

## University of Glasgow Report to Scottish Funding Council GCRF QR Funding 2019-20

### *Institutional research context*

In its recently launched 2020-25 research strategy, the University of Glasgow (UofG) continues its commitment to three core principles: valuing quality of research over quantity; recognizing that the University succeeds when individual researchers succeed; and emphasizing that how research is conducted is as important as what is achieved. Our strategy identifies collaboration, creativity and careers as focal points for achieving our ambition for the next five years: by working in teams, building on each other's ideas, and making Glasgow the best place to develop a career, our research transforms lives and changes the world.

Our GCRF Small Grants Fund, which is supported by our QR GCRF funding, is conceived and managed to mirror the values articulated in the University research strategy and our GCRF strategy. Specifically, our GCRF funding supports development of equitable and reciprocated relationships with diverse partners, support for early career researchers in the UK and Low-and-Middle-Income Countries (LMICs), and development of capacity both in the UK and LMICs to tackle global challenges. Our funding does not support core UofG staff or activities but is wholly invested in activities to address specific global challenges. This commitment has yielded significant strategic successes, both for UofG and our partners. In 2019-20, we partnered with 105 unique organizations in 32 countries including hospitals, government ministries, NGOs and industry collaborators. Partnerships developed through previous years of funding enabled us to quickly support our partners' response to COVID-19 in 5 countries. Teams supported by our GCRF Small Grants go on to have high degrees of success in external funding calls to continue their work. Our ongoing commitment to partnership development, support for early career researchers and capacity strengthening ensures we remain agile and responsive to future global challenges and crises while producing world-leading research outputs.

In addition to the broader strategic context, examples of individual project outcomes highlight the success of our programme:

- One of our 2019-20 fellows led a successful £800,000 NIHR grant application to address COVID-19 and diabetes in Tanzania. This was accomplished despite her planned programme of work in Glasgow being severely impacted by the COVID-19 outbreak.
- Our COVID-19 Rapid Response project in Chocó, Colombia distributed humanitarian packs to 1,050 at-risk families. In addition to enhancing the reach of the public health messaging and incentivising participation in the study, these packs help mitigate the impact of local movement restrictions on traditional livelihoods and food security.
- Our COVID-19 Rapid Response project in Venezuela established the connections and data collection processes to launch and maintain a database

## University of Glasgow Report to Scottish Funding Council GCRF QR Funding 2019-20

of COVID-19 key figures in Venezuela that is open access and updated regularly:

<https://public.tableau.com/profile/victoria.castro#!/vizhome/MonitoreocasosIRA/MONITOREONACIONALCASOSIRA>

- 3 of the 9 students participating in our Masters level parasitology exchange programme have secured PhD interviews with European institutions.
- A return visit by one of our researchers to Malawi to share the findings of previously-conducted research with study participants and stakeholders has led to an invitation to provide ongoing epidemiological support and facilitate laboratory support for national influenza surveillance.

### ***Progress with our GCRF strategy***

UofG's GCRF Strategy is built around 3 priority objectives:

- Development and support for resilient, equitable and innovative research partnerships with the Global South
- Skills development and capacity strengthening
- Support for Early Career Researchers (ECRs) in the UK and the Global South

These objectives have been achieved through a transparent competitive granting process within UofG that in 2019 offered 6 specific types of funding:

- **Research Projects** that have potential to develop into larger research initiatives through widening and deepening relationships with LMIC partners and conducting smaller scale preparatory studies.
- **Meetings and Exchanges** to develop and/or strengthen relationships with LMIC partners to progress potential collaborations. This can include exchanges of MPA, technical or research staff to create new research management, financial, or technical networks, or meetings to develop research ideas and strengthen collaborative partnerships. Funding may also be used to support team members of previously-funded activity (from any funder) to travel back to the relevant ODA communities and share the outcomes of the conducted research/activity.
- **Administrative Support** for existing research networks that are transitioning from nascent to self-sustaining.
- **Capacity Strengthening** (e.g. training courses) to build research, technical and administrative skills in UofG and/or LMIC organisations to increase capacity to deliver collaborative research activities.
- **1 year research fellowships for LMIC Early Career Researchers** to enable ECRs from the Global South to develop independent early career experience.
- **Masters Studentships for LMIC students** to undertake a 1-year University of Glasgow Masters programme.

## University of Glasgow Report to Scottish Funding Council GCRF QR Funding 2019-20

Each of the funding types addresses one or more of our priority objectives, thereby integrating our success across the breadth and depth of our portfolio.

As noted above, our 2019 portfolio included work with 105 unique collaborators from 32 countries, directly addressing our first main objective of partnership development. Only 49 of those collaborators were Higher Education Institutions, reflecting our stated ambition to diversify the nature of our research partnerships. Of the 59 individual initiatives funded, 13 were Meeting and Exchanges, offering teams the ability to meet in order to develop the ideas and relationships necessary to build lasting collaborations. 17 of the funded activities were pump-priming research projects, recognizing that newly-developed research relationships benefit from pilot data and joint research outputs before progressing to large scale applications. As of the August 1<sup>st</sup>, recipients of our Small Grants funding have submitted follow-on applications to external funding sources worth £17,439,949. As of December 1<sup>st</sup>, £3,881,885 of funding has been won and just over £4.8 million worth of applications are still awaiting a decision. As stated in all briefing sessions for our GCRF Small Grants call, UofG's intent is not to have successful 1-year projects, but successful enduring collaborations. This is evidenced in the option of our Meetings and Exchanges offer for teams to return to the site of previous work and share findings with local stakeholders. That so many of our initiatives successfully transition to external funding sources demonstrates our success in building sustainable partnerships that can work together to address global challenges.

