ISSUE 3 - 2020/21

A DAY IN THE LIFE OF DR EMILY ADAMS

-

-

At the forefront of the development of rapid diagnostic tests for COVID-19.

PREDICTIONS FOR THE NEXT 125 YEARS OF GLOBAL HEALTH

Friends and partners share their predictions on how they think the global health landscape will look in the next 125 years.

EQUALITY IN SCIENCE

Key to LSTM's success as a world-leading research institution is our continuing ability to attract and retain the most talented people.

A MASSIVE BOOST TO LIFE SCIENCES RESEARCH

£18.6m from UK Research and Innovation (UKRI) Strength in Places Fund (SIPF) for five years to deliver an innovative project.

125 YEARS 1898 - 2023

LSTM



LSTM and the fight against COVID-19.



"SHOULD WE RETHINK THE WAY WE APPROACH GLOBAL HEALTH IN A POST-COVID-19 WORLD?"

Competition Winner- see page 12



🗲 Give £25 > Save lives 🗧



LSTM take part in a new decade long campaign funded by the Bill & Melinda Gates Foundation.





The race to combat Pyrethroid Resistance in Mosquitoes.

CONTENTS

- 01 Welcome
- 02 Director's Message
- 03 The Next 125 Years of Global Health
- 04 COVID-19: LSTM Responds
- 06 2020 Honorary Graduate: Dr Mwelecele Ntuli Malecela
- **08** Malaria Prevention
- 10 2020 Honorary Graduate: Dr Anarfi Asamoa-Baah
- 12 Competition Winner

- 13 5 minutes with: Professor Moses Bockarie
- 14 2030: A Decade of Health
- 16 Equality in Science
- 18 MSC Global Health Programme
- **19** Developing our Education Portfolio
- 20 Life Sciences Research
- 22 #BumpitForward
- 23 Introducing: Dame Tina Lavender
- 24 Inspiring Alumni

Lead Author: James McMahon.

Contributing Authors: Sam Airey, Sophie Black, Karen Brady, Dr Martha Chinouya , Michael Lurie and Karen Miller.

Designed by: Icon Creative Design.

Liverpool School of Tropical Medicine, Pembroke Place, Liverpool, UK L3 5QA. info@lstmed.ac.uk +44 (0) 151 7053100.

Company registration No: 83405. VAT registration No: 887125885. Registered charity No: 222655

WELCOME

I am delighted to share with you the third edition of Lead Magazine. I also would like to say a huge warm welcome to the class of 2020 to LSTM's alumni family.



Wherever you are in the world I think we can all say 2020 has been a year like no other.

We have all had to adapt to new routines – I, for one, am writing to you from my home rather than on campus this year – but questions remain about what the future may hold.

In this edition of Lead Magazine, we explore how LSTM, our alumni, friends, and partners have worked tirelessly in the fight against COVID-19. On page 5, we look at number of ways LSTM has provided expertise and assistance in the Oxford COIVD-19 vaccine trials.

Meanwhile, on page 3, you can read predictions sent it to us by our friends and partners on what they think global health will look like in the next 125 years. We also want to hear from you, get involved by letting us know what you think the next 125 of global health will look like.

We are also delighted to announce this year's honorary degree recipients; Alumnus Dr. Anarfi Asamoa-Baah (MSc Community health, 1989) who is leading Ghana's response to the COVID-19 pandemic and Dr Mwelecele Ntuli Malecela, Director, Department of Control of Neglected Tropical Diseases at the WHO. You can read more from pages 6-9.

We are always looking at new ways to involve our alumni community with LSTM. Last year we invited our alumni and friend's community to participate in LSTM's alumni and friends blog competition. And you did not disappoint! We received a fantastic response, and you can read the winning post on page 12.

We want to thank all our alumni who took part in our recent focus groups and online survey, as we look to develop our education programs.

As we enter 2021, we are delighted to launch a new photography competition and are inviting you all to get involved, for your chance to have your photos printed in the 2021 edition of Lead.

We will be announcing more ways for you to get involved with us throughout the year. Make sure you sign up to our alumni community for updates and news on this.

Finally, wherever you are in the world, I hope we can stay in touch. I also hope you are staying safe and well, and that someday soon we can welcome you back to Liverpool.

ames MCOMahon

Best wishes, James McMahon

Alumni and Donor Relations Officer alumni@lstmed.ac.uk

Join our alumni and friends community:



scan or code: SIGN UP TODAY Istmed.ac.uk/sign-up LEAD – Issue 3 0 Istmed.ac.uk

DIRECTOR'S MESSAGE

I would like to take this opportunity to recognise the incredible work of our alumni, staff, students, friends and partners over the last year in tackling the COVID-19 pandemic. Throughout what has undoubtedly been one of the biggest global threats to humanity in living memory, we have been humbled by the many stories we have heard about the tireless efforts of the LSTM global community during this crisis.

The relevance of our work in global health has never been more profound. I am proud that collectively, our global LSTM family is continuing to work at the front line of the healthcare systems, often in very challenging circumstances, as well as driving forward the science which will have far-reaching impact in beating COVID-19 and in better defending the world in the future.

This issue of LEAD magazine highlights just some of this incredible work. We are delighted to be recognising this year's Honorary Graduates for their own significant contributions to global health, including Dr Anarfi Asamoa-Baah, who has led Ghana's response to the pandemic.

This edition of LEAD also commemorates the achievements of LSTM's 2020 graduates who will be receiving their awards at a virtual ceremony. I would like to take this opportunity to congratulate them for completing challenging programmes under even more challenging circumstances than usual. This issue of LEAD also aims to look forward, beyond the pandemic and LSTM's 125th anniversary in 2023 to consider the global health challenges for the future. These are the challenges which LSTM's Class of 2020 will play a key role in addressing. I wish them all the best in their future careers.

Professor David Lalloo

Director



Dr. Haja Wurie, Dean, Faculty of Nursing, College of Medicine and Allied Health Sciences, University of Sierra Leone:

"Emerging and re-emerging infectious diseases will continue to be pivotal in the future of global health, linked to the one health platform, but multi-sector efforts, through the gender, vulnerability and inclusivity sensitive lens, to achieving UHC and addressing the inequalities that often hide in plain sight, will not be triggered by global shocks."

Iain Barton, CEO, Clinton Health Access Initiative:

"As with the last 125 years, the next will surely lead to more great discoveries in the causation and treatment of disease, with technology and genomics playing an ever-increasing role. But focus on the cures for prejudice, poverty, inequality, and other social determinants of health, while harder to address, will surely deliver the greatest impact."

