



2020 Farrar Foundation Newsletter

The Farrar Foundation was established in August 2011 with the aim to provide young people with opportunities and a way into Education, Research, the Arts and Sport. As we enter our tenth year, we have been able to directly support over 150 Farrar Foundation Fellows from Viet Nam, Nepal, UK and through our partnership with the Africa Research Excellence Fund support 123 Fellowships in twenty-three countries in Africa.

2020 has inevitably been a year dominated by COVID19. A year like no other. But as so often in a crisis the ingenuity of people is a source of inspiration. The Farrar Foundation updated our governance through the Charity Commission, ensured all our financial statements are all in order and consolidated our asset base and income. The foundation is in a strong financial position with an asset base on 31 January 2021 of £36,544 (31 January 2020 ~£32,700) and a current annual income of approximately £10,000. The awards made each year are funded through this income. The asset base remains invested for long term growth.

In 2020 we bid farewell to two founding Trustees of the Farrar Foundation, Cathy Rustom and Tony Crawford. Cathy and Tony have been absolute stalwarts throughout the foundation's existence, providing insights, challenge, unselfish and gracious support. We could not have set up or delivered our success over the last decade without both Cathy and Tony's wonderful contributions. We are extremely grateful. We also welcomed three new Trustees Elena Peticucci, Danil Ukhorskiy and Sofya Sudets who will join Sam Farrar, John Hankin and Jeremy Farrar as the new Trustee Board.

We have modernised our governance statutes with the Charity Commission, renewed our commitment to diversity and inclusion in all we do, ensured all financial reports are complete and on schedule and in 2021 we will update the foundation's web site and this newsletter. The foundation spends approximately 0.6% of its annual budget on running the organisation (maintenance of the CAF Bank Current account), 99.4% of all other funds are made available to our partners for their inspiring work.

The Foundation has now and will in future focus on a small number of established partnerships and will make more substantial awards for three years to allow long term planning by our partners and the foundation and as a result we hope achieve greater impact.

In 2020 we made multi-year awards to the Quy Vuot Kho Foundation in Viet Nam, the Mountain Medicine Society of Nepal, the Birat Nepal Medical Trust, the Swasthya Foundation of Nepal and the Africa Research Excellence Fund. These three-year awards have refocussed our work to provide opportunities and a way into education, research, the arts or sport for young people. We are particularly committed to opportunities for a diverse and inclusive community and will report every year on issues of diversity, inclusion and culture in all our work and that of our partners. We are delighted to report that over the first ten years over fifty percent of all awards are to women, in Asia, Africa and the UK.

Quy Vuot Kho

The COVID-19 pandemic has disrupted all our lives but for the people living in the Central provinces of Vietnam, where many of our Fellows come from, COVID was only one of the crises faced in 2020. The region also suffered from thirteen typhoons in 2020. Viet Nam suffers typhoons every year but 2020 witnessed an unusually high numbers of damaging typhons leading to loss of life and a huge economic damage.

Therefore this year Quy Vuot Kho aimed to provide additional Fellowships to students from regions of Viet Nam affected by these typhoons. Many of these students from have choosen not to apply for Quy Vuot Kho (QVK) Fellowships in previuos years, as one student articulated -

“In previous years, I did not apply as I would like to save the scholarships for those with more finance difficulty than me, while I could still manage with little support from my family. But this year we have lost everything with so many typhoons”.

Other applicants applied for scholarships this year because of the profound financial changes as a result of the pandemic.

“In previous year I was still able to earn money from part time work to manage the university fees and living costs. But this year because of COVID there was no work available since so many small businesses, shops and restaurants, were closed due to COVID-19. Then my family couldn't support me either as they also struggle at the moment with no work available and then there will hit by the devastating typhoons”

A few alumni decided not return to apply this year, we contacted them to ask for a reason, we heard

“Lives in Central provinces suffered so much damage and for so long (months of

floods and typhoon came one after the others) that so many class-mates faced great difficulty to complete their studies as they totally lost all financial support from their families. I encouraged these to apply as they needed it most. I came from southern provinces and my situation was not as severe as these people. I could not financially contribute to support those in central provinces like many others, doing this I felt I also could help too”.

