
UK – VN Science and Innovation Newsletter

ISSUE 2 – JULY 2019

**HIGHLIGHTS OF
THE QUARTER**

From Page 2

OPPORTUNITIES

From Page 6

**APPLE
FOR THOUGHTS**

From Page 7



HIGHLIGHTS OF THE QUARTER

April – June 2019

LAUNCHING OF UK'S INTERNATIONAL RESEARCH AND INNOVATION STRATEGY (IRIS)

IRIS, announced in May 2019, is the UK's long-term strategic vision and framework for international research and innovation collaboration. It acknowledges the expansion in the scope and profile of the UK's research and innovation collaboration, and the changed policy context in the UK following the publication of the [Industrial Strategy](#). It sets a framework built on 7 thematic pillars ranging over the UK's commitments to be a global partner, to tackle greatest global challenges, to create the best conditions for talents and innovation, and to advocate for better research governance, ethics and impact. Overseas partners will be familiar with a set of existing tools and programmes for science and innovation collaboration with the UK, such as the Newton Fund, GCRF, Fleming Fund, NIHR Global Health Research Programme, and Global Entrepreneur Programme. Equally important for audience is that further, new initiatives and schemes will follow to deliver the new Strategy.



[NEW GCRF PROJECT EXPLORES THE POTENTIAL APPLICATIONS OF MACHINE LEARNING FOR THE EROSION/ACCRETION PROCESS OF VIETNAM BEACHES](#)

Funded by GCRF through the Department for the Economy (DfE) Northern Ireland, a new UK-Vietnam collaborative research project proposes a low-cost AI system to better understand the mechanisms of the coastal erosion/accretion process, thus significantly reduce immediate impacts associated with erosion such as employment risks, damages to property/infrastructure and economic loss. The trained model will be developed based on data from the beaches in Khanh Hoa and Quang Nam. The low-cost solution is envisaged to be applicable to other areas where the local authority cannot afford costly assessments which requires sensor deployment and personnel for data collection and analysis but could afford protection measures if needed. This research collaboration is led by Dr. Vien Ngo and Dr. Trung Q. Duong from Queen's University Belfast and Prof. Nguyen Trung Viet, Thuy Loi University, Vietnam and was established at the [UK-Vietnam IoT workshop](#) under sponsorship of the Newton Prize 2017 and the Newton Research Environment Links programme.

[NEWTON FUND PROJECT DEVELOPS A DIGITAL TWIN MODEL FOR MONITORING LIFELINE INFRASTRUCTURES IN VIETNAM](#)

Funded by the Newton Fund Institutional Links programme and supported by British Council, a research team from the Middlesex University and the University of Transportation and Communications are working to develop an efficient and affordable methodology that can early detect structural damages in civil lifeline infrastructure such as roadways, bridges, dams, and port facilities. In the first phase, researchers will develop a low-cost monitoring system by using vibration based field testing with Vietnamese conditions. Secondly the team will develop a twin digital model to simulate what happens in a real lifeline structure. The aim is that the digital twin will have full function of many response outputs compared to limited sensory data as is the case for the physical structures.



Project group meeting in Hanoi

The project has progressed well with 75% of data collection completed for the first phase in the first three months. It is anticipated to take another three months before moving to the second phase. Phase two will be coordinated in the UK mostly by the Middlesex University, with a Digital Twin Research Lab hopefully launched soon. The research partnership also has opportunities to expand further, including collaboration with French scientists. In Vietnam, the project has been presented to Ministry of Construction through a Vietnam-UK research seminar at the Institute of Construction Economics in early June. While the project website is under development and will be launched soon, for now follow [the project on Facebook](#) if you want to get involved.

KENT UNIVERSITY’S ENGAGEMENT WITH VIETNAM RESEARCH COMMUNITY | The University of Kent is engaged in two GCRF projects in South East Asia. [The OSIRIS Project](#) is applying mathematical modelling techniques for disaster management and infrastructure planning in Vietnam. [The SEARC Project](#) is developing new approaches to the mass production of vaccines for Thailand and the wider SEA region. Although there is clearly urgent need to bring more research funding into the region, scientists from Kent realised that there was often insufficient knowledge of the funding landscape and / or of the methods needed in order to successfully apply for international research funds. To tackle this, the University of Kent, in partnership with Hanoi University of Science, ran a “Research Resilience” conference in Hanoi on 23-24 May. Attended by over 70 guests from across SEA, day 1 was given over to presentations intended to bring delegates up to speed about the range of funding opportunities available to them; and of how to successfully apply for those funds. On the second day, delegates could choose to participate in focused workshops on vaccine development, operational research and enhancing research management capacity in SEA. The presentations and the event booklet can be downloaded from the [event website](#). The organisers hope that this event marks the beginning of an ongoing relationship between Kent and other academic institutions throughout Vietnam and the region; and that, together, they can work to both enhance research capacity *and* research activity in SEA. For further information about Kent and how you might work together, please get in touch with the event organiser, Dr Sarah Tetley, s.r.tetley-8@kent.ac.uk.



