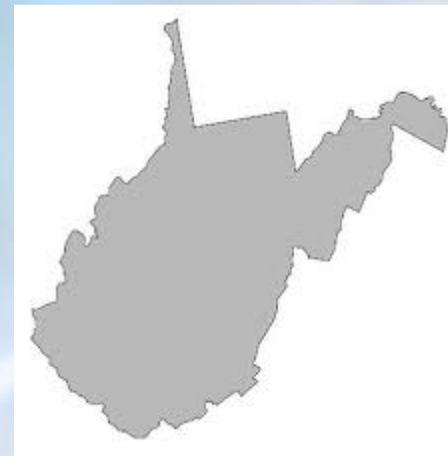




Leveraging EPSCoR to build merit capacity

Paul Hill, Ph.D.
Vice Chancellor for Science and Research
West Virginia Higher Education Policy Commission



Vision 2015

West Virginia Science and Technology Strategic Plan

- Extend the EPSCoR vision
- Invest \$250 million in state funds
- Recruit 89 new research faculty
- Build two new research facilities
- Produce more STEM degrees
- Develop new tech-based businesses
- Implement RII grant

Federal Research Support Builds Infrastructure

National Science Foundation EPSCoR
\$ 4 million per year/5 years

- Investments in Infrastructure
- Faculty Recruitment
- Laboratories/Instrumentation
- Cyberinfrastructure
- Students