Our second core objective, capacity strengthening and skills development, is addressed directly through several of the fund's components (Masters scholarships, Capacity Strengthening, Research Fellowships) and also included as a required element of all initiatives we fund. Overall, 777 individuals received training, participated in capacity strengthening workshops or engaged in knowledge exchange events. The nature of this engagement varied highly, from Masters level students embedding with labs in Glasgow on bespoke exchange programmes to community leaders in Colombia receiving guidance on how to utilize modules on grief and mourning developed collaboratively in response to COVID-19. In addition to capacity strengthening in terms of skills and knowledge exchange, we have also developed capacity at institutional levels. Our projects have supported efforts to develop new malaria diagnostic tools, have brought computers and microscope capacity to Malawi, and developed resources and databases for responding to COVID-19. When COVID-19 dramatically impacted many of our projects, we were quickly able to pivot to supporting our partners' capacity to respond to the epidemic in 5 countries. From provision of Personal Protective Equipment (PPE) and diagnostic support to studies on the risk of medical workers contracting COVID-19 and developing innovative messaging to connect with communities about the risk of COVID-19, our funding has strengthened our partners' capacity to response to global threats. The embedding of capacity strengthening in our activities and our emphasis on reciprocal knowledge

## **University of Glasgow Report to Scottish Funding Council GCRF QR Funding 2019-20**

exchange ensures capacity to address global challenges is developed in the UK and the Global South. Full details on individual projects can be found in the excel template.

The third key objective outlined in our strategic plan is support for Early Career Researchers (ECRs) in the UK and the Global South. We ring-fence 25% of our funding for ECR-led initiatives, but in no year of our Small Grants Call has it been necessary to alter any aspect of our normal competitive process to ensure this ring-fenced funding is fully used. We support our ECRs to develop competitive proposals and in 2019-20, 44% of our awards were led by ECRs. These awards give ECRs at Glasgow the opportunity to develop independent partnerships, grant management and leadership skills, and explore novel research topics. In addition to supporting ECRs in Glasgow, this year we offered one-year fellowships to two ECRs in the Global South. While successful (one fellow developed a successful NIHR proposal), the COVID-19 outbreak impacted on the ability of the fellows to engage with a wide network in the UK. We have chosen not to repeat the fellowship option in our 2020 awards due to the ongoing challenges of the outbreak.

### **Impact of COVID-19**

COVID-19 had a severe impact on our planned programme of activity for 2019-20. 31 of our initiatives were unable to complete some aspect of their planned programme of work, including 12 that were unable to proceed at all due to the pandemic. Most of these initiatives were allocated funding from our 2020-21 allocation to complete their work (those that did not were by choice of the relevant PI). We expect these projects will be forced to modify some of their original objectives due to the constraints of the pandemic.

We were able to quickly determine the amount of funds expected to be unused as a result of COVID-19 and in April launched a short-turnaround call for COVID-19 Rapid Response proposals that could be delivered in the limited time available. The focus of the call was supporting the capacity of our partners to respond to the challenge of COVID-19 and so was well within the capacity strengthening remit of our GCRF strategy. We were quickly able to mobilize 5 awards with partners in Malawi, Uganda, Tanzania, Colombia and Venezuela. The awards reflected the diversity of our partners' needs, ranging from biomedical to epidemiological to community engagement. The details of these awards can be seen in the excel template. They exemplify the work we have done to build relationships with our partners and our ability to support local response on very short notice when circumstances require. There will be no underspend in our allocated GCRF funds.

### **Detailed list of funded activities**

**University of Glasgow Report to Scottish Funding Council  
GCRF QR Funding 2019-20**

The completed template is included in our report submission e-mail.

**Gender Equality**

The University of Glasgow's Equality and Diversity Unit is responsible for promoting and embedding all aspects of equality and diversity within the University community. The Unit brings together all relevant policies and information on the various training courses available to students and staff of the university.

With specific reference to embedding best practice for Gender Equality in the ODA/GCRF sector, a Gender Equality statement is required as part of all applications to the GCRF Small Grants Fund, specifically requesting information on how Gender Equality has been considered with respect to the project team, the recruitment of participants and the possible implications of any findings. In addition, the University's International Development Research Manager, College of Social Sciences Business Development Manager and the College of Science and Engineering's Business Development Manager maintain a joint depository of Gender Equality Statements from grant applications that are available as reference materials. Finally, the International Development Research Manager has developed a series of "Crash Course" workshops on various aspects of international development grant application and management. One of these workshops focusses entirely on Gender Equality and covers how to consider Gender Equality as part of project design and how to demonstrate such consideration in grant applications.

In terms of how Gender Equality can be demonstrated in our GCRF activities, there are several examples that highlight how this has been taken into account in individual projects. One of our initiatives invited applications from Masters-level students from across Africa to embed with parasitology labs at UofG for a period of three months. The selection process actively considered the bias against female applicants in academia (both in the UK and Africa) and chose to award spaces on the programme to female applicants in the event of a tie on all other criteria. There was one tie where this approach was utilized and created a more balanced student pool. Another example is highlighted by the illustrated book intended to encourage interest in STEM in India. The main character is female and the team also carefully chose a broad selection of skin colours for characters, as colourism is strongly present in India. These choices ensured children would feel represented in the book and were discussed with the UK's leading company for behavioural analysis, Behaviour Hackers Ltd, Birmingham, UK.

