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RSE The Royal Society of Edinburgh
KNOWLEDGE MADE USEFUL

ReSourcE

THE NEWSLETTER OF SCOTLAND'S NATIONAL ACADEMY

BUILDING TRUST

Professor Mutapi focuses on community engagement to improve health in deprived communities

ALSO IN THIS ISSUE:

Racism in academia | Equality at home | Disability and Covid-19 | RSE reaches out to Africa

Welcome to the Spring 2021 edition of *ReSourcE*. With initial rollout of a raft of vaccines well under way, there is a real glimmer of hope that we can soon start to emerge from the worst of the Covid-19 crisis, although we still have some way to go to ensure that all countries are equally well protected.

Although Covid-19 has impacted upon all our lives, it has further exposed and amplified the inequalities that exist within our society. Against that backdrop, this edition of *ReSourcE* takes as its primary focus issues of equality and diversity. In the pages that follow, you can read about the disadvantages experienced by some sections of society, both historically and exacerbated by the global pandemic. These have underscored the far-reaching impacts of inequality and the need to better understand and address these crucial issues. Members of RSE's Young Academy of Scotland (YAS), Debora Kayembe and Pinar Aksu, for example, emphasise the need to build resilience that is inclusive of every part of society, while Professor Francisca Mutapi expresses a need for community engagement in tackling systematic health inequality. Elsewhere, Professor Lynn Abrams considers inequality in the home through the lens of Covid-19, while Dr Erin Jessee, RSE research awardee, spotlights Rwanda's proud record of equality in parliament despite a recent troubled past. Finally, *The Last Word?* from Alan Cumming looks to society to overcome fears and embrace equality.

I hope you find this edition insightful and stimulating and, as always, we welcome your feedback and ideas for future editions.

Dr Rebekah Widdowfield
Chief Executive, RSE

ON THE COVER: RSE Fellow Professor Francisca Mutapi is Professor of Global Health Infection and Immunity at the University of Edinburgh.

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Funds for a better future

In February, the RSE launched two funding initiatives to help tackle two of the world's most urgent challenges: both aimed at researchers and academics, one was intended for those whose work has been adversely affected by Covid-19, the other for those investigating the impact of climate change.

The RSE Research Re-Boot (Covid-19 IMPACT) Research Grant provides financial backing for academics of up to £25,000 to restart existing research or kick-start new work. The fund was created to support anyone whose work has been disproportionately impacted by Covid-19 and applications were particularly encouraged from those who have taken on caring responsibilities due to Covid-19, or are disabled, LGBTQIA+, Black, Asian and Minority Ethnic (BAME) and/or Early Career Researchers (ECRs).

The RSE COP 26 International Climate Change Network Grant offered funding of up to £10,000 for existing research networks to assess the impact of climate change ahead of Scotland hosting COP26 in Glasgow later this year.

The response to both of the calls was extremely positive – there were 126 submissions for the Covid-19 IMPACT Grant and 13 applications for the COP26 International Network equivalent. Following assessment, successful applicants were informed and funds were issued in March.

Katherine's research post

In a bid to understand its history and specifically its colonial links with the African continent and slavery, the RSE has appointed Katherine Burns from the University of Edinburgh to undertake a scoping review to help provide an initial overview and to identify further research that may be required.

As a Scottish Graduate School for Arts and Humanities PhD intern, Katherine's work will draw on historical archives, discussions with current Fellows and African scholars facilitated via members of the RSE's Africa Working Group and from data held by various Scottish Higher Education Institutes (HEIs).

Katherine Burns

Her scoping work will aim to provide factual and accurate data with which the RSE can begin to understand this specific period in its history.

Professor Alison Phipps FRSE and Dr Christine Whyte, University of Glasgow, are providing mentoring support to Katherine whose findings will be shared in the public domain later this year.

More details of this research will be shared in future editions of *ReSourcE*. This work is considered to be a key initiative in support of the Black Lives Matter movement and will contribute to the RSE's ongoing work on issues of equality and diversity, human rights, refugee background scholars and 'people of culture'/BAME communities.

Positive thinking

A series of events featuring experts and well-known faces is looking at how Scotland can successfully emerge from the pandemic

The RSE's Post Covid-19 Futures Commission was established last May to help Scotland emerge as positively as it can from the pandemic.

The Commission has set up four working groups made up of Commissioners and other people representing a range of subjects and sectoral expertise, to consider the themes of Building National Resilience; Data, Evidence and Science; Inclusive Public Service and Public Debate and Participation. Each of these groups has its own programme of activities.

Highlights of the past few months include an interview between Kirsty Wark FRSE and actor, writer and comedian Janey Godley on her role in public messaging in the pandemic. This interview has been viewed more than 28,000 times on YouTube since it first premiered last December. A related panel discussion, '*Voices of Covid: Who Cuts Through and Why?*', featured Janey along with Professor Jason Leitch CBE, Scotland's National Clinical Director of Healthcare Quality and Strategy; Mona Siddiqui OBE FRSE, Professor of Islamic and Interreligious Studies at Edinburgh University; and was chaired by Professor Dame Anne Glover. It considered wider public messaging in Scotland and has also proven a popular video on the RSE's online channels published post-event.

Kirsty Wark and Janey Godley

A virtual roundtable discussion in March provided a safe space for the academic research community to better understand the priorities and objectives of journalists when reporting on Covid-19. Hosted by journalist and Fellow Jim Naughtie FRSE, it explored ways in which academic researchers and journalists can work together more effectively to communicate Covid-related data, analysis and commentary. It also examined what scientists want to get across to journalists when they are being interviewed.

March also saw the first RSE 'hack', an event which brought a variety of people together virtually from different backgrounds, working environments and areas of society to engage and address the question of '*How can we tackle the spread of "fake news" and build public knowledge and trust in sound science?*'. This was a great opportunity to trial a new format of digital problem-solving and to stimulate wider debate on the question, encouraging collaboration and consideration of the many dimensions to the question.

The Commission held fringe events at the Scottish Liberal Democrats and Scottish Greens spring party conferences to explore the issue of resilience in society, hosted by Professor Ian Boyd, FRSE Chair of the Building National Resilience Working Group. These events were well attended and offered the opportunity to have a conversation with policy influencers and stakeholders and raise the profile of the Commission's work.