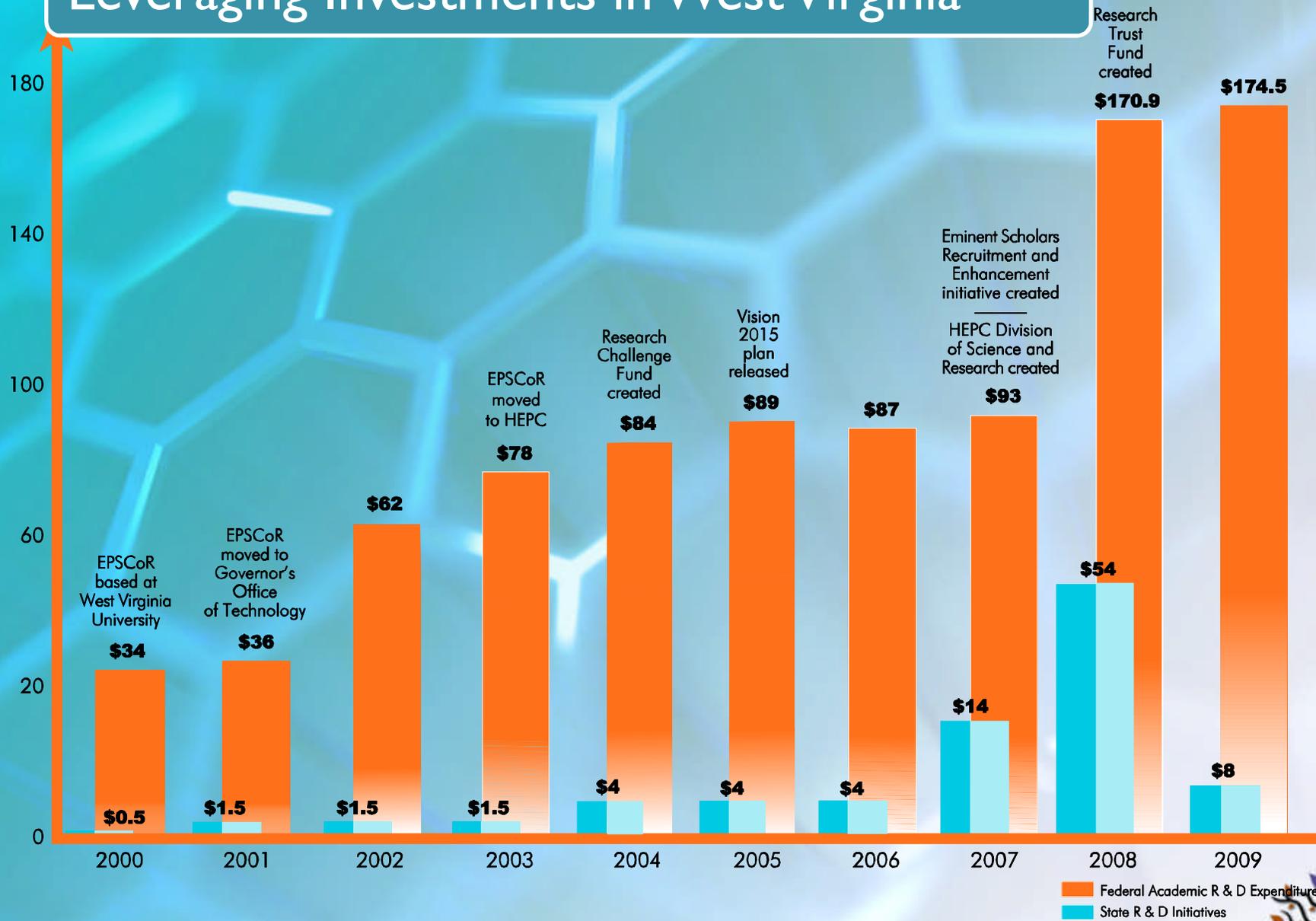
Research Goals

- Develop a world-class capability in bionanotechnology for enhanced public security and environmental safety
- Create a center of excellence at convergence of biometrics, nanotechnology, forensics and molecular biology
- Build on existing strengths at West Virginia, Marshall and West Virginia State universities

Leveraging EPSCoR for State Investment

- **W.Va. Research Trust Fund**
 - \$50 million state investment
plus \$50 million private investment
- **Eminent Scholars Recruitment and Enhancement Program**
 - \$10 million
- **Research Challenge Fund**
 - \$ 4 million annually

Leveraging Investments in West Virginia



CAREER Awardees

Paul Cassak, 2010: “The Effect of Shear Flow on the Scaling of Magnetic Reconnection and Solar Wind-Magnetospheric Coupling.”

Bojan Cukic, 2000: “Software Reliability Assessment for High Assurance Systems.”

Katerina Goseva-Popstojanova, 2005: “Improving Web Quality through an Integrated Approach.”

David Klinke, 2011: “Interrogating Antagonistic Mechanisms of Signaling Cross-talk in Natural Killer Cells.”

Justin Legleiter, 2011: “The Role of Mechanical Properties in Amyloid Binding to Cellular Surfaces.”

Daryl Reynolds, 2008: “Multimodal Cooperative Networks: Design, Analysis, Prototyping, and Integrated Education.”

Arun Ross, 2007: “Human Recognition - Models for Biometric Pattern Representation, Individuality, Indexing and Fusion.”

Xiaodong Michael Shi, 2009: “Developing 1,2,3-triazole skeletons as novel chiral building blocks in asymmetric catalysis.”

Building competitive scientists



Dr. Tina Cartwright, Marshall University.
Ensuring equity and access for
underrepresented groups.
Three awards for \$2.1 million

Dr. Cerasela-Zoica Dinu, West Virginia University.
Integrating nano-technology with biology,
advanced technology, electrochemistry.
Two awards for \$408,000



