

HB 33 - Senate Finance Committee Hearing

Testimony by Jeanne Powell Ogden

Resident of Dublin, Ohio

June 8, 2023

Chair Dolan, Vice Chair Cirino, Ranking Member Sykes and the rest of the Senate Finance Committee, good morning.

Thank you for allowing me to speak to you today. My name is Jeanne Ogden. I am a lifelong resident of Ohio, wife, and mother of three bright daughters. I hold a Civil Engineering degree from Ohio State University and am the founder of Trans Allies of Ohio.

The items I wish to address in HB 33 today place me in the interested party category.

In 1963, at age 25, J. Anthony Powell, traveled from Lexington to Cleveland with his Master's Degree in Physics, to accept a position at NASA Lewis Research Center, because Ohio had significantly more scientists and engineers than Kentucky. NASA was rapidly expanding its workforce to make a landing on the moon a reality by the end of the decade.

Powell's research involved semiconductor crystal growth for use in electronic devices which were needed for the electronic devices used in the space program. At the time, no semiconductor material was capable of withstanding the high-temperatures inside rocket engines.

Decades later, Powell's landmark 1989 paper on the use of CVD to grow low-defect silicon carbide layers on commercially available silicon carbide wafers solved that problem. Powell's team provided 700 samples of the new material to 50 companies, CREE being one of them, and a multi-billion dollar global industry was born.

Silicon carbide electronics are utilized by renewable energy grids, computer power supplies, nuclear power-generating systems, electric vehicles, hybrid electric aircraft, and space vehicles.

Why am I telling you this?

Two-thirds of the world's semiconductor chips are made in Taiwan and these small chips are critical in industries from cars to defense. The US, through the CHIPS act recognizes the threat that poses to national security, and Ohio, like the space program, will need to grow our aerospace and semiconductor industry and expand its workforce to counter that threat.

That's why INTEL is coming.

It's why OSU is about to launch a state of the art Center for Advanced Semiconductor Research and Education.

Yes, Intel is coming, but we have a stem worker shortage, particularly in the area of semiconductor research and fabrication. The House Aviation and Aerospace Committee was briefed on this shortage a few weeks back and will be hosting industry and research leaders, including the Director of NASA Glenn Research, to find out how to address the shortage—ASAP.

J. Anthony Powell, my father, used to say he had the best job in the world – he got to play with million dollar toys every day. For him, it was job satisfaction.

Anti-DEI and Anti-LGBTQ bills like SB 83, HB 68, HB 183, SB 117, HB 8, and more will not help bring workers to Ohio.

There is evidence our workers and graduates are fleeing. No amount of money will offset a job atmosphere that is hostile to a large portion of workers, their families, and friends.

The UAW understands this.

Tech industry understands this. It's why they value DEI in their businesses.

The Harvard Business Review understands this. Yes, they published an article on how DEI “doesn't work” but other articles show the value of DEI and explain how to create DEI that does work. It is not compelled speech. Workers are required to be trained in cultural competence on a regular basis and industries want employees who can hit the ground running.

As far as “liberal indoctrination” in our universities is concerned, most of our universities have recently pledged to follow the Chicago Principles which would enhance diversity of thought on college campuses.

I urge you to consider these issues before adding any of these bills to the budget and work together with industry and our higher education system to develop a program to foster diversity in all its forms in a way that will not slow down our supply of the best and the brightest students, employees, and rockstar research, industry, and business leaders in this state.

I am prepared to answer questions or put you in contact with people who can give you more details on these issues. Thank you for your attention.

<https://www1.grc.nasa.gov/glenn-history/hall-of-fame/biographies/j-anthony-powell/>

<https://www1.grc.nasa.gov/glenn-history/>

[U.S. Universities Are Building a New Semiconductor Workforce - IEEE Spectrum](#)

[How the United States' Semiconductors Will Compete With China \(foreignpolicy.com\)](#)