Dr Jeremiah Chakaya Global Health Professor of Respiratory Medicine at LSTM and co-deputy Director of IMPALA:

"To imagine what the world will be like in 125 years' time, it may be good to go back 125 years. Then the world was slower- travel, communication, literary everything was slower. In 125 years, everything will be faster than it is today, technology will have advanced to make everything faster. "With a faster world and greater, faster connectivity, health challenges will likely be more universal with a greater need for interregional and cross border actions"

PREDICTIONS FOR THE NEXT

125^{IN GLOBAL} HEALTH

The global health landscape has changed considerably since LSTM was established almost 125 years ago. From the discovery of the malaria transmission from mosquito to human; to development of new drugs, insecticides, vaccines and diagnostics; pioneering resistance research and building capacity in health systems by training and working with generations of leaders and innovators in global health.

As we look to our 125th anniversary in 2023, we asked our friends and partners to share their predictions on how they think the global health landscape will look in the next 125 years.

We want to hear from you! What will the future of global health look like to you? Get involved by emailing your prediction to **alumni@lstmed.ac.uk**

Nyovani Janet Madise PhD, DSc, Head of Malawi Office & Director of Development Policy, African Institute for Development Policy:

"Global Health will be dominated by mental health issues; many people across the world will become depressed because of lack of human contact and loss of identity, as their jobs and majority of health and social services are taken over by robots."

Professor Refiloe Masekela, HOD: Department of Paediatrics and Child Health, University of Kwazulu-Natal:

"Whilst equity in health across populations in a key priority in global health, we wait to see whether the next industrial revolutions (beyond the fourth) will still continue to have a paradoxical effect amongst poorest and most vulnerable populations."

Trevor Mundel, President of Global Health, Bill and Melinda Gates Foundation:

"One-hundred-and-twenty-five years ago, malaria was endemic to nearly every nation on earth; I believe the next 125 years will see an end to malaria and the control or eradication of all mosquito-borne diseases."

Karsor Kollie, Program Director, Neglected Tropical Disease Program, Liberia Ministry of Health:

"My prediction is that in the next 125 years, the pattern of morbidity and mortality in global health will almost entirely transform or be attributed from communicable to Non communicable diseases and conditions."

Professor Stephen Gordon, Director, Malawi-Liverpool-Wellcome Trust:

"If we have true partnerships in future that are led by well-trained people of every nation, then the world can look forward to sharing further improvements in health – a term that should encompass physical, mental and spiritual human health, in an environment diverse with species in a stable ecology."



Trevor Mundel

Refiloe Masekela

COVID-19: LSTM RESPONDS

COVID-19 has had an unprecedented effect on our lives. Recent events have shown, global pandemics do not respect geographical boundaries, and a globally focused effort is needed to combat them. That is why the work of the Liverpool School of Tropical Medicine has never been more important.

WE NEED TO THINK GLOBAL TO ACT LOCAL.

For an organisation like LSTM, deploying our resources where we can to support the fight against COVID-19 has been our civic and moral duty. Our researchers and clinicians support front line care in the NHS, provide expertise to Public Health England and the WHO and mobilise our research focus onto the rapid development of new diagnostics, treatments and prevention strategies to halt the disease.

In April, LSTM launched the COVID-19 Response and Resilience Fund to raise vital funds to support critical COVID-19 research at LSTM and to provide essential equipment for the frontline response in Malawi. This included the installation of an Oxygen Plant at Malawi's Queen Elizabeth Central Hospital, funded by the Wellcome Trust, the first of its kind in the country.

With the help and support of our donors in the UK, alongside local donors, and businesses in Malawi, we were able to raise an additional £197,000.

160 staff and friends of LSTM raised £11,700 by participating in our 'Race to Malawi' event. Teams were challenged to walk, jog or cycle the equivalent of 8,268km from Liverpool to Malawi by collectively logging their daily (socially distanced) exercise. We have played a leading role in the UK response to COVID-19 and community interventions here and overseas:

- Our researchers have been at the forefront of the development and validation of rapid diagnostic tests for COVID-19, including a partnership with Mologic on an antibody test which was developed for manufacture in the UK and in Dakar, Senegal.
- In partnership with Pfizer, we are testing a potential vaccine for COVID-19-related pneumonia, using a pioneering novel technique developed at LSTM.
- LSTM was selected as one of the UK sites for Phase III of the University of Oxford's COVID-19 vaccine clinical trial, the biggest phase III trial site outside Oxford, recruiting 900 participants. Initial data points to the vaccine having currently has an efficacy up to 90%. Unlike other vaccine candidates, it does not need extreme cold storage to be transported. AstraZeneca and Oxford have pledged that the first phase of distribution will be on a not-for-profit basis, therefore enabling access globally.
- LSTM's 3D printers were repurposed to produce up to 80 face shields a day for frontline NHS workers.
- LSTM alumni around the world are playing their part to tackle COVID-19, including alumnus Dr Anarfi Asamoa-Baah (MSc Community Health, 1989), former Deputy Director-General of the World Health Organisation, who is leading Ghana's national response.



scan or code: DOWNLOAD OUR LSTM RESPONDS BOOKLET



For the latest on LSTM response to the COVID-19 pandemic, visit: lstmed.ac.uk/covid-19



Malawian minister of Local Government, Honorable Ben Phiri, opens the oxygen plant.



A plaque assay with cells infected with inactivated SARS-CoV-2.

ERADICATING LYMPHATIC FILARIASIS: **A DREAM ALMOST REALISED**

"It's a story about a young girl who dreamed about being a researcher, about a young woman who climbed the hills of Amani in search of that dream, and the woman who is living that dream doing research and contributing to the control of a disease she has worked on all her life!" Tanzania is on track to follow its neighbour Malawi in eliminating lymphatic filariasis (LF) as a public health problem by 2024. This remarkable achievement will be in no small part thanks to the efforts of a truly inspirational figure in the fight against neglected tropical diseases – Dr Mwelecele Ntuli Malecela.

2020 HONORARY GRADUATES



LF, commonly known as elephantiasis, is a painful and profoundly disfiguring disease caused by a microscopic, thread-like worm which is transferred from person-to-person by mosquitos. Its visible manifestations cause disability and deformities of sufferers' limbs, breasts and genitals. Added to this is the profound psychological, social and economic impact on the individual, their families and the wider community. It is this far-reaching impact which has inspired Dr Malecela to dedicate her life to the disease's eradication and which makes her a worthy recipient of an LSTM honorary degree. Dr Malecela explains:

11 I started out as a parasite specialist, but soon wanted to shift my focus to lymphatic filariasis, or elephantiasis. It was highly endemic in Tanzania at the time and there wasn't much being done about it. My first experience of working with sufferers of the disease was very disheartening. I could see their physical deformity, but I knew there was little I could do for them. It was a frustrating situation where I would go in and talk about the disease but not be able to do anything. For me it was very sad... I could really paint a very desolate picture of the disease... I think, after leprosy, it is one of the most stigmatising diseases you can have - people just want to stay away from you.

Dr Malecela has been working in the field of LF since 1987 when she first joined the National Institute for Medical Research in rural Amani. Starting as a junior scientist in the field of LF ("At the time mine was a predominantly wormy world" she has said), she later focused on the immunoepidemiology of filarial infections and ran successful programmes for LF patients.