The Times ran a series of articles from Commissioners over the winter, offering different perspectives on the pandemic and the podcast series 'Tea & Talk with the RSE' concluded with more than 2,000 downloads since series launch. Its second series of interviews with Fellows further explored their own unique expert opinions on the pandemic.

Future work includes a series of video case studies showing the impact of Covid on certain groups and communities, and an international roundtable establishing communication between nations on their approach towards public messaging, health advice and data.

Articles, videos, podcasts, blogs and think pieces can be found on the Info Hub on the Commission's website at www.rsecovidcommission.org.uk/info-hub

Professor Jason Leitch CBE

Professor Mona Siddiqui

NEW FELLOWS JOIN THE SOCIETY

The RSE has elected 87 new Fellows from across sciences, arts, education, business and public life, including many who have made a positive impact during the global Covid-19 pandemic

In March 2021, the RSE announced that 87 new Fellows had been elected from across the sciences, arts, education, business and public life. They join the current roll of more than 1,600 leading thinkers and practitioners from Scotland and beyond, and who volunteer their time and expertise freely to enable the RSE to deliver on its mission of 'Knowledge made Useful'.

This year's cohort includes many new Fellows who have made a positive impact during the global Covid-19 pandemic: either as a result of their academic research, their contributions to the arts, or for the role they have played in communicating complex information to the public.

Louise Macdonald

The list includes many leading academics such as **Professor Devi Sridhar**, Chair of Global Public Health and Director of Global Health Governance Programme at Edinburgh University. Professor Sridhar, whose research considers the effectiveness of public health interventions, has become a household name in the last 12 months as a public health expert during the coronavirus pandemic.

Commenting on her Fellowship, Professor Sridhar said: "It is a great honour to have been elected a Fellow. The Society has a long and esteemed history, but I'm particularly supportive of their recent work in raising the profile of women scientists. Scientists have played a vital role in tackling the Covid-19 pandemic and it is scientific advances which will ultimately provide the path out of the pandemic."

Professor Devi Sridhar

Louise Macdonald OBE, who has been instrumental in helping to shape Scotland's future for young people through her work as CEO at Young Scot, was also made a Fellow. She was recently appointed National Director of IoD Scotland and has also co-chaired the RSE Post Covid-19 Futures Commission's Public Debate and Participation Working Group, and the First Minister's National Advisory Council on Women and Girls.

Another Fellow from the world of business is **Professor Lorne Crerar CBE**, founding Partner and Executive Chairman of leading law firm Harper Macleod LLP. He is an Emeritus Professor of Banking Law at University of Glasgow, author of '*The Crerar Review*' which reformed scrutiny of public services, and the creator of the reform proposals for residential property transactions resulting in the current home report system.

Professor Lorne Crerar

Professor of Infection at the University of Dundee, and Chair of the Scottish Antimicrobial Prescribing Group, **Dilip Nathwani** has also been elected a Fellow. Professor Nathwani is a global leader in advocating for the pivotal role that healthcare professionals have in dealing with the global pandemic of antimicrobial resistance, supporting their education in understanding how antibiotics work and improving their prescribing behaviour, a situation which has been exacerbated by the current Covid-19 crisis.

Alongside the 79 Ordinary Fellows, is Honorary Fellow **Baroness Onora O'Neill of Bengarve**, who is known globally for her

Professor Dilip Nathwani

work in political philosophy and ethics, and seven Corresponding Fellows from across the world. While these Fellows are not based in Scotland, their work is vital in addressing the most important challenges facing our country. One such Fellow is **Dr Mhoia Leng**, who was one of Scotland's first specialists trained in palliative care and is now a lead advisor on palliative care for many international agencies and institutions.

Professor Dame Anne Glover, RSE President at the time, said: "As Scotland's national academy we recognise excellence across a diverse range of expertise and experience, and its effect on Scottish society. This impact is particularly clear this year in the latest cohort of new Fellows, which includes scientists who are pioneering the way we approach coronavirus; those from the arts who have provided the rich cultural experience we have all been missing; and some who have demonstrated strong leadership in guiding their organisations and communities through this extraordinary time.

"Through uniting these great minds from different walks of life, we can discover creative solutions to some of the most complex issues that Scotland faces.

"A warm welcome is extended to all of our new Fellows."

RSE Fellows recognised in The Queen's 2021 New Year Honours

Knighthood

Professor Francis Gerard McCormac
Principal and Vice-Chancellor, University of Stirling.
For services to Education and to the Economy

Commander of the Order of the British Empire

Professor Wendy Anne Bickmore FMedSci FRS
Director, MRC Human Genetics Unit, University of Edinburgh.
For services to Biomedical Sciences and to Women in Science

Professor Allister Ian Ferguson
Professor of Photonics, University of Strathclyde.
For services to Science and to Industry

Ms Caroline Jane Gardner
Former Auditor General for Scotland.
For services to the Scottish Public Sector

Professor Sheila Rowan MBE FRS
Director, Institute for Gravitational Research and Chief Scientific Adviser for Scotland.
For services to Science

Professor Petra Wend
Former Principal and Vice-Chancellor, Queen Margaret University, Edinburgh.
For services to Higher Education

Officer of the Order of the British Empire

Dr Hermione Cockburn
Scientific Director, Dynamic Earth.
For services to Public Engagement in Science

Member of the Order of the British Empire

Professor Geoffrey Allan Codd
Emeritus Professor of Microbiology, University of Dundee.
For services to Water Quality

Professor Dame Sue Black FRSE appointed a peer

Professor Dame Sue Black DBE FBA FRCP FRAI FRSE, one of the world's leading forensic scientists and author of *All That Remains*, has been made a non-party-political peer by the House of Lords Appointments Commission.

Commenting on the announcement, **Dr Rebekah Widdowfield**, CEO of the RSE, said: "It is wonderful news that Professor Dame Sue Black has been appointed as a peer. She is a remarkable individual, and a committed RSE Fellow. Her work in forensic anthropology and anatomy has had a profound effect not only in Scotland, but across the UK and globally and has helped place this country at the heart of pioneering forensic anthropological research. She is truly deserving of this peerage, and I congratulate her on this honour."

