> and inform policymakers of progress against carbon targets.

The SHACS instrument also has the potential to be operated as a network of CO² monitoring hubs around the tropics to improve monitoring of CO² and carbon emissions and support UN Sustainable Development Goal 13 in taking urgent action to combat climate change.

### **Highly commended entries**



### **Teale Phelps Bondaroff**

2009 Commonwealth Scholar

Canada

PhD Sea Shepherd Conservation Society

University of Cambridge



## The Taylor & Francis CSC Research implementation and uptake stream

Dr Teale Phelps Bondaroff was highly commended by the judges for his paper 'Characterising changes in a decade of Mexican sea cucumber crime (2011–2021) using media reports', published in SPC Beche-de-mer Information Bulletin.

I am the Director of Research for OceansAsia, a marine conservation organisation based in Hong Kong. My interest in sea cucumbers stemmed from our work investigating the demand for luxury seafood products and what species may be impacted if demand for shark fins declined. This resulted in my first research paper on sea cucumber wildlife crime – a rapidly growing, lucrative and clandestine transnational crime – in India and Sri Lanka. This first paper contributed to increased public awareness and action taken against smugglers and poachers by authorities.

My latest research paper on Mexican sea cucumber crime aimed to develop this work and expand global attention of sea cucumber crime beyond a specific geographic area or country, to expose the global scale of the problem. My paper, written with an international team of researchers, studied news stories covering incidents of sea cucumber crime and helped provide a better understanding of the issue in Mexico. I am now working with academics around the world to refine and extend the research method used so it can be applied to other regions and species. I am also completing a book chapter that explores the issue more broadly.

I hope my work will increase awareness of sea cucumbers, highlight the wildlife crime targeting them, and help drive conservation efforts to protect these important, yet not widely known, animals.

### Aji Alex Moothedathu Raynold

2017 Commonwealth Rutherford Fellow

India

Post Doc. Gene Therapy for Tissue Engineering and Repair

Queen Mary University London



### **CSC Research output stream**

Dr Aji Alex Moothedathu Raynold was commended highly by the judges for his paper, 'Competitive binding and molecular crowding regulate the cytoplasmic interactome of non-viral polymeric gene delivery vectors', published in *Nature Communications*.

Ribonucleic acid (RNA) therapy is the treatment or prevention of disease using RNA-based molecules. RNA is a nucleic acid present in all living cells that has structural similarities to DNA and carries messenger instructions from DNA to create important cell proteins. Since the 1990s, RNA therapeutics have been successfully used in cancer therapy and more recently in the development of COVD-19 vaccines.

RNA or DNA cannot enter the cells independently but require a carrier, either viral (eg: adenovirus) or nonviral (polymers, lipids etc.), for efficient intracellular (occurring within cells) delivery. Non-viral carriers are safer due to their non-immunogenic nature. My article investigates the fate of polymer brush nanoparticlegene complexes, a surface coating of polymers, within the cellular environment. Polymeric nanoparticles are manipulatable materials and have the potential of reabsorption in the body. The research focuses on the macromolecules facilitating release of the complexed genetic material from the nanoparticles.

We used small interfering RNAs (siRNAs) as a model genetic material to form polyplexes with the brushes. Using a model based on competitive binding, we quantified the impact of the polyplexes on molecules within and outside the cell responsible for facilitating the release of complexed siRNA.

The results identified that the primary regulator of RNA release is caused by competition from highly charged biomacromolecules. Our data also indicates that the presence of proteins associated with translation and transcription in our cells underlies a broader impact of vectors on translation.

My research findings are directly relevant to the increasing need to develop RNA vaccines enabling the improved design, efficiency, and safety of vectors used in RNA based therapy.

# The value of networks and collaboration for Commonwealth Alumni

Interpersonal networks are integral to enabling professionals and researchers to build new relationships, gain additional skills and exposure to new perspectives, and engage in collaborations to devise solutions to development issues.