This success, and the completion of an MSc and PhD on the immunology of filariasis (specifically filarial immune evasion mechanisms) at London School for Hygiene and Tropical Medicine, led to her being promoted to Director of Research Coordination and Promotion in 1998. From there she rose to become the first female Director General of the institute in 2010 and then the Chief Research Scientist in 2016.

In 1998, when the World Health Organization announced a plan to eliminate LF, Dr Malecela's extensive experience meant she was central to developing a plan for Tanzania. Two years later she led the launch of the mass LF treatment campaign which was to have such an impact in Tanzania – the National Lymphatic Filariasis Elimination Programme. This programme was part of a massive global scale-up targeting the 120 million people affected by LF, an approach which has trail blazed the control and elimination strategies for the majority of the 20 NTDs.

It was this programme which kick started the enduring partnership between Dr Malecela and LSTM. Financial and technical support from LSTM's LF Support Centre (which became the Centre for Neglected Tropical Disease) supported the launch of a drug administration programme on Mafia island off the Tanzanian coast – a case of starting small, learning and then scaling up. She recalls, "my legacy from the lab to the field to control came full circle".

Following a brief stint at the Tanzania Commission for Science and Technology in 2017, Dr Malecela joined WHO; first as the director of the Africa regional office in Brazzavile, Congo, where she was responsible for providing policy, managerial and diplomatic advice to the Regional Director, then moving to Geneva in 2018 to take up the post of Director of Department for the Control of Neglected Tropical Diseases.

Dr Malecela is still at WHO today and is the principal architect of its NTD Road Map for 2021-30. This new strategy is a remarkable achievement, reflecting and framed by the growing commitment to achieving sustainable development goals and universal health coverage. It acknowledges how fragile and vulnerable NTD programmes are to shocks and stresses and fully embraces the need for research and innovation in all NTD programmes. Her approach to developing and delivering the roadmap, her engagement with the global community, and her skills for diplomacy, tolerance and tact are all characteristic of her highly effective management style.

The list of organisations, international committees, philanthropic initiatives and scientific publication to which Dr Malecela has contributed and is part of is long and impressive. However, it is the impact her work has had on the lives of millions of her fellow Tanzanians which is most noteworthy and the reason why Dr Mwelecele Ntuli Malecela has been awarded this honorary degree.



Malaria prevention in Africa is dependent on Insecticide Treated Nets (ITNs) which prevented **500 MILLION** malaria cases from 2000-2015.

THE RACE TO COMBAT PYRETHROID RESISTANCE IN MOSQUITOES

owever, until 2017, all insecticides used in ITNs were pyrethroids and LSTM's research has highlighted the public health threat from pyrethroid resistance. Insecticide resistance poses a serious threat to insecticide-based interventions in Africa. There is a fear that resistance escalation could jeopardize malaria control efforts.

LSTM has pioneered research into the causes, consequences, and rapid spread of pyrethroid resistance in African malaria vectors and provided practical solutions to combat the problem. The outputs of this research, which span the translational pipeline, have alerted international agencies to the problem, defined the scale and complexity of the issue, informed the development of new classes of insecticides and next-generation ITNs using insecticide or insecticide/synergist combinations, and informed national and global policy on when, and where, the new products should be deployed for maximum public health impact.

Designing new approaches for resistance monitoring, LSTM has evaluated alternative analytical methods; these have been incorporated into WHO guidelines (2016) and discussions are ongoing on the incorporation of alternative assays for new insecticides. These measures have strengthened resistance monitoring and helped operational decision-making.

Understanding the genetics and behaviour of mosquitoes has been key in understanding and combatting insecticide resistance and has been pivotal in the development of mitigating strategies. Our work on pyrethroid resistance mechanisms has led to several new classes of ITNs, including PBO-pyrethroid nets that are now being included in many national net distribution schemes across Africa, whereas our studies on mosquito behaviour have led the development and field testing of nets that can utilise insecticides previously discounted from the use on nets, given their cost or toxicity.

Researchers from LSTM have designed a new bednet that can kill mosquitoes more efficiently than existing nets, in a way that increases the choice of insecticide used, while minimising risk to the individual.

The team, led by LSTM's Professor Philip McCall, designed is dubbed as the 'Barrier Bednet 'as a solution to the increasing problem of resistance in African mosquito populations to pyrethroids, the main insecticide class currently used on bednets. "DESPITE THE APPARENT SIMPLICITY, THE RESULTS ARE QUITE SIGNIFICANT."

Using video tracking systems developed with engineers from the University of Warwick, the team had already mapped the behaviour of malaria mosquitoes around bednets, which allowed them to explore how and where mosquitoes could be targeted. From this came the barrier design, simply an extra panel of netting positioned above a standard bednet's roof, where mosquitoes collide with it as they fly back and forth above the net.

Despite the apparent simplicity, the results are quite significant.

Professor McCall explained: "Ensuring that long-lasting insecticidal bednets (LLINs) remain effective despite insecticide resistance is a global health priority and a research goal for those looking for effective tools to prevent the spread of malaria. Putting insecticide on the panel above the roof of the net means that is beyond the reach of children, doesn't come into contact with those sleeping inside the net and is rarely touched during routine daily activity. This paves the way to use insecticides previously unavailable for bednets because of possible health risks from direct contact. Plus, if we only use the effective insecticide on the barrier panel, it means that manufacturing nets would cost a lot less, as would the over-the-counter price for the people that need them. It also means we could consider additional insecticides that might have been ruled out previously as too expensive."

FROM RURAL GHANA TO WHO: THE ROAD TO UNIVERSAL HEALTH CARE

2020 HONORARY GRADUATES

Even a cursory reading of Dr Anarfi Asamoa-Baah's highly impressive CV reveals just how very adaptable, talented and committed he is to health, not just in his native Ghana but across the world. His nearly 40-year career has seen him adeptly move from clinical work to academia, ministry posts to global health, and then most recently to pandemic response.

This remarkable list of achievements, and the notable influence he has had across several fields, makes Dr Anarfi Asamoa-Baah a real inspiration for this year's graduands as they embark on their own careers, and an ideal candidate for an LSTM honorary degree. "One of the challenging aspects of my work has been getting my medical colleagues to appreciate that health is much more than medicine"



Before he had reached the age of five, Dr Asamoa-Baah's nickname was 'doctor', and it was apparent that health was to be his calling. He remembers:

I was particularly fascinated with butterflies, birds, and the functioning of the human body. My favourite subject has always been biology and it was very obvious, even at a young age, that I will be a doctor. II

This early enthusiasm led, almost inevitably, to the University of Ghana Medical School where Dr Asamoa-Baah graduated with a MBChB degree. Clinical work followed, and it was while working as a doctor in charge of a small mission hospital in rural Ghana that he developed an interest in public health and working with poor communities. Dr Asamoa-Baah became a District Medical Officer and within two years was appointed as Deputy Director of Health Services responsible for communicable disease in the most populated region of Ghana. And then Liverpool came calling.