Celebrating former RSE Fellows

Since it gained its Royal Charter in 1783, the RSE has enjoyed a rich legacy from its Fellowship of individuals, all 'eminently distinguished in their subjects'. From that time, well-known figures such as Joseph Black, Walter Scott, Charlotte Auerbach, James Clerk Maxwell and James Watt to name but a few, have been granted the status of RSE Fellow. The RSE wishes to remember and celebrate some of its past Fellows and to highlight some of the great achievements of these leading scientists and thinkers who may not be as well known but whose contribution to their fields was significant.

ALEXANDER MAIR

Alexander Mair OBE, MD(Aberd), FRCPE, FSPH, FFCM. 1912-1995

Alec Mair, born in 1912, hailed from Banffshire. He left school age 14 to become a clerk with a firm of fish salesmen in Buckie, and it wasn't until he was 25 that he entered the Medical School of the University of Aberdeen as a mature student, then graduated MB, ChB in 1942.

From 1942 to 1946 he served in the Royal Army Medical Corps (RAMC) and was involved in D-Day evacuations of casualties to England. After the war, he returned to Aberdeen, took a Diploma in Public Health and in 1948 was appointed lecturer in Public Health at the University of Aberdeen.

In 1952 he graduated MD with Honours, with a thesis on 'Silicosis in Aberdeen Granite Workers' and was appointed Senior Lecturer at the University of St Andrews. He was promoted to the Chair of Public Health and Social Medicine a couple of years later, and his investigatory interests continued to be mainly in occupational disease. He published research on chest diseases in textile workers, Byssinosis and Farmers' Lung.

His chair was transferred from St Andrews to the University of Dundee, where, in 1970, he created an Institute of Occupational Health as well as a Dundee and District Occupational Health Service, an Occupational Health Laboratory and courses in Occupational Health Nursing.

Mair served on the Advisory Committee on Medical Research in Scotland and on the Medical Advisory Committee of the UK Health and Safety Commission, as well as various other bodies and committees concerned with social and industrial medicine and the welfare of the disabled.

Elected a Fellow of the RSE in 1980, he retired from his Chair in 1982 as Emeritus Professor. Many years later his contribution to medicine in Scotland was reassessed and he was awarded the OBE in 1994.

Covid-19 impact on inequality

The pandemic has highlighted the disadvantages faced by certain sections of society

Covid-19 is an infectious disease caused by the newly discovered coronavirus. Most people infected with the Covid-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems, like cardiovascular disease, diabetes, chronic respiratory disease, and cancer, are more likely to develop serious illness.

A profound shock to our societies and economies, the Covid-19 pandemic underscores society's reliance on women both on the front line and at home, while simultaneously exposing structural inequalities across every sphere, from health to the economy, security to social protection.

For many families, school closures and social distancing measures have increased the unpaid care and domestic load of women at home, making them less able to take on or balance paid work. The situation is worse in developing economies, where a larger share of people are employed in the informal economy in which there are far fewer social protections for health insurance, paid sick leave and more.

Responding to the pandemic is not just about rectifying long-standing inequalities, but also about building a resilient world in the interest of everyone.

Debora Kayembe

According to Dr Mike Ryan from the World Health Organization Emergencies programme: "This is what's killing people, not just the virus. It's underprivilege, it's lack of access, it's years and years of living with health conditions that haven't been properly managed because of the colour of your skin or because of ethnicity or because of your social group… this is still a deeply unfair, deeply inequitable world in which access to the basic human right of health is something that is given by privilege and by how much money you have…"

It is certainly the case that this pandemic has not only caused devastation, but by ripping away the bandages from an old wound, has uncovered wider inequalities in our society's ability to deliver equitable healthcare.

It has also highlighted the failure to recognise health as a fundamental human right and that basic healthcare of people in certain communities has been forgotten, or refused, for decades.

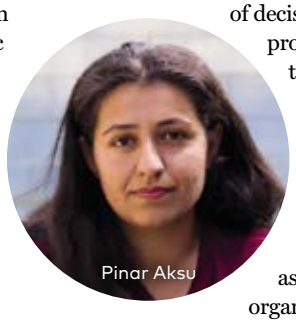
It is imperative to build a more secure, safe environment for our communities. Health security is not an abstract concept; health security is about fairness; it's about equity. For example, older people have paid a terrible price in this pandemic: in loneliness, in isolation, in so many other things but there are many other people suffering the same way.

Debora Kayembe, YAS ARAR (At Risk Academics and Refugees) Member and Rector, University of Edinburgh

Our voices must be heard

The right to work has grown in importance due to Covid-19 and everyone should be able to contribute to the economy

Life for the asylum and the refugee community was difficult before Covid-19: from not being able to work and living on under £40 a week of asylum support, to difficulty in accessing higher education and facing the fear of detention and destitution. The pandemic highlighted further inequality for the asylum and refugee community across the country.


Pinar Aksu

A key part of being part of the community involves having the right to work, for people to participate and contribute to the economy and to their community. Not being able to work also means being dependent on organisations and charities to survive. Maryhill Integration Network (MIN) – the organisation for which I work – coordinates projects to welcome asylum seekers and refugees in the community in Glasgow. It is also a member of the *Lift the Ban* coalition which asks for the ban to be lifted and for people to have the right to work.

It is really important to involve people directly affected by an issue at the centre of decision-making process and to provide skills and opportunities to participate in creating and being part of change. An example of this process was evidenced by the members of the MIN 'Voices' group, an advocacy and peer-support group for those in the asylum process. Last year, they organised a gathering (following Covid-19 rules), to raise awareness of this issue and developed an online Right to Work: Campaign Gathering and Animation Launch to further continue the discussion with policy makers, politicians and civil society organisations.

This process highlights the importance of using art and creativity as part of projects and programmes. Arts-based approaches provide a platform for people to express their feelings and experiences without having the need to explain themselves. This approach could also be used when raising awareness about migration. A key project developed by the young people was during the creation of the book *The Sea of Paperwork*. Using creative writing, visual arts, and theatre workshops, the young people from various schools created the artwork which was then used for an exhibition at the CCA (Centre for Contemporary Arts), Glasgow. The book is now being developed to be used as an educational resource across the communities.

For change to happen, to welcome people into communities and to raise awareness, we need to use community development approaches – making sure people have opportunities for creativity, are informed about their rights and feel empowered to participate and raise their concerns.

