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Senator Fonfara, Representative Berger and distinguished members of the Finance Committee, my name is Ishita Mukerji and I am testifying in opposition to the elimination of the Bio Medical Research fund. I am a Professor of Molecular Biology and Biochemistry and Dean of Natural Sciences and Mathematics at Wesleyan University.

The Bio Medical Research fund serves a very important function in the state particularly in light of the declining budget of the National Institutes of Health, which is the primary federal source of support for biomedical research. In constant dollars the NIH budget has been reduced by more than 20% since 2003 and this trend is expected to get worse with a decrease of 35% for the projected 2019 budget relative to the 2003 budget. Thus, the funding provided by the state is extremely important as it fills an important hole created by the declining NIH budget.

Diminished support of Biomedical research has real consequences for the U.S. economy, but importantly also for the state's economy. Funding in biomedical research supports the development of new drugs and treatments for such diseases as cancer, Alzheimer's disease and HIV. Reducing support of biomedical research reduces the pace and ability of researchers to develop new drugs and therapeutic treatments. For example, nationally, the costs associated with an aging population and increased incidence of Alzheimer's disease are projected to be close to \$1 trillion by 2050 if new treatments are not developed.

I'd like to turn my remarks to the Biomedical research supported by the State that is occurring at Wesleyan University. These funds have been awarded to my colleague Manju Hingorani who is studying the proteins that repair DNA. Unrepaired DNA can lead to the growth of tumors and other cancers. The funding is allowing her to study specific mutations in the repair proteins that lead to Lynch syndrome, a genetically inherited predisposition to different types of cancer including colorectal cancer. Another important goal for the work is the development of a sensor to detect when the repair protein is mutated. The device can identify the mutated DNA repair proteins in a rapid, low cost manner to facilitate diagnoses in Lynch Syndrome patients. This device has the potential to raise the standard of care by improving preventative screening, counseling and chemotherapy. My colleague, Manju Hingorani, has partnered with Prof. Patra in the Department of Biomedical Engineering at the School of Engineering, Bridgeport University to design and build this device. So, this grant improves the research infrastructure in the state by fostering and supporting cross-institutional collaborations and partnerships. The funds also support job growth in the state through the training of undergraduate, graduate students, and post-doctoral scholars, and encourage these trained individuals to remain in the state. I know that there are research projects that are being supported in a similar way at other CT institutions and also know that these partnerships and breakthroughs would not be possible without this funding. I hope that you will continue supporting this important work.

Thank you,

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