After my house job, I opted to do a rural posting, and it was during this time that my interest in public health was heightened. I hosted a colleague, Dr Martinez, who was then a student at LSTM. He had come to Ghana for his attachment. Around that time, I was offered a WHO Scholarship to do a postgraduate in Public Health and was torn between LSTM and the London School of Hygiene and Tropical Medicine."

Being a football fan, and with a gentle push from Dr Martinez, Dr Andrew Cassels (then a lecturer at LSTM), and Dr Katja Janousky (who was working at WHO in Geneva), Dr Asamoa-Baah opted for LSTM. He describes the two years he and his wife spent in Liverpool, first as a master's student and then as a lecturer, as "one of the best times of my life" and the start of a relationship that has endured. He explains:

It [LSTM] opened my eyes and mind to the incredible academic rigour, the quality of the faculty and the rich experiences one acquires from such a wide-ranging experience. Post-graduate qualifications in health planning, health economics and health policy followed before Dr Asamoa-Baah returned to Ghana in 1990 to head the Policy, Planning, Monitoring and Evaluation Division of the Ministry of Health. His appointment as Director of Medical Services followed in 1997 and proved a momentous period for Ghana's health service. Dr Asamoa-Baah remarks:

I am proud I was part of the movement to advance the strengthening of the District Health Systems in Ghana, in the establishment of the Ghana Health Service, the National Health Insurance Scheme, the Food and Drugs Authority, and for establishing a mechanism of partnership with external contribution to the health sector in Ghana.

During this period (1988-98), Dr Asamoa-Baah also served as a WHO consultant and advisory committee member for primary health care, health systems strengthening, research and training in tropical diseases, and the expanded programme on immunisation.

1998 saw a permanent move to WHO when Dr Asamoa-Baah worked as a Senior Policy Advisor to the Director-General. His roles included Assistant Director-General for External Relations and Governing Bodies, Health Technology and Pharmaceuticals, Communicable Diseases, HIV/AIDS, tuberculosis and malaria programmes, and tropical diseases. Then in 2007, Dr Asamoa-Baah took up the post of Deputy Director-General of WHO.

As you might expect from someone grounded in both medicine and public health, the work Dr Asamoa-Baah led at WHO aimed to deal not only with the medical side of disease treatment but also with the social, economic and cultural aspects and their long-term repercussions. Universal health care remains an important focus for him.

Throughout this period at WHO, Dr Asamoa-Baah's links with Liverpool remained and included collaborations on a range of projects including neglected tropical diseases, HIV, TB and malaria.

With such an illustrious career at WHO there must be many contenders for Dr Asamoa-Baah's list of particular achievements, but he reflects...

¹¹ I have been very lucky to have worked with really excellent people. It has been an exciting journey for me... I take pride in the fact that I worked with the late Mr Kofi Annan in establishing the concept of the **Millennium Development Goals** (you will recall that three of the eight goals were health sector goals)... I am happy with the role I played in establishing GAVI (the Global Alliance for Vaccines and Immunization), and the Global Fund for HIV, TB and Malaria... I am particularly proud of my involvement in the NTD movement, in the drafting of the Sustainable Development Goals, and in the promotion of Universal Health Coverage.

In 2015, Dr Asamoa-Baah returned to Liverpool to deliver the LSTM Leverhulme Lecture. During his presentation he reflected on the improvements achieved in many global health markers over the previous 15 years. With great prescience he also said that the world was becoming a smaller place, in future infectious diseases would spread widely, and that unless every country was prepared, no country would be prepared.

In 2020, that prediction came true and the global health picture changed markedly, as did Dr Asamoa-Baah's role. Ghana's President Akufo-Addo appointed him as the Presidential Coordinator for the government's Coronavirus Response Programme, where he is currently responsible for coordinating all aspects of Ghana's Covid-19 response. Given his experience, unwavering dedication and commitment to universal access to quality health care it is a challenge to which Dr Asamoa-Baah is well suited.

COMPETITION WINNER

he winner of LSTM's first Alumni and Friends Blog Competition, Domhnall McGlacken-Byrne is a doctor currently studying for the Diploma in Tropical Medicine and Hygiene at LSTM. After his Diploma, he plans to work overseas in a humanitarian context, such as with MSF, before resuming his postgraduate training in paediatrics in Ireland.



We love to hear from you. If you are a keen writer then why not get in touch with us and find out how you can get involved in blogging for LSTM: alumni@lstmed.ac.uk

"SHOULD WE RETHINK THE WAY WE APPROACH GLOBAL HEALTH IN A POST-COVID-19 WORLD?"

A few weeks ago, Ireland's Prime Minister Micheál Martin looked sombrely into the country's living rooms and announced that, as coronavirus cases soared, the country would need to enter a further, painful period of lockdown. True to form as a former schoolteacher, Mr. Martin concluded with an Irish proverb: *"Ar scáth a chéile a mhaireann na daoine"*.

("Remember lads" Mr. Regan used to say in Irish class, "if you're unsure how to end an essay, just go with the first proverb you think of.")

To be fair, this seanfhocal was well-chosen. It means 'people live in each other's shadow'. That no man is an island, in other words. That the lives we lead are close, vulnerable and contingent on those around us, to a greater extent than we might like to admit.

So much has changed in the months since the start of the Covid-19 pandemic. Lives have been lost, all weddings cancelled, all funerals muted, and social life as we know it upended by the sad paradox of us protecting each other by remaining apart. Amid the upheaval, as my Diploma in Tropical Medicine nears its conclusion, I have now found myself reflecting not on what has changed, but more importantly on what has not. Life has changed, but its underlying values remain constant. And for those who care about global health, many lessons of recent months have been trueall along.

Perhaps the most profound of these is that, in a fragile world, to be human is to depend on each other. The pandemic has merely reminded us of this.

The clearest example has been the strategies adopted to curtail the spread of the virus. As terms like 'R-nought' and 'asymptomatic transmission' entered public consciousness, we realised that successful efforts to flatten the curve needed to be collective by definition. The act of wearing a mask in shops protects not only ourselves, but the person at the till, others in the queue, and ultimately the most vulnerable members of society. Healthcare workers donning PPE each day did so not for ourselves, but for the patients under our care and loved ones at home. For society as a whole to get through, everyone needed to be protected.

Equally, as we pin our hopes on the search for an effective vaccine, this logic of mutualism asserts itself. The need for equitable distribution of a vaccine once available is likely to prove as crucial as the science itself. For society to control Covid-19, a vaccine must be available to all citizens, rich or poor. Likewise, on a global level, if a 'vaccine gap' emerges, where rich nations stockpile a vaccine while transmission occurs unchecked among poor countries, this will be both immoral and deeply short-sighted. As Bill Gates has written1, the only way to eliminate the threat of Covid-19 anywhere will be to eliminate it everywhere.

Looking further beyond Covid-19 to issues such as climate change and antimicrobial resistance, this mindset of shared vulnerability will be needed to overcome the greatest global health challenges in decades to come. In the here and now, if women are deprived of obstetric care, and neglected tropical diseases are allowed to cause avoidable misery, and children die from basic, treatable illnesses, we all suffer in the end.