Commonwealth Alumni have strongly indicated that they are actively engaged with these types of networks. In the CSC's 2021 Longitudinal Alumni Survey, almost all respondents indicated that they maintained contact with networks in the United Kingdom (97%), their home country (99%), third countries (96%), and with other Commonwealth Scholars, Fellows, and Alumni (94%).

Alumni were also asked in the survey to describe how they have made use of these networks and engaged in collaborations in both their professional and personal life. Just under half (45%) of the respondents provided details about the different types of peers and professionals they had been engaging with from across national and international bodies. Of those who provided comments about their networking activities, a strong majority (81%) reported that they have used membership-based networks, such as alumni networks (which the respondents developed during their scholarship) or professional networks, such as national and international registered associations, councils, and research clubs. One quarter (24%) of respondents also specifically cited engagement with interpersonal networks in their responses.

Alumni also talked about how they benefitted from these networks in their responses. One-half of the respondents shared examples where they found their networks useful, with professional collaborations (19%) and research (10%) being the most frequently mentioned activities. Communicating their work by taking part in conferences, presenting their research work, or publishing their work in peer-reviewed journals (9%), and getting grants and funding (8%) were also mentioned by respondents. Similarly, just under two-fifths of the respondents reported that they benefitted from both professional (19%) and personal (14%) skills development due to their networks, as well as providing skills development to peers through mentoring and capacity building (7%). The remaining one-tenth have reported progression both academically (5%) and in their careers (6%) thanks to their networks.

Finally, alumni have also shared examples where they have been able to deliver development impact through their networks, for example by collaborating with the public and private sector to develop skills that directly impact service delivery at local levels.

The networks have helped me to upgrade my knowledge by providing academic materials and research articles."

### The value of networks and collaboration for Commonwealth Alumni

"I have joined American Society of Clinical Oncology, International Association of Hospice and Palliative Care and Asia Pacific Hospice Network. Have published a research article in ASCO as a co-author. Have applied a grant for Home Care Service initiation and function & started the project in our Institute with that help. The networks have helped me to upgrade my knowledge by providing academic materials and research articles."

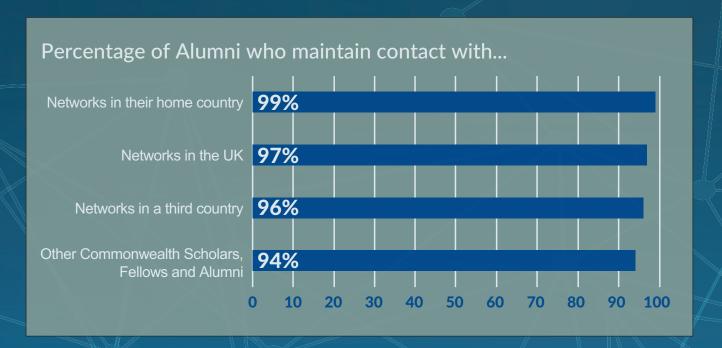
Dr Kabindra Bhagabati, 2015 Commonwealth Distance Learning Scholar "My Ghanaian professional networks have been most influential in my professional development so far. My personal and professional networks have gotten me involved in numerous projects (both public, NGO and donor-partner funded). These include the development of national guidelines for public health activities, supportive supervisory visits to regions and district health teams, as well as multi-country research projects."

Dr Joshua Arthur, 2014 Commonwealth Shared <u>Scholar</u>

"The networks I have joined during and after the scholarship are as follows: The Malawi Alumni association, The Malawi National network on Gender based Violence, Men for Gender Equality Now, Men Engage Alliance Africa, The African Women's Development and Communication Network, Regional Psycho-social Support Network, Mental Health and Psycho-social Support Network. Through these networks I have had joint projects with others for instance under the Mental Health and Psychosocial Support we have formed group inter-personal therapy in Schools with support from UNICEF."

Grace Mercy Nyirenda Banda, 2016 Commonwealth Master's Scholar

Overall, there is compelling evidence demonstrating how networks and collaborations add value for Commonwealth Alumni, both in terms of their personal and professional development, and increasing the reach of their work. Every year, hundreds of Commonwealth Scholars and Fellows study at UK-based institutions to build their skills and knowledge. However, the relationships that Scholars and Fellows develop during their studies and careers are an invaluable resource that they can continue to draw from and work with for the rest of their lifetime.