Pinar Aksu, YAS ARAR Member, is a human rights activist, theatre maker and Development Officer at Maryhill Integration Network

TACKLING RACISM: TIME TO STEP UP

Movements such as Black Lives Matters have highlighted the issue of discrimination in society but now it's time to tackle the lack of diversity in our universities where inclusion is still sadly lacking

Black Lives Matter has helped put racism in the spotlight, and it is timely to reflect on whether our institutions and disciplines are as diverse and inclusive as they should be. As one of a small number of Black Asian and Minority Ethnic (BAME) RSE fellows, I would like to see the RSE show leadership on the issue of racial discrimination in Scottish universities and colleges. There is an urgent demand amongst staff and students to see academia's racial inequalities addressed, but guidance on how to do so is badly required.

The UK has a BAME representation of around 14%[1], but in my university, less than 7% of academic staff are BAME[2]. (That there are fewer BAME people in Scotland compared to the rest of the UK is barely relevant, since universities attract staff and students from around the world). Representation decreases as we go up the academic hierarchy. At St Andrews, less than 3% of professors are BAME, and we have zero BAME heads of department, directors of units, or members of the university executive. If you live in Scotland, odds are people of colour are underrepresented in your local university too. St Andrews, like many universities, is now actively addressing these issues, but there is a very long way to go.

If you believe that there is no discrimination in your workplace, think again. Racism works in subtle ways. Little things we do – the places vacancies are advertised, the composition of search committees, the images on websites, the components of syllabi – all bias the landscape against minorities. Statistics show that people with minority ethnic names are substantially less likely to get a job interview[3], BAME staff are less likely to be promoted and are paid less than white counterparts[4], and they get fewer and smaller research grants[5].

In various Equality, Diversity and Inclusion roles that I play, I regularly hear of BAME staff and students being subjected to racist abuse, micro-aggressions, or discrimination, or complain about racist abuse their children receive in our local schools. Many are scared that reporting racism at work leaves them labelled as trouble makers, and angry that complaints were not taken seriously. Sadly, UK BAME academics often feel like outsiders[6].

Professor Kevin Laland

We all have a responsibility to reflect on these data. To me, they can only imply that there is something about our academic procedures and culture that is off-putting to, and discriminating against, BAME staff and students.

It's not good enough merely to lament these facts, nor even to protest them. What is required is action. Many of the same issues – underrepresentation, gaps in promotion, pay and grant income – also arise for gender. Over the last decade, I have seen my department make headway on gender inequality through engaging with the Athena SWAN program. There were no magic bullets – progress took years of sustained work. It took thirteen actions over 10 years (introducing gender-balanced panels, bias training, flexible working etc) for us to go from male-biased to gender-neutral recruitment. It took nine actions to achieve gender parity in grant success, and a further six to approach gender balance in promotion. The lesson that I take from engaging with Athena SWAN is that positive change is often achieved through many small steps. Tough challenges are overcome through relentless pursuit of marginal gains.

The same lesson must now be applied to addressing racism in Scottish academia. We must introduce diversity training, robust procedures for reporting harassment, diverse conference guidelines, and many more actions (see Laland et al 2020 for further suggestions). The ideas are there. What is required is a combination of hard work and leadership.

The RSE can play an important role in endorsing and incentivising such antiracist activities, but ultimately we must all do our bit. If we genuinely want change, we must each take responsibility for those spheres we can influence, and revise how our laboratory, department or university operates.

Kevin Laland is Professor of Behavioural and Evolutionary Biology at the University of St Andrews

Further reading:

Laland KN et al 2020 Racism in academia, and why the 'little things' matter. Nature 584:653-4

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[1] Office for National Statistics (2013) 2011 Census: Key Statistics and Quick Statistics
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[5] bit.ly/3r18ebw
[6] Bhopal K 2015. The Experiences of Black and Minority Ethnic Academics: A comparative study of unequal academy. Routledge.

Ending health inequality requires community engagement

People from the poorest backgrounds are more likely to die from Covid-19 so we must work closely with deprived communities to improve their health and living conditions, says Professor Francisca Mutapi

The Covid-19 pandemic has shone a very bright light on health inequities globally and in the UK. Health inequalities are the avoidable, structural differences in the health of different groups of people. These occur at country, societal, system and individual levels.

Examples of Covid-19 global health inequality range from PPE procurement to lockdown impacts on the poorest to the scramble for vaccines. In the UK, the British Medical Association has reported that doctors from ethnic minorities have been disproportionately affected by PPE shortages in the NHS. At an individual level, Public Health England reports that Covid-19 mortality rates in the most deprived areas have been double those of the least deprived areas. These outcomes are not surprising. They are a consequence of existing health inequality in the UK [1,2].

Systematic health inequities arise over decades and cannot be fixed quickly. Much depends on trust and relationships between communities and health systems. The *2018 Wellcome Trust Global Monitor Report* showed a clear positive relationship between trust in scientists and attitudes towards vaccines in the online version. Trust in scientists and policy makers is a critical tool for improving systemic and societal health equity.

Professor Francisca Mutapi

We can also learn lessons on how to build this trust from the control of other diseases. For example, I work on diseases that predominantly afflict the world's poor, aptly known as Neglected Tropical Diseases (NTDs). These diseases are treatable and preventable, but inadequate political attention and resources mean that those most vulnerable to NTDs usually lack access to healthcare, clean water and sanitation, creating a perpetual cycle of infection. Nevertheless, over the past two decades, there has been significant progress in the control of NTDs.

Success usually depends on working directly with affected communities. For our national NTD control programmes, we consult the communities in advance, run awareness campaigns and ensure treatments are administered by local teams. Our consultations are inclusive, ensuring community representation reflects the community's diversity. Using this approach, we routinely achieve compliance levels greater than 90% in the target populations. There's a name for this: community engagement.

We need to do more of this in the UK and around the world if we are going to address the health inequities that have been amplified by Covid-19. The answer will not be found in policy-makers' offices and conference rooms, but in affected communities, working with them to build trust in order to achieve better health for all.