We do indeed live in each other's shadow. One of the great ironies of this pandemic was the immediacy with which we saw this truth – yet it was true all along. A world in which universal human rights are upheld, where extreme poverty and avoidable death are not tolerated, is a world that is more sustainable, safer, and happier for all of us.

MINUTES WITH PROFESSOR MOSES BOCKARIE

(PhD, 2015)

Director of International Cooperation Africa & Head of Africa Office, European & Developing Countries Clinical Trials Partnership (EDCTP).

Professor Bockarie is the recipient of the 2016 Royal Society of Tropical Medicine and Hygiene Mackay Medal for outstanding work in tropical health. He is also Chair of the WHO/TDR Scientific Working Group for Vectors, Environment and Society and a member of the WHO Regional Programme Review Group for Neglected Tropical Diseases in the African Region. Before joining EDCTP, he was a member of the independent EDCTP Scientific Advisory Board. He was also the Director of the Centre for Neglected Tropical Diseases and Professor of Tropical Health Sciences at the LSTM.

DESCRIBE YOUR ROLE IN ONE SENTENCE:

Right now, I oversee the management of funds to support capacity strengthening and product development for poverty related and neglected infectious diseases in sub-Saharan Africa.

WHY DID YOU WANT TO WORK IN MEDICAL RESEARCH?

I was inspired by the pioneering outputs of the Sierra Leone based field laboratory of the Liverpool School of Tropical Medicine in medical discoveries in the 1920s. The building, where the life cycle of onchocerciasis was described by Professor Blacklock, is now part of the University of Sierra Leone where I did my undergraduate degree.

HOW DO YOU WANT TO SEE THE SECTOR CHANGE IN THE NEXT FIVE YEARS?

Good question, I would like to see African scientists leading state-of-the-art scientific investigations in Africa. Recent contributions to genome data on the evolution of the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have shown that this is possible.

MY PROUDEST ACHIEVEMENT AT WORK WAS:

It has to be demonstrating the important role of vector control in the elimination of lymphatic filariasis.

"SUPPORTING YOUNG AFRICAN SCIENTISTS TO BE LEADERS IN GLOBAL HEALTH RESEARCH."

THE BIGGEST CHALLENGE FACING GLOBAL HEALTH IS:

Not an easy question, but I think it is the limited funding for tackling poverty related and neglected diseases.

RIGHT NOW, I WANT TO:

Support young African Scientist to be leaders in global health research.

AT WORK I'M ALWAYS LEARNING THAT:

Publishing the little findings that may not seem important at the time is important. I was one of the first people to demonstrate in the field that mass drug admiration to control NTDs could reduce malaria transmission through reduction of survival rate of mosquitoes feeding on treated individuals. The rest of the world caught up with the idea 20 years later. Medicines for malaria control is now a hot topic.

IF I COULD GO BACK 10 YEARS AND MEET MY FORMER SELF, I'D TELL THEM:

I would tell myself to be more collaborative and expand your network.

WHAT IS THE BEST PART OF YOUR JOB?

Meeting my former students in leadership roles at WHO, BMGF and national disease control programmes all over the world.

WHAT MAKES YOU SMILE?

Having a paper accepted for publication.



LSTM is proud to be a part of a new decade long campaign funded by the Bill & Melinda Gates Foundation which highlights the research being carried out in the UK which benefits the health of people globally.

The campaign launched in October 2020 with a six-week media campaign showcasing the UK's ground-breaking work in science and innovation to solve some of the world's greatest health challenges.

We are thrilled the campaign features three LSTM led projects part of the '10 Things the UK is doing to make the world healthier', such as tackling TB with drones in Nepal, our snakebite research, and Tiny Targets, an innovative programme to strengthen national tsetse fly control programmes.

The campaign also features two LSTM researchers as part of the "10 people in the UK who are changing the face of health", Dr Emily Adams and Professor Daniela Ferreira.



Dr Emily Adams

CHANGING THE FACE OF HEALTH: DREMILY ADAMS

Emily Adams is Senior Lecturer in Diagnostics for Infectious Disease and Diagnostics Lead for LSTM's Research Centre for Drugs and Diagnostics. Emily's research ranges from point-of-care diagnostics such as rapid-diagnostic-tests (RDTs) to simplified molecular diagnostics that can be used at the community level.

Emily's team has been at the forefront of the development and validation of rapid diagnostic tests for COVID-19, including a partnership with Mologic on an antibody test which was developed for manufacture in the UK and in Dakar, Senegal.



SCAN OR CODE: READ ABOUT A TYPICAL DAY IN THE LIFE OF DR EMILY ADAMS

This work was critical in accelerating testing solutions for low-resource settings where diagnostic testing capacity is extremely low, but where rapid testing is essential in helping to contain transmission. Her work has also included understanding modes and of COVID-19 transmission in various settings. Emily is also part of a team leading a study measuring transmission and the impact of COVID-19 on households in Liverpool.

NOVEL SNAKEBITE TREATMENT

LSTM's Centre for Snakebite Research and Interventions (CSRI) has shown that the repurposing of an existing medicine, commonly used to treat mercury poisoning, is effective in treating some snakebites.

Snakebites kill up to 138 000 victims every year, and around 400 000 survivors are left with permanent physical disabilities or disfigurements.

Those most affected live in some of the world's poorest communities in sub-Saharan Africa, Asia and Latin America and often rely on agricultural activities for their income. This research has the potential to save lives and limbs by removing treatment delays.



DID YOU KNOW?

CSRI hosts the largest and most diverse collection of tropical venomous snakes in the UK to support its diverse research activities, education, and public engagement work.

DRONES TRIALLED TO FIGHT TB IN NEPAL

LSTM and partners are trialling the use of drones to combat tuberculosis in some of Nepal's most rural and inaccessible areas.

TB is the world's biggest infectious disease killer and there are more than 40,000 new cases in Nepal every year. Early and correct treatment is reliant on good diagnostic testing and the drones are being used to greatly reduce the transportation time of samples for testing.

This work will make the job of volunteers easier and allow patients in remote areas to access better and more convenient care, 'leaving no-one behind'.





largest Tsetse breeding colony in the UK.

OUTSMARTING BIG DISEASES. ONE TINY TARGET AT A TIME

LSTM led the development of an innovative but extremely simple solution to reduce the risk of Trypanosomiasis, also known as Sleeping Sickness using 'tiny targets' to kill the disease-carrying Tsetse fly. The traps use bright blue insecticide-treated fabric not much bigger than a handkerchief, mounted on a stick next to a river where the flies live. The fabric attracts the tsetse flies and they are killed by the insecticide, which reduces the population to such an extent that the number of cases drops dramatically.

These these tiny targets, which are much less expensive than the traditional traps, are just as effective in killing the tsetse fly vector of this terrible disease. As a consequence we are able to offer protection to a population, as well as their livestock, at a fraction of the cost.



