

Special feature: strengthening local capacities to accelerate knowledge and technology transfer for sustainable economic recovery after pandemics

The COVID-19 pandemic has shown not only the vulnerability of the world to diseases but also the urgent need to cooperate on the global level and to reach multilateral solutions on equitable access to vaccines and medical treatments. IP and know-how have played an enabling and facilitating role as the foundation for trust-based collaborations among creators and innovation stakeholders: governments, business, academia and funding institutions. Prompt pandemic response was based on an interplay primarily between patents, know-how and trade secrets.

A special COVID-19 response package was also launched by WIPO in 2021 to accelerate knowledge transfer and technology adaptation and to assist member states in ensuring rapid and effective sustainable economic recovery after the COVID-19 pandemic through an effective use of the IP system.

In this area of technology and innovation support, this response package translated into the development of a number of technology transfer resources related to accelerated life sciences innovation as well as resources and training materials on patent and technology search and licensing in the areas of prophylactics, therapeutics, bio-analytics and bioinformatics for communicable diseases.

New resources that are being developed in this area will include specific training materials on technology search in scientific and technical content using search tools available through ARDI and Research4Life programs, training materials and reference documents on patent search for chemical compounds and biological sequences including evaluation of search results, and patent disclosure requirements, as well as specific training on IP management, IP valuation and technology transfer in the field of biotechnology.

These training materials will be supported by resources that are being developed specifically for the Biotechnology Sector, such as an *IP Valuation Booklet for the Biotechnology Sector* and a *Technology Transfer Primer*, which will be integrated into the WIPO Academy's distance learning course portfolio. The IP Policy Template for Academic and Research Institutions included in WIPO's IP Policy Toolkit is also being updated to include specific issues related to accelerated life sciences innovation and to help institutions enter into cooperation, R&D and licensing

agreements to fight pandemics more effectively. This package should help member states build capacity for successful transfer of the necessary IP rights and scaling up of inventions to the level of innovative technologies in response to pandemics.

Building on the PLR on COVID-19-related vaccines and therapeutics that was published in 2022, which provides early observations on the patenting activity that took place in the field of COVID-19 vaccines and therapeutics, and compares results with clinical trial data for related candidate vaccines and drugs, an updated and extended version of the report will be published in 2023.

A key factor for innovation ecosystems being able to respond to public health crises is also maximum availability and disclosure of genetic sequence data for the development of diagnostics, therapeutics and vaccines. WIPO is contributing to the development of a *Guide for Patent Searches and Submissions Related to Genetic Resources (GRs) and GR Data in the Life Sciences* and related training modules. The guide will address in particular the challenges for users with fewer resources and less patent information know-how to conduct prior art searches and submissions involving biological sequence listings in publicly accessible patent and non-patent literature databases. In this regard, the IPID will also compile and disseminate free and open-source data sources and analytical tools for chemical compounds and biological sequences through, in particular, the WIPO INSPIRE platform, and identify new patent databases and patent database providers specialized in technologies related to prophylactics, therapeutics, bio-analytics and bioinformatics as potential resources and partners for the ASPI program. These resources will be completed by the end of 2023.

Building on existing resources, specific tools are also being developed to create a basis for a better understanding of the specificities of technology transfer processes when the subject matter is GRs or GR data. In this regard, WIPO is also developing a *WIPO Toolkit on Intellectual Property and Genetic Rights Resources Management*. The toolkit will include an interactive GR licensing tool that aims to provide practical guidance for licensees and licensors who wish to license IP rights for genetic materials and/or genetic data, highlighting important IP questions to consider during this process. It will also contain practical case studies and use cases, model templates and sample provisions, as well as an interactive licensing checklist to support decision-making in this area, intended for anyone providing or receiving intangible assets related to GRs in the context of knowledge and technology transfer. An online GR licensing samples and templates library will complete the toolkit. In light of the particularities in the disclosure and protection of inventions related to chemical compounds and biological materials and organisms, protection of test data, and the nature of trade secrets and know-how underpinning innovation in these areas, a reference document on these specificities will also be prepared. These tools will be completed in 2023.

On April 25 and 26, 2022, the Center for International Intellectual Property Studies (CEIPI), based in Strasbourg, organized the SEED Ideathon on “Access to Anti-Covid Vaccines.” WIPO took an active part in the competition as a member of the jury as well as offering a special reward to the winning team – a mentoring program to reflect on the team’s proposal. The project consisted of a race of reflections around equitable access to vaccines. The Ideathon coincided with World IP Day, highlighting the role of creative young people and the importance of using the IP system to realize their innovative ideas. It will continue in 2023, focusing on making connections between creative industries and technology transfer and supporting female entrepreneurs.



Photo: CEIPI