

Submitter: Ashley Mason  
On Behalf Of:  
Committee: House Committee On Higher Education  
Measure: HB4154

Chair Lively and members of the committee,

For your record, I am Dr. Ashley Mason. I earned my Bachelors, Masters and PhD at Oregon State University (OSU). My background is in Electrical Engineering, Materials Science, and Multi-functional thin films. The devices I studied in school and eventually researched ranged from nanometers to hundreds of microns. For reference, the average width of a human hair is approximately 50 microns. Thin films are widely used in the semiconductor industry and my initial interest in them stemmed from my undergraduate coursework.

After my first device physics class we took a lab course where we learned about fundamental semiconductor processing with hands-on experience in lab-scale manufacturing. It was through faculty research and support from undergraduate research programs that I gained access to and experience with more expensive manufacturing and analytical equipment. As I progressed through my degree programs it was these experiences that also inspired my pursuit of internships at companies and national labs to explore my interests which would eventually lead me through my PhD program and to a position at HP as an integration engineer in one of our wafer fabs. In addition to working on current products, I help develop advanced materials and solutions for HP's future strategic directions. I share this because my advanced learning at OSU helped enable this.

The legislature's proposed investment in HB 4154 provides research universities with the opportunity to recruit semiconductor-related faculty, invest in tools needed for research and education, advance research partnerships with industry, train engineers and scientists that the industry needs to complete globally while building Oregon's R&D innovation ecosystem. It provides the opportunity for students to discover areas they are truly interested in where they can contribute most effectively.

In addition to the technical work at HP, I am proud to work somewhere where diversity, equity and inclusion is valued. We believe great innovation is driven by diverse perspective and as such, I continue to volunteer at universities to share about my own path through school and industry. This is important to me because I am passionate about giving back to my institution and others and enjoy the opportunity to share what I've learned and potentially spark something in another future materials engineer.

Through the passage of HB 4154, Oregon students will see more opportunities

including increased access to great faculty, updated lab equipment, and partnerships with industry. All of these support our shared interest in building a more diverse, inclusive, and successful workforce.