Building competitive scientists

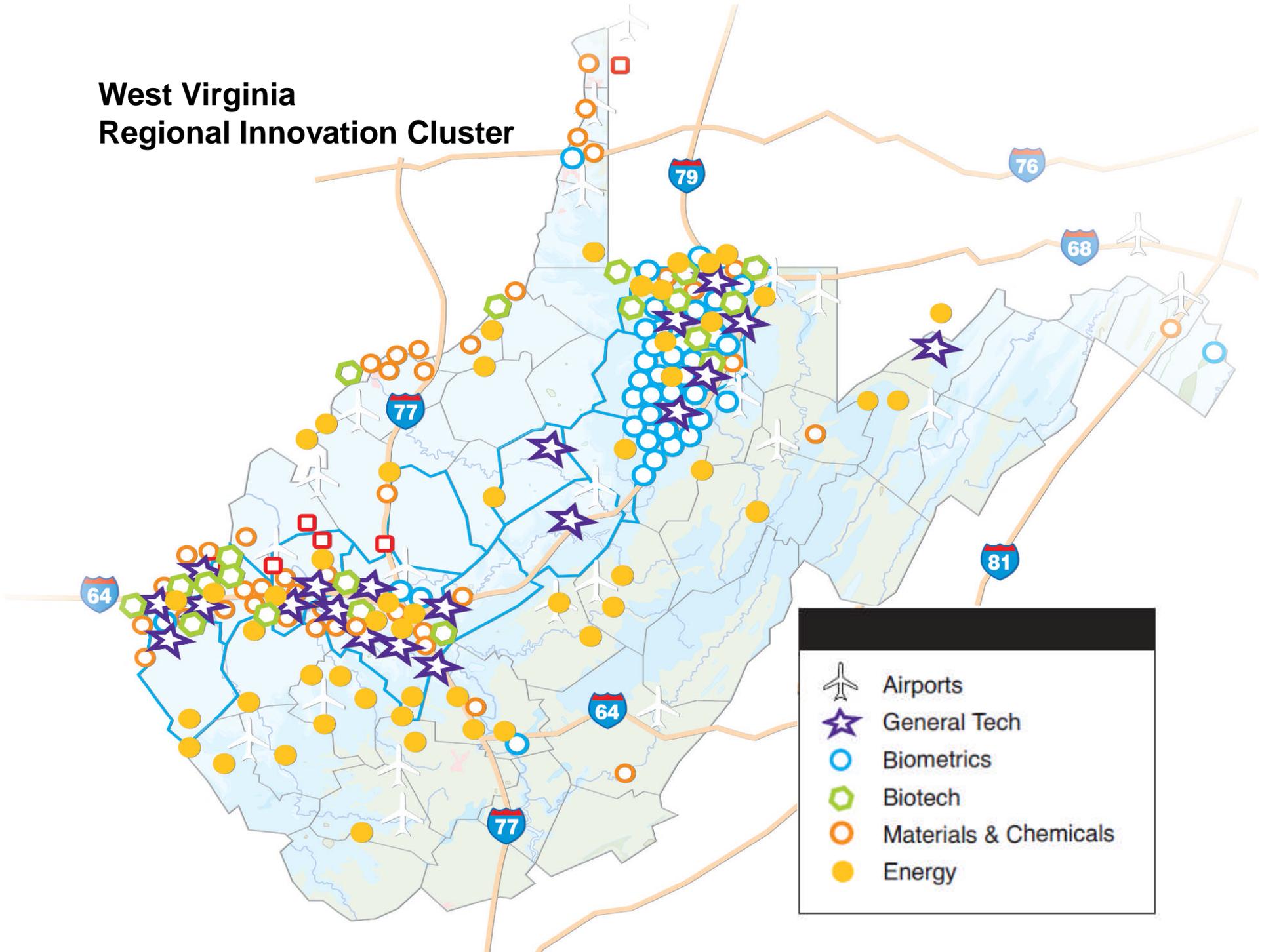


Dr. David Lederman, West Virginia University.
Magnetic interfaces and nano-structures.
Eleven NSF awards totaling more than
\$3 million.

Dr. Maura McLaughlin,
West Virginia University.
Detecting gravitational waves -
international partnership.
Three NSF awards totaling \$6.5 million



West Virginia Regional Innovation Cluster



Contact / Discussion

Paul Hill, Ph.D.

Vice Chancellor for Science and Research
West Virginia Higher Education Policy Commission

304-558-4128 x1

Paul.hill@wvresearch.org

www.wvresearch.org

