INTERNATIONAL FEDERATION OF BIOSAFETY ASSOCIATIONS

Cultivating the Biosafety Profession





International Federation of Biosafety Associations



THE UNIVERSITY OF BRITISH COLUMBIA





Project Objective

This project will assist countries in cultivating a qualified biosafety workforce to implement risk-based biosafety and biosecurity best practices including the requirements of the WHO 4th Edition Laboratory Biosafety Manual and its supporting monograph on Biosafety Program Management.

A knowledgeable and capable biosafety officer, whether a full-time employee or part-time responsibility, is a foundational element for an organization's biosafety and biosecurity program. The COVID-19 pandemic has placed a significant demand on the biosafety and biosecurity profession and many countries face an overall shortage of these specialized individuals. Working on the frontlines, and often behind the scenes, the profession remains largely unknown to students interested in pursuing a career in sciences who are steered toward more visible career paths. In a recent IFBA survey, young scientists asked to provide their experiences related to diversity, equity, and inclusion in their workplaces, said that "the lack of a degree program specifically in biosafety leads to skilled and experienced biosafety professionals being undervalued by those holding doctorate degrees in adjacent fields". Formalizing a biosafety career path within the higher education system is a key priority for cultivating a diverse and future biosafety workforce. This project will identify approaches for formalizing careers in the field of biosafety and biosecurity and support young scientists/youth with the tools and resources to establish a career within, and/or transition into, the biosafety and biosecurity workforce.



Project Description

University Biosafety/Biosecurity Undergraduate Degree Program, Masinde Muliro University of Science & Technology, Kenya

This project will build upon the IFBA's existing initiatives to formalize a biosafety and biosecurity as a career path with the higher education university system in selected universities around the globe. The IFBA's Biosafety Profession Technical Committee is collaborating with Kenya's Masinde Muliro University of Science and Technology (MMUST) to build upon their biosafety and biosecurity course curriculum and pilot an undergraduate degree program in biosafety and biosecurity. Additional project participants include the University of British Columbia (UBC) and representatives from the IFBA's Member Biosafety Associations in Kenya and Tanzania. The UBC is partnering by providing non-educational supports, including contributing to the project by providing technical assistance and subject matter expertise through its Department of Safety & Risk Services, including through its Research and Compliance unit and Biosafety team. The experiences and lessons learned at MMUST will be shared with the international biosafety and biosecurity community for further implementation in universities globally.

Specific outcomes of this project include the following

Strengthened and more visible biosafety and biosecurity career path within higher education systems



Pilot undergraduate degree program developed at the Masinde Muliro University of Science and Technology, Kenya as a model for other universities globally



Scaled up workforce skilled in biosafety and biosecurity risk-based decision making for implementation of the WHO's Laboratory Biosafety Manual



Normalization of university degree programs and careers in the field of biosafety and biosecurity