

**INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION  
ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)**

**Geneva, Switzerland  
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Contribution by WIPO

to the CSTD 2020-2021 priority theme on “Using science, technology and innovation to close the gap on Sustainable Development Goal 3 on good health and well-being”

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**PRIORITY THEME 2:** Using science, technology and innovation to close the gap on SDG 3, good health and well-being

**United Nations Commission on Science and Technology for Development (CSTD)**

Dear international organization/UN entity/agency,

The CSTD 23<sup>rd</sup> annual session selected “Using science, technology and innovation to close the gap on SDG 3, good health and well-being” as one of the priority themes for its 24<sup>th</sup> session (2020-21 period).

Science, technology, and innovation (STI) can play an important role in strengthening the capacity of all countries, in particular developing countries for early warning, risk reduction and management of national and global health risks as described in SDG 3D. Data science, biomedical science and engineering and other technologies can broadly transform health and medicine and specifically support countries and regions in their responses to emerging health crises as well as in their preparedness for future threats. Beyond specific technological innovations, STI policy advice, diplomacy, and international cooperation also play a prominent role in current and future infectious disease preparedness and response. The theme will explore experiences about using STI to strengthen health outcomes as well as approaches to regional and global STI cooperation in this field.

The CSTD secretariat is in the process of drafting an issues paper on the theme to be presented at the CSTD inter-sessional panel meeting. In this context, we would like to solicit inputs from international organizations, UN entities and agencies on this theme. We would be grateful if you could kindly answer the following questions based on your organization’s work at the global level.

1. Can you give examples of international projects/policies aimed at using science, technology, and innovation for early warning, risk reduction and management of national risks? What are the main challenges confronted while trying to implement these projects/policies?

2. Could you share specific examples, projects or initiatives that have used frontier technologies (e.g., AI, drones, blockchain, 3D printing, etc.) or other forms of innovation in general in addressing the Covid-19 pandemic?

3. Can you provide examples of policies/projects/initiatives aimed at strengthening health innovation systems at the global level? For example, how does your organization support the building of innovative capabilities through investments in R&D and human capital? What projects are in place to stimulate healthcare innovation and effectively address safety, ethical and other concerns?

- [In 2011, WIPO and the non-profit organization BIO Ventures for Global Health \(BVGH\), formed WIPO Re:Search -- a public-private initiative that supports early-stage research and development \(R&D\) in the fight against neglected tropical diseases \(NTDs\), malaria, and tuberculosis.](#)
- [WIPO Re:Search harnesses the power of public-private partnerships to make IP available to scientists who need it. It accelerates the discovery and development of technologies for NTDs, malaria and tuberculosis by sharing IP on a royalty-free basis with the global health research community, catalysing and fostering global health collaborations, and contributing to capacity-building in developing countries.](#)
- [WIPO Re:Search’s 149 members spread across 42 countries on six continents include eight of the world’s leading pharmaceutical companies – Eisai, GlaxoSmithKline, Johnson & Johnson, Merck, MSD, Novartis, Pfizer, & Takeda -- as well as prestigious academic institutions and research institutes from the public and private spheres.](#)
- [Over the past decade, WIPO Re:Search has fostered among its members 164 collaboration agreements, of which 52 are currently active and 11 are advancing through key milestones on the product development pathway.](#)

- WIPO has also developed a Patent Information Initiative for Medicines (Pat-INFORMED) which provides a service to the global health community, particularly those involved in procurement of medicines, by facilitating easy access to medicine patent information. The data is provided directly by the biopharmaceutical companies and hosted by WIPO. Anyone can search the Pat-INFORMED database simply by entering a medicine's INN (International Nonproprietary Name) to obtain relevant information about its patent status in a particular country. Uniquely, Pat-INFORMED also provides a facility for procurement agencies to make follow-up inquiries directly with participating companies. While it is not a tool to provide Freedom to Operate analysis, it facilitates access to patent information and can improve efficiency in procurement processes.

4. Could you share case studies of international cooperation that have strengthened health capacities, particularly in developing countries? Can you provide success stories involving global cooperation in academic research networks, STI diplomacy, or initiatives to make healthcare innovations accessible for all?

- The WIPO Re:Search Fellowship Program helps developing countries increase their scientific and research capacity by establishing research sabbaticals, generously supported by funds-in-trust (FIT) from the Government of Australia.
- The WIPO Re:Search Fellowship Program builds an international community of researchers to catalyse R&D for diseases of poverty. Through this program, pharmaceutical companies and academic research institutes with advanced laboratories host scientists from low- and middle-income countries (LMICs) to provide training and conduct mutually beneficial research collaborations.
- As of September 2020, WIPO Re:Search has organized 20 fellowships for researchers from LMICs, totalling 100+ months of training. One fellow received post-fellowship grant funding for over 750,000 U.S. dollars, another was appointed to an adjunct faculty position at Australia's Griffith Institute for Drug Discovery. Fellows cite the following as benefits of this program: quicker career development and promotions, acceptance into post-graduate programs, attainment of faculty positions, and broader recognition of research via publications.
- A WIPO Re:Search-facilitated collaboration on Malaria between MSD and Australia's Walter and Eliza Hall Institute of Medical Research demonstrated that parasite aspartyl protease enzymes are attractive drug targets as they perform essential functions at different stages of the parasite life cycle. Based on this work, the collaboration team in 2018 competed for, and won, a Wellcome Trust Seeding Drug Discovery (SDD) Early Stage Award for nearly 3.6 million U.S. dollars. The team is using this funding to advance its R&D with the aim of progressing to a lead-optimization stage discovery program.

5. Could you suggest some contact persons responsible for projects/policies, related technologies and international collaboration in this context as well as any experts dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

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6. Do you have any documentation, references, or reports on the specific examples on the priority theme in your organization?

- [Pat-INFORMED – The Gateway to Medicine Patent Information](#)
- [Global Innovation Index 2019. “Creating Healthy Lives — The Future of Medical Innovation” \(2019\)](#)
- [WIPO and the Sustainable Development Goals - Innovation driving human progress \(2019\)](#)
- [WIPO Re:Search: Advancing Product Development for Neglected Infectious Diseases through Global Public-Private Partnerships \(2019\)](#)
- [WIPO Re:Search Partnership Stories 2016-2019: Driving R&D for Neglected Infectious Diseases Through Global Cross-Sector Collaborations \(2019\)](#)

Please send your responses and any further inputs on the theme to the CSTD secretariat ([stdev@unctad.org](mailto:stdev@unctad.org)) by 7 October 2020. We look forward to receiving your valuable inputs.

Sincere Regards,

CSTD secretariat