

TESTIMONY

**TO: House Committee on Higher Education
Chair John Lively**

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Oregon Health & Science University
Senior Director, Technology Transfer**

DT: February 28, 2023

RE: House Bill 2824

Testimony against House Bill 2824. Wednesday, February 28th at 3:00pm.

Chair Lively and members of the House Committee on Higher Education, my name is Travis Cook and I'm the Senior Director for Technology Transfer at Oregon Health & Science University.

Thank you for the opportunity to testify against House Bill 2824. This testimony is on behalf of OHSU, Oregon State University, University of Oregon, and Portland State University.

At OHSU, I'm responsible for all Technology Transfer operations and the implementation of OHSU's intellectual property strategy, and all related business development activities including startup formation, strategic partnerships and licensing of patents and other intellectual property. Over the last two decades, I have managed and transacted on portfolios of intellectual property, I have developed defensible patent strategies to maximize the impact of products and services in public and private sectors.

Background:

Each of the major research universities in the state have an office focused on maximizing research innovation impact to benefit society and the economy. The vast majority of research that leads to innovation is funded by the federal government and industry. Like other offices across the U.S., offices focused on maximizing research and innovation impact support the protection and licensing of intellectual property, as well as a range of non-state-funded programs and resources dedicated to support and enhance innovation and entrepreneurship. They do not generate substantial excess revenues and require significant self-generated income to incent inventors, and to sustain and grow these efforts. Universities provide these resources and dedicate these efforts in support of attracting and retaining high-quality faculty interested in maximizing the impact of their work, while training the next generation of innovators and entrepreneurs, and to support the economy.

An Oregon Success Story:

Innovative academics and university resources that support them have a profound impact on economic development with demonstrated increases in economic output. Take for example Vir Bio, an OHSU startup whose foundational intellectual property was developed over the last two decades with financial support from the federal government and various foundations who support infectious disease research such as Bill & Melinda Gates Foundation and International AIDS Vaccine Initiative. OHSU invested in securing patent rights covering a high-risk high reward vaccine technology platform that may be a solution to treating infectious diseases such as HIV, tuberculosis, and the flu. However, the patents are only a tool to encourage the development of products and services; progress is realized from the tireless work of our academic and entrepreneurial founders. The observed impact for the state comes from work force development and capital brought into the region to bring innovative high-risk technologies to market. Over the years, Vir has developed a highly specialized workforce, many of whom were trained at OHSU. They have used local legal and business services, and built out commercial infrastructure to support the growth of its research needs on the South Waterfront in Portland Oregon. Vir's growth has been supported by some of the largest institutional and strategic investors worldwide drawing attention to the region furthering the state's mission to drive economic development and position Oregon as a rich and vibrant startup ecosystem. Today, Vir has raised over a billion dollars, is traded on the Nasdaq stock exchange, and has launched sotrovimab, authorized for the early treatment of COVID-19; a drug that was co-developed with GlaxoSmithKline plc (LSE/NYSE: GSK).

A Virtuous Cycle:

While there has been modest revenue observed by OHSU, we invest more into innovation and entrepreneurial services than we receive from licensing of our patent portfolio; I assume this to also be true for the other major research institutes within the state. It's this virtuous cycle of investing in innovation and entrepreneurship that will lead us to regional economic prosperity and growth of resources for community benefit.

Patents are expensive, really expensive, and academic discoveries need to be validated by the community to produce viable solutions to the world's toughest challenges. In fact, revenue generation from successful patent licensing is quite rare. As reported by The Regents of the University of California, 0.1% of their inventions results in \$1,000,000 or more in license revenue while only 4% of inventions resulting in revenue. Our academic inventors work tirelessly, including nights and weekends, to advance their ideas and discoveries to maximize their impact; this effort is above and beyond their teaching, research, and service required. Our innovators are incentivized with our commitment to share of net licensing income with them. This Bill that has been introduced will directly take money away from innovators, reducing their incentive to provide us with their solutions to our greatest community problems.

Instead of discussing how the state can benefit from the issuance of patents which alone doesn't generate revenue, the conversation should be about how we can invest in innovation and entrepreneurship to build industries. HB-2824 will reduce the resources available to the major research universities that are critical to startup company development reducing economic prosperity in the region. While I have not done exhaustive research into the matter, I

am not aware of any other state that requires a share of revenues from its research universities based on a non-revenue generating milestone such as the grant of a patent or from license revenue observed from the exploitation of a patent.

Recall, most of our research funding comes from the federal government who does not ask for a percent of revenue from patents or licensing thereof. The federal government does however, place a number of requirements on patents derived from research supported by federal money that benefit our startup ecosystem, e.g. substantial manufacturing in the U.S. and priority given to small business concerns. The federal government also requires that revenue we receive be reinvestment back into research and education to remain internationally competitive in technology development. It would be a mis-step for the state to capture revenue from federally funded inventions that are not directly developed with state funding.

Conclusion:

In conclusion, four of the major research universities in the state are against this Bill. Further, do not agree with sharing of revenues with the state of Oregon for which it does not substantially invest directly in (e.g. research, innovation and entrepreneurial programing, the cost of patenting), yet it does benefit substantially on the occasion when success does occur through products and services that support Oregonians (e.g. new high wage jobs created by companies licensing patents, and through the strengthening of our industry sectors through procurement of services and supplies).

I'd like to thank Chair Lively and members of the House Committee on Higher Education for their time and attention, and for considering the major research universities position on HB-2824. I ask that you consider me a resource for this Bill and I welcome any questions that you may have on this testimony.