Discussion session in the “Research Resilience” Workshop

IMPACTS FROM TRAINING FOR VIETNAMESE YOUNG RESEARCHERS | As part of the programme “Enhancing Science & Innovation Capacity of Vietnam for Sustainable Development” within the framework of the Newton Programme Vietnam, three training courses for Vietnamese researchers were organised in Ha Noi, Da Nang and Ho Chi Minh City from 27th May to 14th June, by British Council and Vietnam Institute of Science Technology and Innovation (VISTI). The training was designed to equip young Vietnamese researchers with supplementary skills to improve research quality and transfer research results based on the research excellence framework in the UK. With a wide range of topics and skills, the five-day training course left positive impacts on participants. *“I am very pleased that I’ve completed this course. I was provided with a very important and core knowledge system on how to improve research capacity for researchers such as a research capacity framework for researchers, a 5D indicator system to evaluate a researcher, a research or a technology transfer”*, said Dr Hoang Ngoc Minh Chau, Deputy Director, Scientific Research and Project Management Office, University of Social Sciences and Humanities, Vietnam National University – Ho Chi Minh City.



Training for Vietnamese young researchers in Hanoi



A NEW TOOL TO FIND UK-BASED COLLABORATORS FOR RESEARCH APPLICATIONS

Prospective applicants to all open Newton Fund calls should note that [Universities UK International](#) (UUKi) offers a partner matching service to help connect partner country's researchers to potential UK collaborators. Applicants wishing to use this service should complete UUKi's [Partner Request Form](#), ideally as soon as possible after the launch of the call. UUKi is then able to suggest UK researchers or research groups which have similar research interests and expertise, and may therefore be interested in collaborating. Partnership requests will also be included on UUKi's [Opportunities for Collaboration webpage](#).



BRITISH AMBASSADOR VISITED A UK-VIETNAM JOINT RESEARCH PROJECT ON CLIMATE CHANGE IN MEKONG RIVER DELTA

British Ambassador to Vietnam Gareth Ward paid his first trip ever to the Mekong River Delta to join a river field trip with the project "Resilience and Sustainability of the Mekong Delta to Changes in Water and Sediment Fluxes" (RAMESES) last May. Funded by the Newton Programme Vietnam through NERC and NAFOSTED, the research project aims to investigate flow and sediment routing through the Mekong delta across the annual monsoon flood and develop a new understanding of the impact of relative sea-level rise and sediment routing processes, from which to guide aquaculture and agriculture adaptations to changes. Ambassador Ward was very impressed with Mekong life, the dedication and effective collaboration between researchers from University of Hull, University of Southampton, Can Tho University and the Southern Institute of Water Resource Research. The Ambassador also had a chance to meet Can Tho University Board of Rectors to discuss research topics of interest like climate change, aquaculture and fisheries, energy, etc. Together with Professor Daniel Parson, Director of Energy and Environment Institute, University of Hull, he gave a talk about the technology era and opportunities for young generation to young Vietnamese students.

OPPORTUNITIES

JULY – SEPTEMBER 2019

LIF in-country workshop

 14-15 August 2019  Hanoi


[INISCOM 2019](#) - 5th EAI International Conference on Industrial Networks and Intelligent Systems – Supported by the Newton Fund Institutional Links Programme and the Newton Prize 2017

 19-20 August 2019  Ho Chi Minh City






GCRF “Improving the Resilience of Infrastructures in Storms in Vietnam” (IRIS) project:

i. Research workshop: “Symposium on Wind and Structure Interaction: Aero-elastic Simulation”

 8 September 2019  Industrial University of Ho Chi Minh City
 Registration is available [here](#) until 15 August 2019.

ii. Training workshop: "Computational Fluid Dynamic (CFD) training workshop"

 10 September 2019  Industrial University of Ho Chi Minh City
 Registration is available [here](#) until 15 August 2019.

iii. Outreach event for high school students: "Structures in winds"

 14 September 2019  Ho Chi Minh City
 Free entrance

Research Funding Calls

- [GCRF funding bulletins](#): Interested researchers are invited to subscribe for UUKi’s bulletins to stay up to date about GCRF funding calls.
- [GCRF human infection challenge vaccine \(HIC-vac\) network](#). Register for membership to receive training and travel grants.
- [Fourth call for research to improve adolescent health in low and middle income countries](#). Deadline: 16 July 2019.
- [Wellcome Trust Impacts of vaccines on AMR](#). Deadline: 6th September 2019.
- [GCRF Sustainable Enhancement of Agriculture and Aquaculture Production Translation Call](#): Projects will need to provide evidence of a link to a current or previous BBSRC or NERC research grant. Deadline: 18 September 2019.
- [GCRF Networking Grants](#): Round 5 open in mid-July 2019.
- [UKRI Future leaders fellowships](#): Round 4 open in September 2019

APPLES FOR THOUGHT

THE UK & INNOVATIVE STARTUPS: AN AREA OF COLLABORATION TO EXPLORE



Startup development is an area receiving great interest in the world and also in Vietnam the last few years. For the Vietnamese government, developing the innovative startup ecosystem is considered an important means to commercialize and accelerate science and technology research results coming both from public sector (i.e. universities and research institutes) as well as private sector (i.e. startup companies, SMEs and large corporates).