The interviews were organised on 15th November 2020 and the award ceremony on 20th November 2020. This is Teachers Day and in such a terrible year, a day to celebrate. The Award Ceremony was held at the National University of Science with Dr Nguyen Tri Nhan and Ms Bui Thi Nhu Ngoc, Head and Deputy Head of Biology and Biotechnology Department of University of Natural Science. Also present were Associate Professor Dang Thi Phuong Thao, Head of Post Graduate Training Office, MSc Phung Le Cang, Lecturer of the Department and Head of Campus One of University of Natural Science. Associate Professor Nguyen Du Sanh, previous Head of Biology and Biotechnology Department. In addition, the management board of Quy Vuot Kho and all the students attended.

“I come from the Centre of Viet Nam so I have always been aware not to be wasteful, but this year with lessons from double disasters, these values from my parents hit me strongly and made me love my poor province and made me commit to give back one day, instead of thinking about leaving. Also, it confirmed that I was right to choose to be a biologist to study more about the life science. The recent events taught me to think more maturely and prepare my future path after observing the great difficulties my people going through. Their strength and resilience to stop crying and restart everything on the same plot of land, their skill sets to face the natural disaster to

reduce the damage and start again, have impacted me to be more mature in learning to contribute one day. Knowledge is definitely one way to improve my life and my family's living condition and to look forward in the future. Anything like this could happen again and this is a life time experience, I will learn a lot from this.

Those comments really brought home to use how important the Quy Vuot Kho is to so many students from poorer provinces or Viet Nam. If we are to maximise the opportunities for all the people of Viet Nam, if we are to build an equitable and just society, we have to be able to encourage and support these young students and offer them the same opportunities and a way into education and a university degree.

In 2020, information for the QVK Fellowships were announced on our website and the University fanpage, social media, the website of the Biology and Biotechnology Department of National University. This year, we decided not to call for donations or contributions from others since we understood that the COVID-19 situation would lead to income reduction of many of our supporters. However, we still received around 50 Million VND (£1600) directly with approximately 50% of this from the lectures of the department. The contribution of Farrar Foundation helped enormously for us to make decision in this situation. We knew we had and will have money from Farrar Foundation. We prepared that we may not have funds for the 15 year



Anniversary in 2021 but we are determined to carry on our mission to support the students this year, especially those in the final year. Despite the challenges of 2020 we were able to offer 31 Fellowships.

Over the last fifteen years, QVK has made 373 awards, of these the Farrar Foundation has supported 117 Fellowships since 2011. We are greatly indebted with the generous support and partnership of the Farrar Foundation.

Birat Nepal Medical Trust

Farrar Foundation Fellow Ms Kritika Dixit is an early career global health researcher from Birat Nepal Medical Trust. Kritika is passionate about the need to conduct research to understand the barriers to healthcare access faced by rural and underprivileged people in Nepal, and to provide evidence to inform patient-centric healthcare models which improve equity for Nepal's diverse communities. Kritika reflects, 'the grant has been an important stepping-stone towards independent research funding in my academic and professional development. The experience gained during the grant has enabled me to enhance my qualitative research knowledge and skills, introduced me to innovative technology in healthcare, increased my collaboration with local and national authorities and international researchers and more importantly, it has supported me to start my doctoral degree at Karolinska Institute in Sweden. Following this research, I have received another research grant from Royal Society of Tropical Medicine and Hygiene to study the impact caused by COVID-19 on tuberculosis service delivery. I look forward to expand my research career in global health and I wholeheartedly thank Farrar Foundation for giving me this wonderful opportunity at my initial career stage'.