## **Alumni news**

The updates below (listed by year of award) summarise just some of the achievements of our global alumni. To let us know about your successes, email alumni@cscuk.org.uk

### 1996

Vinay Kumar Kapoor has launched the online live interactive teaching and learning portal, Jaipur Surgical Tutorial - Superspecialty (JST-SS), to support higher surgical trainees in the areas of surgery, surgical gastroenterology, and Hepato-pancreato-biliary surgery. (Academic Fellow from India, Cancer Epidemiology, King's College London)

### 2003

Fannie Lafontaine leads the Canadian Partnership for International Justice (CPIJ), which has received the Social Sciences and Humanities Research Council's 2022 Partnership Award. CPIJI supports the victims of international crimes in obtaining justice at the national level and at the International Criminal Court. (Scholar from Canada, LLM Law, University of Cambridge)

### 2009

**Teale Phelps Bondaroff** has been elected municipal councillor for the District of Saanich, British Columbia, Canada. (Scholar from Canada, PhD Sea Shepard Conservation Society, University of Cambridge)

### 2011

Chee Peng Hor was announced as one of Ten Outstanding Young Malaysians 2022 in the category of Personal Improvement and/or Accomplishment. Organised by Junior Chamber International Malaysia, the award recognises young Malaysians who have demonstrated exceptional achievement through their profession. Dr Peng also received the Bill and Melinda Gates Foundation Professional Development Award to present research findings at the International Congress on Infectious Diseases. (Distance Learning Scholar from Malaysia, MSc Global Health, University of Edinburgh)

**Dacia Leslie** has been awarded the UWI/Guardian Life Premium Teaching Award for Excellence in University Teaching. The award recognises and celebrates excellence in university pedagogical practice. (Scholar from Jamaica, PhD Criminology, Cardiff University)

### 2012

Tolulope Victoria Akerele is the inaugural winner of the Three Minute Thesis competition at Memorial University for her pitch, 'Building Inclusive Cities and Mobility Systems for Immigrants in Atlantic Canada' which draws on her current doctoral research investigating how transit systems that consider the needs of immigrants can enhance immigrant retention in Atlantic Canada. (Shared Scholar from Nigeria, MSc Transport Planning, University of Leeds)



Vinay Kumar Kapoor



**Chee Peng Hor** 



**Dacia Leslie** 



**Eucharia Nwaichi** 

### 2013

Patience Kerubo Kiyuka has received a US National Academies Eric and Wendy Schmidt Award for Excellence in Science Communication. The awards honour science journalists and research scientists who have developed creative, original work that addresses issues and advances in science, engineering, and/or medicine for the general public. (Distance Learning Scholar from Kenya, MSc Infectious Diseases, London School of Hygiene and Tropical Medicine)

### 2015

**Eucharia Oluchi Nwaichi** has been awarded the 2022 John Maddox Prize for engaging communities in conflict to research solutions to pollution in the oil fields of the Niger Delta. (Academic Fellow from Nigeria, Environmental Science, University of Nottingham)

### 2019

Vincent Obia has received the 2022 Association of Internet Researchers (AoIR) Best Student Paper Award for his paper, 'Matrix of Dependence, Postcolonialism, and Social Media Regulation in an African Context'. The paper was highlighted for its focus on digital media regulation and its application of a postcolonial lens. (Scholar from Nigeria, PhD Regulation of Online Broadcasting in Nigeria, Birmingham City University)

### **Obituaries**

### 1984

**Brian Flumerfelt** was an authority on the structure and function of the central nervous system and a professor of medical histology in the Department of Anatomy at the Faculty of Medicine at Western University for 35 years. His distinguished career included MRC scholarships, three years as Assistant Dean of Research in the Faculty of Medicine, and ten years as Chair of the Department of Anatomy and Cell Biology. He retired in 2006, becoming a Professor Emeritus. He passed away on 10 January 2023. (Medical Fellow from Canada, Anatomy, University of Cambridge)

