

BioACCESS Attends WHO Global Meeting on Non-communicable Diseases

Donovan Guttieres, a research scientist for the [BioACCESS Initiative](#) within MIT's Center for Biomedical Innovation (CBI), was awarded a grant, along with 19 other young researchers from around the world, to participate in the World Health Organization (WHO) [global meeting](#) on Non-communicable Diseases (NCDs), which was held on December 9-12, 2019 in Muscat, Oman.

In 2015, the United Nations created a series of Sustainable Development Goals ([SDGs](#)) aimed at solving some of the most systemic social welfare and justice, environmental, and global development challenges that burden underdeveloped and underrepresented populations across the world, including in the United States. These goals include ending hunger and poverty, ensuring environmental welfare, and promoting healthcare on a global scale. The latter mission, "ensuring healthy lives and promot[ing] well-being at all ages", includes the long-term goal of: *by 2030, reduce by one-third premature mortality from NCDs through prevention and treatment, and promoting mental health and well-being.*

The WHO meeting in Oman brought together stakeholders from WHO member states to assess progress on the NCD SDG and to build global partnerships and an international community of researchers dedicated to solving this complicated, multi-stakeholder problem. Despite global commitments, progress remains slow and inadequate where access to NCD therapies are concerned. This is especially true for low- and middle-income countries (LMICs), who bear a disproportionate number of the total and premature deaths due to NCDs. Consistent with our efforts in the BioACCESS Initiative, a core component of the meeting was identifying barriers to the timely access of safe, effective, and affordable medicines in the context of universal health coverage (UHC). In 2015, governments also set an 80% minimum target for availability of affordable essential medicines (including biologic medicines) in both public and private sectors of every country by 2025. A persistent challenge to achieving this goal, however, has been providing these essential medicines for patients who are more geographically dispersed and eliminating financial hardships for patients in LMICs, who must generally pay out-of-pocket.

During the meeting, Donovan participated in a session titled, *Integrating Artificial Intelligence and Digital Health into the NCD Response*, and spoke about MIT's continued leadership in the space of AI and the need for analytical tools to measure trade-offs across innovations to inform decision-making. He was also a reporter for the opening plenary session of the conference titled, *Prioritizing action to ensure that more people benefit from UHC*. Below are a few key take-aways from the meeting's discussions:

- Data-driven tools are needed to help inform decisions around the implementation of cost-effective national responses against NCDs;
- Health systems need to shift from vertical (i.e. disease-specific), responsive programs to ones that are more integrative and proactive;
- Digital health plays an increasingly important role in transforming healthcare systems, but their impact will depend on the appropriateness of systems designed;
- There is a severe funding gap in the NCD space, which accounts for only 1-2% of total health-related overseas development assistance, highlighting the need for innovative financing mechanisms to accelerate the NCDs agenda;
- Multi-sectoral and multi-stakeholder partnerships are needed to promote a whole, system approach to identifying and overcoming barriers.

Meetings like this are essential for BioACCESS' mission of enhancing global access to biologic therapies through systems analysis and innovations in manufacturing, supply chain management, diagnostics, and adherence. Interactions with others doing work in this area; including representatives from ministries of health, disease-specific organizations, UN-related

initiatives, industry, patient advocacy groups, and research organizations; provide deep insight into existing efforts and may point to opportunities for BioACCESS to contribute to and partner with like-minded organizations. This global meeting served as a unique opportunity to showcase ongoing efforts within BioACCESS and the broader CBI community as well as acting as a catalyst for continued work in this space.