

WEST VIRGINIA

INBRE

The National Science Foundation IDeA Network of Biomedical Research Excellence

What is INBRE?

The IDeA Network of Biomedical Research Excellence (INBRE) is a competitive federal research program established by the National Institutes of Health in 2004. Investigators at Marshall University—in partnership with researchers at West Virginia University—have been awarded significant INBRE funding to help increase West Virginia's competitiveness for federal biomedical research funding. Through a network of partner institutions, the program impacts biomedical research at all levels and in all regions of the state.

Goals of the program in West Virginia are to:

- Help build biomedical research expertise and capacity;
- Assist faculty at the state's undergraduate institutions with development of biomedical research programs and competitiveness for external funding;
- Provide student research opportunities; and
- Help train the state's future workforce in science and technology.

Scientific Focus

The multidisciplinary research theme for WV-INBRE is cellular and molecular biology, with a particular focus on chronic disease-related conditions, including cardiovascular disease, cancer, diabetes and obesity. WV-INBRE investigators are also conducting biomedical research projects in infectious disease, mathematical modeling drug therapies and development of natural products as chemotherapeutic agents.



Major Research Projects

These WV-INBRE projects are based at a network of undergraduate institutions around the state, with mentors at either Marshall University or West Virginia University. The undergraduate institution investigators are selected competitively for funding, following peer review by experts in the relevant fields of scientific study. Each network research project is funded by WV-INBRE up to \$125,000/year for up to three years. Funded investigators must meet milestones related to presentation of research findings at state and national meetings, manuscript submissions and grant applications.

Faculty Research Development Awards Program

The WV-INBRE program helps faculty members at undergraduate institutions enhance their research skills by providing funding for pilot projects. These projects are funded for one year for up to \$50,000 each. Funds for this program are also available for workshops and professional development, for travel to present research results at national and international meetings, and for equipment purchases.

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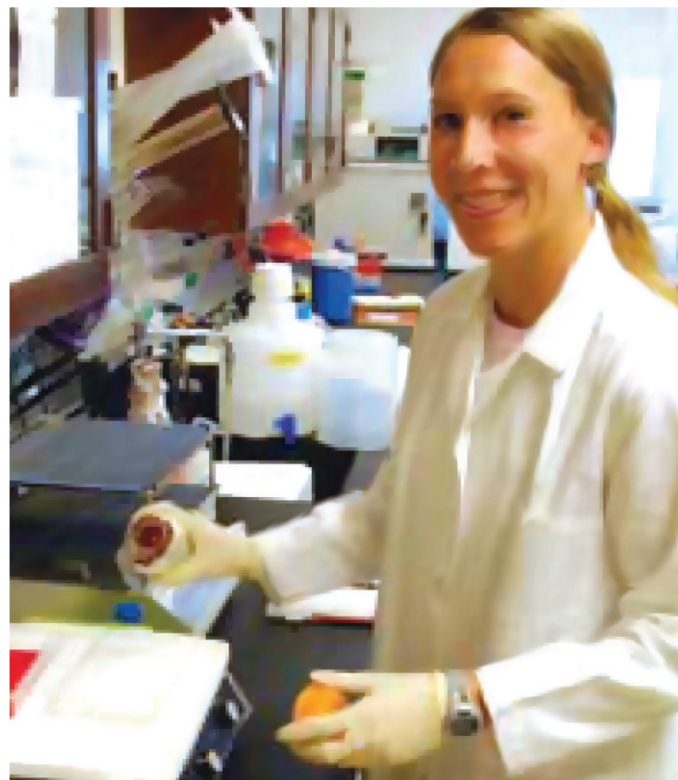
Summer Research Program

This component of the WV-INBRE program provides students at the undergraduate institutions research opportunities in labs at Marshall University and West Virginia University. During the nine-week program, participants work on a biomedical research project with mentors and graduate students at one of the lead institutions. Each student in the program is paid a salary of \$4,500. The program culminates in a Summer Research Symposium with oral and poster presentations of research findings by participants, and a keynote address from a nationally-recognized speaker. Summer Research Program student projects have focused on a variety of topics, including genes associated with high blood cholesterol; how cancer cells make new blood vessels; neurobiology regulating food intake; and how air pollution contributes to high blood pressure.

Economic Development Impact

In addition to resulting in life-changing discoveries and innovations, biomedical research through the INBRE program also serves as a catalyst for economic development, improving the quality of life for everyone.

Since 2004, the INBRE project in West Virginia has been awarded more than \$35 million in federal funds, resulting in an estimated overall economic impact of more than \$80 million.



West Virginia INBRE Key Personnel

- Dr. Gary Rankin, Marshall University, Principal Investigator
- Dr. James Sheil, West Virginia University, Program Coordinator

West Virginia INBRE Participating Institutions