### 2013

Esther Phiri was active in promoting Science, Technology, Engineering and Mathematics (STEM) to female students. She was part of the FemaleINSPIRES project funded by the Royal Academy of Engineering (UK) which seeks to bring together and encourage women working in STEM subjects and address the worldwide STEM gender imbalance. She was also part of the Transforming Energy Access - Learning Partnership, which brings together universities in 8 countries in Africa to develop renewable energy access. She passed away in September 2022. (Scholar from Malawi, PhD Renewable and Sustainable Energy, Loughborough University)

## **Alumni events**

August 2022-February 2023

### **In-country Events**

### Pre-departure briefings for 2022 Commonwealth Scholars

In August and September, the British Council, on behalf of the CSC, delivered a number of Pre-Departure Briefings to help new Scholars prepare for living and studying in the UK, and meet with other new Scholars and Commonwealth Alumni.



Pre-Departure Briefing - Zambia

### Welcome Home events

Between November and January, Commonwealth Alumni have welcomed returning Scholars and completing Distance Learning Scholars to their local alumni network. Events have taken place in India, Nigeria, Sierra Leone, Pakistan, Ghana, and Sri Lanka.



Welcome home event - Pakistan

### **Botswana**

A small group of alumni in Botswana attended a reception for Her Royal Highness the Countess of Wessex during her visit to Botswana in October 2022.

### Ghana

In January, alumni in Ghana attended an event on 'The role of climate change in sports development in Ghana' which aimed to raise awareness of climate change policies in Ghana and their application across a broad range of activities, including sport.

### India

Alumni in India took part in a panel discussion titled, 'Strengthening Health Systems and Capacity' in November 2022, where they unpacked the ongoing impact of COVID-19 and the importance of preparing health systems for future challenges. The event coincided with a visit by Emma Green, Deputy Director of Scholarships, Tertiary Education and Partnerships at the UK Foreign, Commonwealth and Development Office.



Alumni attending 'Strengthening Health Systems and Capacity' panel discussion, India

### **Pakistan**

Alumni in Pakistan took part in a roundtable discussion titled, 'Climate Change, Clean Air and Oceans' in February 2023, to discuss pertinent climate-related issues and adaptation strategies and solutions.

### Uganda

Commonwealth and Chevening Alumni in Uganda took part in a career guidance session for secondary school and university students in Kampala and Wakiso Districts in October 2022. They also attended a reception for Her Royal Highness Princess Royal during her visit to Uganda in October 2022.

### **Alumni Association activities**



Alumni facilitating Project Stand Up in Tanzania

### Canada

In August and December, the Canadian Association of Commonwealth Scholars and Fellows (CACSF) hosted two events bringing together Commonwealth Alumni living and working in Singapore and Washington DC, USA.

In November, CACSF hosted a reception for alumni living and working in Toronto to meet with visiting members from the Association of Commonwealth Universities.

### The Gambia

In September, the Commonwealth Scholars and Fellows Alumni Association-The Gambia (CoSFAGAM) held their first meeting to discuss priorities and next steps for promoting the association and connecting with alumni in-country.

### India

In August, the Indian National Alumni Association of Commonwealth Scholars and Fellows UK (ACSFIndia) launched their quarterly email newsletter, ACSF Bulletin.

### Nigeria

In October, the Commonwealth Scholars and Fellows Alumni Association Nigeria (COSFAN) held a two-day community engagement event on the topic, 'Developing girls participation in sports by creating new opportunities for an all-inclusive and level playing field,' in Ujoelen Community, Ekpoma, Edo State.

### **Tanzania**

In November, the Commonwealth Scholars and Fellows Alumni Association Tanzania (CSFAAT) collaborated with The Pink Box Initiative, a local organisation which seeks to empower women through menstrual hygiene and sexual reproductive health education, to deliver the event, Project Stand Up, which aimed to raise awareness of sexual violence against children at the school level.

