Nanotechnology Research and Development Act of 2003 sponsored by Oregon Senator Ron Wyden

The Nanotechnology Research and Development Act authorized funding for nanotechnology research and development (R&D) over four years, starting in FY 2005. The legislation put into law programs and activities supported by the National Nanotechnology Initiative (NNI).

This investment was made based on the promise of nanotechnology to revolutionize the way we detect and treat disease, monitor and protect the environment, produce and store energy, and build complex structures as small as an electronic circuit or as large as an airplane. Congress also envisioned the impacts that nanotechnology would have on many sectors of the economy, leading to new products, new businesses, new jobs, and even new industries.

The Act spurred the State of Oregon to make impactful investments in university research and innovation.

ONAMI

The Oregon legislature created the Oregon Nanoscience and Microtechnologies Institute (ONAMI), a Signature Research Center, to advance University research and innovation.

During the period FY05-FY15, ONAMI made significant investments in research at OSU, UO, and PSU:

- $4,380,000 for 12 signature researcher awards supporting faculty hires and startups
- $7,633,475 research proposal matching funds, leveraging $78,497,275 in competitive awards
- $2,874,855 in shared facility support

ONAMI also played a key role in securing a $55,000,000 congressional appropriation for four collaborative earmarks supporting research at OSU, PSU, and UO.

In 2007, ONAMI transitioned to a focus on providing seed and pre-seed capital investments to university spinouts and deep science startups. The Institute has funded 69 Oregon startups, leveraged over $1,219,572,030 deployed in Oregon, and directly created over 750 Oregon jobs. ONAMI seeded Inpria of Corvallis, a 2007 OSU spinout acquired by JSR Corp. for $650 M in 2021. Inpria supplies materials for semiconductor manufacturers to operate at the leading edge. ONAMI provided the first funding for Energy Storage Systems (ESS) of Wilsonville, now listed on the New York Stock Exchange. ESS manufactures and supplies battery systems for long-duration energy storage, accelerating the clean-energy transition. See https://onami.us/portfolio for a partial listing of the companies in ONAMI's investment portfolio.

ATAMI

In 2003, the Oregon legislature approved $20 M in capital spending for the Oregon University System. OSU's portion of $9.5 M supported infrastructure improvements to Building 11 on the Hewlett Packard campus. The building now houses the OSU Advanced Technologies and Manufacturing Institute (ATAMI). ATAMI serves as an R&D facility and business incubator. It has hosted 39 companies as tenants since its inception and provided support to 70 local companies in total. The R&D facility provides cutting-edge manufacturing and analytical tools for both OSU academic researchers and company tenants. This unique public-private partnership has enabled a robust and effective cost model for delivering capabilities and services. Tenant companies have spent more than $8M in leases and services, including more than $5.3M in just

the past 4 years, as the Institute has focused its vision on specialty chemical and electronic materials for semiconductor and device manufacturing. Current tenants include Inpria, Crown Electrokinetics, which went public in 2020 with a $21.5M IPO, and Valliscor, the market leader in supplying bromofluoromethane, a key pharmaceutical ingredient.

Together ONAMI and ATAMI provide a key resource for Oregon's universities and resident companies. They have a strong history of supporting high-tech research and commercialization aligned to semiconductor manufacturing. Consequently, they are especially well positioned to amplify university, business, and State efforts to grow R&D and the workforce aligned with the CHIPS Act.