Through all of these mechanisms – institutional frameworks, best-practice sharing, and inclusion of Gender Equality in all applications to our GCRF Small Grants Fund, we continue to develop our expertise and experience to ensure Gender Equality is considered across our entire international development research portfolio.





Project ID	Project Title	Lead Institution	Country	Region	Start Date	End Date	Status	Impact	Key Findings/Outcomes
2020-01-001	Water and Sanitation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Water and Sanitation	Study of water and sanitation in Bogotá, Colombia. The project focused on the impact of COVID-19 on water and sanitation services. Key findings include the need for improved water supply and sanitation infrastructure in urban areas.
2020-01-002	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-003	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-004	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-005	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-006	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-007	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-008	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-009	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.
2020-01-010	Healthcare Innovation in Bogotá	Universidad de Bogotá	Colombia	Bogotá	2020-01-01	2020-03-31	Completed	Healthcare Innovation	Study of healthcare innovation in Bogotá, Colombia. The project focused on the impact of COVID-19 on healthcare services. Key findings include the need for improved healthcare infrastructure and services in urban areas.



<p>Collaboration meeting for Ghana Interim vaccine</p> <p>5055-SIC-131</p>	<p>The project included development of a network to progress the development and implementation of a transformation form of O368/16/16 - already a patent to be used as a vaccine - in collaboration with Ministry of Health, Kenya, Kenya Teaching Hospital, and National Special Projects. The technology will facilitate remote assessment of patients in rural locations, increasing health access and follow-up. The funding supported a evaluation analysis of the form of vaccine (O368/16/16) and its suitability, and included vaccine formulation and packaging for manufacturing.</p>	<p>Good health and Wellbeing (SDG 3) Industry and Innovation (SDG 9) Partnerships for the Goals (SDG 17)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Equilibria session with 100 attendees to collect feedback on the formulation of vaccine and partnership with Hospital in addition vaccine</p>	<p>Pi.Dennis@ghp.com GHC Mary Ryan@equipe.ac.uk</p>	<p>Ghana</p>	<p>€1,845.00</p>	<p>04/08/2018</p>	<p>31/07/2020</p>
<p>Project development meeting for DRC Vaccine</p> <p>5055-SIC-001</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DRC Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>No Poverty (SDG 1)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Application submitted for DRC Centre of Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Pi.Luke Robinson@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Maliawi Angola Botswana Uganda</p>	<p>€3,179.80</p>	<p>01/08/2019</p>	<p>31/07/2020</p>
<p>Visit by Dr. Rodrigo Oliveira to Glasgow</p> <p>5055-SIC-132</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>No Poverty (SDG 1)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>A malaria PhD student in Brazil was funded to data management and the development of the proposal as well as attending a malaria workshop in Glasgow.</p>	<p>Pi.Vivian Antunes@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Brazil</p>	<p>€1,368.00</p>	<p>04/08/2018</p>	<p>31/07/2020</p>
<p>5055-SIC-133</p>	<p>These funds supported Health Environment Awareness Training for staff and students at the University of Glasgow. Each attendee was conducting or planning to conduct work associated with the sustainable development goals (SDGs) in the context of the University of Glasgow. The funds supported one session with 32 attendees and a deposit for a second session was requested to be held in May 2020. The COVID-19 pandemic has meant that the second session has not yet happened. The attendees were asked to complete a questionnaire to help us to identify the activity into SDG, GCRF and ODCD categories or categories of activities as well as students attending work settings on a wide range of projects or placements to multiple geographical contexts (e.g. Mar Ryan attended in acquisition of her first year South Africa in an African Malaria Capacity Strengthening initiative that supported attendees from all over Sub-Saharan Africa while another attendee was a PhD student travelling abroad to conduct her research in tropical countries).</p>	<p>Partnerships for the Goals (SDG 17)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>12 UoG staff and students received specialist training to promote, spread and respond to risks while working in laboratory or health care environments.</p>	<p>Pi.Mary Ryan@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p></p>	<p>€3,034.74</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-134</p>	<p>Richard Budge attended an Innovative UK consortium building and funding briefing event for the Agri-Tech Funding call. Richard had previously raised UK grants leading to support a research initiative to develop agri-tech energy production and the event was an opportunity to pitch ideas to UK industrial partners who would be interested in joining Richard and the Research partner to develop their proposal. Richard was an O2 as a lead investor and his role was supported by another UK investor.</p>	<p>No Poverty (SDG 1)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>1 O2 attended a consortium building and funding briefing event to develop proposals for a research initiative to develop agri-tech energy production.</p>	<p>Pi.Mary Ryan@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Ghana</p>	<p>€2,684.00</p>	<p>01/08/2019</p>	<p>31/07/2020</p>
<p>5055-SIC-137</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Pi.Francoise.Baldwin@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Rwanda</p>	<p>€88.00</p>	<p>04/08/2019</p>	<p>31/07/2020</p>
<p>5055-SIC-139</p>	<p>Human-wildlife conflict poses a major challenge for conservation and economic development in many African countries, and inter-disciplinary approaches are needed to tackle its complex dimensions. The program provides support for a 4 course conservation education, Nature Management to develop skills by understanding the Conservation Management of African Invertebrates MSc at the University of Glasgow. The taught component of the MSc course will be completed by research to have student certified in the program. Content will include: the role of Malaria's English language tests. He is now enrolled on the course and this will be fully reported in the 2020-21 reporting cycle.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Sarah.Chester@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Tanzania</p>	<p>€8,128.00</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-143</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Thomas.Lee@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Ghana</p>	<p>€8,138.00</p>	<p>04/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-146</p>	<p>The project builds on current University of Glasgow research into everyday practices and understandings of transmission in rural Uganda, which focused first on understanding how risk and environmental factors of inequality. The project builds on this report but focuses on understanding the transmission of COVID-19. The project will support research to understand the transmission of COVID-19 in rural Uganda, which focused first on understanding how risk and environmental factors of inequality. The project builds on this report but focuses on understanding the transmission of COVID-19. The project will support research to understand the transmission of COVID-19 in rural Uganda.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Lucy.Pearce@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Uganda</p>	<p>€9,920.00</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-148</p>	<p>The project will support MSc level Bahanga MSc studies based on an exciting early career research project on the transmission of COVID-19. The project will support research to understand the transmission of COVID-19 in rural Uganda, which focused first on understanding how risk and environmental factors of inequality. The project builds on this report but focuses on understanding the transmission of COVID-19. The project will support research to understand the transmission of COVID-19 in rural Uganda.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Maria.Vera@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Tanzania</p>	<p>€5,885.00</p>	<p>04/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-149</p>	<p>Ashefa/Derwisa is a major malaria vector throughout Africa, but detailed understanding of its biology is limited by the difficulty of culturing it in the laboratory. Led by Emmanuel Ndiru, an outstanding postdoctoral fellow from Tanzania, research at the malaria health institute has made significant progress in understanding Anopheles. The project is working to develop the laboratory strains of Anopheles to improve the understanding of its biology and to improve the understanding of its biology and to improve the understanding of its biology.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Hannah.Ferguson@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Tanzania</p>	<p>€8,000.00</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-142</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Chris.Hopson@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Tanzania</p>	<p>€8,000.00</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-144</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Thomas.Morison@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Tanzania</p>	<p>€8,000.00</p>	<p>01/08/2019</p>	<p>ongoing</p>
<p>5055-SIC-147</p>	<p>The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria. The funding was to support a Proposal Development Meeting leading to an application to the DCHCI Centre for Health Innovation (DCHCI) to progress the use of the new vaccine against malaria.</p>	<p>Quality Education (SDG 4)</p>	<p>2020 - Equitable Access to Sustainable Development (SDG 10)</p>	<p>2020 - Sustainable Development (SDG 3)</p>	<p>Scholarship student achieved the required English scores to accept the GCRF Small Grants Scholarship offer.</p>	<p>Pi.Lisa.Bentley@equipe.ac.uk GHC Mary Ryan@equipe.ac.uk</p>	<p>Ghana</p>	<p>€8,000.00</p>	<p>04/08/2019</p>	<p>ongoing</p>