### **Uganda**

In November, the Uganda Commonwealth Scholars and Fellows Alumni Association (UCSFAA) organised a mental health and psychosocial support workshop on alcohol and drug use at two schools in Gulu and via a radio talk show.

### **Zambia**

In December, the Commonwealth Alumni Association of Zambia (CAAZ) delivered a workshop promoting Commonwealth Scholarship and Fellowship opportunities for students at the Copperbelt University.

### **Regional Events**

The Commonwealth Scholars and Fellows Alumni Association Nigeria (COSFAN) and the Commonwealth Alumni Association, Sierra Leone delivered their second webinar in a series promoting Commonwealth Scholarship and Fellowship opportunities in October 2022

Alumni in Nigeria and Sierra Leone also attended a panel discussion titled, 'The Future of Accessibility and Inclusion for People with Invisible and Visible Disabilities' in December 2022.

### **Alumni** events

### **Development in Action Webinar Series**

August 2022

Turning barriers into possibilities

CSC theme: Access, inclusion and opportunity

Commonwealth Scholar Stephen Ojwan'g discussed his Master's research project on the development of parasports in Kenya. Stephen aims to formulate interventions and solutions to the common constraints limiting elite and grassroot sports participation for people with disabilities in developing countries

such as Kenya.

September 2022

Girls in STEM: A case study of a secondary school in Nairobi

CSC theme: Access, inclusion and opportunity

Commonwealth Alumnus Margaret
Kamau discussed the importance of
fostering innovative teaching and learning
approaches in Science, Technology,
Engineering, and Mathematics (STEM) for
marginalised girls in schools in Nairobi, Kenya
and the challenges faced by secondary school girls in

October 2022

this field.

Private eye care in Nigeria: A key to SDG 3?

CSC theme: Strengthening health systems and capacity

Commonwealth Alumnus Dr Omojeme Adomi discussed how eye health care is a key component of public health and examined the critical role of the private eye health sector, especially in countries like Nigeria where the lack of political

investment to address healthcare issues has weakened the public health sector.

November 2022

The viability of mandatory rehabilitation in Jamaican prisons

CSC theme: Strengthening global peace, security and governance

Commonwealth Alumnus Dr Dacia
L Leslie discussed the viability of
mandatory rehabilitation for prison
inmates in Jamaica and explored how
state capacity can be developed to
improve the intended outcomes of the
rehabilitative process.

December 2022

Building climate resilience in Small Islands

CSC theme: Strengthening resilience and response to crises

Commonwealth Alumnus Dr
Claire Durant explained how
climate change is negatively impacting
Small Island Developing States (SIDS) in the Caribbean
and how, despite their small contribution to global
green house gas emissions, SIDS must respond to the
challenges caused by climate change.

January 2023

Exploring impact through doctoral research

CSC theme: Science and technology for development





The winners of the 2022 CSC Research Impact Awards (RIA), Mirriam Makunge and Dr Olajide Olusola, discussed their winning research articles and the important role of research in addressing global challenges and contributing to sustainable development.

February 2023

Developing a spaceborne atmospheric CO<sup>2</sup> monitoring instrument

CSC theme: Science and technology for development

The winner of the 2022 RIA topical prize, Commonwealth Alumnus Dr David Ikpaya, shared his research designing and building a spaceborne atmospheric carbon-

dioxide monitoring instrument known as SHACS (Spatial Heterodyne Atmospheric Carbon-Dioxide Spectrometer), which aims to mitigate the effects of climate change.

## Scholar events

### **Leaders in Sustainable Development Programme**

With the aim of introducing Scholars to contemporary development issues and enhancing their skills in sustainable development practice, 18 workshops have been held between November 2022 and March 2023 on topics ranging from networking and fundraising to decision making and theories of change.