In terms of collaboration between Vietnam and UK regarding startup development, we have seen initial initiatives and results. This starts with the implementation of the Newton Fund Leaders in Innovation Fellowship (LIF) programme, which has provided short term training on technology commercialization and application for 14-15 Vietnamese innovators each year for the last five years. One goal of this programme is to support scientists in developing spin-offs from academic-based research as well as techno-entrepreneurs in building successful startups.

Another related initiative is Pitch@Palace organised for the first time in Vietnam last year. Pitch@Palace is a platform founded by the Duke of York in 2014 for entrepreneurs all over the world to present their projects and receive supports from CEOs, influencers, angels, mentors and business partners. Logivan, the winning startup from Pitch@Palace Vietnam, went on to win Pitch@Palace Global, which took place at St James Palace, London. Interestingly, Logivan founder, Ms Linh Pham, is a Cambridge alumna for neuroscience.

Built upon such initiatives, there are many more windows of opportunities for collaboration between Vietnam and the UK on the front of startup development. The areas of focus could be the technologies that the UK has comparative advantages on but also have great potential of application in Vietnam, for example Fintech and Medtech.

For Fintech, the UK attracted \$3.3 billion of venture capital investment in 2018, becoming the leading country in Europe and ranking third in the world, after the US and China¹. Besides traditional measures, many startups have also been able to raise funding through crowdfunding platforms². Moreover, with a successfully implemented Fintech sandbox and multiple government incentives provided for Fintech companies³, startups in this field have ample room for growth.

For Medtech, the UK is proud for having a strong research base, world-leading innovation and skilled engineering workforce⁴. With nearly 3,700 companies and 21 billion GBP of annual turnover in 2018, the sector produces a wide range of medical devices and diagnostic technologies.

These are also the areas that Vietnam has great potential for and has been developing the last few years. Particularly, the Vietnamese government has announced that the State Bank of Vietnam is designing a Fintech sandbox to boost investment and operation in this field⁵. Some of the deals with highest investment in the startup industry over the last few years, for example payment platforms such as Momo, Moca and OnOnPay, are in the Fintech field. For Medtech, Vietnam with a population of nearly 100 million people, urgently needs to develop its healthcare sector, which provides many potential opportunities for Medtech companies. There is also an emergence of Medtech startups trying to disrupt the market such as platforms to connect healthcare service providers and customers like ViCare or Medlink.

Regarding means of collaboration in these fields, since the short-term training and events have shown to achieve initial results, innovation stakeholders seem to be looking forward to more in-depth and long-term capacity building programmes. An exemplary initiative could be a program that selects the most potential Vietnamese startups in the field of Fintech and Medtech to go through a pre-accelerator process in Vietnam, then another acceleration period in the UK to become truly successful global startups.

We really hope to find potential partners from both Vietnam and the UK who are willing to co-design and co-organize such initiatives to better leverage upon industry advantages of the two countries, hence helping to boost our innovative startup development.

Phan Hoang Lan

Head of Innovative Startup Ecosystem Support
National Agency for Technology Entrepreneurship and Commercialisation Development (NATEC)
Ministry of Science and Technology (MOST)

¹ The Fintech Times, <https://thefintechtimes.com/category/fintech-uk/>, 2019, (accessed July 2019).

² J. Dawson, 'How the UK fintech sector is set to fare this year', <https://www.bankingtech.com/2019/04/how-the-uk-fintech-sector-is-set-to-fare-this-year/>, 2019, (accessed July 2019).

³ Fintech Sector Strategy, <https://www.gov.uk/government/publications/fintech-sector-strategy>, 2018, (accessed July 2019)

⁴ Invest in Great Britain, <https://invest.great.gov.uk/industries/medical-technology/>, (accessed July 2019)

⁵ H. Le, 'Workshop on International Experience in Fintech Regulatory Sandbox', <https://bit.ly/2XEPGEk>, 2018, (accessed July 2019)

UK-VN
SCIENCE
AND
INNOVATION
NEWSLETTER

Issue 2
July 2019

Acknowledgement

This newsletter was developed by the British Embassy Hanoi, with contribution from the Newton Fund delivery partners and researchers from UK and Vietnam.

Contact

Newton Fund Programme Team, British Embassy Hanoi
Email: NewtonFund.Vietnam@fco.gov.uk