Professor Francisca Mutapi FAAS FZAS FRSE, Professor in Global Health Infection and Immunity, co-Director of the Global Health Academy at the University of Edinburgh, and Deputy Director of the NIHR Global Health Research Unit Tackling Infections to Benefit Africa

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[1] www.bma.org.uk/news-and-opinion/bame-doctors-hit-worse-by-lack-of-ppe

[2] www.healthscotland.scot/health-inequalities

WRITING WOMEN BACK INTO RWANDAN HISTORY

An African nation with a recent troubled past has a proud record of equality in parliament. We now have new resources that will shine a light on women's experiences in Rwandan society before the colonial period

Rwanda is largely known to the outside world for what official sources have labelled 'the 1994 genocide against the Tutsi', whereby extremists affiliated with the nation's ethnic Hutu majority attempted to exterminate the nation's ethnic Tutsi minority, as well as its political moderates. However, in the post-genocide period, the nation has been lauded internationally for its efforts to promote gender equality. Most notably, Rwanda leads the world in women's representation in parliament, with women holding 63% of seats, and an additional 52% of cabinet seats[1]. These advances are especially welcome given the patriarchal nature of Rwandan politics and society, at least in the 20th century.

However, little is known about Rwandan society prior to its colonial period (Germany, 1895-1916; and Belgium 1916-1962), particularly regarding gender norms and women's access to power. It is this realisation that prompted our team in 2017, with support from the RSE and the Rwanda Academy of Language and Culture (RALC), to launch a scoping project that explored Rwandan social bonds in historical perspective. We spent a year translating oral traditions that had been narrated by former court officials and documented in Kinyarwanda and French by the historian Jan Vansina during his fieldwork from 1958 to 1960. This resource has increasingly revealed understudied oral traditions about women who lived during the Nyiginya kingdom that ruled Rwanda from the 16th century until 1962. These oral traditions are proving invaluable for revealing the complexity of Rwanda gender norms across different periods, regions, and social classes, and the varied forms of power that women could exercise in their everyday lives.

To help bring these stories out of the archives and into the hands of interested Rwandans, in 2018 – with further support from the RSE and RALC – we began working to create a graphic novel series. Our first graphic novel, *Nyiragitwa, daughter of Sacyega*, has just been published in Kinyarwanda, English and French with the Rwandan publisher, Mudacumura Publishing House. It highlights a story about a woman named Nyiragitwa who allegedly lived during the 17th century. The graphic novel offers provocative insights on what life for semi-elite Rwandan women might have been like during this period, including their potential ability to become independently wealthy and exercise significant political power in their communities. We hope it will be a starting point for more historically-informed efforts to write women back into Rwanda's early history.

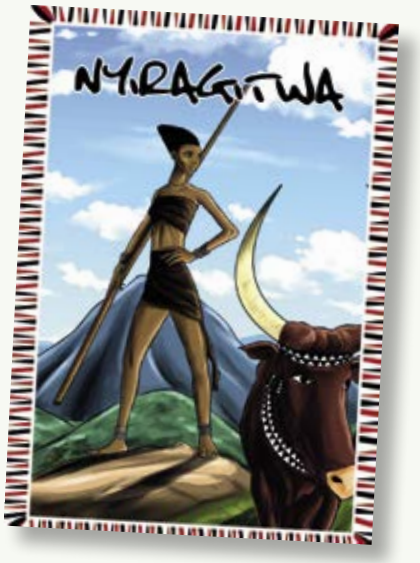
Nyiragitwa, daughter of Sacyega is sold on Amazon, though Muducumura Press as well as in Rwandan bookstores.

Dr Erin Jessee, Senior Lecturer, History, University of Glasgow, RSE Small Grants Awardee (2017), and Jerome Irankunda, Director of Students Affairs at the University of Tourism, Technology and Business Studies, Sylvere Mwizerwa, Research Assistant, and Christian Mafigiri, Artist

The RSE offers a number of awards across disciplines and at every stage of a researcher's career. Visit www.rse.org.uk for details.

References:

[1] Moloney and Bhalla 2020



Caring about inequalities at home

The pandemic has demonstrated that women are expected to do far more around the home than men. Moving forward, the way to address this issue might involve looking at how societies behaved in the past

Over the last year, the question of how households have managed the burgeoning responsibilities in the home from housework to home schooling has been a lively topic of debate. While for some, the extended time at home has increased opportunities for greater sharing and more quality time to spend with family members, there is no doubt that in this particular crisis, the labour of keeping body and soul together has fallen predominantly on women. At the start of the pandemic, Andrea Flynn, Director of Health Equity at the Roosevelt Institute, remarked: 'The women I know shouldering a disproportionate burden of the household and emotional labour aren't doing so because our husbands are misogynistic assholes. … Why then, at times of crisis, do these imbalances emerge? Because structural sexism is always lurking just below the surface, ready to rear its ugly head and quickly upset any semblance of intra-household gender equity." Historians are not surprised. Historical research addressing the gender inequalities of the household is longstanding and tells us that the unequal distribution of care work is intransigent in the face of changes in all other aspects of economic and social life. In this respect it demonstrates what historian Judith Bennett in her book *History Matters: Patriarchy and the Challenge of Feminism* (2007) describes as the 'patriarchal equilibrium' whereby advances in women's experience in the past are not accompanied by improvements in their status.

Professor Lynn Abrams

Why are the inequalities of care in the domestic sphere so hard to challenge? In the 1960s and 70s, the combination of profound changes in the lives of women who came of age in the post-war decades and feminist critiques of the gendered division of labour in the home suggested a moment when those inequalities would finally be addressed. If campaigns such as 'wages for housework' failed to make inroads, then the growing numbers of married women in paid employment combined with women's shifting expectations of marriage as an environment facilitating self-actualisation, might have been expected to have impacted on the inequalities of care within intimate relationships. But instead, the typical pattern for many women was the dual role (which saw women returning to the labour market when their children could be left) or increasingly working motherhood which left untouched the sexual division of labour.

The pandemic has caused a societal disruption and while in many households there has been a resurfacing of gendered patterns of labour and care, the situation does present an opportunity to unpick the systems and structures underpinning household inequality. Historians have shown that societies in the past or governed by other political systems organised domestic care along kinship and community lines. Infants and children were not the sole responsibility of the mother; circles of care effectively extended responsibility for the sick and the elderly beyond the nuclear family. This knowledge challenges the assumed 'natural' association of women with care work in the late modern world and demonstrates that this care model is the result of patriarchal structures. Historians' findings should now inform the conversation about how emotional and domestic labour is organised that has become so critical to the functioning of our society.

Lynn Abrams FRSE is Professor of Modern History and a member of the Centre for Gender History at the University of Glasgow

THE LIMITATIONS OF SCIENCE IN MEDICINE

Patients who have several medical conditions deserve compassion and humanity and their treatment should be guided by morality as well as evidence. Showing a human touch is vital for our health experts

Sir Walter Scott was President of the Royal Society of Edinburgh from 1820-1832. On the 14 January 1829, he called a meeting of the RSE Council to discuss a proposal from Dr Robert Knox based on his anatomical research.

