



Western Michigan University
ScholarWorks at WMU

WMU President John Dunn

Office of the President

3-11-2009

Educating for the Life Sciences Business Review West Michigan Forum

John M. Dunn

Western Michigan University, john.dunn@wmich.edu

Follow this and additional works at: <https://scholarworks.wmich.edu/dunn>



Part of the Higher Education Commons

WMU ScholarWorks Citation

Dunn, John M., "Educating for the Life Sciences Business Review West Michigan Forum" (2009). *WMU President John Dunn*. 309.

<https://scholarworks.wmich.edu/dunn/309>

This Speech is brought to you for free and open access by the Office of the President at ScholarWorks at WMU. It has been accepted for inclusion in WMU President John Dunn by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



John M. Dunn
Educating for the Life Sciences
Business Review West Michigan Forum
3/11/09

(Couple of good WMU/life sciences stories below--for possible use during Business Review Life Sciences event today.)

Life sciences education and economic development--doing well by doing good.

An important part of life sciences education goes beyond the technical skills learned and into the ethical and moral issues that are at the heart of a solid university education. We do the technical very well, but there are also ethical and moral issues involved in life sciences research and development. There's a sense of leading by example by faculty members at a research university who can show students how to do well by doing good.

Two current examples from my own university involve spinoff companies that have the potential to save lives--that's at the core of their mission--but they also are leading to products that will help position our state as a life sciences Mecca and ultimately produce jobs and income.

- **Genemarkers**, a biotech startup associated with WMU (Drs. Charles Ide and Anna Jelaso-Langerveld.)

- It's a contract genomics research company, using gene expression techniques in a variety of ways for clients in a fields from environmental to pharmaceutical as well as researching the genetic basis for an orphan disease.

-That orphan disease affecting a small population is Multiple Systems Atrophy, which is a very quick and insidious form of Parkinson's that is always fatal.

-The work completed to date has attracted the attention of MSA treatment experts at Vanderbilt University. A major fundraiser, Miracles for MSA, will be held in Nashville next week sponsored by a Pittsburgh Steeler (Fernando Bryant) whose high school coach's wife is a MSA victim.

The funds will be used to further the WMU research, which already shows promise for identifying genes that are not properly regulated and may trigger the disease. Ultimately that could lead to an effective therapy and lives saved.

-There's also a very commercial and potentially lucrative side to Genemarkers' gene expression work that involves the cosmetic industry, anti-aging genes and the company's ability to test commercial products at the biological level. The same people urgently trying to save the lives of those with MSA are using the same techniques to foster product development.

• **Patient Safety Organization One Inc.**, a new company that takes the stringent approach of aviation simulation training and applies it to the health care industry. It's based on the premise that human error and miscommunication is the major cause of airline accidents and patient injuries in hospitals. Airlines have used simulation training to combat accidents. Hospitals are just beginning to realize the value of such team training.

PSO One is a spinoff from our College of Aviation and, again, it's about saving lives, but also developing a commercially viable product that hospitals across the nation will use.

PSO One is the product of more than three years of research by the Center of Excellence for Simulation Research (CESR), a research firm founded locally by Dr. William Rutherford and Dr. Bill Hamman, both physicians and commercial pilots working for our College of Aviation.

Their research was funded by \$4.2 million in grants, with \$2.8 million coming from a Michigan Economic Development Corporation (MEDC) grant and additional funding from other state and local sources, including the Forest Park Foundation in Illinois and Battle Creek Unlimited.

Currently, PSO One is ending its research phase and focusing on developing a curriculum and product, which would enable the company to run simulations at thousands of hospitals. They also hope to begin expanding and hiring a local staff.

Again--lives save and economic development fostered.

- KCC connection to today's topic????? Kellogg food safety initiative
- Got a question? Ask an expert.

That's the idea behind an annual career event at Western Michigan University that is open to the community and designed to help those transitioning into science-related fields. We've just marked the third year of this program.

WMU brings back recent alums in grad school or pursuing science-related careers to answer questions and give current students a reality check and advice about becoming a life scientist. Organized by WMU chemist and researcher Dr. David Huffman, it is presented with the help of Huffman's NSF grant through the CAREER Program and sponsored by life sciences companies at the BTR part, "For the students making presentations this year, things didn't come together for them immediately," Huffman says. "They all struggled to discover their passion and didn't get immediate acceptance into their careers. That's especially true now of many students, because of the economy and other factors."

The event is structured somewhat informally to allow those who attend to interact with presenters.