WEST VIRGINIA
EPSCoR

The National Science Foundation Experimental Program to Stimulate Competitive Research

West Virginia EPSCoR Investing in research improves education, economics.

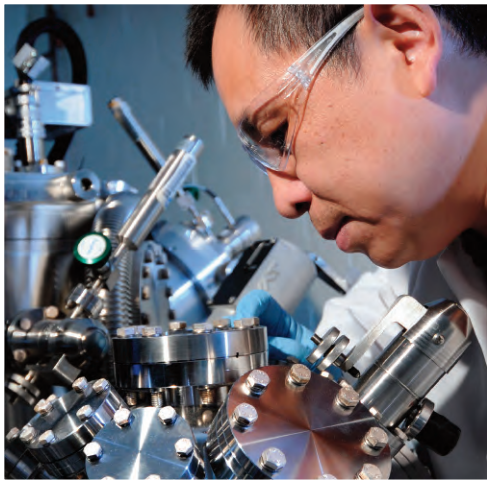
In 2010, West Virginia EPSCoR received unprecedented funding from the National Science Foundation (NSF) to launch extensive research in bionanotechnology at West Virginia University, Marshall University and West Virginia State University. This $20 million grant began in August 2010 and continues for five years. Technology developed under this Research Infrastructure Improvement (RII) program, Bionanotechnology for Public Security and Environmental Safety, will have widespread and significant impacts on security, environment and medicine. Innovations in these areas have the potential to create new marketable technologies and devices – and the jobs to manufacture them.

What is NSF EPSCoR?

NSF EPSCoR is a partnership between the National Science Foundation and the state to improve the Research & Development (R&D) competitiveness through the state's academic science and technology infrastructure. EPSCoR is a university-oriented program, with the goal of identifying, developing, and utilizing academic resources that will lead to increased R&D competitiveness.

At West Virginia University (WVU)

EPSCoR researchers are studying bimolecular sensing elements for health (early disease detection and drug detection and discovery) and environmental threat detection applications using single biomolecules and integration with multifunctional materials. EPSCoR researchers are also developing "lab on a chip" devices that require low power and provide high accuracy for identifying potential environmental threats, pollutants and event diseases.



At Marshall University (MU)

EPSCoR researchers are studying nanobiology to develop novel sensors and produce nanomachines that will facilitate early and sensitive detection of environmental insults and hazardous conditions. Researchers also are studying cellular development to discover new sources of adult stem cells for neurological disorders, and to understand the role of genes in development and the relation between cell biology and the environment.

At West Virginia State University (WVSU)

Researchers are focusing on biotechnology applications in environmental remediation, crop improvement, biomedical research and animal biodiversity. EPSCoR funding has provided for the acquisition of cutting-edge research equipment.

WEST VIRGINIA
EPSCoR

Workforce Development

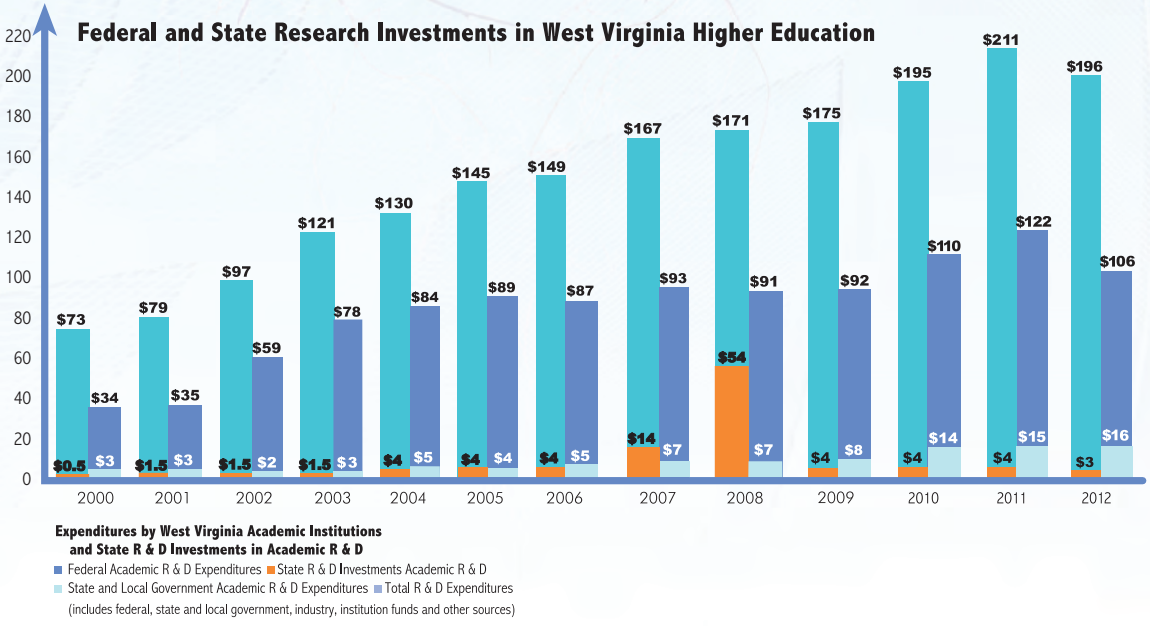
At WVU, NSF EPSCoR programs supported more than 90 undergraduate and 50 graduate students from 2010 through 2013. At MU, EPSCoR provided student stipends and tuition that has supported training of more than 60 undergraduates and graduate students. At WVSU, EPSCoR funding has made it possible for more than 60 underrepresented students per year to continue their STEM education.

West Virginia EPSCoR Key Personnel

- Dr. Jan Taylor
  Project Director of West Virginia EPSCoR and
  Director of West Virginia Division of Science and Research

Growing state support

As EPSCoR has grown in West Virginia, so has state support for science and research. The West Virginia Higher Education Policy Commission's Division of Science and Research, which directs EPSCoR in West Virginia, administers the state's annual $3 million Research Challenge Fund and $50 million Research Trust Fund.



WV Division of Science and Research | 1018 Kanawha Blvd. E, Charleston, WV 25301 | phone 304.558.4128 | fax 304.558.2321