The Honorable Tom Young, Chairperson Workforce and Higher Education Committee

Mr. Young & Committee Members,

Thank you for the opportunity to participate in the democratic process and voice my firm opposition to House Bill 6 "Enact Advance Ohio Higher Education Act" (State Bill 1). This is the first time I have ever provided testimony in any legislative context, but I was moved to do so by the extreme dismissal of over 800 Ohioan's prior oppositional testimony— many of whom are in spirit if not literally my peers, colleagues, students, mentees, and friends. I hope this committee and, if it comes to it, the larger house of representatives and governor are not nearly so deaf to the will of the people.

<u>About me.</u> So you can appreciate where I am coming from and why I am so passionate about this bill's opposition, here's a little about me. I am originally from South Carolina and witnessed firsthand the negative consequences of unconscious and <u>conscious</u> discrimination based on race, gender, sex, religion, and sexual orientation from an early age. I ended up earning a Mechanical Engineering degree from Clemson University in Fall 2004 and graduated first in my class. Between the Fall 2004 and Spring 2005 commencements **only 7 of the ~130 graduates (~5.3%) from my department were women** – even fewer were of color.

I was shocked by the number of my non-engineering peers who had no clue I was even an engineering major until the week of graduation (some even thought I was joking) as well as how many of my own classmates did not realize I was academically the top student by a wide margin. Clearly their unconscious biases were at play when they assumed I was a business major and/or more of an average student.

I have no idea how many opportunities I missed out on due to my gender <u>despite being so meritorious</u>, but I do have some stories about how I was discriminated against. *One particular instance from my research mentor's prejudices almost cost me my graduating honors status and my future – the future which originally brought me to Ohio.* Luckily my father recognized the unfair treatment and stepped in to advocate for me to the Chair and eventually the Dean. A compromise was eventually made. I have only recently realized the severity of that unconscious bias against me, which could have been avoided had my research mentor been used to teaching a more diverse set of students or <u>even had the most basic of DEI-related training</u>.

I first came to Ohio in August 2005 to attend graduate school at Case Western Reserve University. When researching graduate schools, *I did not consider staying in South Carolina at all due to the culture and largely applied to schools in the Northeast and West Coast where I felt I would be more respected, accepted, and safe*. I earned both a masters and PhD in Biomedical Engineering from CWRU before leaving Ohio for 11 years for my postdoc at Washington University in St. Louis (WUSTL) and first faculty position at Saint Louis University. There are a lot of reasons I gravitated to Biomedical Engineering, but a large part is its inherent focus in inclusion, value of diversity, and diverse demographics. *This isn't entirely altruistic... much of our emphasis on considering others is to widen products' applicability, prevent waste, and increase revenue...* but it is hard to appreciate others and design to include them if we are not allowed to learn about them through class discussions, training, and personal connections.

My spouse, a Northern Ohio native, and I met while I was a graduate student in Cleveland, and, after having our 2 children in St. Louis we were eager to move back to Ohio for both the promising career opportunities and proximity to family. I have now been faculty at The Ohio State in the biomedical engineering department for a little over 2 years and I LOVE my job. The environment has been the best for me in so many respects, and my career trajectory has been greatly accelerated, but...

This bill will likely <u>cripple</u> my ability to be an effective educator, productive researcher, and foster innovations that will ultimately help Ohio develop its work force, retain and attract high talent individuals, and develop new businesses to contribute to Ohio's economic growth.

While I have many issues with the bill, I have selected 3 to discuss here.

1. Conflicting Language and Mutually Exclusive Mandates.

I <u>whole heartedly</u> support higher education classrooms and educators presenting multiple views, delving into respectful discussions on difficult or controversial topics with students to expand their horizons, and fostering tolerance of "the differences in opinion that naturally occur in a public higher education community" (line 590-591), and "support[ing] individual capacities for growth" (lines 589-590) — in essence "intellectual diversity" (line 605).

