Building an International Community to Catalyze Research for Diseases of Poverty

Affecting more than one billion people globally, diseases of poverty—including neglected tropical diseases (NTDs), malaria, and tuberculosis—require the coordinated efforts of the international research and development (R&D) community to improve the arsenal of tools to prevent, diagnose, and treat them. Scientists in disease-endemic countries, in particular, are critical contributors to such efforts, due to their in-depth disease knowledge and understanding of the local contexts in which patients are diagnosed and treated. However, due to limited resources, these scientists may lack access to the equipment and expert know-how needed to perform advanced R&D.

With funding from the Government of Australia, and under the purview of WIPO Re:Search, BIO Ventures for Global Health (BVGH) and the World Intellectual Property Organization (WIPO) have implemented a fellowship training program that is preparing scientists from endemic countries to contribute to R&D initiatives for diseases of poverty. Through short-term placements at Australian, European, and American pharmaceutical companies and academic research institutes, scientists from Africa and the Indo-Pacific region are gaining access to state-of-the-art technologies, acquiring new skills, and participating in meaningful, mutually beneficial research collaborations that will enhance their own scientific programs at home.

Fellowship hosts and fellows are located around the world. Creating a sense of community is important to the long-term impact and sustainability of the program. Such communities provide the professional support needed to keep scientists engaged in their field of research and attract new researchers; connect scientists with the resources and expertise they need to advance their research; help troubleshoot research challenges; and encourage discourse that stimulates new research ideas and sparks unexpected discoveries.

WIPO Re:Search
WIPO Re:Search is a global consortium founded by BVGH, WIPO, and leading pharmaceutical companies in 2011 to accelerate the development of new drugs, vaccines, and diagnostics for neglected tropical diseases, malaria, and tuberculosis through the free sharing of intellectual property assets such as compounds, technology, and expertise. The Consortium has over 140 Members across 40 countries (including companies, academic and non-profit institutions, and government organizations). More than 140 R&D collaborations spanning 14 diseases have been established to date.
Neglected Tropical Diseases (NTDs)

Neglected tropical diseases are a group of bacterial, parasitic, and viral diseases that disproportionately afflict the world’s poorest communities. Found primarily in tropical and sub-tropical regions, NTDs cause immense suffering and death and represent significant obstacles to economic development. Despite the enormous toll of these diseases, there are a limited number of safe and effective vaccines, diagnostics, and drugs to prevent, detect, and treat them.

BVGH and WIPO convened past, present, and future WIPO Re:Search fellowship participants at the 1st Malaria World Congress in Melbourne, Australia to cultivate the fellowship research community. During the Congress—the vision of which was a “unified approach to health equity”—fellowship hosts and fellows presented their research and plans for continued collaboration, shared the skills and insights they gained, and described how the program impacted their research and professional development.

As the hosts and fellows emphasized during the Congress, the importance of collaboration and a supportive scientific community cannot be understated. Twenty fellowships have been coordinated across seven diseases of poverty—dengue fever, malaria, onchocerciasis, parasitic helminthiases, schistosomiasis, snakebite, and tuberculosis—and have already resulted in four peer-reviewed publications, a common metric of research success. One fellow has attributed the advancement of his malaria research program—including over 750,000 USD in competitive grant funding and the training of numerous students—to his sabbatical experience, while another fellow has been awarded a Ph.D. studentship.

Global challenges require global solutions. By cultivating an international community of scientists, the WIPO Re:Search fellowship program is poised to make an extraordinary impact on the field of NTD, malaria, and tuberculosis research.

“Building relationships with experts worldwide is critical to my research and my institute’s development. The FIT programming at the Malaria World Congress allowed me to build relationships with the other FIT participants, and discuss our respective research projects and areas for collaboration.”

- Dr. Shafiul Alam, WIPO Re:Search Fellow
International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)