## Understanding and enhancing the Community-led response to COVID-19 in Colombia

**The University of Glasgow partnered with the Diocese of Quibdó and the Scottish Catholic International Aid Fund (SCIAF) to understand the effect of the COVID-19 global pandemic in Chocó and to develop an effective collective response. Chocó is the poorest and most ethnically diverse region of Colombia. The project's vital public health measures and psychosocial support reached approximately 5,000 people in total.**

This action research project enhanced the capacity of Diocese of Quibdó, a central member of the departmental Emergency Response Committee in Colombia, to develop a collective response to the COVID-19 pandemic in a way that recognised, respected and learned from the common and differentiated challenges faced by various ethnic communities.

Mark Camburn, Scottish Catholic International Aid Fund's Programme Officer for Latin America, said: 'It's hard to overstate just how much of an impact this project had on preventing the spread of COVID-19 and supporting vulnerable communities through lockdown. The funding allowed us to further collaborate at a time when strong international partnerships are needed most. By combining the University of Glasgow and SCIAF's knowledge and experience with local expertise in the Diocese of Quibdó, we were able to take significant steps towards reducing the spread of coronavirus in communities, so ultimately, this funding saved lives.'

### Understanding communities

This project, led by Professor Mo Hume, employed research methodology which ensured that the experiences and voices of local ethnic communities were heard and at the forefront of decision-making.

The research team worked together to understand and address the challenges that face local communities where the pre-existent humanitarian crisis has deepened as a direct result of COVID-19. In order to address the effects of COVID-19 in communities such as Chocó, collaborators had to develop capacity that is informed by and built on existing collective cultural practices.

Professor Hume said: "This is a really challenging time for communities in Chocó where a pre-existent humanitarian crisis has become much more complex in the context of a pandemic. Existing research on COVID and other pandemics shows that ethnic minority communities experience increased inequalities that are caused by and exacerbate existing discrimination. This is critical for those who live in contexts like Chocó where limited formal health systems and ongoing armed conflict create very particular risks for Indigenous and Afro Colombian territories. At the same time, we have much to learn from their collective responses to crises."

### Workshops and communication

As with most inclusive research partnerships, workshops and communication are key to enabling successful outcomes and long-term impact. The Diocese worked with community leaders to identify families at particularly high risk to COVID-19 and the effects of lockdown. Professor Hume and colleagues developed workshops about capacity to respond to COVID-19 using culturally inclusive training and practice.



*Researchers from the University of Glasgow, Diocese of Quibdó and SCIAF*

Adopting a work package approach, the team focused on:

- providing psycho-social support for communities affected by the crisis.
- tailoring public health prevention and containment measures.
- generating best-practice lessons for future crisis planning in Chocó and other fragile contexts.

The team partnered with local communications and media teams to disseminate messages to local communities that include key public health measures and background to the pandemic, as well as fostering solidarity and drawing links with the wider humanitarian crisis in Chocó.

