

**Growing Technology Transfer/Commercialization  
Opportunities in the Mountain State:**

**Technology Transfer  
at  
West Virginia University**

**Gary J. Morris, Ph.D.**

**Registered Patent Agent**

**Associate Director of Technology Transfer**

**February 28, 2013**

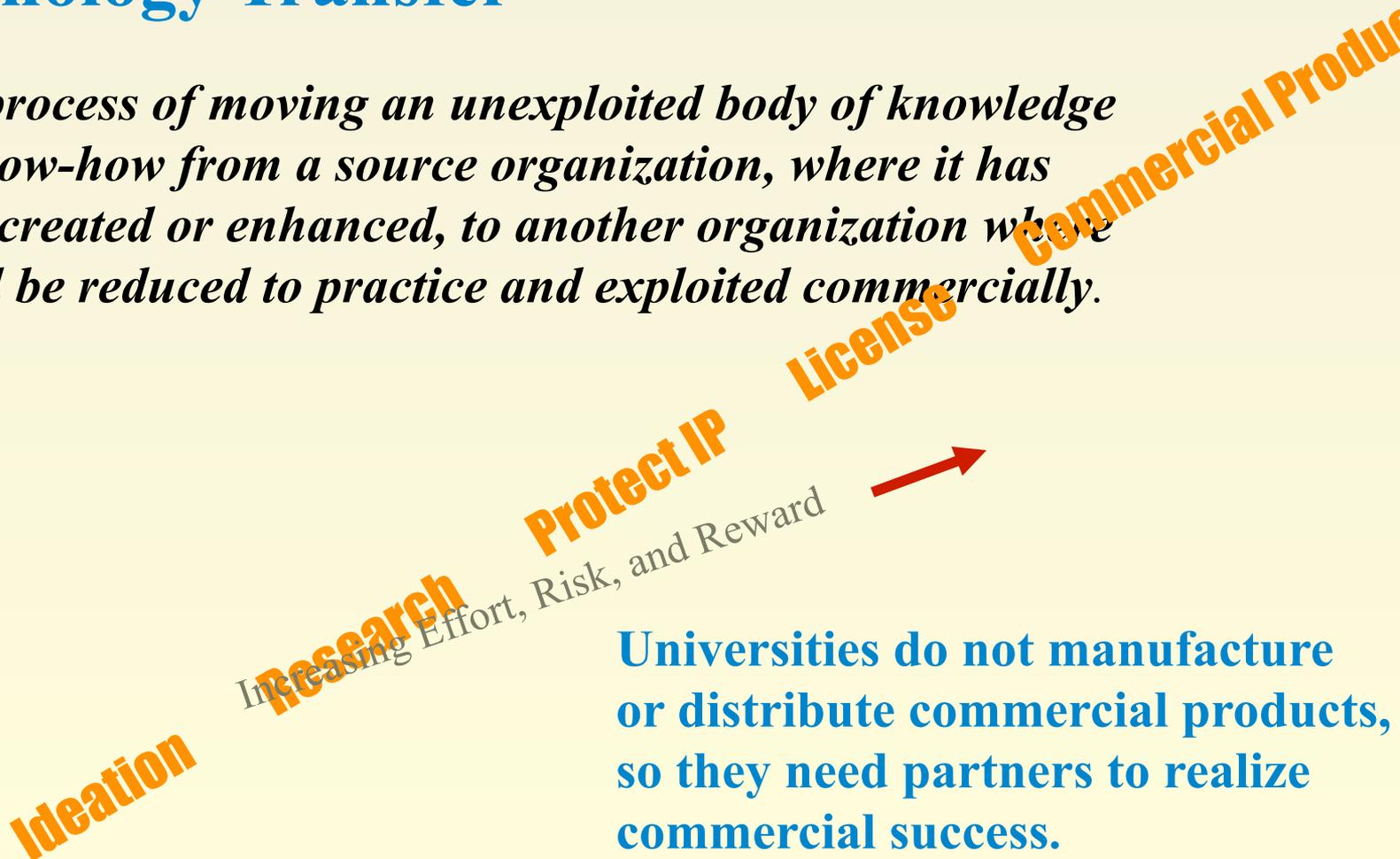


# Technology Transfer at Universities

---

## ➤ Technology Transfer -

*The process of moving an unexploited body of knowledge or know-how from a source organization, where it has been created or enhanced, to another organization where it will be reduced to practice and exploited commercially.*



**Universities do not manufacture or distribute commercial products, so they need partners to realize commercial success.**

# Functions of WVU Office of Technology Transfer (OTT)

## ➤ **Manage Intellectual Property Portfolio**

- Review invention disclosures~(40-50 per year)
- Perform prior art searches
- File and prosecute patent applications
- Manage external law firms

## ➤ **Commercialize WVU Technologies**

- Assess commercialization potential
- Market technology to external parties
- Draft license agreements

## ➤ **Develop New Business Opportunities**

- License technologies to external partners
- License technologies back to researchers to spin-off new companies

## ➤ **Educate the University Community about Tech**



# Marketing WVU Technologies

---

## ➤ Passive Marketing

- OTT Web Page - Patented and patent pending technologies are described to attract potential licensees.
- Wellspring Flintbox Web Page - Technologies available for license are described where companies can browse.

