

British Council China Higher Education Partnership Fund (2018-2024)

**Food Safety & Nutrition –
Collaboration in Higher Education
is the Key to Long-Term Success**

Transnational Collaboration

Successful projects always come with a feel-good factor. All the more so when positive impacts include long-term benefits that will far outlive the initial hard work. With the support from the **British Council Higher Education Partnership Fund**, a recent project based at the University of Leeds is a case in point. Spanning from 2018 to 2024, the **Partnership and Capacity for Teaching and Training in Food Safety and Nutrition** was designed from the start to create immediate returns as well as continuing benefits.

Partners in this project came from Tanzania, China and the UK. There was an underlying rationale to benefit not just those participating nations, but to create a genuinely global resource that can be

accessed worldwide.

Behind this approach is the understanding that food safety and nutrition underpin civil society in several ways. In low- and middle-income countries (LMICs) in particular - and in poorer regions of wealthier economies - there can be a gap between what is understood at establishment level and how the relevant information is accessed by those who need it. Education is vital conduit for sharing that essential knowledge, and higher education can drive change so that useful and practical knowledge is supported by ongoing research and implementation.

Thus, this project aimed to achieve several goals at once:

- promote capacity for research and training,
- develop education and training opportunities in food safety and nutrition,
- model a global approach to public health, including providing internationally accessible information and training,
- deepen international exchanges and cooperation, share advanced concepts and benefit the world.



Practical Academic training

The Partnership and Capacity for Teaching and Training in Food Safety and Nutrition is a standout example of bridging the gap between theory and practice, proving that strong academic foundations can drive real-world impact.

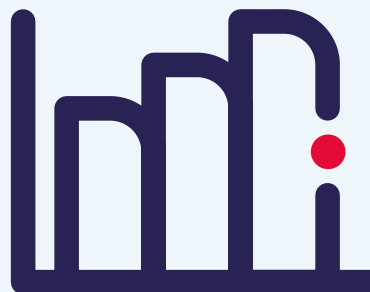
At the heart of this project were two elements: training and supporting early career researchers (ECRs) from The Nelson Mandela African Institution of Science and Technology (NM-AIST), Tanzania, and the establishment of a joint research lab between the University of Leeds (UoL) and Jiangsu University (JSU) to study non-invasive detection of food pathogens.

The two aspects are complementary. PhD students, research assistants, technicians and field workers were trained on advanced biomarker techniques and lab skills, while the new lab has been able to support this training as well as pursue research into making non-invasive food pathogen detection practical and accessible. The research and training have also included food safety education through fieldwork in local communities.

Following the same thread, the project has supported PhD students and researchers from the NMAIST and other institutions in Africa to **receive food safety lab skill training at the UoL, and a joint programme** (with funding from the China Scholarship Council) supporting

an MSc in rural development in China – initially **12 MSc students** from JSU were trained at UoL, with more being trained in Tanzania and in other African countries.

Collaborative workshops were also featured. One was online, providing food security training to **twenty ECRs** each from UoL and JSU. A second was held in Leeds, with participants from the UoL, JSU, Zhejiang University, and the China Centre for Disease Control and Prevention. The focus here was child malnutrition in Asia - a good illustration of the very practical outcomes of the project as a whole being tied to higher education. This is also in keeping with the expectations of the British Council Higher Education Partnership Fund. Indeed, one of their stipulations for funding required links between the higher education communities in the UK, China and elsewhere across the world. Academic exchange has been a key element in this whole project and has contributed significantly to its successes.



Global Access to Vital Food Safety and Nutrition Knowledge

The second major element in the project - interwoven with the research and training outlined above - was to create a free training resource, available globally. This Massive Online Open Course (MOOC) provides training in key areas of food safety and nutrition. Entitled **Food Safety and Nutrition, a Global Approach to Public Health**, it is found on many educational platforms worldwide, including [Future Learn](#).