Important to the communications was a grounding in collective cultural and historic struggles, foregrounding the importance of a holistic approach to self-care which recognise the inextricable connections between humans and the natural environment they inhabit. The team produced four videos, including the composition of a song, to help communicate these messages, which they disseminated widely among social media.

### **Tailored approach to supporting communities**

A key issue facing communities is the impact of COVID-19 on mourning rituals, which are collective processes in Chocó where the community comes together to celebrate and mourn their dead. These collective mourning practices are prevented due to public health guidelines. The team developed six modules on grief and mourning to support affected families. These modules underpinned 18 virtual workshops with around 100 participants. These modules now form an important resource for communities dealing with a key dimension of the mental health effects of the pandemic.

Public health prevention and containment measures tailored to the specific challenges faced by communities in Chocó was a priority. In remote areas with little access to health infrastructure, traditional medicines are often the only option for marginalised communities. Training delivered by community partners supported communities to draw on local ancestral knowledge to mitigate the effects of the pandemic (including the production of a guide to using traditional medicines to treat COVID-19 symptoms). The team utilised these training sessions to address the pressing needs of the community. Humanitarian packs containing personal hygiene products, personal protective equipment and food were delivered to over 1,050 at-risk families.

Utilising their knowledge of the community the Diocese developed useful tools for data collection and grassroots responses. This approach included 61 online surveys, 10 interviews with key stakeholders and three focus groups (24 participants). A final report draws a range of lessons that are already informing the Diocese's response to the next phase of the pandemic. The report outlines the intersecting challenges of Chocó's pre-existing humanitarian crisis and COVID-19, including increased activity from armed groups during lockdown and confinement of communities. It also recognises the importance of the Diocese's unique role as a trusted and embedded local actor in communicating difficult public health messages and responding to the needs of communities.

#### **Key facts**

- Collaboration with international partners designed to provide tailored and effective interventions which were **co-created with the community**.
- The project reached approx. **5,000 people**.
- **Humanitarian packs were delivered to 1,050 at-risk families**.
- The team supported the development of a **guide to using traditional medicines to treat symptoms of COVID-19**. Hugely valuable to remote communities unable to access healthcare systems.
- **'Lessons learned' report** published to assist in the next phase of the pandemic.

## Understanding community crime prevention to counter illicit antiquities trafficking in post-earthquake Nepal and Myanmar

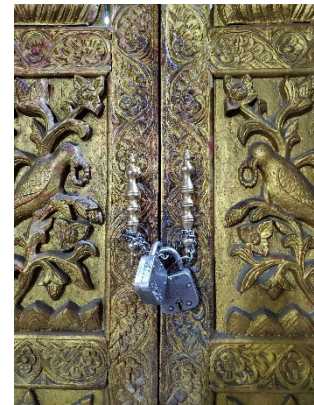
Nepal and Myanmar are both renowned for their cultural heritage, especially their sacred artefacts. Due to a global demand for these items, material culture in these countries continues to disappear from monuments, public and private collections, and archaeological sites. Currently, there is no official reporting mechanism and a lack of available data on the causes, consequences and challenges of archaeological looting.

Dr Emiline Smith from the University of Glasgow has investigated local community-based security models in Nepal and Myanmar to assess why looting of cultural heritage takes place and the effect this has on social cohesion.

### Crime prevention

Funding of £49K from the SFC Global Challenges Research Fund enabled Dr Smith to travel to Nepal and Myanmar to interview legal and cultural heritage specialists including government officials, policymakers, museum curators, community leaders, non-governmental organisation (NGO) representatives, activists and law enforcement. The common theme from the interviews with these stakeholders found that many people are committed to ending the theft, looting and trafficking of antiquities but there is no system to unify these efforts.

Dr Smith explains, “The research looks at both the global network and the local context of illicit trade, so we can identify weak points in the trafficking chain where we can effectively intervene. We have investigated interdisciplinary approaches to improve understanding of national and local crime prevention strategies to counter illicit antiquities trafficking—to see what works and what does not.”



*Communities around Nepal have taken it in their own hands to protect heritage, placing temples under lock and key after decades of looting.*

### Addressing the issues

Criminology is currently an underdeveloped academic field in both Nepal and Myanmar and the research team brought together foreign expertise and in-country capacity to advance knowledge in this area.

Whilst there is recognition that there is a global demand for the countries' cultural heritage which has led to statues and artefacts being stolen from places of worship, museums and monuments in local communities, there is an absence of more sustainable income sources within the countries, leading to the continuation of looting and trafficking.

Cultural heritage can provide a source of pride, unity, and social cohesion within low-to-middle-income countries (LMICs) and it is also a source of economic development. Countering the looting, trafficking and destruction of cultural heritage, and restoring national pride by repatriating cultural objects held abroad, contributes to more inclusive and resilient communities.

To address these challenges, Dr Smith worked with colleagues from the University of Oxford; United Nations Educational, Scientific and Cultural Organisation (UNESCO) Yangon; Myanmar Archaeology Association (MAA) and the International Council on Monuments and Sites (ICOMOS), to undertake a thorough criminological overview of the networks in place to loot, traffic and destroy cultural heritage and an assessment of potential intervention points.

The research led to the creation of a report for Department of Archaeology on future strategies to combat antiquities trafficking and improve the effectiveness of relevant legislation, policy and law enforcement. The report also analysed the effectiveness of current formal and informal crime prevention methods.

### **Building a network**

The research team are keen to build a new working group with various stakeholders to consult when a cultural object goes missing or needs to be repatriated. To create this network, the team have hosted various advisory meetings and a capacity building session, attended by 67 participants at the Department of Archaeology in Nepal. The project team provided training on how to document cultural heritage and how to recognise and document looting. They also provided information on protective frameworks that surrounding countries have adopted to identify potential prevention strategies for Nepal.