Offering DEI training goes against those goals. Not everyone thinks or learns alike. What is good for one person may be detrimental to another based on a wide variety of factors. I often have to implement different strategies to impart the same content understanding to students. I would not know about these strategies or even know how to identify students that are struggling because they need a different approach if it were not for the DEI training I have received over the past decade. These trainings have changed my relationship with teaching, mentoring, and my students for the better. They have greatly contributed to my success and in turn that of my research and classroom students.

Further, how can a student have a powerful, memorable, ah-ha moment of understanding a different opinion if all of their classes and dorms are stacked with people who come from a similar background and life experience? Or worse, *the people who are different are not comfortable speaking up because DEI is not visibly valued.* These discussions that are truly impactful and foster intellectual diversity only come when we get to mix and mingle with people who come from other segments of our regional, state, national, and global societies.

So no, I don't think it is a good idea to blanket end DEI programs nor to provide blind "equality of opportunity" (line 594) as that undermines other aspects of the bill which I find quite valuable to training and educating Ohio's future leaders and innovators.

2. Lack of Appreciation for Diverse Backgrounds to Drive Innovation.

I run a research lab which has produced 2 patents (with plans for many more) and multitude of papers which have advanced not only biological knowledge but more so enabling technologies or processes to advance biological diagnosis and research. I could not do this alone. I prioritize having diversity in my lab team, generally require small group meeting attendance, and discourage only one-on-one interactions between me and my trainees.

Why? Because diverse teams better identify flaws in an idea that be addressed before wasting a lot of time and resources. Because diverse teams come up with more creative solutions. Because diverse teams as an aggregate have a larger set of unique experiences to draw from when problem-solving.

That innovation-driving diversity need not be the things that are specifically addressed in this bill (i.e. race and sex) but will be indirectly affected if we set up an environment that does not value diversity and inclusion nor purposely attempt to increase diversity in our higher education communities. It could be based on hobbies, what family members do, future plans, hometown location, socioeconomic status, etc...

For example, we were having issues with using a "standard" 2-part resin procedure to secure small animal bones for mechanical testing. Two-part resins have been used for decades with lifew modifications and have many limitations — especially for small specimens like mouse and rat bones. Essentially, these resins are difficult to mix accurately at small volumes to achieve uniform curing — sometimes they don't cure at all. I knew there had to be a better way. After some brainstorming and discussion with my team, we landed on one-part UV curing crafting resin with a nail salon UV unit. We tried it. It works FANTASTICALLY, and after presenting the project at the recent annual

meeting for the Orthopaedics Research Society, many labs have reached out to us for advice on implementing it with their samples. Thus I am elevating Ohio State's status and presence nationally while also enabling more rigorous research nationally and globally.

This innovation was not revolutionary or difficult to implement, but why hadn't any other research group tried it before??

..... because **we have people in the group who like to craft and/or who get acrylic nails regularly**. Yes, white and, more so, black women who knew about these products meant to be used in small volumes and use them themselves (often with only one hand!).

3. <u>Inability to attract and retain highly meritorious talent.</u>

I have had over 18 OSU students work in my lab. Of those, 11 are from Ohio. They are amazing in general. Personally, I find them to be far more hardworking, productive, and creative than all but a few of the undergraduate and medical students I mentored while at CWRU, WUSTL, or SLU. *I am thankful that those 11 chose to stay in Ohio for undergraduate studies*. However, who I really want to discuss are a few non-Ohio students, who have been exceptionally valuable to the lab and the university – and would NOT have attended Ohio State if not for DEI programs and generally already supportive culture for "intellectual diversity".

<u>Kaitlyn Cimney</u> – 2nd year Biomedical Engineering PhD student – Kaitlyn followed much the same academic path as myself. She is from SC, was top in her Bioengineering class at Clemson University, and wanted to go to graduate school. *She has excelled here at OSU*. She not only holds an executive leadership position in our graduate student association but already earned podium finalist opportunities at our departmental symposium and the Hayes Forum (with a 2nd place finish at the former). Unlike me, Kaitlyn is openly queer. With her academic successes and outstanding references she could have gone anywhere. She chose to come here not only for the academics but because she felt she could be herself here and grow within the larger queer community. I am not sure I could have recruited her here under the present climate.