"I used to think that drone is operated by human just like an aeroplane, but after seeing it without human, I was totally surprised." The introduction of drones for healthcare in one of the rural and hilly regions of Nepal- Pyuthan,

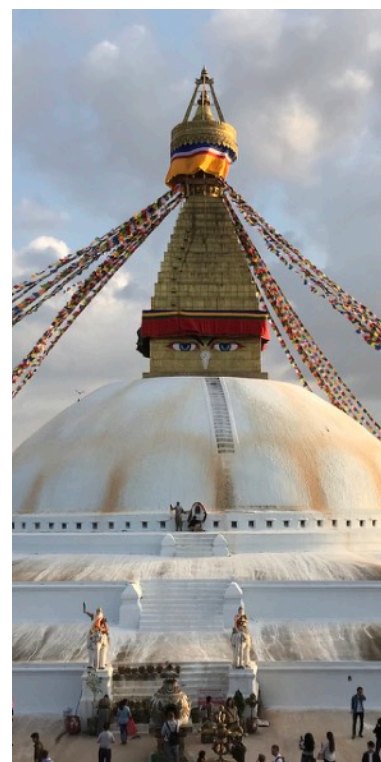


has generated excitement among the local people. Birat Nepal Medical Trust (BNMT) and DroNepal, two national NGOs, jointly developed an innovative drone clinical sample transport programme for the first time in Nepal in 2019, focusing initially on transporting sputum samples to advanced diagnostic facilities for tuberculosis (TB) diagnosis. www.drones4nepal.org

Every year in Nepal, more than 60,000 people develop tuberculosis (TB) disease. With early diagnosis and initiation of treatment, TB can be cured. Yet, every year, between six and seven thousand Nepali people die of this curable, preventable disease. People struggle to reach health services and get a diagnosis. One of the reasons for these problems is distant health facilities and an extremely poor network of roads. Often, people have to walk for hours while sick even to reach a basic health post-often little more than a hut with few medicines. Therefore, to create a linkage between the rural population and the health system, BNMT developed a network of drones to link eight rural health centers with a hospital and a primary health care center where we installed rapid molecular diagnostic testing for TB (the GeneXpert machine).

With the introduction of this new technology, it was important to understand community perceptions about the drones, and if the service effectively increased access to healthcare services in the district. In March 2020, with financial support from the Farrar Foundation, Kritika Dixit organised a discussion meeting with local community members of Dharmawati municipality, one of the rural drone locations. During the discussion, the community people shared that the use of drones in geographically remote areas such as Dharmawati Rural Municipality reduced the transportation costs as well as minimized the physical burden to reach health centers which otherwise would take several hours by walking. We noted that the participants were aware of using drones in healthcare for transporting samples. One of

the people said, "Drone is a new technology and effective machine. It goes to the lab and brings the report". The participants especially strongly requested the use of more drones in healthcare because these technologies are of utmost importance to the elderly, people with a physical disability, and with low socioeconomic conditions. Expressing their emotions, the participants shared that their friends in the neighbourhood were excited to see a 'unique object' flying over their sky, making them curious about it. They shared that following the introduction of drones in the area, there have been awareness-raising programmes for local people, community leaders, and school children both on using drones in the community as well as on the importance of testing for TB. These programmes are crucial to informing the community people about the use of new





technologies in healthcare as well as for the safety, security, and shared understanding. During the discussion, people raised their concerns regarding the financial investment on the drones, which they believe is high, and wondered if the money spent is worth the outcome. People recommended using drones in clusters where people are at higher risk of TB and mentioned the need for awareness and advocacy for its optimal benefit. People suggested conducting advocacy campaigns by mobilizing community leaders, mothers' groups, and community health volunteers. These concerns and interest from the local people in using the drone is one of the positive notes for future-scale up and sustainability of the project.

BNMT also conducted another discussion meeting with the neighborhood community, Okharkot Rural Municipality, where drones have not yet been implemented. The discussion was conducted with local people to understand if they knew about drones and what their perception was regarding the use of drones in their community. During the discussion, a few participants mentioned that they had seen drones taking pictures or mapping the area. The participants discussed that the problems of health, including tuberculosis, is rampant in their community, where people are less aware of the communicable diseases and visit health centers only when their health condition deteriorates or when they are no longer able to leave their bed. The participants also mentioned that the geographical terrain in their community is very rural and people often walk for several hours on foot to reach health centers, which are often away from the settlement area. One of the participants mentioned that "If drone is used in Okharkot, it will be a new facility for the people here and it will be highly appreciated." Other participants claimed that the use of drones is a sign of development. "I feel that new technologies are used in Pyuthan, it is a sign of development". Regarding any perceived risks of using drones, one participant

mentioned that "People aren't scared of drones as they are used to seeing aeroplanes and helicopters flying in the sky".