The team also organised a knowledge exchange workshop at the Ministry of Culture, Tourism and Civil Aviation for 55 participants including representatives of government, law enforcement, non-governmental organisations (NGOs), charities and community activism groups. Following presentations from the research team, Nepal Police on formal crime prevention strategies and a museum specialist on repatriation efforts, a two-hour long roundtable took place to discuss the challenges to create a system of community-driven protection of cultural property.

The project has brought together academic and non-academic collaborators to create a new, interdisciplinary network to focus on the key issues and challenge to tackle the looting of cultural heritage. The network's report 'Strategic Planning for the Department of Archaeology' will contribute to policy development to combat the illicit antiquities trade.

The research has led to the development of a database for Nepal's Department of Archaeology, a repository of missing artefacts which will strengthen efforts to counter looting and destruction and increase protection of cultural heritage.

### **Future Engagement**

Dr Smith and the project team are keen to continue to build capacity in Nepal and Myanmar to protect and preserve their cultural heritage. Research in Myanmar was cut short due to the Covid-19 pandemic, however, the research team will resume this work when possible to complete the overview of the protection and destruction of cultural property within this country.

The development of the new collaboration has led to a further funding application for SFC GCRF Small Grants 2020-21 funding and a new research proposal is in development for the UK Research and Innovation Newton Fund to expand the network to Indonesia and include the growing problem of wildlife trafficking.

#### **Key facts**

- Collaboration with international partners to provide **an evidence-based overview of looting of cultural heritage in Nepal and Myanmar.**
- **'Strategic Planning for the Department of Archaeology'** report published for the Ministry of Culture, Tourism and Civil Aviation on future strategies to combat antiquities trafficking.
- The research team have created a database of Nepal's stolen artefacts **to increase protection of cultural heritage**
- The research will lead to more effective **crime prevention strategies, policy change and increased public awareness of the effects of looting and trafficking of antiquities**

## **Establishing surveillance and modelling tools to understand and evidence the COVID-19 outbreak in Venezuela**

**The University of Glasgow made use of an established and embedded Global Challenges Research Funded network – Vector Borne Disease Control Network - Venezuela – to gain a deeper understanding of how COVID-19 was spreading in Venezuela and provide evidence to support COVID-19 control measures. It is estimated that 90% of Venezuelans live in extreme poverty, since 2015 five million have fled the country, with almost two million ending up in Colombia. Intense urbanisation, high population density, poor living standards, and a dilapidated healthcare infrastructure make Venezuela acutely sensitive to the COVID-19 pandemic.**

By supporting Venezuelan scientists to undertake disease surveillance and modelling in the absence of state infrastructure, the main objective of this project was to mitigate the health consequences of Venezuela's rapid economic decline in the midst of the COVID-19 pandemic.

Dr Martin Llewellyn, project lead, explains the importance of the project, "Our role was to help establish mapping tools and inform modelling techniques to help health workers and key stakeholders understand the pandemic and how it is affecting the population. With the right information about COVID-19, healthcare infrastructures in Venezuela can take appropriate action to save lives that may otherwise be lost to COVID-19, famine or other indirect sources of mortality".

### **Data – understanding the pandemic in Venezuela**

It is widely accepted that the number of cases and deaths has been underreported by the Venezuelan government. A focus for this project was to gather COVID-19 incidence and morbidity data via formal and informal channels, and data mining; providing key stakeholders with data on the extent of the pandemic.

The research team established new connections and developed existing informal links to hospitals to obtain data, develop a model and create open-source databases. These databases are updated live and provide information such as ventilator occupancy, respiratory disease mortality and other key indicators. These data are fed forward via live access to key stakeholders to help inform healthcare decisions.

Extensive modelling has been undertaken to predict the potential growth of the outbreak and, to date, two monthly reports issued, funded by this project. The two reports have been widely reported in local and international news media. Also, they have been the main alternative and accurate source of the true epidemic size and level of transmission of COVID-19 in Venezuela during the first epidemiological wave.

Dr. Maria Grillet, co-investigator says "modelling scenarios with indirect indicators of transmission is a great challenge, but the best current alternative in Venezuela, where epidemiological information is very limited. The grant was really beneficial, it allowed us to develop a set of models that generated potential epidemiological scenarios that informed health authorities and community about how was the epidemic unwrapping in Venezuela during the first COVID-19 wave".

## Population – changing behaviours

Preventing the transmission of the virus requires people to change their behaviour and adopt new habits to help prevent the spread. Modifying human behaviour is challenging and requires a level of understanding knowledge, attitudes, and practices (KAPs) regarding health threats.

This study explored KAPs among people in Ecuador. An internet-based questionnaire was used to assess knowledge about COVID-19, attitudes toward ability to control COVID-19, self-reported practices related to COVID-19, and demographics. A total of 2399 individuals participated.

Participants had moderate to high levels of knowledge and expressed mixed attitudes about the eventual control of COVID-19 in Ecuador. Participants reported high levels of adoption of preventive practices. The study found that the greatest area for improvement is regarding pessimistic attitudes on the eventual control of COVID-19. The research team would recommend that suggests health education and outreach should not only focus on knowledge and prevention practices but should also promote optimistic attitudes.

## Transmission between Venezuela and Colombia

Given the scale of the mass migration between Venezuela and Colombia gaining some understanding of how the virus may be acquired could help inform estimates of the growth of the pandemic and undetected transmission.

