

GUEST EDITORIAL

My Shark Tank Experience: Inventing Tools for Population Health

Many of you may be familiar with the popular ABC show "Shark Tank." In the show, inventors try to recruit investors to help them bring their new products to market. The "sharks" are the investors, individuals with a track record of success in business and money to invest in promising new goods and services. The inventors come from all walks of life and pitch all sorts of ideas to the sharks, like the "CitiKitty Cat Toilet Training Kit," "I Want to Draw a Cat for You," and "Pork Barrel BBQ Sauce." While the products may sound whimsical, the investors are serious, hard charging individuals who always try to get the best deal whether it is in the inventor's best interest or not. That's why they are called sharks.

I never thought of myself as an inventor - I am a grant funded health services researcher, so the main "product" of my work is peer-reviewed publications aimed at health services researchers and practitioners. All that changed when I met the people who work in Jefferson's Office of Technology Transfer and Business Development (OTT). I thought that OTT was concerned with people who invent a new vaccine or a useful assay, but it turns out that their purview includes developing any useful intellectual property created by Jefferson into a product or service with a commercial value. They even have a form where researchers like me can report our creations to the university - the "Report of Toolkit Invention" (ROTI). After meeting with

the team at several of their Friday morning Innovation Corner breakfasts, I started registering my work with OTT.

I registered three tools with OTT. The first was an economic model that we developed in order to evaluate the economics of companion diagnostics used to treat non-small cell lung cancer.¹ The second was a statistical method to determine the quality of US hospitals using publicly reported quality data.² The third was a tool to determine the value of new therapies from the point of view of a health insurance company, which we call the "Jefferson Evaluating Therapeutics Tool" (JETT).³ That third tool piqued OTT's interest, and they brought me in for what I thought would be a collegial meeting - a 15 minute slideshow presentation followed by a brief discussion.

What I got instead was an experience in Jefferson's own internal shark tank that I will never forget. Katherine Chou, Executive Director of the Office of Technology Transfer and her team aggressively questioned me about the value of my tool. There are thousands of approved drugs in the US - was I proposing to apply the JETT to every one? Also, I was using publicly available data, so what real value did my tool offer? Finally, insurance companies are incredibly focused on the cost of new drugs, so how would my tool offer a useful new service that insurance

companies couldn't get elsewhere. It was an intense form of constructive critique that was quite unlike the collegial, academic atmosphere I am used to experiencing here at Jefferson.

Eventually, we were able to come to an understanding of how the JETT was both innovative and useful. In fact, it turned out to be a perfect fit for Jefferson's new Innovation pillar. While I cannot share all the details of our strategy moving forward, I can say that we are currently not considering the traditional routes of patent or copyright for my invention. Instead, we will collaborate with other experts here at Jefferson and external thought leaders at insurance companies and other enterprises in order to maximize and realize the value of JETT. I can definitely say that I am looking forward to my next visit to the shark tank. It has also changed how I do research. Now, in addition to thinking "where will this project get published?" I think "what is the intellectual property that I will generate, and does it have a commercial value?" It is a new way of thinking for me, and one that I think will work both with the new Jefferson and the new reality for how science will be funded going forward.

Robert Lieberthal, PhD

Assistant Professor
Jefferson School of Population Health
Robert.Lieberthal@jefferson.edu

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