PROFESSOR DANIELA FERREIRA

Daniela is Head of the Clinical Sciences Department and Professor of Respiratory Vaccines and Infection Immunology. The team's work focuses on pneumococcal bacteria and the development of new vaccine strategies. The Experimental Human Pneumococcal Challenge (EHPC) Model is the only model in the world in which participants are inoculated with live pneumococcal bacteria in their nose. This model is used as a vaccine testing platform as well as a transmission model for prevention strategies with multiple flourishing life science partnerships. This work is critical as pneumonia kills more children globally than any other infectious disease.

Daniela's work has involved the development and trialling of a number of COVID-19 vaccine candidates, including the FASTER study in partnership with Pfizer, which aims to understand how bacterial pneumonia leads to severe COVID-19 infections. Daniela is also leading the LSTM-arm of the phase III Oxford vaccine trials.

EQUALITY IN SCIENCE

Key to LSTM's success as a world leading research and teaching institution is our continuing ability to attract and retain the most talented people to fulfil our mission of improving the health of the world's poorest people.

To achieve this, it is vital that LSTM is a great place to work and study, where we foster an institutional culture in which everyone can thrive and flourish.

We have signed up to the Vitae Concordat to Support the Career Development of Researchers, which aims to improve the employment and support for researchers and research careers in UK higher education. Together with other initiatives to support progression and research culture, we will develop a blueprint which can be extended and adapted to provide opportunities for development across the whole organisation.

Aa global organisation, with colleagues from diverse backgrounds, professions and experiences our diversity and inclusion strategy is vital to address barriers and promote equity and to build our cultural competence and embed shared values which will create a collective language and framework to shape our environment.

CELEBRATING WOMEN IN SCIENCE

Professor Janet Hemingway

Professor of Vector Biology, Chair in Insect Molecular Biology and former Director of LSTM, Professor Hemingway has over 34 years' experience working on biochemistry and molecular biology. She was the youngest woman ever to become a full professor in the UK.



Dr Euphemia L. Sibanda

Euphemia is an implementation science researcher who is based at Centre for Sexual Health and HIV AIDS Research, Zimbabwe, where she leads a portfolio of operational research studies on HIV and sexual & reproductive health. She joined LSTM as an honorary research fellow in December 2016 and was appointed Senior Lecturer in Global Health and Epidemiology in 2019. Euphemia is a 2018 recipient of the MRC/DFID African Research Leader Fellowship.

Much of her work has been implementation science research aimed at evaluating interventions at various points of the HIV continuum of care, including prevention of mother-to-child transmission of HIV, HIV testing and adoption of treatment and prevention strategies.

Letitia Obeng (PHD, 1965)

In 2018, Dr. Letitia Obeng was the first person to be awarded an honorary degree by her alma mater, LSTM and is just one of many national and international honours bestowed on Dr. Obeng. They include the Order of the Star of Ghana and her unanimous appointment as the first female President of the Ghana Academy of Arts and Sciences.

> She is the first Ghanaian woman to graduate with a bachelor's degree in science, as well as the first to be awarded a doctorate in science, which she gained at LSTM after arriving in Liverpool in the 1960s with her three children, aged eight, six and three.



Inclusion, Diversity & Engagement Manager Sophie Black n February 2020 I joined the Human Resources Team at LSTM as Inclusion, Diversity & Engagement Manager, having little idea that within my first month we would be in the midst of a global pandemic and would all begin to work remotely. I couldn't have imagined a stranger start for a role in which engagement with colleagues is so crucial.

World events have necessitated a reframing of my role, and made my first nine months at LSTM something of a challenge. The differential impact of COVID-19 on varying sectors of society, and the Black Lives Matter movement, have given organisations across the world significant impetus to reflect on their own practices, and the barriers to progression faced by people with protected characteristics are now deeply embedded in the minds of many people for whom they were previously only peripheral issues. Addressing these issues will be tough, no doubt, but LSTM is passionately committed to doing exactly that, with humility, open mindedness, transparency, and accountability. A key action will be establishment

of our BAME Advisory Panel, who will work hard to ensure that LSTM is a truly egalitarian workplace community, and a beacon of active anti-racist cultural practices and norms.

My own aspiration is to lead on the development of that inclusive future for LSTM, taking account of who and where we are, and helping shape the vision of where we want to be in the future. My personal vision is of an organisation which prides itself on its inclusive, global environment, which knows and passionately believes that this is the only way to unlock the benefits that a diverse workforce can bring, and which appreciates that inclusion goes much further than a simple list of protected characteristics, or check-box ticking of our legal obligations. Inclusion means so much more: it means that all voices are heard, barriers to progression are dismantled, and that we, individually and collectively, are truly empowered to call out and eradicate behaviour that isn't aligned with the values of the organisation.

When I first joined LSTM, I was immediately impressed by how many colleagues were already onboard with this vision, and how they recognised the importance of my focus on ensuring our working environment is as inclusive as possible. It is clear that with a clear global remit LSTM will continue to attract diverse candidates from the global talent pool – this gives us a real advantage, but we must also work hard to ensure that we develop and retain our most committed employees – I and the leaders in LSTM believe that we can only do that by creating an global environment where everyone feels a sense of belonging and shared purpose.

There's always work to do in this arena, and we won't always do things perfectly. However, as an organisation we are all committed to working hard to improve and have a clear vision of becoming sector-leading in this area. We will only succeed in this by working as a community - being challenging when required, but also by maintaining and strengthening the connections that we have within the LSTM global community.

As a global organisation, the barriers to creating an inclusive environment cannot be underestimated, and we need to work hard to create nurturing environments for all staff regardless of location, within the cultural and legal barriers that we may face globally. This is a challenge, but one that with the knowledge, experience, and expertise of our staff I am confident that we are well-equipped to address.

We are all committed to the future of the organisation, and I am really looking forward to working with all members of our global community to ensure that LSTM is truly an exceptional place to work and study.



MSC GLOBAL HEALTH PROGRAMME

Reflecting on the first wave of the Covid-19 pandemic with Dr Martha Chinouya, MSc Global Health Programme Director:

When Covid-19 began to unfold itself, it had a huge impact on universities as most of the face-to-face offerings had to quickly adapt and respond to social distancing rules by transferring to online delivery. However, the LSTM MSc Global Health Programme (GHP), developed before the pandemic, was already nested on a virtual learning environment which is embedded in pedagogy for the development of key global health competencies for our learners. As this is an online programme, students are not required to be physically present in Liverpool.

When the world was being 'locked down' and new travel restrictions were being introduced, our learners were in their home countries with their families and children, receiving and offering

support during this uncertain period. 'Lockdown', for most, was a family experience, which meant negotiating work and home responsibilities, including childcare as schools were closed. As they had not migrated to England for educational purposes, they remained an important resource in their home countries, contributing to local Covid-19 responses, using competencies that were being developed through the Global Health programme. They were able to share experiences/good practices with their peers who were scattered across the globe to make local impacts. As emerging global health leaders, they tell stories of how, through the programme they have gained a range of skills, knowledge and values that influence their work in providing local innovative solutions that reduce inequalities.



