Lunenfeld-Tanenbaum Research Institute
Sinai Health System

TECHNOLOGY TRANSFER & INDUSTRY LIAISON
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Toronto, Ontario, Canada, M5G 1X5
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Sept. 7, 2021

To Whom it May Concern:

RE: LEGISLATIVE EFFORT TO AMEND SECTION 101 OF THE US PATENT

As a major urban teaching hospital with an internationally renown research institute, patient advocacy and charitable organization, we support existing laws and Supreme Court decisions that prohibit patents on laws of nature, natural phenomena and abstract ideas. Weakening those laws would endanger public health, impede scientific research, and imperil our ability to recover fully from the COVID-19 pandemic.

Today's laws against patenting abstract ideas, laws of nature, and natural phenomena are critical to supporting the development of innovative fields of research, like precision medicine and genetic testing. For example, public access to the genetic sequence of the virus responsible for COVID-19 made it possible for researchers and companies to develop and commercialize a wide variety of diagnostic tests and vaccines at unprecedented speed. The result has been more access, more competition, and more innovation. By contrast, when severe acute respiratory syndrome (SARS) emerged in 2003, the Supreme Court had not yet clarified the legal prohibition on patenting genetic sequences. Because pharmaceutical and biotechnology companies raced to get patents on the virus and its genetic sequence, the U.S. Centers for Disease Control and Prevention was forced to defensively file its own patent applications to protect patients' access to essential medicine and researchers' access to essential tools.[1]

Likewise, we need to keep the ban on patenting abstract ideas, laws of nature, and natural phenomena to ensure that innovative treatments and diagnostic tests remain affordable and accessible to the people who need them. For many years, Myriad Genetics held patents on two genes associated with a high risk of breast and ovarian cancers that allowed it to control a monopoly on all testing. The company had the sole right to examine how likely patients were to get cancer based on the genetic material in their bodies. After the Supreme Court clarified the law against patenting naturally-occurring gene sequences in 2013, competitors quickly developed and commercialized more affordable and comprehensive tests that have saved countless lives.[2]

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[1] *See* Paul Elias, *Race to Patent SARS Virus Renews Debate,* ASSOCIATED PRESS (May 5, 2003), https://apnews.com/article/145b4e8d156cddc93e996ae52dc24ec0.

[2] *See* Andrew Pollack, *After Patent Ruling, Availability of Gene Tests Could Broaden*, N.Y.TIMES (Jun. 13, 2013), https://www.nytimes.com/2013/06/14/business/after-dna-patent-ruling-availability-of-genetic-tests-could-broaden.html.

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Pursuing this strategy will enable a retrograde step; as an example, by potentially blocking the ability to use particular collections of genetic markers. If passed, the legislation would impair innovation not spur more robust discoveries to treat many, many diseases.

As these examples show, scientific researchers, health care providers, and patients depend on access to abstract ideas, laws of nature, and natural phenomena. We oppose changing the law that ensures public access to them because doing so would threaten future innovation, healthy competition, and affordable access to quality health care that people desperately need now more than ever.

Darlene Homonko
Director