The timing was a problem. William Burke, the body snatcher, had been tried and found guilty on 24 December but was not due to be executed until 28 January. Knox was reputed to be the procurer of Burke's victims and had not had the opportunity to defend himself. Leading from the chair, Scott successfully argued that the proposal should be declined, recording in his diary: "I think hearing it before Mr Knox has made any defence would be an intimation of our preference of the cause of Science to those of Morality and Common Humanity."

Scott's priorities hold true today. While science has transformed our ability to understand and change the world, most notably during the Covid-19 pandemic, its application is frequently an exercise in political choices and human values. And when science is not there to guide us, value-based choices are all we have.

Since the first randomised controlled trials of streptomycin treatment for tuberculosis in the late 1940s, evidence-based medicine has revolutionised health care. The mass delivery of treatments of proven effectiveness, such as control of high blood pressure to prevent strokes and heart failure, means that health care can improve population health, and widen health inequality if health care delivery is uneven in the population.

The highest quality evidence comes from randomised controlled trials in which neither patients nor the researchers know who is on what treatment and the effects of treatment can be evaluated free from many sources of internal bias. But ironically, the edifice of evidence-based medicine is a monument to external bias as whole groups of questions, places and patients are systematically excluded from this type of study.

In a landmark study of 1.75 million patients in general practice in Scotland, patients with the most common chronic conditions who only had that condition and no other were always a minority. Most patients had several other conditions, which is called multimorbidity. Yet multimorbidity, and especially complicated multimorbidity, is an exclusion criterion for most trials of treatment of specific conditions. These excluded patients are generally the patients who keep the NHS busy. The 10% of patients in Scotland with four or more conditions account for 47% of potentially preventable unplanned hospital admissions.

Professor Graham Watt

When general practitioners serving Scotland's most deprived communities were asked to list their educational needs, a common response concerned how to apply evidence-based medicine when so little of the evidence is based on the types of patient they see.

One of the pioneers of evidence-based medicine, the US physician Alvan Feinstein, wrote: "Until the methods of science are made satisfactory for all the important distinctions of human phenomena, our best approach to many problems in therapy will be to rely on the judgments of thoughtful people who are familiar with the total realities of human ailments."

Although patients with multimorbidity are all different, their needs are generally the same, namely unconditional, personalised continuity of care from professionals whom they know and trust, and who are guided not only by evidence but also morality and common humanity.

This article first appeared in The Scotsman

Professor Graham Watt MD FRCGP CBE FRSE is Emeritus Professor in General Practice and Primary Care at the University of Glasgow

A LINK WE MUST FINALLY BREAK

Many disabled people are faced with hardship and poverty in their everyday lives and, faced with an often unhelpful benefits system, they struggle to get by. It's time to listen to their needs and act

Even before the Covid-19 pandemic the link between disability and poverty was firmly established, levels of disability are far higher in areas of poverty in both the Global South and North. Recent work by the Joseph Rowntree Foundation, for example estimates that nearly half of all those who live in poverty in the UK are either disabled themselves or live with a disabled person[1] and 31% of disabled people in the UK live in poverty compared to 20% of non-disabled people. Covid-19 and the responses to suppress its spread will magnify this effect. Prior to the pandemic, the relationship was complex, and it can be difficult to disentangle and separate out causative factors. In disability research we distinguish between the impairment, or condition, and the socially produced barriers that discriminate against, and disable people with, impairment. Both of these are affected by poverty and the relationship is bidirectional. Poverty creates the conditions that exacerbate and increase the potential for ill-health and impairment while the onset of these conditions can lead to poverty, and disabled people who live in poverty experience greater disadvantage.

There are many reasons why disabled people live in poverty. The cost of living for many disabled people is often higher and they face additional costs. These may be associated with their impairment, for example they might need to keep their house warmer or require special food. They may also be the result of barriers, public transport may be inaccessible, there may be limited low-cost accessible housing, and adaptations and aids to daily living are often very expensive.

Not only are outgoings affected, so too are incomes. Benefits in the UK have been deliberately set below the cost of living, ostensibly to encourage people to seek work and disabled people have been hardest-hit by recent changes to the benefit system. Not only are disabled people less likely to work, in 2020 the employment gap was 28% and when they do work, they are often paid less than their nondisabled co-workers. Recent research by the TUC suggests that disabled workers earn £2.10 per hour less than their non-disabled

Professor Nicholas Watson

peers[2]. Disability affects pensions; disabled people often have to retire earlier, so not only are their incomes likely to be lower, so too is their pension. There is very poor provision of special needs nurseries across the country, and the additional care required to support a disabled child often means that one parent cannot work, this has both an immediate and long-term impact on family income, affecting both income at the time, and future pensions.

Covid-19 has the potential to impact on both the costs associated with disability and on income. Many disabled people and their families have been forced to shield and this has added to living costs, people for example may not be able to access low-cost supermarkets and have to use home delivery services, increasing food costs. It has also made it much harder for disabled people and their families to work. In our ongoing research looking at the impact of Covid-19 on disabled people we have talked to many people who either themselves or their family members have had to give up work. This is particularly the case for families where there is a person with a learning disability. This effect has been amplified by the suspension of a large number of services for this group and many now rely on their families for care and support.

We have known for a long time that if we seriously want to tackle the problems of poverty, we won't be able to do so successfully unless we account for the needs of disabled people. The pandemic has reinforced this and, as Glasgow Disability Alliance describe, it has supercharged the inequalities experienced by disabled people.

Professor Nicholas Watson FRSE is Professor of Disability Research at the Centre for Disability Research, School of Social and Political Sciences at the University of Glasgow

References:

[1] www.jrf.org.uk/report/uk-poverty-2020-21
[2] www.tuc.org.uk/sites/default/files/2020-11/Disabled%20workers%20note.pdf

Care and compassion

People with learning disabilities have been particularly vulnerable during the pandemic, and as we move out of lockdown, it's important to consider their future health and wellbeing

The impact of Covid-19 in care homes has been one of the most heart-breaking elements of this awful pandemic. More than 3,000 people in Scotland's care homes have lost their lives to the virus; that is 1 in 12 of all care home residents, which accounts for more than a third of all the deaths in Scotland[1].