Data collection has been ongoing at two Venezuelan hospitals in Caracas and Carabobo. Testing in Colombia, coordinated by our partner Universidad del Rosario, has been ongoing for several months. The project is still to report on the outcomes of this study.

The research team also undertook a study of the genetic similarities of COVID-19 in Venezuela and Colombia. Genomic sequencing demonstrated similarity between SARS-CoV-2 lineages from Venezuela and viruses collected from patients in bordering areas in Colombia and from Brazil, this is consistent with cross-border transit despite preventive measures including lockdowns.

The study also found the presence of mutations at sites may potentially be associated with increased infectivity. A more transmissible mutation of the virus may pose additional challenges for the control of the virus in Latin American countries. The report advised that public health authorities should carefully follow the progress of the pandemic and its impact on displaced populations within the region.



*Venezuelan research team carrying out solid-phase peptide synthesis (SPPS), to produce COVID peptides.*

### Key facts

- The project established surveillance and modelling tools which helped scientists and stakeholders understand the COVID-19 outbreak in Venezuela; providing much needed scientific evidence to support COVID-19 control measures.
- The project has resulted in reports modelling the potential path of the outbreak. These represent the only accurate account of the pandemic in Venezuela.
- Results from genomic sequencing suggest that cross-border transmission is taking place highlighting the overall risk to the Latin America region and the need for public health authorities to monitor the pandemic and its impact on displaced populations.

## Exploring sustainable livelihoods and farming practices in Malawi refugee camps

**Ongoing crises and conflict have led to 18 million people - around 26% of the world's refugee population- to live in refugee camps across Sub-Saharan Africa. These areas have become new urban ecologies with significant political, economic, and environmental vulnerabilities. The largest refugee camp in Malawi is Dzaleka with over 42,000 residents.**

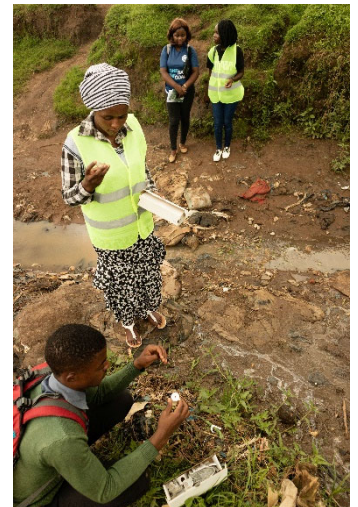
A team of researchers from the University of Glasgow led by Dr Lazaros Karaliotas has collaborated with researchers from the Lilongwe University of Agriculture and Natural Resources (LUANAR), Malawi and the non-governmental organisation, CARD (Church Aid and Relief Development) to analyse the farming practices and the modes of organising everyday life within Dzaleka and work with residents of the camp to support sustainable everyday livelihoods.

### Co-designing solutions

In Dzaleka, camp residents, with the support of humanitarian place making interventions, have developed small-scale farming and gardening practices to cover some of their everyday needs. A £74K SFC Global Challenges Research Fund grant enabled the research team to investigate the economic, social, and ecological challenges faced by displaced people within the camp and how communities can build sustainable livelihoods in vulnerable conditions.

The funding enabled Dr Karaliotas and his colleagues to work with CARD, local university staff and resident gardeners, farmers and market traders as well as community leaders to map out past, present environmental challenges and future sustainable living spaces.

Dr Karaliotas explains, "We encouraged a 'citizen science' approach to the research and worked closely with CARD to train ten camp residents to collect and analyse environmental data such as soil, air and water quality throughout the camp to understand and analyse how these factors impact on farming and everyday activities such as washing and cooking in refugee communities. The residents had a key role in shaping the project."



*Camp residents, Borel, Joseleni and Nisha, perform water quality testing in Dzaleka with research assistant Grace Chilongo.*

The project's methodology was co-designed with CARD and piloted in Malawi in November 2019. The residents of the camp were also involved with co-designing the research sites and questions.

The research team conducted walking interviews and focus groups to explore how camp residents' experiences and farming strategies can create a sense of belonging to the land they live on. The residents were able to raise concerns around living conditions in the camp and three research videos were co-produced with camp residents to highlight such issues.

### Working together

The research team are building a collaborative and responsive consortium to promote the welfare of camp residents and the sustainability of the environments which they inhabit, bringing together expertise to address and respond to problems identified by local communities.



The team planned, with Lilongwe University, a regional symposium on 'Humanitarian Place Making in Refugee Camps' to bring together key stakeholders of the refugee camps including refugee representatives, government officials and camp managers to discuss humanitarian place making interventions, which is the approach to planning, designing and managing public spaces, capitalising on a local community's assets. The Symposium was due to take place in May 2020 but was cancelled due to the pandemic.

However, a smaller, focused local symposium was arranged during the research team's visit to Malawi, which has facilitated research capacity building through the creation of strong links with refugee representatives, United Nations High Commissioner for Refugees staff and non-governmental organisations practitioners. The camp residents who took part in the initial research presented their findings and the concerns about soil and water quality to make plans to improve living conditions in the camp. Three posters summarizing key findings, response strategies and 'Guidelines for best practice' will be disseminated in the camp through CARD to raise awareness in the camp communities.

### Future Steps

The project's participatory design has placed refugee communities at the heart of research as co-producers of knowledge. It has created a strong network of collaborators who are keen to continue to work together to support the residents of the fast-growing Dzaleka refugee camp.

