West Virginia's Innovation Transfer Consortium

TECHCONNECT
WEST VIRGINIA

Presented by Jack Carpenter, Director
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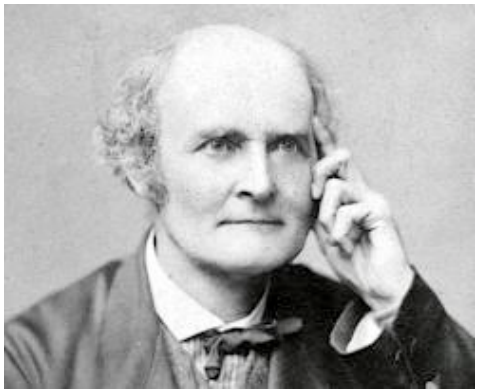
WV Bioscience Summit

U.S. Innovation and Commercialization Overview

According to McKinsey & Company, a global management consulting firm, in 2010:

- 84 percent of executives say innovation is extremely or very important to their companies' growth strategy
- The approach companies use to generate good ideas and turn them into products and services has changed little since before the financial crisis – but not because executives think what they were doing worked perfectly



https://www.mckinseyquarterly.com/Strategy/Innovation/Innovation_and_commercialization_2010_McKinsey_Global_Survey_results_2662

U.S. Innovation and Commercialization Overview cont.

- More companies are seeking growth through new products or services or new customers in existing markets than are pursuing growth through new markets

- Few industry respondents say their companies are good at the processes and tactics tied to successful innovation

  * generating breakthrough ideas
  * selecting the right ideas
  * prototyping
  * developing business cases

https://www.mckinseyquarterly.com/Strategy/Innovation/Innovation_and_commercialization_2010_McKinsey_Global_Survey_results_2662

Jobs and salaries – the reason why commercializing bioscience research is particularly important

- Bioscience workers earn more than $77,000 per year compared to the national average of $45,000 in 2009
- The industry diversifies the economy and generates state and local taxes
- The industry is linked with technology transfer efforts of universities, community college workforce development, and inflow of federal and private research grants

http://www.bio.org/articles/how-grow-jobs-through-biotech-industry-development-0

The West Virginia story according to Battelle's State Bioscience Industry Development 2012

- West Virginia was one of 22 states that gained bioscience industry jobs between 2007 and 2010

- West Virginia has bioscience research specialization in three of the five key specialization areas associated with the industry:

  * Drugs and Pharmaceuticals
  * Medical Devices and Equipment
  * Research, Testing and Medical Laboratories

http://www.bio.org/sites/default/files/v3battelle-bio_2012_industry_development.pdf

The West Virginia story cont.

- **WV** had 6,400 jobs in the bioscience industry in 2010
- Four in 10 state bioscience jobs are in drugs and pharmaceuticals
- Drug manufacturing has grown its job base by 28 percent since 2001and continued gains despite job declines at the national level
- WV has had little to no activity under way in the Agricultural Feedstock and Chemicals category or recently added Bioscience-Related Distribution category in the subsectors of bioscience research as defined in Battelle Institute's 2012 report on State Bioscience Industry Development

http://www.bio.org/sites/default/files/v3battelle-bio_2012_industry_development.pdf

The role of colleges and universities

According to an MIT study, in addition to conducting research that leads to their own discoveries that can be patented and licensed institutions can:

- Help attract new knowledge
- Adapt knowledge originating elsewhere to local conditions
- Integrate previously separate areas of technological activity in their regions
- Unlock and redirect knowledge that is already present in the region but not being put to productive use

http://web.mit.edu/ipc/publications/pdf/05-010.pdf

Shimanasaki gets it

"All scientists and engineers work on research that has the potential to become a product of significant medical value… There is a vast difference between working on a project, and developing a company. Companies develop and commercialize products—but projects don't become commercial products without a successful company."

Craig Shimanasaki, PhD, Co-Founder, Chief Executive Officer and President, InterGenetics Inc.

West Virginia's Challenge

- Energize West Virginia's institutions of higher education to grow, develop and commercialize bioscience expertise leading to new products, industries and jobs

- Harness the power resident in its higher education institutions for an effective economic development plan focused on growth of bioscience industries and the accelerated expansion of the job market

Positive Steps in the Mountain State

West Virginia IDeA Network of Biomedical Research Excellence – WV-INBRE:

- Develops research opportunities for undergraduate students as a pipeline into research careers; enhances development of biomedical research; and encourages the WV science and technology knowledge base

Centers of Biomedical Research Excellence – COBRE

- Broadens the geographic distribution of NIH funding; creates core resource technologies; and funds collaborative scientific pilot projects

http://www.wv-inbre.net/about.asp

TechConnect WV's Innovation Transfer Consortium

- Great potential resides in the deep and broad talent base of WV STEM scholars and scientists at work in WV's colleges and universities

- Their work represents job-creating ideas for West Virginia if the right idea meets the business expertise and investments

- The goal of ITC is to connect WV colleges and universities with commercialization resources

- ITC is composed of representatives of colleges and universities and will expand to include economic development organizations, regional businesses and potential investors interested in stimulating applied research, innovation and commercialization

http://techconnectwv/innovation-transfer-consortium/

Founding WV colleges and universities participating in ITC

Bluefield State College

Concord University

Fairmont State

West Virginia Wesleyan College

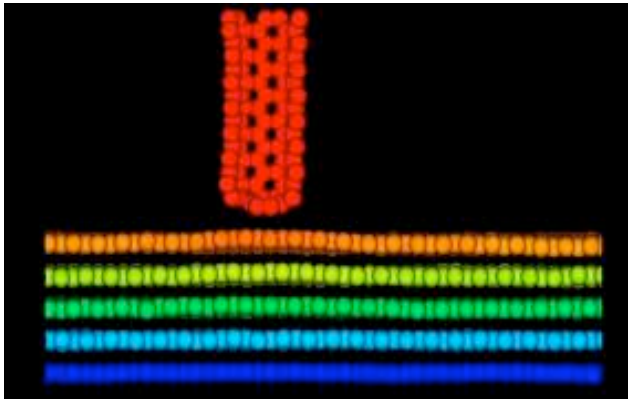
W. Va. State University

Seed Grant Program for Research and Commercial Partnering – ITC's kickoff initiative

- Provides matching grants of up to $5,000 each for "close-to-commercialization" projects involving partnerships between primarily undergraduate institutions and the private sector

- The project must have a company/college research relationship

- Intended to assist in the commercialization of a product, innovation or technology;
  test the feasibility of a technology or product very close to commercialization; and assist a company in completing a milestone project that will directly help catalyze the growth of the company



ITC Seed Grant Program cont.

- **Preferred preference will be given to projects that relate to these industries:**

  * **Chemicals and Advanced Materials**
  * **Biotechnology/Life Science**
  * **Identification Technology**
  * **Medical Devices/Health Care**
  * **Nanotechnology**
  * **Energy**

- **Applications for the inaugural round of competition were due last Friday and application reviews are now under way**

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Questions?

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