

Faculty of Biology, Medicine and Health

We are delighted to present the fourth edition of our quarterly FBMH Internationalisation Newsletter.

Our newsletters aim to highlight pertinent International Teaching & Research Partnerships and Collaboration Opportunities, keep you up to date with funding changes and opportunities, and items we consider will be important and beneficial to your teaching and research.

We welcome any suggestions or comments regarding our newsletter or any other aspect of our Internationalisation work.

Professor Keith Brennan Vice Dean for Internationalisation

RECENT EVENTS

FBMH Vice Dean for Internationalisation appointed

We are incredibly pleased to announce that from 1 March 2022 Keith Brennan is now the Vice Dean for Internationalisation within FBMH

Internationalisation of the Faculty's activities is a key enabling feature of our Faculty Strategic Framework and a major part of our five-year plan. Reporting directly to the Dean of Faculty and as a member of FLT, The Vice Dean role will work closely with School, Faculty, and central leadership to successfully formulate, deliver, and embed strategic and operational plans supporting Internationalisation activity. Ensuring that there is a connected and focused approach to achieving our goals across the Faculty and Schools, and in accordance with the University's overall strategy.

Kenya 2022



In March 2022, Graham Lord, Keith Brennan, Mahesh Nirmalan and Rob Bristow, along with Richard Cowan from the Christie Hospital, visited Kenya to launch two ground-breaking initiatives that will help to uplift cancer services through healthcare education, training and research as part of the Kenya-UK Healthcare Alliance.

Along with <u>Olive Mugenda</u> and her colleagues from <u>Kenyatta University</u> <u>Teaching</u>, <u>Referral & Research Hospital</u>, they joined the launch of the Centre of Excellence for Cancer Research and Training. This Centre will endeavour to understand the different forms and aetiology of cancer in East Africa and thus the different treatments needed. The work of this Centre will significantly change cancer outcomes in Kenya and the wider East African region.

They also visited Kisii County, along with <u>Richard Erlebach</u> from the British High Commission, for the launch of the Centre of Excellence for Healthcare Education & Training at <u>Kisii University</u>. They had the chance to hear the vision of HE James Ongwae, the Governor of the <u>Kisii County Government</u>, and <u>Professor John Akama</u>, the Vice Chancellor at Kisii University, to develop a Medical City Campus at Nyosia. It is a tremendous vision, which the Kisii County Government is close to realising. It will be amazing for the University of Manchester and The Christie NHS Foundation Trust to be part of this vision and help develop the curricula needed to train the next generation of doctors, pharmacists and nurses for Kenya.

The visit was concluded with an opportunity to meet the Development Partners of the <u>Ministry of Health, Kenya</u> and to present the plans co-developed by <u>Kisii</u> <u>University, Kenyatta University Teaching, Referral & Research Hospital</u> and the Kenya UK Healthcare Alliance. The meeting was led by <u>Susan Mochache</u> PS for Health and Director General <u>Patrick Amoth</u>. The CS for Health <u>Mutahi</u> <u>Kagwe</u> joined the meeting briefly to support our proposals. The meeting was very positive and the plans were very well received by <u>Jane Chuma</u> from <u>The</u> <u>World Bank</u>, <u>Samora Otieno</u> from the British High Commission in Kenya, Juliette Nabyonga from the <u>World Health Organization</u>, John Kuehnle from USAID and <u>Kumiko Yoshida</u> from Japan International Cooperation Agency (JICA). A small and focused implementation group has been set up and is currently seeking the funding needed to make the ideas a reality.

Professor Graham Lord was on <u>Good Morning Kenya</u> discussing our new health partnership in Kenya.



University of Bordeaux -March 2022



In March, Nigel Hooper and Qing-Jun Meng, along with other University representatives, visited University of Bordeaux (UoB) to explore opportunities for collaboration.

The UoB ranks in the top 100 in the Europe and 5th in France. It has a student population of 53,000 (12% international). UoB offers comprehensive biomedical and applied health disciplines including medicine, biology, pharmacy, dentistry, public and digital health (with 350 academic staff, 17 National Research Units, 990 PhD students), which align very well with FBMH.