The research team have a successful follow-on SFC Global Challenge Research Fund bid (Understanding Refugee Re-location in Malawi in the context of Covid-19) in collaboration with Malawi partners to identify refugee concerns. This new research project will lead to a large-scale GCRF funding bid on humanitarian place making with the network of collaborators.

In the long-term, the research team will continue to seek to upscale and diversify the research through interdisciplinary partnerships.



*Camp residents, Joseleni and Borel, perform soil quality testing in Dzaleka with research assistant Grace Chilongo.*

### Key Facts:

- **42,000 people live in the Dzaleka refugee camp** in Malawi
- A £74K SFC Global Challenges Research Fund grant enabled Dr Karaliotas and his research team to **investigate the economic, social, and ecological challenges** faced by displaced people within the camp.
- The project placed refugee communities at the heart of research **as co-producers of knowledge**. Camp residents were given training to collect and analyse environmental data throughout the camp to understand and analyse how these factors impact on farming and everyday activities.
- A strong **network of collaborators has been created to support the residents of the refugee camp**.

## **Understanding & mitigating the impact of HIV infection on the burden and severity of influenza illness in Malawi**

**Acute respiratory infections (ARI) account for 2.4 million deaths globally and 27% of these deaths occur in sub-Saharan Africa. In Malawi, they are most common cause of adult hospital admissions, putting severe strain on the health care system.**

Dr Antonia Ho, Clinical Senior Lecturer at the Medical Research Council (MRC)-University of Glasgow Centre for Virus Research, is working with the local community, healthcare staff and national policy makers in Malawi to improve understanding of influenza infection – in terms of how it presents, who it affects and what time of year it circulates – also highlighting the increased risk of symptomatic influenza and severe disease in HIV-infected people, and emphasising the importance of influenza surveillance.

Dr Ho's initial research identified that HIV-infected individuals are more at risk of ARIs such as influenza infection, and they are five times more likely to have severe disease, compared with HIV-uninfected people. The research, funded by a Wellcome Trust Clinical PhD Fellowship, conducted two observational studies at the Queen Elizabeth Central Hospital in Blantyre, Malawi, recruiting over 1700 patients. The study found that 57% of influenza-associated hospitalisations were attributable to HIV. Other factors such as household overcrowding, poor sanitation and food insecurity also contribute to risk of severe influenza illness in Malawi.

### **Embedding research learnings**

Funding of £4.8k from the Scottish Funding Council Global Challenges Research Fund enabled Dr Ho to return to Malawi to share her findings directly with study participants and stakeholders.

Dr Ho presented her research findings to the participants and staff in the hospital who took part in her original research to make them aware of the risks of influenza and the importance of infection control measures.

Dr Ho explains, "We followed the study participants for two years, so my study team and I developed a good relationship with them. The people who share their lives with researchers seldom see the results of their efforts. Sharing study results with the participants signals not only the openness and accessibility of researchers, but also raises a positive profile of research in general and highlights the need for interventions that may decrease the risk of future harm."

One study participant praised the good practice of sharing the research results and felt improved "self-worth" that they had "contributed to an overall enrichment of scientific knowledge."

Limbikani Chaponda from the Public Health Institute of Malawi said, "Dr Ho's visit was timely as it laid the foundation for Influenza Surveillance. Her continued support will enable the Ministry of Health to start testing circulating viruses and report flu data to WHO which will lead to access to vaccines."

During the visit Dr Ho was able to discuss the prescription of antibiotics for the treatment of influenza illness and other respiratory viral infections. Antibiotics are often prescribed for influenza. However, as it is a viral illness, they won't treat the disease, and can lead to people developing antibiotic resistance. Dr Ho's discussions with the Blantyre Community Advisory Group and medical staff at the Queen Elizabeth Central Hospital highlighted the symptoms associated with flu and discouraged the prescription of antibiotics if doctors felt the chest infection was caused by a virus rather than bacteria.



*Dr Ho and Sitithana Muyaso, clinical officer for the BASH-FLU study, disseminating study findings to previous study participants.*

The funding has also enabled Dr Ho to engage with the local scientific community and national policymakers within the Ministry of Health to discuss strategies to reduce the burden and severity of influenza illness amongst HIV-infected adults.

### **Next steps**

Currently there is no routine respiratory viral surveillance or national influenza immunisation programme in Malawi. Dr Ho was invited by the Influenza Surveillance Task Force to visit three potential study sites in Bwaila District Hospital, Mchinji District Hospital, and Kamuzu Central Hospital to give recommendations for the development of future respiratory viral surveillance and influenza preventative strategies, such as vaccination.

Dr Ho is keen to continue to support the implementation of respiratory viral surveillance in Malawi, which will be key to the country's pandemic preparedness strategy. During the COVID-19 pandemic, Dr Ho has continued supporting the Malawi Ministry of Health. She has led a prospective cohort study of healthcare workers and community members to ascertain the occupational exposure to SARS-CoV-2, and has recently received funding from the Wellcome Trust to implement a SARS-CoV2 serosurveillance study, in partnership with the Ministry of Health and Malawi Epidemiology and Intervention Research Unit (MEIRU).

### **Key facts**

- Dr Ho's initial research study found that **57% of influenza-associated hospitalisation was attributed to HIV.**
- A £4.8k SFC Global Challenges Research Fund grant enabled Dr Ho to **disseminate research findings to former study participants and engage directly with healthcare staff, the local community and policy makers.**
- **Inclusive research practices are about equitable partnerships and inclusion.** Importantly participants of the study learned the outcomes of the research, and the importance of infection control measures.
- Dr Ho is currently **working with the Ministry of Health on a study on SARS-COV-2 sero-surveillance.**