The health inequalities faced by people who have a learning disability are well documented; the Scottish Learning Disabilities Observatory (SLDO) found that people who have a learning disability die on average 20 years younger than the general population[2]. Our analysis must now consider the intersectionality of learning disability with institutional living.

Theresa Shearer

As Public Health Scotland reported in its analysis of the first wave of Covid-19, the risk of care home outbreak increases progressively as the size of care home increases[3].

ENABLE Scotland, which was established 67 years ago by families who were determined to keep their children out of institutions, does not run care homes but focuses on supporting people to live a good life in their own home in the community of their choice with a team of Personal Assistants (PAs) built around them.

While new research by the SLDO found that people who have a learning disability are twice as likely as the general population to contract Covid-19, twice as likely to be hospitalised and three times more likely to die[4], the people supported by ENABLE Scotland's PA Model were no more likely to contract Covid-19 or be hospitalised than the general population. To date, thank goodness, none of the 1,100 people supported by our PAs have lost their lives to the virus.

Rooted in the evidence and analysis of the impact of Covid-19 on this population, ENABLE Scotland joined with partners across the sector to shine a light on these health inequalities and successfully persuaded the Scottish Government to elevate every adult with a learning disability into Priority Group 6 for vaccination.

The recently published Independent Review of Adult Social Care in Scotland recommends prioritising investment in social care as a key feature of Scotland's recovery from the Covid-19 pandemic[5].

It is essential that such investment reflects and prioritises the fact that independent living in a home of your own in the community of your choice is a basic human right for everyone, including people who have a learning disability or complex care needs.

We owe it to this population to take on the challenge of embedding such a rights-based model of social care and support across Scotland's public service landscape to truly address intersectional health inequalities in our post-pandemic future.

Theresa Shearer is Group CEO of ENABLE Scotland and a member of the RSE Post-Covid-19 Futures Commission Inclusive Public Service Working Group

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[1] www.nrscotland.gov.uk: Deaths involving coronavirus Covid-19 in Scotland
[2] www.sldo.ac.uk: Life expectancy and mortality
[3] beta.isdscotland.org: Discharges from nhsscotland hospitals to care homes
[4] www.sldo.ac.uk: life expectancy and mortality Covid-19
[5] www.gov.scot: Independent review adult care Scotland.pdf

The future of Scottish universities

This pandemic has shown how much universities are financially reliant on international students

In February, the RSE and the House of Commons Scottish Affairs Committee jointly organised a roundtable to discuss the Committee's inquiry into universities and Scotland. This brought together Fellows and Young Academy of Scotland (YAS) members and committee MPs. The inquiry is considering the impact of Covid-19 and Brexit on the sustainability of Scotland's universities.

A key point to emerge from the discussion found that the pandemic has demonstrated how reliant many universities are on income from international students which brings into sharp focus the sustainability of current funding arrangements, and how new approaches to funding are needed to address structural underfunding. It also suggested that a decrease in international students and staff could lead to a decline in Scotland's 'soft power'.

Also, notwithstanding the benefits of online learning, it cannot replace the value of face-to-face and peer-to-peer learning. The pandemic has also shown the value of interdisciplinary learning in preparing learners to address major societal issues.

The discussion also highlighted the importance of UK Research and Innovation (UKRI) taking account of the research priorities and needs of Scotland.

A summary report of the discussion was produced by RSE and submitted as evidence to the committee's inquiry. www.rse.org.uk/wp-content/uploads/2021/03/Universities-and-Scotland-Roundtable.pdf

RSE
The Royal Society of Edinburgh

ADVICE PAPER
February 2021 | NO: 21 - 02

SCOTTISH AFFAIRS COMMITTEE / ROYAL SOCIETY OF EDINBURGH UNIVERSITIES AND SCOTLAND ROUNDTABLE

Introduction

RSE/YAS Project on Tertiary Education Futures

Internationalisation and Marketisation

Focus on the value of tertiary learning

Students are sharing their experiences as project aims to stimulate debate on how higher and further education will be delivered

The RSE and the Young Academy of Scotland (YAS) recently launched a joint project that is considering the purpose, role and value of tertiary education in Scotland. It aims to stimulate wide-reaching debate on the future of tertiary education, provoke fresh thinking and generate new insights and ideas to inform future policy and practice. This builds on existing work which YAS has undertaken on the future of higher education.

The last five to 10 years have seen a series of significant developments impact on the tertiary education system in relation to skills and enterprise, widening access and the learner journey, changes in the delivery landscape, particularly the establishment of regional colleges, new modes of delivery including graduate apprenticeships and online learning, and enhanced articulation pathways between colleges and universities.

The impact that Covid-19 has had, and continues to have, on our tertiary education system means that this work is now of even greater importance. The Scottish Funding Council's review of the coherence and sustainability of higher and further education also brings an added focus for the project.

The project will secure a wide range of views and perspectives, especially from practitioners, learners, employers and the wider public, in bringing forward experiences, new ideas and ambitions for the future of tertiary education in Scotland. With the focus on facilitating dialogue and debate and encouraging futures thinking, the backbone of the project will be a series of virtual roundtables organised and facilitated by RSE and YAS.

A range of outputs including think pieces, blogs, videos and podcasts are planned to stimulate discussion and to engage widely.

The first discussion session was held in March and brought together 30 learners from across Scotland's universities and colleges. Learners shared their lived experiences of, and motivations for, entering further and higher education, what influenced their decision on choice of course and institution and how their choices are shaped by their future plans and aspirations. Further roundtables are planned with learners from different backgrounds, including those in the senior years of schools and those in apprenticeship programmes.

The project is supported by a working group comprising a wealth and breadth of expertise and experience across the tertiary education system and it comprises Fellows, Young Academy members and others who can make a substantial contribution to our work. Should you wish to find out more about our plans or how you can engage, please contact the policy team at the RSE: publicpolicy@theRSE.org.uk

Professor Anne Anderson FRSE, Chair of the Tertiary Education Futures Working Group; formerly Vice-Principal and Head of the College of Social Sciences at University of Glasgow

ENGAGING WITH AFRICAN COUNTRIES

RSE partners with the African Academy of Sciences to collaborate on new research projects and joint programmes

As Scotland's national academy, the RSE has a widespread network of contacts and collaborations throughout the globe but, as yet, there have been few connections on the African continent. Given the huge diversity, energy and innovation found across Africa, the RSE identified a need to build partnerships in the region.