The meetings were very productive. After the discussions, both sides felt very positive about a strong research partnership and agreed there were ample scope and opportunities for collaborations. During the face-to-face meeting discussions and follow-up conversations, the following research areas have been proposed for initial collaborations and partnership developments:

Cancer - <u>Bordeaux Integrated Research in Oncology (BRIC)</u>. Bordeaux University is about to build a comprehensive cancer research centre with ~600 researchers. Therefore, there are plenty of opportunities for co-operation. Key areas include tumour microenvironment/metabolism, cancer genetics and tumour resistance to treatments. UoB has strong platforms for tumour characterisation from single cell to omics to imaging to data sciences. Majid Khatib (Director of Bordeaux Inserm Oncology Research Unit) was in the meeting and keen to collaborate.

Neuroscience - Bordeaux has a large <u>Neurocampus</u> with 500 researchers +150 PhDs, which is strong in brain imaging, bioinformatics (BiB, Bioinfomatics in Brain), neurodegenerative disease, addiction and neuropsychiatry, cognition, synapses. Jerome Baufreton (Director of the Department of Neuroscience) came to the meeting discussions and expressed enthusiasm to follow up, particularly around neurodegenerative diseases.

<u>Endothelial research</u> - UoB has research strength in cardiovascular research, including various endothelial tissues in brain and periphery, role of endothelial cells in thrombosis, critical hind limb ischemia, blood-brain barrier dysfunction in cerebrovascular disease, retinopathy and vascular lesions. Alain-Pierre Gadeau is the Director of Biological and Medical Sciences and also Head of Inserm Research Unit in the Biology of Cardiovascular Diseases. He is keen to promote collaborations between the two Faculties. UoB is also the home of Liryc, a National Centre of Excellence in heart electrophysiology (AF. VF, arrhythmia, heart failure)

The Inserm <u>BioTis</u> Centre has >20 PIs working on tissue engineering in bone, vasculature, skin and bio-fabrication. Nicolas L'Heureux is the Research Director who specialises in cell matrix assembly. He was in the discussions and showed strong interest to collaborate.

A reciprocal visit from UoB to Manchester was suggested in Autumn of 2022 for leads of potential research areas to meet up and explore further opportunities. Meanwhile, joint research workshops are being discussed in the above research areas, which are also likely to take place this Autumn.

SciLifeLab, Stockholm - April 2022



Andy Sharrocks, Karen Piper Hanley, Kevin Couper, Cerys Manning and Mudassar Iqbal travelled to <u>SciLifeLab</u> in April as part of a larger University delegation to Stockholm University and KTH (Royal Institute of Technology in Stockholm).

SciLifeLab is a technology and data science focused institution that is primarily interested in developing the ways we look at biology rather than studying biology directly. The institute effectively provides the core facilities for Sweden. The technologies are reviewed once every four years by an international advisory board to ensure they remain cutting edge and those that have been superseded are removed from the portfolio. An interesting new development within SciLifeLab is <u>Data Driven Life Sciences</u>. DDLS is addressing the need to cope with: the ever-increasing number of large datasets; the integration of datasets from different 'omic approaches; and the reuse of datasets.

Cerys, Mudassar and Kevin are currently working on applications to the Manchester, KTH & Stockholm University Joint Research Fund to support a Single Cell Analysis conference with SciLifeLab and an exchange programme for the experimental officers within the core facilities in Manchester and SciLifeLab.

Lastly during the visit, Keith Brennan and Nigel Hooper had the opportunity to visit the <u>Karolinska Institute</u> to explore the possibility of including the third arm of the Stockholm Trio into the collaboration with the University. The discussions were positive and we are hopeful that they will visit in the Autumn to extend the discussions.

Indiana - June 2022



Indiana University

Indiana University has been a Humanities strategic partner for the last five years and with the possible renewal of the memorandum of understanding, the three Faculty leads for Internationalisation have been reviewing our links with the university. Indiana University is a very large university with around 100,000 students split between 9 campuses across the state. The two largest campuses in Bloomington and Indianapolis each have around 30,000 students.