Therefore, the community people strongly emphasized the importance and need of using drones in healthcare in the rural areas of Nepal. There is a need to expand the use of drones in rural areas of Nepal in close coordination with local people and improve people's accessibility to the health services.

The results from the qualitative evaluation will be formally analysed for publication and used to help BNMT and partners design improved engagement activities with community stakeholders during implementation and scaling of this valuable technology.

Swasthya Foundation of Nepal

In 2019 we established the Nepal Swasthya Foundation to support young people in health care research. In 2019, with the support of the Farrar Foundation we were able to make awards to three Fellows:

- Ms Archana Maharjan for training on R Programming
- Ms Anjana Tachamo to allow her to complete her Bachelor Degree in Nursing
- Ms Anisha Prajapati to completing her Medical Degree

The awards were made in November 2019. Due to the pandemic that has occurred this year, much of the planned trainings were delayed. However, all three courses are

starting again, and we are sure that they will be able to realize their dreams this year.

Archana has been working as a data manager at the Clinical Research Unit based at the Patan Hospital in Kathmandu Nepal for the past two years. On a day-to-day basis she manages study data, checks this data to ensure completeness and accuracy and generates study reports. However, she faces some problems at work with the data and therefore has identified that she needs to enhance her knowledge and skills on programming. R programming is now widely used by researchers to manage and analyse data and therefore she has even been trying to self-learn.

This is where we have identified that she will need to go for a taught course to work efficiently. Archana will enroll in a Data Management for R-Programming Course in a local institution in Kathmandu. The course that she will enrol in contains general introduction into the R ecosystem, basic data transformations, filtering and ordering data, data visualisation and sorting missing values.

Anjana Tachamo has been awarded the Farrar Foundation award for 2019 to help complete her graduate degree in nursing. Anjana has thrived in the research environment but after four years has realised that she needs to pursue her formal training as a nurse. In 2018 she started a three-year Bachelor Degree in Nursing. She has already completed her first year with distinction. The funding provided by the Farrar Foundation will help her to complete her second and third years. After completing the first year of the degree, her supervisors have felt that she has very strongly developed her nursing skills of patients care and management. We feel that if she could complete her degree she will be able to enhance her skills and knowledge and will be able to continue more effectively her work thereby enhancing the health of the people by administering better health care and services to them. This year, Anjana

course will primarily focus on medical and surgical nursing with components of child health and mental nursing. The course will also include nursing research and statistics as well as English communication and soft skills.

Anisha Prajapati has been awarded the Farrar Foundation award for 2019 to help complete her graduate degree in nursing. Anisha has been working at the Clinical Research Unit in Kathmandu, Nepal as a Research Nurse for the last three years. Anisha has a diploma in nursing and started working as a Research Nurse as soon as she completed her diploma. Anisha time with the research unit has strengthened her desire to pursue a career in the nursing. She says nursing for her is not only a career, but it is her passion now. Anisha has enrolled in a three-year graduate nursing course. She has passed her first year with a distinction and is looking for financial support to complete her degree. Anisha's course this year will focus on primarily on midwifery and obstetric nursing, community health nursing and she will learn management skills of nursing services and education.

Mountain Medicine Society of Nepal

In the year 2020, Mountain Medicine Society of Nepal (MMSN) conducted several outdoor activities with the support from Farrar Foundation by ensuring proper safety measures and encouraging female participation. Indoor wall climbing and outdoor rock-climbing sessions (Climbing for Fun) were facilitated by a certified trainer and a Diploma in Mountain Medicine graduate. In each "Climbing for fun" session there were 25 enthusiastic participants, where they learned basic rope handling techniques, knot making techniques, communicating during climbing and other climbing skills. Sticking to our aim of encouraging as many enthusiasts as possible each session were participated by many first timers.

Cycling for Fun, another event was conducted with 16 enthusiastic participants. It was a joyful day out where participants got to see some breathtaking view of Kathmandu valley and mountains towards the north of valley. In fact, this event was very much appreciated because this was the first outdoor activities for many of the participants after the monotonous lifestyle we had during lockdown. A day hike and clinical case



scenario: This event was facilitated by Diploma in Mountain Medicine graduates in the Shivapuri National Park. In the middle of the hike the team leader presented a simulated scenario and taught them trauma basics focusing on primary survey, patient transport and preparing first aid kit for a hike. Rafting and swift water rescue training program with overnight camping was conducted in thrilling waters of Bhotekoshi River.