Dr Martha Chinouya

WHAT OUR STUDENTS SAY ABOUT THE PROGRAMME:



Linet Okoth, Kenya:

"Global Health program in LSTM is an opportunity that came at the best time. It is a unique course that exposes students to global health not forgetting contextualizing their learning to their local context. The course is flexible, excellent supervisors with good content that allows learners to acquire knowledge, not forgetting networking in the globe among the students."

Silvestre Ngwa Suh, Sierra Leone:

"With the knowledge gained from the M.Sc. Global Health at LSTM, I contribute in influencing policy decisions around key COVID-19 response pillars including case management, logistics and supply chain, community sensitization, and more importantly in helping the Ministry of Health ensure the continuation of essential health services at primary, secondary and tertiary care levels."



Dr Laura Carey, UK doctor working in Malawi:

"The assignments often involve developing a solution to a specific global health related issue. For example, forming a communication strategy for a new government policy. As a clinical researcher, I had not fully considered the steps beyond developing the evidence. An understanding of the translation of evidence into policy is essential for anyone considering a career in global health. The group work assignments involve working collaboratively with colleagues across different time zones, another key skill for working within global health."



To find out more information about the MSc Global Health programme at LSTM, visit: lstmed.ac.uk/MScGH Call: +44 (0)151 702 9590 Email: mylstm@lstmed.ac.uk



SCAN OR CODE: We offer all our alumni Loyalty Tuition Fee Discounts, up to 20%, on all our taught programmes. visit: lstmed.ac.uk/alumni Our MSc Global Health programme is underpinned by LSTM's vision of decreasing the disease burden in resource poor settings through research, education and building capacity. The programme contributes to the global health agenda articulated in the UN's Sustainable Development Goals. he COVID-19 pandemic has demonstrated the critical role of education and capacity strengthening in the global health agenda. LSTM staff, students and alumni have been directly involved in projects around the globe addressing

the impact of COVID-19 on society.

As we look forward, we need to intensify our efforts to increase our provision to address the skills gap in developing tomorrow's global health leaders.

We cannot afford to remain static. As part of driving this agenda, we are embarking on some very exciting new initiatives. Our Education Strategy will be launched in early 2021 which will outline a distinctive model for education at LSTM which is internationally recognised and respected.

As a key enabler of the Strategy, we will be developing Pembroke House, a ground-breaking teaching space with the digital capability of supporting collaborative and problem-based learning. Its design will be informed by recent experiences gained by responding to COVID-19 and will vitally reflect on student feedback to ensure its design and ethos is aligned with the needs of our students across the globe.

We are also scoping exciting new programmes to be launched that reflect the latest trends and areas of specialism in our field.

Our approach to these programme developments is very much market-led with significant consultation from internal and external stakeholders. Feedback from our alumni is fundamental to all this activity. Our alumni are in senior positions in their respective fields and enablers of change on a national and international level.

In partnership with our Alumni Relations Team, market research is being conducted with LSTM alumni to inform the development and structure of these programmes and to embed the expertise and global perspective of the content and delivery. Through targeted focus groups and Alumni surveys, we are engaging and reconnecting with an incredibly engaged and supportive alumni network. We are thrilled to be working with our alumni community and will regularly update and consult on our plans to ensure their relevance to the global community.



MASSIVE BOOST

TO LIFE SCIENCES RESEARCH IN LIVERPOOL



ecognising the Liverpool City Region and North West England's existing world-class expertise in life sciences, a Liverpool School of Tropical Medicine (LSTM) led consortium has received £18.6m from UK Research and Innovation (UKRI) Strength in Places Fund (SIPF) for five years to deliver an innovative project delivering integrated therapeutic solutions for human infections.

The newly formed consortium named iiCON, along with LSTM, includes the Liverpool University Hospitals NHS Foundation Trust, Unilever UK, University of Liverpool, and Evotec Ltd and the AMR Centre, which are based at Alderley Park, Cheshire.

The project will act as a catalyst for economic and regional productivity by leveraging £115 million worth of investment, creating eight specialist, commercially sustainable research platforms for infectious diseases therapeutics in North West England. These research platforms will go on to transform the efficiency of new product discovery, development, evaluation, and impact assessment.

With the Liverpool City Region, Cheshire and Warrington having the largest concentration of infectious diseases research in the UK, it is no surprise that this consortium of organisations was chosen for the SIPF funding. The region has shown an impressive, meticulous response to the COVID-19 outbreak, working on active research programmes in vaccines, diagnostics, and therapeutics. Project lead, LSTM's Professor Janet Hemingway, said: "LSTM devised this programme together with our industrial, NHS and academic partners aiming to be the first choice globally for infection research and development initiatives. This grant secures the international reputation of the region in infection innovation and will attract substantive follow-on international investment."

LSTM Director, Professor David Lalloo said:

"Throughout its history, LSTM has always been at the forefront in innovative approaches in finding solutions for human infections. The current global COVID-19 outbreak shows again how essential and relevant our global expertise in the diagnosis, treatment and prevention of these diseases is."

LTSM, with industry funding, is currently carrying out two trials – one focusing on immunology in bloods, nasal mucosa and bacterial colonisation associated with clinical outcomes. The wother takes samples from healthcare workers and COVID-19 patients to assess changes in biomarkers during exposure to/ development of infection.

Investment in diagnostic technologies at LSTM, initiated in response to the antimicrobial resistance (AMR) crisis, have been rapidly adapted to provide validated diagnostics to meet the needs of the COVID-19 outbreak. It has allowed Liverpool to become a test bed for new diagnostic technology development and evaluation trials for COVID-19. To this end LSTM has been central to the validation of lab based COVID-19 anti-body tests and rapid diagnostic tests with multiple commercial and academic partners.

ELEVATING THE LIVERPOOL CITY REGION AND THE NORTH WEST OF ENGLAND AT THE FOREFRONT OF GLOBAL RESEARCH AND DEVELOPMENT.

> infection innovation consortium

"LSTM HAS ALWAYS BEEN AT THE FOREFRONT OF INNOVATIVE APPROACHES TO FINDING SOLUTIONS."

0

0

Give £25 > Save lives # Bungit For a fo

lstmed.ac.uk/BumpitForward

WHY IS 'BUMP IT FORWARD' IMPORTANT?

As the vaccine rolls out in advanced economies, the health inequalities across the world become more stark. For example, in the UK, the vaccine rollout is well underway with every person eligible for a free vaccination on the NHS.

In poorer countries, it will take longer for the vaccine to reach even the most vulnerable or frontline workers. For health systems which are already woefully under-resourced, dealing with a second wave and new strain of COVID-19 is a monumental challenge. Hospitals and clinics are operating without the basics to protect their staff and patients. PPE and basic sanitation is in short supply, frontline workers are dying or are at home sick with COVID-19 – without basic support, fragile health systems will be decimated of their most precious resource at this time – health workers.