The focuses of the two campuses are slightly different. The Bloomington campus is much more humanities focused, although there are some natural science departments on the campus including Biology. The healthcare schools are on the Indianapolis campus, along with the Purdue School of Engineering & Technology.

Biology, **Bloomington**

Substantial department with 65 group leaders with interests in: microbiology; virology; genome, cell & developmental biology; and evolution, ecology & animal behaviour. They have approximately 1400 UG students who are mainly pre-med. They have strong interests in chromatin biology (modification, conformation and transcriptional pausing), DNA repair and replication, and are moving towards single cell analysis, particularly within a cell and developmental biology context.

AMPATH, Indianapolis (AMPATH Kenya)

The Centre for Global Health has a 30 year- long and highly successful institution to institution interaction with Moi University and Moi Teaching & Referral Hospital, the only level 6 hospital in Western Kenya. They have supported the development of many specialist services within the hospital, initially through training in Indiana but now through MMed programmes in Kenya. They are now starting to support training virtually, including the use of Project Echo They have also supported the development of a clinical trials unit and clinical research. Again, this started with training programmes at Indiana, where a Kenyan researcher would be embedded for a year while they develop a research question to take back to Kenya. Since these research training programmes have transferred to Kenya. The trials unit has worked with both the MRC and NIH in many different projects, including reproductive choice after pregnancy, paediatric oncology diagnosis & care, and HIV transmission between mother & infant.

AMPATH is looking to replicate the interaction they have with Moi, Kenya in three other countries with different universities within the AMPATH consortium leading the work, NYU is leading in Ghana, UT Austin in Mexico and Mount Sinai in Nepal. Discussed the possibility of UoM formally joining AMPATH and the sharing of knowledge to support UoM work in Kenya.

School of Medicine, Indianapolis

The School of Medicine has numerous <u>research centres</u> that are of interest. These are cross institution centres that draw together both basic biology researchers and clinical scientists. Those of greatest interest include the:

- <u>Center for Computational Biology and Bioinformatics</u>
- Vera Bradley Foundation Center for Breast Cancer Research
- Melvin and Bren Simon Comprehensive Cancer Center

- <u>Centre for Diabetes and Metabolic Diseases</u>
- Brown Center for Immunotherapy
- <u>Center for Musculoskeletal Health</u>
- <u>Stark Neurosciences Research Institute</u>
- Herman B Wells Center for Pediatric Research
- <u>Center for Regenerative Medicine and Engineering</u>

Within FBMH, interest has already been shown in the Center for Diabetes and Metabolic Diseases, Brown Center for Immunotherapy and Herman B Wells Center for Pediatric Research.

School of Dentistry, Indianapolis

The School of Dentistry has a long-standing collaboration with UoM through Ian Pretty and the Colgate Collaboration. This project has been funded by both NIH and Conacyt grants for work in Thailand and Mexico. They have a strong Dental Informatics programme and they are looking to link medical and dental records.

School of Nursing, Indianapolis

The School of Nursing has several research groups that clearly overlap with the interests of our <u>Division of Nursing</u>, including cancer, older adult care, palliative care and chronic diseases. They also have a group interested in pedagogical research.

The International Team is currently working through the different leads.

New funding for researchers and a Centre for Digital Health agreed by the Manchester-Melbourne-Toronto Alliance



The Universities of Manchester, Melbourne and Toronto have announced new funding to develop bi- and trilateral research projects, and a declaration to establish a new International Centre for Translational Digital Health. The announcements follow the signing of a <u>Strategic Alliance</u> between the three institutions last year, and represents the first steps in expanding the

relationship – enhancing cooperation between academics on three continents. The agreements were signed in Manchester following a joint visit on 21 April.

The first, the Manchester-Melbourne-Toronto (MMT) Research Fund 2022, has been jointly funded to a total of £300,000 by the three universities to create partnerships between two or three of the institutions. Further details and how to apply can be found on the <u>University website</u>.

The International Centre for Translational Digital Health will add Melbourne to an existing partnership between Toronto and Manchester. The expanded Centre will work on topics such as remote monitoring and virtual care, health policy and implementation, data science and AI and digital health inequity. All three cities have similarities in terms of population, how healthcare is funded and organised, and the combined expertise of the universities.