In 2019, a small group of Fellows, experts and practitioners were convened to form the RSE Africa Working Group. Initially beginning at a Pan-African scale by partnering with the African Academy of Sciences (AAS), this approach would establish partnerships with the flexibility to capitalise on many long-standing multilateral networks which have grown up between African and Scottish colleagues. As a statement of its intention and values, the group developed the statement "Knowledge Made Mutually Useful", with its aim to support positive long-term international relations between the RSE and national academies of African countries.

The group is now looking to formalise the RSE-AAS partnership by having it underpinned by a Memorandum of Understanding. It aims to collaborate on establishing and developing research and innovation partnerships; address global challenges such as the impacts of Covid-19, climate change, biodiversity loss, sustainable development and how to empower local communities and future generations through greater engagement. It will engage in dialogue and collaboration with scholars in Africa on the slave trade, including establishing the extent of the RSE's involvement, and will develop future joint programmes of redress where considered culturally appropriate.

If you would like to know more about the RSE Africa Working Group or would be keen to engage with it, then please contact Alan Salonika (asalonika@theRSE.org.uk), RSE International Manager.

The African Academy of Sciences is based in Nairobi, Kenya

Upcoming events

A series of events is planned for this year, as part of the RSE's commitment to engaging audiences around Scotland and beyond and inspiring them with the knowledge and expertise of its Fellows.

ENGINEERING IN THE CLIMATE EMERGENCY

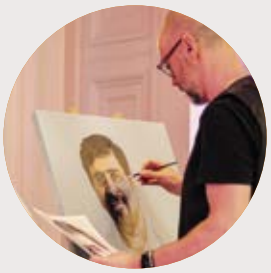
THURSDAY 13 MAY 2021 | 17:30–18:30

How can technology work towards a just transition? A joint discussion with the Royal Academy of Engineering (RAE), bringing together engineering expertise with perspectives from policymaking and social science. Chaired by Professor Sir Jim McDonald FREng FRSE, RAE President. The panel discussion includes Professor Becky Lunn MBE FREng FRSE, Dr Leslie Mabon and Ragne Low.

AT-RISK ACADEMIC REFUGEES DISCUSSION

THURSDAY 27 MAY 2021 | 13:30–14:30

ARAR members are invited back to discuss the influence and effects of having been painted and their experience over the last year living through this pandemic. The discussion will be co-chaired by I.D Campbell, artist, and Professor Alison Phipps FRSE, UNESCO Chair: Refugee Integration through Languages and the Arts.



THE PUBLIC AND PRIVATE WORLDS OF SIR WALTER SCOTT

MONDAY 28 JUNE 2021 | 18:00–19:15

A joint event with the Society of Antiquaries of Scotland focusing on the public and private worlds of one of Scotland's most celebrated storytellers. Chaired by Professor Gerard Carruthers FRSE, this talk will be delivered out by Dr Iain G Brown MA PhD FSA FRSE FRSA FSAScot and Kirsty Archer-Thompson BA MA FSA Scot.

SUMMER EVENTS PROGRAMME

The RSE's summer events programme *Curious* will run for a third year, with a mixture of online panel discussions, talks, demonstrations and workshops. The themes of Our Planet; Innovation and Invention; Health and Wellbeing; and Covid-19 will be explored.

Details of how to book for all of these events, which will all be held online, can be found in the Events section of www.rse.org.uk

Overcome your fears and embrace equality

We should all be allowed to live the way we choose. That's not too much to ask, is it?

I'm always perplexed by the way we talk about phobias. An arachnophobe is obviously terrified of spiders, but does that necessarily mean that they hate them? And far from hating open or crowded spaces, I am sure there are agoraphobes who yearn to be able to embrace them.

But then of course there are homophobes and transphobes who, it is always assumed, hate, not merely fear, gay or trans people.

We are living in turbulent times, and one of the biggest changes to our social equilibrium in the last few decades has been the huge recalibration of how queer people are perceived and treated in our society. Marriage equality, once so unimaginable and abhorrent to many, is now commonplace. Perhaps the most gratifying aspect from my point of view as a queer man is not the legal rights or celebration and happiness I have enjoyed because of this, but the confirmation of the idea that when people are exposed to and begin to understand something they hitherto were ignorant of and felt threatened by, they very quickly stop being afraid and aggressive. They have lost their phobia. It wasn't hatred after all, just a fear of the unknown, of the other.

The most recent example of this has been the way trans and non-binary people are related to. We all scoff when we hear politicians from Chechnya or Malaysia say there are no gay people in their countries, yet many of us entertain the notion that being trans is a fad, a fashionable bandwagon too many people are jumping on and possibly altering their bodies in ways they might live to regret. To anyone who thinks this way I thank you for your concern, but ask you to consider that maybe there seems to be lots more trans people these days because the climate is such that they feel, for the first time ever, safe to come out and present in the way they feel is their best selves. They've always been there. The rest of us just haven't allowed them to be visible.

And to those who carp that non-binary people are just making it too confusing for us with all their pronoun nonsense, might I posit: how much does it cost you to make the effort to refer to someone the way they want to be referred to? And also, it's not a test, we are allowed to get pronouns wrong, and would you think it okay to be annoyed with someone who wanted to be referred to as Black and not coloured or Negro?

We all want equality, don't we? Don't we? We should all have equal respect, equal pay, equal rights. That's what feminism is all about, what every civil rights struggle has been about. But rights aren't like cake. Someone else getting some doesn't mean you have any less.

Maybe we all need to examine our phobias and see if some of them are more about our (very understandable) fear of the unknown, of the other, and we are allowing that to dictate opinions we might otherwise baulk at.

"HOW MUCH DOES IT COST YOU TO MAKE THE EFFORT TO REFER TO SOMEONE THE WAY THEY WANT TO BE REFERRED TO?"

© Matthieu Camille Cohen

Alan Cumming OBE HonFRSE is an actor, producer, singer, author and activist.

He has received more than 40 awards for his humanitarianism and social activism, three honorary doctorates, both the Great Scot and Icon of Scotland awards and was made an OBE (Officer of the British Empire) for his contributions to the arts and LBGT equality. He was made an RSE Fellow in 2020.

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