Testimony of Tom Zupancic PhD
Before the State of Ohio House Workforce & Higher Education Committee
Tuesday, May 13th, 2025
Support of HB91, relating to Ohio's TBITXL program

Chairman Young, Vice Chair Ritter, Ranking Member Piccolantonio, and all members of the Ohio House Workforce & Higher Education Committee, thank you for giving me the opportunity to present testimony on HB91, The Traumatic Brain Injury Treatment Accelerator Program (TBITXL).

I'm Tom Zupancic, a Ph.D. Scientist and entrepreneur, boasting years of experience in the development of biotech products. Currently, I hold the distinction of being the inventor of 31 issued US patents. My journey in Biotechnology commenced at Eli Lilly, where I contributed to the production system for human insulin, marking the first FDAapproved biotechnology-based product. Subsequently, I spent 8 fruitful years at the Battelle Institute, spearheading advancements in multiple biomedical technologies. Later, I played a pivotal role in the success of an Ohio startup from the Edison Biotechnology Institute, guiding it to an IPO on the NASDAQ stock market. My journey then led me to Silicon Valley, where I focused on forging business collaborations and developing patented Intellectual Property to create tangible assets. Seventeen years ago, I returned to Ohio, founding InfinixBio in Columbus, Ohio. InfinixBio is a contract research organization dedicated to advancing breakthrough technologies to address critical, unmet medical needs with clients ranging from Nationwide Children's Hospital to Wright-Patt Airforce Base to Ohio University.

The Traumatic Brain Injury Treatment Accelerator Program (TBITXL), with The Brain Injury Research Foundation serving as the research coordinating center, is a unique public-private partnership poised to position Ohio as the epicenter of traumatic brain injury research. Much like North Carolina's reputation in vaccine technology, Pennsylvania's expertise in gene therapy, and Maryland's leadership in infectious disease technology, this initiative aims to emulate these success stories in Ohio. Furthermore, I'd like to illustrate how California promoted positive change statewide by pioneering cell therapy technology:

In 2004, California voters overwhelmingly approved a bill authorizing $3 billion in general obligation bonds to establish the California Institute for Regenerative Medicine. This nonprofit institute has since generated over 50,000 jobs, contributed hundreds of millions of dollars in taxes, and yielded billions in revenue for the state. Moreover, it has catalyzed numerous organizations to match the state's funding commitment, magnifying its impact. Today, it stands as a global leader in stem cell technology, already reaping royalties and interest from its investments.

While this funding mechanism represents just one of the strategies states have implemented to enhance their competitiveness in medical research, there is a dwindling

interest among large pharmaceutical companies to independently develop therapies for traumatic brain injuries. Instead, these companies have increasingly relied on acquiring or licensing third-party biotech products from universities and startups. A study conducted by researchers at Johns Hopkins Bloomberg School of Public Health revealed that the median cost of clinical trials supporting FDA approvals of new drugs is $19 million, constituting only a fraction of total drug research and development costs. The bulk of pharmaceutical expenditure is allocated to discovery and preclinical stages, averaging $430 million. Amidst the challenges posed by TBIs dismal clinical trial track record and the hesitancy of small biotech companies entering the market due to lengthy and uncertain drug development timelines, Ohio emerges as a frontrunner in becoming the central hub for brain trauma research.

The requirement for matching grants infuses additional capital into Ohio's economy. Research funded by the NIH generates $2.46 in economic activity for every $1 of funding, according to United for Medical Research. Investing in research and development not only saves lives but also fuels job creation and economic growth across our communities. Ohio's research universities are a treasure trove of talent and entrepreneurship, precisely the economic inputs TBITXL aims to expand. Sustaining a constant pipeline of innovative therapies will solidify Ohio's position as a leader in TBI drug discovery and retain top research talent within our state, preventing brain drain to Silicon Valley and beyond.

The Traumatic Brain Injury Treatment Accelerator Program is poised to achieve for traumatic brain injuries what the Manhattan Project and Apollo 11 accomplished for physics and space exploration. The convergence of individuals from universities and biotech companies across Ohio, uniting to combat a shared affliction for the betterment of humanity, is truly extraordinary. Such collaborative efforts on this scale are unprecedented in my experience.

Today I am advocating for policy reform to enable more efficient and equitable research and development spending to treat a condition that has disabled over 110,000 adults in Ohio.

Chairman Young, Vice Chair Ritter, Ranking Member Piccolantonio, and all members of the Ohio House Workforce & Higher Education Committee, thank you for allowing me to give testimony today.

I am happy to answer any questions at this time.