It is envisaged that the new partnership will jointly develop research papers, student exchanges, new technology and secure external funding. The translational nature of the centre means that an emphasis will be placed on using research to improve healthcare in the three partner cities and beyond. Read the full story

RESEARCH & INNOVATION UPDATES

China Scholarship Council (CSC) Innovation Platform Application



The Faculty's Internationalisation Team is delighted to announce that we have won a Chinese Scholarship Council Innovation Platform award in conjunction with our partner Shanghai Jiao Tong University School of Medicine (SJTUSM).

The £830,000 award is for three years in the first instance and includes: two PhD students per annum registered at Manchester; two co-supervised PhD students per annum registered at SJTUSM who will visit UoM for 1-2 years (with project costs); and 1-3 visiting postdocs per annum for 6-12 months (with project costs).

In the future, we also hope to be able to offer one dual award PhD student per annum. These awards are in addition to the existing CSC studentship scheme (6 per annum).

Following the first recruitment round in March 2022, Andrew Renehan successfully recruited Mengying Wang to a 3-year PhD looking at diabetes, obesity, cancer incidence and cancer-related mortality in Chinese populations. Janine Lamb and Hector Chinoy will also be inviting successful postdoctoral fellow Xia Lv to Manchester this autumn. Their yearlong joint research project is to understand how autoantibody profile, genetic risk factors and environmental exposures relate to clinical presentation in idiopathic inflammatory myopathies, particularly across different ethnic groups.

The second recruitment round will start soon, and we are encouraging academic colleagues to explore possibilities of taking PhD students and postdoctoral fellows through this CSC scheme to drive joint research projects with PIs from <u>SJTUSM</u>.

Conflict Support Fund

In response to recent University announcements, each Faculty will receive funding to support PhD studentships (new or transfers) for individuals displaced as a result of war.

Information has been added to our <u>website</u> so please feel free to share with any contacts or let me know if you have any specific cases or questions. It is most likely that the priority initially will be Ukraine but it will apply more broadly. A formal process and eligibility for studentships commencing in 23/24 is yet to be determined, but any requests for support during 22/23 will be managed individually and overseen by the Doctoral Academy Leadership Team.

TEACHING, LEARNING & STUDENTS UPDATES

International Student Experience Programme

With the launch of the <u>BSc Clinical Pharmacy programme</u> with China Pharmaceutical University in September 2021, Li Chia Chen and Selena Tai have been busy developing and running the International Student Experience Programme. ISEP is a student peer-mentoring scheme for students who have joined the newly launched BSc Clinical Pharmacy Programme. These students will study for the first two years of their programme at China Pharmaceutical University in Nanjing, China before completing the second and third years of the MPharm programme in Manchester. The students will then return to Nanjing to complete their final registration year.

ISEP has been set up to support to support these students as they transition to Manchester. The scheme adopts the social learning theories and encourages peers to work in a group to share, communicate and support each other's learning. Volunteer student mentors from MPharm programme are paired with a group of five or six Year 1 BSc Clinical Pharmacy students in Nanjing. These groups meet virtually once a month to discuss a wide range of topics, including cultural awareness, independent living skills, academic stress & time management, health & wellbeing, professional & career planning, and reflective learning. Through this scheme, Li Chia, Selena and the student mentors are preparing our shared students with the China Pharmaceutical University for their transition to Manchester and completion of their <u>clinical programme</u>

CURRENT AND FORTHCOMING INTERNATIONAL FUNDING CALLS

Manchester-Melbourne-Toronto (MMT) Research Fund

The launch of the MMT Fund follows the signing of a Strategic Alliance between the three institutions last year. The partners are contributing a total of £300,000 to support bi- and trilateral research projects which combine mutual areas of interest and strength and demonstrate the potential to foster ongoing collaboration. The opening of the fund coincides with the visit of senior academics from Toronto and Melbourne to our campus. The fund welcomes applications from all research areas. Proposals that aim to provide opportunities for jointly awarded PhDs at a future stage are encouraged.