We anticipate these experiences would be helpful for more than 110 participants making them capable of decision making throughout their far-reaching career in wilderness medicine. We are planning to introduce trekking and lifesaving skills in rural terrain in the coming year. We are grateful for the generous support from the Farrar Foundation which has helped us to organize effective and fun filled outdoor activities that has encouraged young doctors for the love of mountains and being close to nature.

Africa Research Excellence Fund

Since 2015 the AREF have offered potentially life-changing opportunities to more than 200 researchers from 30 countries across Africa, setting them on the path to leading their own research teams within the continent.

Below are some of our key achievements to date:

27 researchers have benefited from an AREF Research Development Fellowship, with placements at 17 research centres in Africa and Europe.

Of the 20 researchers who have completed their Fellowship so far, nearly half of them

have already gone on to secure additional research funding, amounting to £2 million.

141 researchers have benefited from one of our grant-writing workshops.

20 additional Fellows have benefitted from the 18-month AREF Excell Researcher and Leadership Development Programme.

6 African institutions have strengthened their own research capacity through the Excell programme.

10 researchers have benefited from our Towards Leadership Programme, commissioned by three Global Challenge Research Fund networks.

11 researchers have benefited from our Communications Masterclass.

5 scholarships were awarded to AREF fellows to attend the Introductory Course in Epidemiology & Medical Statistics (The Gambia), organised by London School of Hygiene and Tropical Medicine.

21 AREF beneficiaries have gone on to win funding, amounting to £5 million, from the Wellcome Trust, National Institutes of Health, European and Developing Countries Clinical Trials Partnership (EDCTP), AESA, Royal Society UK, Tropical Health and Education Trust (THET).

Anna Linton Fellowship

Anna Linton received a Farrar Foundation Fellowship to work Alzheimer's Research UK Drug Discovery Institute, University College London as part of an undergraduate placement. Here, working with the biology team, Anna explored potential drug targets for Alzheimer's Disease. Anna graduated from the University of Bristol with a 2:1 in Neuroscience (MSci). Following graduation, Anna worked on the NHS Whole System Integrated Care Dashboards Project, a collection of digital tools for patient health and social care summaries. During this time Anna



developed an appreciation of a much more holistic approach to patient care and the use and potential uses of information as patients navigate the healthcare system.

Being inspired to explore this further, in 2019 Anna joined the first cohort of the UKRI Centre for Doctoral Training (CDT) in Artificial Intelligence (AI) for Medical Diagnosis and Care at the University of Leeds. This is an integrated PhD and MSc programme focusing on applying AI techniques to cancer diagnosis and care. Through this PhD programme Anna will develop skills in AI and programming

methods, health informatics and health research. Alongside this, Anna has also been able to embrace many opportunities within the Centre for Doctoral Training including making presentations to visitors and engaging in outreach events such as panel discussions on AI, transparency and equity.

Now in the second year of the programme Anna has started the PhD. The research for the PhD explores patient self-evaluations following diagnosis and treatment. This will use AI techniques to analyse patient data which should provide insight into the quality of

life, survival and predictors of their long-term health outcomes.

Awards 2019-2020

Quy Vuot Kho Foundation Vietnam

Fellowships for students at National University of Viet Nam

Mountain Medicine Society of Nepal

To train medical professionals and students in mountain medicine and 'Climbing for Fun'

Africa Research Excellence Fund

To support the next generation of African Scientists

Birat Nepal Medical Trust

To support a Fellow to work on tuberculosis including use of drone technology to deliver health care and conduct research in hard to reach parts of Nepal

Swasthya Foundation Nepal

To support Fellows to pursue health education and research in Nepal

Farrar Foundation 2011-2020:

Fellows: 155

Grants Awarded 2020-2021: £10,500

Grants Awarded 2012-2021: £77,920

Assets 31st January 2021: £36,544

