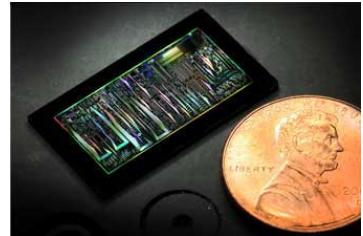




## Washington STARS Fact Sheet

The first two Washington STARS, Michael Hochberg at the University of Washington and Brigitte Ahring at Washington State University in 2 years have already generated an \$8.56 return for every dollar invested by Washington State. Utilizing the state's relatively modest investments, these two STARS are targeted at nanophotonics, a potential multi-billion industry, and the sustainability energy field of 2nd generation bio-fuels.



Dr. Michael Hochberg, is the director of the Institute for Photonic Integration at the University of Washington, and winner of President Obama's 2009 Presidential Early Career award. The nanophotonic team's research focuses on silicon as an ideal material system for integrated optics at telecommunications wavelengths. The team has been exploring multiple applications of the silicon photonics platform both to build interesting and important optical devices, exploring new physical phenomena. The research projects span the space between very applied work on devices like ultra-low voltage electro-optic modulators, to interest in chip-scale nonlinear and quantum optics for novel light sources and all-optical logic circuits.



Dr. Brigitte Ahring, founded and directs the Bioproducts, Sciences, and Engineering Laboratory (BSEL) located in Richland. BSEL is a joint project between Pacific Northwest National Laboratories and Washington State University. Dr. Ahring started up an ethanol processing plant in Bordman, Oregon and initiated a six-city test site for converting city waste products to aviation bio-fuels.

"The new Bioproducts, Sciences, and Engineering Laboratory is a cornerstone of the efforts by our university and our state to take a leadership role in the areas of sustainability and clean energy," said Elson S. Floyd, president of Washington State University. "Attracting a world-class researcher such as Dr. Ahring is an outstanding endorsement of that initiative. Clearly, this is a sign of great things to come."

The Washington STARS program is on track to complete the legislatively mandated plan to recruit a total of ten lead entrepreneurial researchers over the 10-year period: 2007-2017. In 2010 the University of Washington and Washington State University, under advice from the WEDC Innovation Advisory Committee, initiated recruitment for two additional STAR specialists in SMART GRID technology. UW completed their recruitment hiring Hugh W. Hillhouse, Rehenberg Chair Professor in the Chemical

Engineering department and the Molecular Engineering and Science Institute, in September 2010. Daniel Kirschen, Professor, Close Endowed Chair, Electrical Engineering, will start in early 2011. His areas of expertise are also smart grid, innovative energy management methods for efficient use, algorithms, and alternative clean energy sources (hydro, wind, solar).

The WEDC Innovation Advisory Committee guides both the STARS and Innovation Partnership Zone (IPZs) with private sector input, ensuring the money invested focuses on areas of high commercial potential and generates economic development benefits for the Washington economy. The Committee, required by legislation, is currently comprised of 27 representatives from public, philanthropic, investment and private sectors. The Innovation Advisory Committee provides the STARS and IPZs programs with guidance on emerging technology recruitment-focus, plan approval, designation criteria and outcome metrics.

Coupled with the long-term strategy of research STARS teams, is the Entrepreneur-in-Residence (EIR) program aimed at generating a short-term boost to Washington economic vitality and stimulating job creation. The EIR program, funded by STARS, is designed to enhance entrepreneurial assistance programs targeted at research universities, key research-dependent industries and small businesses. A strong Entrepreneur-in-Residence (EIR) program is underway at both the University of Washington and Washington State University where a total of 16 EIR's are currently engaged.

Entrepreneurs-in-Residence capitalize on Washington's strong entrepreneurship history by housing leading, locally-based, entrepreneurial executives directly at the universities to collaborate with university researchers. EIRs, working for virtual stipends, contribute necessary expertise for transforming research and intellectual property into viable business strategies, plans and start-ups. After only 18 months of operation, the program has dozens of potential spin-outs in the pipeline converting university intellectual property into private sector businesses and jobs. The EIRs also provide an expert resource for the university's other initiatives which foster entrepreneurship and industry relations. Read more about the Washington State STARS program at [www.WASTARS.org](http://www.WASTARS.org).

About the [Washington Economic Development Commission](#)

*The Washington Economic Development Commission is an independent, non-partisan commission charged by the Washington Legislature with the mission of creating a comprehensive statewide strategy to guide investments in economic development, infrastructure, workforce training, small business assistance, technology transfer and export assistance. The WEDC membership is comprised of business, labor, academic, and association and government leaders.*