Key dates

Applications open: Thursday, 21 April
Deadline for submission: Thursday, 16 June
Results announced: August 2022
Start date of awards: October 2022
The guidelines and link to the online application form are on the web page

Manchester-Tel Aviv University Research Fund

The second round of our joint fund with TAU is now open and seeks to encourage new initiatives in any area with a focus on projects that include Early Career Researchers (ECRs). Further details on the <u>web page</u>

Key dates Call for proposals opens: Monday, 25 April **Deadline for submission:** Thursday, 19 May **Applicants notified:** Friday, 10 June **Project start date:** no later than October 2022 at the latest

Manchester - KTH Royal Institute of Technology and Stockholm University Joint Research Fund

More than 20 staff attended a workshop in Stockholm before Easter on the following themes: Digital trust, privacy and security; Sustainability and circular economy; Molecular biosciences; Water; Inequalities in HE and Quantum science. The second round of our seed fund is intended to support further collaboration in these areas but is also open to any area. The details are being finalised with our partners and the call guidelines on the <u>web page</u>

Key dates

Call for proposals opens: Tuesday, 3 May Deadline for submission: Tuesday, 7 June Applicants notified: Tuesday, 28 June Project start date: August - October 2022

Turing AI World-Leading Researcher Fellowships: round two

Apply for funding to undertake world-leading research to advance the field of artificial intelligence (AI) in the UK with UK Research and Innovation (UKRI).

This opportunity is aimed at established researchers. International applicants are welcome. However, you must be based in the UK at an organisation eligible for UKRI funding to hold the fellowship.

UKRI welcome those: conducting research into AI at a fundamental **or** theoretical level working at the interface between AI and another discipline.

Funding is for up to five years. EPSRC will fund 80% of the full economic cost. Further details can be found on the <u>web site</u>

Deadline: 14th July 2022

Wellcome - Biological vulnerability to extreme heat in maternal and child health

This award will fund research teams to significantly advance understanding of the biological vulnerability to extreme heat in the context of maternal and child health. By the end of the award, successful applicants will have delivered new knowledge at this intersection and generated evidence with the potential to inform new interventions that can be used in real world settings. Deadline: 8th August 2022

UK - South Korea Collaborative R&D

Project value up to £350,000 but must be industry led (academic institutions can partner). Further details on the <u>web page</u>

Innovate UK, part of UK Research and Innovation, will invest up to £2 million in innovation projects in partnership with the Korea Institute for Advancement of Technology (KIAT). The aim of this competition is to fund collaborative research and development (CR&D) projects focused on industrial research. Your proposal must include at least one partner from the UK and one partner from South Korea. UK registered organisations must apply to and will be funded by Innovate UK. South Korean partners must apply to and will be funded by KIAT.

The projects we fund are expected to result in a new product, industrial process or service, be innovative, involve a technological risk, and have high market potential in the participating countries.

Your project must focus on one or more of the following sectors:

- advanced manufacturing and materials artificial intelligence
- clean energy; specifically battery technologies, hydrogen mobility technologies, and future vehicles

Deadline: 6th July 2022

Wellcome Mental Health Data Prize

The Wellcome Data Prize in mental health will support collaborative approaches to research into anxiety and depression in young people. Teams in the UK and South Africa will explore existing data to find new insights and build digital tools that enable future research.

The host organisation where the lead applicant is based must be in South Africa or the UK.

There are three phases to the prize, each six months long and with different levels of funding and support on offer:

Discovery phase: 10 teams will be selected to receive £40,000 of funding

Prototyping phase: 5 teams will be selected to receive £100,000 of funding

Sustainability phase: £500,000 will be allocated across 3 winning teams

Further details can be found on the web site

Deadline: 5th June 2022

EPSRC Lead Agency Scheme

Opportunity for UK researchers to work with overseas researchers in Ireland, Luxembourg, Brazil and the United States. Further details on the <u>web page</u>

Deadline: ongoing call

Royal Society International Exchanges

Up to £12,000 to support reciprocal academic mobility. Further details on the web page

Deadline: 15th June 2022

Horizon Europe

There are currently 329 calls open for submission and a further 100 calls are scheduled to open in the coming months. Further details on the <u>web page</u>

If you wish to contact us about content or to share content within the FBMH Internationalisation Newsletter contact annette.barber@manchester.ac.uk

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