#BumpitForward

With #BumpltForward, we are aiming to get vital equipment and supplies to frontline healthcare workers and support the most vulnerable people in the communities we serve.

"The Covid vaccine is now being rolled out in UK, but it will be a long time before it is available in Malawi, and we are crashing hard into our second wave here, with an overflowing hospital, rapidly increasing deaths, a National State of Disaster declared, and health care workers falling sick."

Professor Melita Gordon,

Malawi-Liverpool-Wellcome Trust Clinical Research Programme, Blantyre



justgiving.com/campaign/BumpItForward

JustGiving

INTRODUCING DAME TINA LAVENDER

LSTM welcomes Professor Dame Tina Lavender to the Department of International Public Health, as she heads up LSTM's new Centre for Childbirth, Women's and Newborn Health (CWNH).

> ame Tina joins LSTM after a successful 12 years as Director of the Centre for Global Women's Health at the University of Manchester and

will build on the international success of LSTM in the field of maternal and newborn health. The new CWNH will specialise initially in two main areas of research: Prevention and Management of Stillbirth and Neonatal Deaths, and Respectful Maternal and Newborn Care.

Along with Dame Tina, a number of her team from the University of Manchester have made the move to LSTM to be part of the new CWNH – Senior Lecturers Dr Carol Bedwell and Dr Tracey Mills, Research Administrator Jon Wood, Senior Programme Manager Roy Daley and Research Associate Valentina Actis-Danna. Born in Merseyside, Dame Tina began her career as a midwife in Liverpool supporting many women to give birth, before training others in the role and researching maternal mortality and morbidity in lower- and middle-income settings. She is the founder and Associate Editor of the African Journal of Midwifery and Women's Health and was named as one of the most inspirational women in the World, by the BBC. Dame Tina is an Honorary Fellow of the Royal College of Midwives and holds a visiting professorship at the University of Nairobi.

Joining LSTM in the run up to its 125th anniversary in 2023, the team of expert researchers and programme support staff at the new centre will build on LSTM's many years of training, research and technical assistance in maternal and newborn health across Africa and South Asia.

Commenting on joining LSTM, Dame Tina said:

"I am delighted to be working at LSTM. It provides an exciting opportunity to work in an environment with such a strong trackrecord of innovative and impactful global health research. This position enables the team and I to build on our previous work for the benefit of women and babies in Sub-Saharan Africa and Asia."

Professor Shabbar Jaffar, Head of LSTM's department of International Public Health, where the new CWNH sits, said:

"I am delighted to welcome Tina and her team to Liverpool. Research on preventing mortality and morbidity of mothers and children is a very high global health priority and crucial for LSTM."

"EXCITING OPPORTUNITY TO WORK IN AN ENVIRONMENT WITH SUCH A STRONG TRACK RECORD OF INNOVATIVE AND IMPACTFUL GLOBAL HEALTH RESEARCH."

ALUMNI SPOTLIGHT

All graduates and supporters of LSTM are a part of a global community of like-minded individuals who want to make a difference to global health. We are proud to attract the best talent from around the world, and even more proud of what they go on to achieve.



DR Sara Mitchell (PHD, 2011)

Sara Mitchell is a senior scientist who completed her undergraduate thesis, MSc and PhD here at LSTM. Sara has been fascinated by tropical diseases and mosquitoes in particular ever since she first spent time at the school almost 20 years ago when participating in work experience while at Archbishop Blanch secondary school (Liverpool). Having decided to pursue a career and degree in Biological Sciences, Sara jumped at the chance to enroll on the first Tropical Disease Biology degree program to be awarded jointly by Liverpool University and LSTM.

Since leaving LSTM, Sara has gone on to an exciting career in vector research. She has worked as a Post-Doctoral Research Associate with Flaminia Catteruccia at Imperial College, London, who she then went on to work with as a Research Fellow at the Harvard School of Public Health in Boston, Massachusetts until 2016 studying the molecular basis of mating and reproduction in both male and female Anopheles gambiae mosquitoes. Sara then moved to work for Verily Life Sciences in San Francisco, California, where she is Senior Scientist on a project called 'Debug' – a vector control initiative led by Google which uses the Sterile Insect Technique to reduce vector populations. Sara has worked on a number of published papers, as well as speaking at several conferences.



Dr Ahmed Al Mandhari is a leading global health expert with extensive experience of managing health systems in his home country of Oman and across the Middle East. Dr Al Mandhari completed his medical qualification at Sultan Qaboos University in Oman in 1993 before coming to LSTM to complete the Diploma in Tropical Medicine and Hygiene in 1996. He then returned to LSTM for his PhD in quality management in healthcare, from which he graduated in 2002. Upon completing this PhD, Dr Al Mandhari spent a further year at LSTM working in a postdoctoral position.

(PhD, 2020) Ahemd Salim Saif Al Mandhari

Since then, Dr Al Mandhari has gone on to hold a number of key positions in Oman, as well as working as an international consultant. From 2005 to 2006, he was Head of Quality

Management and Development at Sultan Qaboos University Hospital, and then Deputy Director-General for Clinical Affairs until 2010. He was then appointed Director-General of Sultan Qaboos University Hospital in 2013, before establishing - and serving as Director General of - the Quality Assurance Unit at the Ministry of Health which gained international recognition for its work. Dr Al Mandhari's research papers have also been widely published, and he is on the editorial board of several journals.

SISTER DR RITA SCHIFFER

(DTM&H, 1997)

Sister Dr. Rita Schiffer is a gynaecologist who came to Liverpool in 1997 to study the Diploma in Tropical Medicine and Hygiene (DTM&H), after having completed her medical training in Germany, and then spending time in Ghana.

After completing her course at LSTM, Rita moved to Ethiopia where she works to this day. She is a Medical Mission Sister (a Catholic nun) working at the remote Attat Hospital, Gurage province, a centre for maternal health which also runs an extensive integrated health service covering a population of over 1 million people, offering essential and often life-saving in-patient care, as well women's groups, water and sanitation activities, and village first-aid stations. The hospital has proved to be a model of its kind, being visited by UNICEF, who attempted to replicate its success elsewhere.

Rita is the Medical Director of the l was able thospital, a challenging but rewarding the last 20 role, which requires providing complex and essential procedures with only basic equipment. Rita is passionate about the standard of, and access to, maternal healthcare in low resource settings.



LEAD - Issue 3

25

What are you most proud of?

"I am most proud of the fact that we were/are able to deliver uninterrupted surgical services, especially the provision of Caesarean Sections, at Attat Hospital for the last 49 years, and of the little I was able to contribute to that over the last 20 years."

STAY CONNECTED

f LSTMED 🕑 🞯 LSTMNEWS (in Liverpool School of Tropical Medicine

Join our alumni and friends network:

k Istmed.ac.uk/sign-up

Our plastic wrap is 100% compostable ΣX