<u>Trinity Dort</u> – August 2024 OSU Graduate – Biomedical Engineering Bachelors of Science – Trinity worked in my lab from the fall of her junior year until graduation in August 2024. Trinity is a New Jersey Native who grew up a **20**-minute train ride from New York city in a multi-generational and multi-ethnic home (and has some exceptionally entertaining stories about her Haitian grandfather who lives in the basement). Trinity is extremely giving, compassionate, and, most importantly, intelligent. She is exceptionally community minded as demonstrated by her organizational contributions to OSU's annual African American Heritage Festival and by her tutoring and mentoring at a local public schools both here in Columbus and in NJ since graduating. In the short time since her graduation, she has already represented The Ohio State University well. While she is considering graduate school directions, she has been serving as a patient liaison and recently started a very prestigious month-long internship program at Oregon Health Sciences University working with their well-renowned rehabilitation engineers.

Trinity is "diverse" from just these identities and experiences alone, but to top it off, *she has Albinism*. So even amongst her family and African American community she is different. Albinism also has physiological effects beyond the color of her skin, hair, and eyes. **She has vision limitations which significantly worsened while here at OSU**. She received a few scholarships due to her disabilities. She relied on accommodations like extra testing time, larger print documents, and screen readers to do her classwork and lab work. She spoke often of it taking her twice as long to complete assignments because of the issues she had taking in the information via reading. I honestly have NO idea how she learned to do the precision mouse dissections she did for her research work... but I wasn't going to stop her from doing anything she wanted to try *and she did it*. Twice she was on the Deans list and she graduated with an impressive 3.2 GPA. **No one lowered the standards for her but we certainly helped make things equitable for her.**This bill would do away with the programs and services which facilitated her becoming a proud Buckeye graduate.

Benjamin Brooks – 1st year Biomedical Engineering PhD Student – By most metrics Ben is NOT an example of DEI categories. He's a 6'6" straight white man from Maryland who grew up in a very stable home with parents who are highly educated. However, Ben ended up going to University of Maryland Baltimore County (UMBC) and earned an undergraduate degree in Mechanical Engineering (May 2024). UMBC does not have a lot of research opportunities, but Ben is/was a phenomenal student and was accepted into our 2023 cohort of the NSF-Supported BUCKEYE REU (Research Experience for Undergraduates) program. Our REU program specifically focuses on increasing diversity and biomechanics. Ben qualified due to UMBC's low-research environment and coming from a different major. Ben was such a good fit that he managed in his short 10-week tenure to get intimately involved in just about every lab project. He returned to OSU and my lab this fall as a graduate student with a college fellowship specifically meant to support those from underserved backgrounds. He chose coming back to OSU over an offer at Johns Hopkin's Biomedical Engineering Program, which is one of the absolute top programs in the nation. I would not have gotten to know Ben or been able to effectively recruit him to OSU without DEI focused programs.

In closing, I strongly feel this bill is detrimental to our state's rich higher education programs for many, many, reasons beyond what I have outlined here – including but not limited to post-tenure review, public syllabus posting, etc. Specifically the tone set by outlawing DEI programming and services as well as more uniform assessment of metrics disproportionately influenced by socioeconomic status and family connections will negatively affect who we can retain here in Ohio and who we can attract from outside. Ultimately this will lead to:

- 1. Failure to recruit the best and brightest from our own state or others.
- 2. Lack of Diverse Teams in our schools and workforce.
- 3. Low Innovation technological advancements.
- 4. Lowered national and international status
- 5. Fewer businesses coming to Ohio
- 6. Poor long-term economic growth

I urge you to please vote against this bill in its entirety or at least until it has been heavily edited to benefit rather than cripple our state's diversity, equity, and inclusion efforts.

Sincerely,

Sarah McBride-Gagyi, PhD

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