Senate hearing testimony for SBIR Technical Assistance Program (Nao J. Gamo, PhD) SB 583 Support

I am a Co-founder and Chief Executive Officer of NeuroSonics Medical, Inc. Founded in 2018, we are developing a novel ultrasound device for minimally invasive neurosurgery based on an invention from the Johns Hopkins University. We envision a pipeline of products that use ultrasound to safely and effectively treat a range of diseases. The company is housed in the incubator program at the Maryland Development Center, a private technology transfer company founded by surgeons and biomedical engineers with the goal of helping to realize the commercial value of intellectual property, both its own and from research programs in Maryland. We currently have three employees, and an office in an Opportunity Zone in downtown Baltimore.

My background includes over 10 years in academic research in neuroscience and psychiatry, during which I was supported by highly competitive grants, including from the NIH, Brain & Behavior Research Foundation, and TEDCO, and published 16 peer-reviewed publications. I have completed undergraduate degrees in Brain and Cognitive Sciences and Music from the Massachusetts Institute of Technology, a PhD in Neurobiology from Yale University, and a postdoctoral fellowship in the Molecular Psychiatry Program at the Johns Hopkins University. The NeuroSonics Medical team has raised \$528,000 in non-dilutive funding, including the Johns Hopkins-Coulter Translational Partnership grant (\$48,000); TEDCO Maryland Innovation Initiative Technology Validation grant (\$165,000); Johns Hopkins Cohen Translational Engineering Fund (\$40,000); NSF I-Corps (\$50,000); and NSF STTR Phase I award (\$225,000). We have interviewed over 150 customers through NSF I-Corps and NSF Beat-the-Odds Boot Camp.

Technical assistance programs have been critical to the progress of our venture. We have participated in the NSF SBIR Proposal Lab, and are currently participating in the NIH Applicant Assistance Program to prepare SBIR Phase I proposals. Government grants are a critical source of funding for technology-based companies at a stage when the products are too early and high-risk for investment funding. However, in order to be competitive for grant funding, there is knowledge and experience that is required to prepare the proposals. Even with my years of experience in preparing and receiving academic grants, there were unique requirements, such as writing a commercialization plan, that I was not prepared for when I started to apply for funding in the context of commercialization. After failing to win the NIH SBIR Phase I award, I applied to participate in the NSF SBIR Proposal Lab. This program completely transformed each section of my proposal, and helped me to understand what the instructions were asking for and what the reviewers expected to see. It was additionally helpful to learn from others in the cohort, both mistakes and successes, and we won the NSF STTR Phase I award. Providing technical assistance programs will allow small businesses with potentially impactful technologies to take the first step to develop their products. Maryland has the largest research budget of any state in the US, and this bill be crucial to accelerate the development and commercialization of these technologies.