## ➤ Active Marketing

- Tremonti Consulting - WVU OTT has recently expanded its marketing efforts by contracting Tremonti to perform independent commercialization assessments and engage in active marketing of WVU technologies.
  - Tremonti assesses technologies based on market space, technical relevance, and state of development.

# Linking Innovation, Industry and Commercialization (LIINC)

---

- Multi-year grant managed by Ms. Lindsay Emery
- Funded by the Claude Worthington Benedum Foundation

## Goals of the LIINC Program

- Enhance entrepreneurial activities between students, faculty, and industry
- Expand the research enterprise
- Expand economic development
  - Increase intellectual property related activity
  - Increase licensing of WVU technologies
  - Increase jobs and opportunities for graduates, current students,

# LIINC: It's About Growing the Innovative Culture...

---

## ➤ Identify Best Practices

- Visit technology transfer offices at other universities
- Interact with consultants in the field to learn trends

## ➤ Disseminate Technology Transfer Information

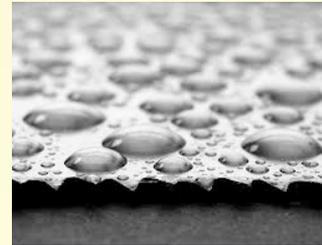
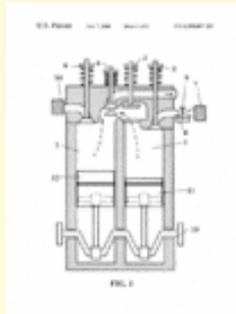
## ➤ Facilitate Faculty/Researchers/Student Interaction with Industry Representatives

- Organize on-campus dinner/mixers
- Host receptions with poster sessions and industry speakers
- Adjoin existing events/speakers
- Visit industrial facilities to engage in technology exchange

# Some Recently Licensed WVU Technologies

---

- **Conjunctival Biometrics** -Univ. of Missouri Start-up
- **Biometric Liveness Detection** -NexID Biometrics
- **Air Injection Engine** -Iron Bay Modeling Co.
- **Hydrophobic/Oleophobic Coatings** -Europtec
- **Coal to Crude Oil** -Quantex Energy



# WVU-Quantex Energy License

---

- Quantex Energy is a well-funded start-up
- Technology focused on the liquefaction of coal (coal to crude oil and other carbon products).
- Quantex is committed to further research and building commercial operating units based on WVU technology.
- Initial laboratory was on the WVU campus, but now have a separate pilot plant building in Morgantown with approximately 20 employees.
- If pilot trials are successful, can begin licensing the process in other countries.



# Some Up and Coming WVU Technologies

---

## ➤ Improved Battery Technologies



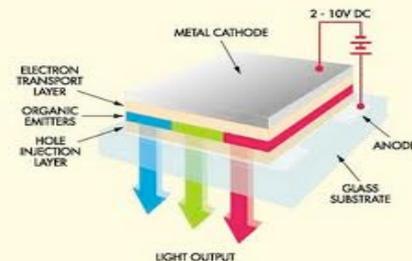
## ➤ Synthetic Diamonds



## ➤ Layered Solid Sorbents for CO2 Capture

## ➤ 3-Dimensional Ultrasonic Diagnosis of Gingivitis

## ➤ Improved Organic LED's



# Additional Related Initiatives at WVU

---

- **WVU President Clements is a member of the US Dept. of Commerce Innovation Advisory Board**
- **WVU 2020 Strategic Plan**  
Goal 2: Excel in research, creative activity and innovation, in all disciplines.
- **Research Round Table** — senior WVU administrators  
Charge 3: Ensure that the research mission is appropriately engaged with graduate and professional education, undergraduate research, global endeavors, and economic development.
- **Innovation Task Force** — WVU STEM fields, medicine, and business administrators
  - Identifies and articulates strategic recommendations to improve WVU's economic impact on the state through research, innovation and commercialization.

# Contacts for WVU Technology Transfer and Innovation

---

**Bruce Sparks, Director of Technology Transfer**

**(304)293-3776**

**[Bruce.Sparks@mail.wvu.edu](mailto:Bruce.Sparks@mail.wvu.edu)**

**Gary Morris, Ph.D., Patent Agent, Associate Director**

**(304)293-6329**

**[Gary.Morris@mail.wvu.edu](mailto:Gary.Morris@mail.wvu.edu)**

**Lindsay Emery, Business Development Manager**

**(304)293-0391**

**[Lindsay.Emery@mail.wvu.edu](mailto:Lindsay.Emery@mail.wvu.edu)**

**Tomoko Fujiwara, Legal Secretary**

**(304)293-7539**

**[Tomoko.Fujiwara@mail.wvu.edu](mailto:Tomoko.Fujiwara@mail.wvu.edu)**

