



Ben Franklin Venture Investment Forum: venture-forum.org

Many early stage technology companies are formed by the scientists and engineers who have developed the firm's technology, those for whom sales and business management often are outside of their experience. Ben Franklin Venture Investment Forum (BFVIF) assists technology entrepreneurs as they begin fundraising efforts, by providing training on topics critical to investor decision-making; by providing critiques of companies' investment summaries and pitches; and by informing angel investor groups and early stage venture capitalists about client companies.

By partnering with other economic development entities in the Commonwealth, particularly Ben Franklin Technology Partners, companies are introduced, by way of innovation contests, to the resources available to them as they begin forming their company, guiding them through the seed-stage funding vetting process and helping them to become business people in addition to technologists.

An initiative of BFVIF, the eMarketing Learning Center helps companies keep pace in the digital economy with seminars, meet-ups and individualized consulting to help them best use social media and online tools that keep them front of mind with their customers.

Center for Entrepreneurship and Innovation: harrisburg.psu.edu/invent

In May 2015, Penn State President Eric Barron launched INVENT Penn State to spur the growth of economic development from innovation at the University. Penn State Harrisburg received a University grant to initiate the center in 2015 with its new director, a Professor of Practice in Entrepreneurship. Center initiatives help faculty, students and local industry develop entrepreneurial projects. The center goals include:

- Providing students with a comprehensive option to explore entrepreneurship through coursework, interaction, and experience with projects and internships.
- Providing faculty with opportunities to work with experienced entrepreneurs and to develop business opportunities around their own ideas and inventions.
- Participating in a collaborative effort to improve University research design and commercialization potential.
- Maintaining a high level of entrepreneurship community interaction (advisory board, mentors, community interaction).

Center for Signal Integrity: harrisburg.psu.edu/csi

Signal integrity is the engineering field that analyzes high-speed electrical interconnects with the overall goal of improving the design, reliability, and performance of digital systems. The goals of the center are to support signal integrity research and product development for local and national companies and to advance research collaboration between Penn State Harrisburg and industry to remain globally competitive. Through this synergy, the center is aligning its cutting-edge research with local connector companies to develop continuing education courses to train the local workforce and integrate signal integrity into the college's electrical engineering curriculum. It is expected that all of these activities will allow a seamless technology transfer to the industry and encourage economic development in Central Pennsylvania.

The center houses a variety of high-end instruments including the new 32 Gbps high-end bit error ratio tester to support ongoing research and testing equipment capacity. The center has a membership base for company interactions which offers pre-competitive research and options to proprietary research projects under separate contracts. The following companies have been or currently are members of the center: Amphenol, Ansys, CST, FCI, Keysight, Nexans Berk-Tek, Phoenix Contact, Samtec, Siemon, Souriau, TE Connectivity, Tektronix and Yazaki North America.

Continuing Education: harrisburg.psu.edu/continuing-education

Penn State Harrisburg Continuing Education extends the resources of the University through high-quality programs and services to enhance individual development, the economic environment, and quality of life. Continuing Education strives to be the educational partner of choice by providing superior customer service, recognizing that the office's efforts are often the first impression an individual has about Penn State. Our growth depends upon establishing and maintaining satisfied relationships. Continuing Education offers:

- Workforce and professional development courses.
- Corporate and customized training solutions.
- Certificate and degree completion opportunities.
- Exam proctoring for World Campus students.
- Access to University resources for external groups.



Central Pennsylvania Research and Teaching Laboratory for Biofuels: harrisburg.psu.edu/biofuels

Created in 2011, the laboratory and greenhouse were built through a public-private partnership between the Pennsylvania Department of Community and Economic Development's Alternative and Clean Energy Program, industry donations and Penn State Harrisburg. The mission of the laboratory is to support research on genetic improvements of crops to increase the profitability of Pennsylvania farmers and greenhouse growers.

Research projects include:

- Sustainable Bioenergy – Develop alternate sources of biofuels from second, third, and fourth generation crops.
- Engineering Bioactive Molecules into Medicinal Plants and Herbs – Complete genetic transformation of crops to produce vaccines against Avian flu, chicken bursal disease, malaria, Type II diabetes, Alzheimer's disease.
- Restoring American Chestnut in Pennsylvania – Introduce disease resistance against fungal blight.
- Nutritional Enhancement and Food Security – Introduce novel genes to nutritionally enhance food crops.

Collaborating companies: Ernst Conservation Seeds; UGI Utilities; Kunj Biotechnology LLC; Select Medical; and Vialactia Biosciences.

Institute of State and Regional Affairs: isra.hbg.psu.edu

The institute is committed to the development and delivery of research, training and service that applies diverse Penn State resources to the enhancement and well-being of Pennsylvania and its citizens through sponsored research activity. Since 1973, the institute has undertaken applied research and service projects for federal, state, regional and local government agencies and for the non-profit and private sectors focusing on data collection and analysis, survey research and evaluation, spatial analysis and mapping, and training and technology utilization. Through these projects, the institute has earned the reputation of recognizing and responding to clients' needs. The institute also strives to enrich the teaching and educational experience of students and faculty. The close relationship the institute maintains with the University's faculty and professional personnel allows it to draw upon these diverse resources in interdisciplinary problem solving. The institute includes:

- **Pennsylvania State Data Center** – The Commonwealth's official source of population and socio-economic data, providing data collection, analysis and development of digital dashboards.
- **Center for Survey Research** – Conducts all types of surveys and interviews.
- **Information Technology Center** – Develops online custom information systems for sponsors.
- **Geographic Information Services Center** – An interdisciplinary research unit that provides support for spatial science research, analysis, visualization, and education.
- **Economic Development Research and Training Center** – Helps communities improve their community and economic development capability and helps professionals along the path to industry certification.

Current projects involve the following organizations, among others: Pennsylvania Departments of Education, Labor and Industry, Transportation, and Drug and Alcohol Programs; Pennsylvania Game Commission; Pennsylvania Commission on Crime and Delinquency; Ronald McDonald House Charities of Central PA; PA Association of Community Health Centers; PA Coalition Against Domestic Violence; United Way of the Capital Region; York County Community Foundation; UGI; PPL; and Gateway Health.

Recycling Markets Center, Inc.: pennrmc.org

Experts helping industry decision makers, entrepreneurs, inventors, and recyclers, the Pennsylvania Recycling Markets Center (RMC) is a non-profit corporation with a mission to expand and develop markets for recycled materials; stimulate demand for products with recycled content; and understand up-to-date market trend data. RMC supports the recycling supply chain – manufacturers, end-users of recycled materials and products, recycling processors, haulers, and ultimately the consumer. Beginning at the demand-side of recycling markets, services include one-on-one materials management technical assistance and business growth consultancy; industry outreach and programming; applied research; and service as an enterprise portal to recycling markets development information. RMC strategically collaborates with many environmental, economic development, and technical assistance organizations – reducing barriers and fast-tracking time to market for processes or products that use Pennsylvania's recycled materials.