"The training empowered me and touched on the areas I was interested especially on how to approach networking according to a situation." - Mastering Networking, 2022 participant

"The content of the workshop will be with me throughout my life, and I will definitely suggest others due to its relevance and impact in various aspects of life" - Leadership Models and Decision Making, 2022 participant

### **Regional Network Events**

Regional Network Coordinators (RNCs) across 12 UK regions have been busy organising events and get-togethers for their fellow Commonwealth Scholars. In February and March they hosted the 'Writing for Development' Leaders in Sustainable Development Programme workshop at various regional locations across the UK. RNCs play a key role in sustaining the Commonwealth Scholarship community and bringing

together Scholars in their local university regions.



London Meet and Greet at Barbican Centre

November 2022

### London **Scholars Christmas** Meet-Up

In December 2022, 15 Scholars from London universities and 8 CSC Programme Officers battled the snow and travel disruptions to get together at the CSC's London office. They discussed making the most of their time in London, upcoming engagement activities, and plans for impact post-Scholarship.



November 2022





Chester

London Scholars Christmas Meet-Up

**December 2022** 

### Connect and Collaborate 2023

Over 300 Commonwealth Master's and PhD Scholars came together this February for the annual Connect and Collaborate event – the biggest event in the CSC calendar. It was a day filled with opportunities to network with fellow Scholars and special guest speakers, to explore the CSC Development Themes in depth and answer key development questions with expert panel speakers, and to hear from esteemed figures on some of today's most pressing issues.



February 2023

## **Get involved**

You can stay part of the CSC community through events across the Commonwealth, by promoting our Scholarships and Fellowships to potential applicants, by joining our alumni associations and other networks, and by keeping us up to date with your recent achievements and challenges.

### **CSC Evaluation and Monitoring Programme**

The CSC Evaluation and Monitoring team measure the outcomes and impact of Commonwealth Scholarships and Fellowships on individuals and institutions, as well as communities and societies by gathering data through longitudinal surveys, counterfactual studies, and case studies involving Commonwealth Alumni. This data is shared through reports to funders, on our website, on social media, and in publications. It also helps inform CSC policies and strategy. Alumni can get involved by taking part in:

We want to keep in touch after you have completed your Commonwealth Scholarship. To do so, we send out a follow-up survey every two years to enable you to share your recent achievements and challenges. Over a tenyear period, this also allows us to track your experiences over time and to report on the different outcomes and impacts of your activities.



Surveys sent via email



Focus Groups



Interviews



Diary Studies



Research Projects



The Alumni Advisory Panel

Your stories and the information you provide are often featured on the CSC website and in a wide range of publications, reports, and presentations, helping you to connect with and share your impact with a variety of audiences both within the UK and across the Commonwealth.

Scan to find out more about the CSC Evaluation and Monitoring Programme



### **Regional Networks**

Regional Network Coordinators organise in-person and virtual events and regional activities across the UK for Commonwealth Scholars and Fellows in the same university or region within the UK to connect and support one another. The regions represented are:

East Scotland Midlands
West Scotland Oxford
North-West England London
North-East England Cambridge

Wales South-West England
Northern Ireland South-East England

### **Knowledge Hubs**

The CSC's Knowledge Hubs provide a platform for Commonwealth Scholars and Alumni studying and working in similar disciplines to network and exchange ideas to support a shared sustainable development outcome under the CSC's six themes.

As a member of a Knowledge Hub, you can post news about your current work and research, share links to readings and publications, and ask and answer questions related to your work.

Scan to find out more about the Regional Networks



Scan to find out more about the Knowledge Hubs



### **Alumni Associations**

Meet and network with Commonwealth Alumni through your local alumni association. CSC alumni-run associations are present in the following countries:



### **Events**

Find out about upcoming CSC community events:





Scan to find out more about upcoming events





### Share your updates with us

We always love to hear from Commonwealth Scholars and Alumni via email or our social media channels about events you've been involved with, development activities you have undertaken, awards you have won, or papers you have published. Here are just some of the Scholars and Alumni we have featured on our channels this year thanks to the updates they shared with us:





For further details about these activities and more, visit www.cscuk.fcdo.gov.uk



### COMMON KNOWLEDGE

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Commonwealth Scholars sharing their stories of collaboration at the Connect and Collaborate Event in February 2023



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