

UM's Tech Transfer Notes  
March 2010  
*Inventions and Innovations*

Dear Colleague,

Dr. Geoffrey Nicholson, inventor of the Post-It™ note, once said, “*Research is the transformation of money into knowledge. Innovation is the transformation of knowledge into money.*”

From the perspective of technology transfer, this statement succinctly captures the need for both time and money to transform **inventions** (resulting from years of research) into life saving and life improving **innovations**. Consider a slightly more detailed scenario: an idea is born and then proven through years of scientific research; practical applications are developed for the idea, resulting in an invention; the invention is transferred to an enterprise focused on commercialization; the enterprise invests resources to develop an innovative product; and finally the product is brought to market to generate revenue, of which part may be reinvested to produce more ideas...

This obviously isn't an automatic process, and unfortunately only a few inventions are ever converted into innovations. Some sources suggest that profits are realized on less than five percent of all patents. So you might be wondering, what's the good news? Well, among this small percentage of successes are several blockbusters that generate billions of dollars in annual revenue. Furthermore, and from the perspective of higher education, universities have been involved with successful innovations such as the hepatitis B vaccine, cisplatin and carboplatin, synthetic penicillin and the avian flu vaccine. The following case studies provide insight into a few additional success stories:

Nicotine Patch: University of California, Los Angeles

Highlights how a 1981 conversation between a UCLA faculty member and a physician (biological brothers) eventually led to Novartis' 1999 release of the over-the-counter version of Habitrol®. For more, [http://www.iphandbook.org/handbook/case\\_studies/cs21/](http://www.iphandbook.org/handbook/case_studies/cs21/)

The University of California's Strawberry Licensing Program

Highlights a multimillion dollar licensing program built around newly developed strawberry cultivars developed for the cool coastal Mediterranean and arid subtropical regions of California. For more, <http://www.iphandbook.org/handbook/ch17/p26/>

Building Healthy Forests with Early-Stage Propagation: University of Saskatchewan

Highlights CellFor's use of University of Saskatchewan somatic embryogenesis intellectual property to reduce production costs and enhance resistance to disease and pests in wood production. For more, [http://www.iphandbook.org/handbook/case\\_studies/cs07/](http://www.iphandbook.org/handbook/case_studies/cs07/)

A Better Tuberculosis Vaccine: Aeras and Vanderbilt University

Highlights joint efforts of the Gates Foundation and the Aeras Global TB Vaccine Foundation to develop a new TB vaccine based on Vanderbilt's delivery system technology. For more, [http://www.iphandbook.org/handbook/case\\_studies/cs12/](http://www.iphandbook.org/handbook/case_studies/cs12/)

The diversity of paths (toward success) among these stories confirms the fact that higher education technology transfer (and commercialization) isn't always a straightforward process and doesn't typically happen overnight. This reality has recently been a hot topic on college campuses and in the press, where universities are being asked to "do more" with technology transfer given the state of the nation's economy. From an administrative perspective, most higher education institutions agree that there is room for improvement and are piloting efforts to enhance the technology transfer activities associated with their research programs. Here at The University of Montana I'm also working on ways to streamline processes for transferring the University's *inventions* into *innovations*. I'll be sharing some of those ideas with you in the coming months through these notes. I'm also very interested in hearing your suggestions on the subject, so feel free to send me an email with your thoughts!

While brainstorming, please keep in mind that the first step in The University of Montana's technology transfer process is already in place – disclosure. If you have an idea (or invention), I encourage you to complete the University's two page downloadable invention disclosure form (<http://www.umt.edu/research/techtransfer/Resources/default.aspx>) and submit it to my attention via email. Let me know if you have any questions.

One final comment: The slides from my (20 minute) Spring 2010 Departmental Presentation have been posted on the web – <http://www.umt.edu/research/techtransfer/Resources/Presentations.aspx>. Please contact Colleen Hoffman at 243-6677 if you're interested in scheduling a time for me to speak with your department or center.

Best regards,  
Joe.

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