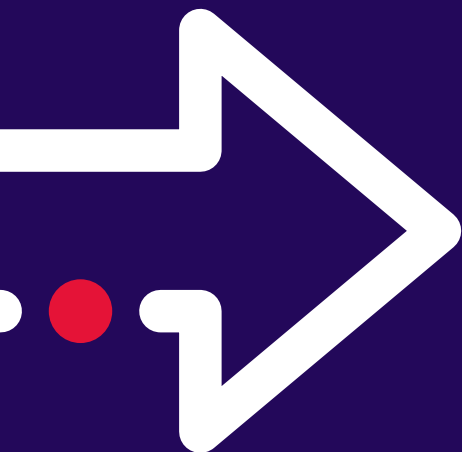
As outlined by **Yun Yun Gong, Professor of Food Safety and Global Health at the University of Leeds**,

“The novelty of the course is to put food safety and nutrition in one room on one course and this allows learners to understand essential issues in food safety while also learning about nutrition.”

Elaborating further, she stressed how, in both the short and long terms, it will “contribute to better education, reduce education inequality, and benefit higher education in [many] African countries.”

One of the PhD students from Tanzania’s NMAIST, Naelijwa MShanga, echoed this relevance when describing her own personal experience.

“My research focuses on the impact of aflatoxin exposure on key micronutrients... This has empowered me and many other researchers to make meaningful contributions to our fields and communities.”



A Model for Future Global Food Safety Resources

One of the outcomes of this project is that it is not limited purely to its original objectives. Already the MOOC has wider application. It is currently being used as a key resource for **a joint online MSc course** under development by the University of Pretoria in South Africa with the UoL. It has also been used as **an online course for MSc majoring in food science and engineering at JSU**, with nearly a hundred participating in the learning and training every year.

Lessons learned here will underpin the MOOC as the basis of other certifications, Masters Degrees and professional training. This fully demonstrated the role of talent training in higher education and the ubiquitous influence of knowledge popularisation. The partnership project, with its focus on networks of collaborating experts, has become a leading model for future global partnerships and as a tool for transnational benefits.



Partnership Successes

Notable achievements include the establishing of a genuine three-way partnership between NMAIST, JSU, and UoL. The focus on teaching, research and learning has supported the project's objectives and created a secure foundation for future and similar co-operation.

The creation of the MOOC is a significant milestone, and brings real benefits to academic and training establishments in Africa and Asia and, in the future, other regions too. It will help improve standards in food safety and nutrition and reduce inequalities in education in low- and middle-income countries. In the three years of its operation, the MOOC has already benefited thousands of users, and has the potential to continue delivering at the same scale.

Shared research in the project has produced **25 joint publications, initiated 22 student exchanges, plus 4 faculty exchanges.**

Naturally, there are some challenges with any partnership-based project. Maintaining momentum was at times harder than the initial set-up, even discounting the impact of Covid-19. However, the fact that all participants persevered and saw significance in their work is evidence of a shared understanding that collaboration, supported by mutual understanding and respect, is a powerful force for progress, now and in the future.





British Council China Higher Education Partnership Fund (2018-2024)

University of Leeds



Project title

Partnership and capacity for teaching and training in Food Safety and Nutrition (2019-2024)



Project introduction

This project brought together University of Leeds, NMAIST in Tanzania and Jiangsu University in China to enhance education and research in Food Safety and Nutrition. It aimed to build capacity through training, student exchanges and the development of online educational resources, while fostering collaborative research across partner institutions.



Major achievements

- Developed a MOOC course on Food Safety and Nutrition
- Trained African Early Career Researchers on food safety/aflatoxin research methodology
- Built strong partnerships on research and teaching with China and Tanzania

Project in numbers

1 MOOC course with thousands of learners globally	4 senior staff exchange visits &
10 MSc	22 student exchanges
8 PhD	25 joint scientific publications &
4 postdocs trained from partner institutions	1 joint lab
40 ECRs from partner institutions trained on food security workshops	



Key innovative aspects

Integrated Food Safety and Nutrition in one MOOC course

Developed novel biomarker technique and applications training for PhD students



Key takeaway

Sustaining partnerships requires mutual understanding and respect, while nurturing ECRs, especially in LMICs, is a vital responsibility of senior academics.



'I loved this course, very useful and functional information. The way to delve into these issues and challenges in society is crucial to become aware and act accordingly.' -- MOOC course learner