Dear Colleague,

It was great to see many of you a few weeks ago at the fifth Montana Economic Development Summit in Butte!

In addition to hearing some great speakers such as Warren Buffet, the event gave me an opportunity to visit with folks about the economic development challenges and opportunities related to higher education in Montana. A specific topic of personal interest was health care innovation, which served as basis for the "Growing Innovative Healthcare Product Companies" panel I served on with some leading industry experts:

**Jim Greenwood** - President and CEO of the Biotechnology Industry Organization (BIO) in Washington, D.C., which represents more than 1,200 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations.

**Rick Anderson** - Managing Director at PTV Sciences, a healthcare venture capital and growth equity firm focused on enabling healthcare entrepreneurs and global innovation through investments in the life science sector, including medical devices, biotechnology, pharmaceuticals, and diagnostics.

**Jon Block** - President of Jon E. Block, Ph.D., Inc., a seasoned consulting firm for all aspects of clinical trial design, implementation and interpretation.

The panel discussion centered around some great questions, including: How do you commercialize basic research? What clinical trial strategies should be used, and what design methods are optimal to ensure continued success in a potentially difficult regulatory environment? What do venture capitalists look for in early stage companies that are growing through these developmental hurdles?

Addressing these questions brought to light some of the challenges early stage life science companies (often linked to universities) are facing today in their commercialization efforts. From a regulatory perspective Jon Block highlighted the fact that FDA approval is becoming more and more difficult to obtain, as evidenced by recent rejections for some larger companies such as Stryker and Zimmer. Adding to this expensive regulatory challenge is the growing difficulty of raising investment capital in the current economic climate, an environment that is placing more pressure on companies to advance their life science products into Phase II (or beyond) in order to obtain investment funding – a task not easily accomplished by early stage ventures.

Amidst these challenges, Rick Anderson shed light on "the opportunity" for research institutions given the impact the "boomer effect" will have on venture capital in the coming decade. In brief, the logic stems from the idea that the generation which protested the Vietnam War and watched Americans land on the moon are going to have high demands for health care innovation as they enter retirement. Under this assumption, investors and companies are looking for the next big innovations in imaging, energy based therapies, and new biomaterials – innovations that will most likely be linked to discoveries coming out of university research laboratories.
So what does this mean for The University of Montana? Jim Greenwood's response was, “focus on your strengths” by "growing your research dollars," which will generate technology platforms having the potential to become life saving and life improving products, and also contribute to the growth of the U.S. (and Montana) biotech industry.

Within The University of Montana's research enterprise, the Department of Biomedical and Pharmaceutical Sciences (BMED) serves as a prime example of what Jim was talking about. The efforts in BMED are centered around three strong research focus areas: neuroscience, environmental toxicology, and medicinal chemistry, a strategy which has resulted in a top ten ranking (according to the American Association of Colleges of Pharmacy) for each of the past five years in terms of NIH dollars to Schools of Pharmacy. In addition to these dollars providing educational opportunities through research, and creating direct local jobs, the associated research efforts have also started to generate intellectual property and start-up companies that are advancing early stage discoveries beyond the lab toward the clinic. Although significant challenges exist, The University of Montana is competing, and moving forward!!!

Thinking beyond healthcare innovation, this exemplary mindset has the potential to enhance the University’s economic impact with regard to research, entrepreneurship, and technology transfer. This fall semester I've been out sharing my related thoughts on these opportunities with some student groups and at some departmental seminars. If you'd like to visit one-on-one or have me speak to a group, please give me a call at 243.2148 or drop me a line at joe.fanguy@umontana.edu.