

PHILADELPHIA BUSINESS JOURNAL

Merck gift equals biotech boost

Premium content from Philadelphia Business Journal - by John George, Staff Writer

Friday, June 3, 2011

DOYLESTOWN — [Merck & Co. Inc.](#) is donating its vast library of about 100,000 natural products, such as plant extracts and fungi, used for drug discovery to the Bucks County-based Institute for Hepatitis and Virus Research (IHVR), which plans to make the collection available to researchers around the world.

Timothy Block, the founder and president of the IHVR and Hepatitis B Foundation, expects the deal will not only bring scores of researchers to Bucks County for access to the previously private library, but also lead to the formation of dozens of new life sciences companies in the region that will seek to commercialize discoveries centered around natural products. Those businesses, he said, are likely to include those developing new therapeutic products, nutraceuticals (food products with health benefits) and cosmeceuticals (cosmetic products with biologically active ingredients).



Photo by John George

Institute President Timothy Block (left) and Director of Technology Innovations William A. Kinney at the Pennsylvania Biotechnology Center.

Drug giant Merck is also providing the IHVR — the research arm of the 20-year-old Hepatitis B Foundation, a research, education and patient advocacy organization — with an undisclosed grant to support the institute's effort to establish an open-access screening center.

"We are going to make available to all scientists ... an asset and opportunity that can only be dreamed about," Block said. "I feel an enormous responsibility that we are being trusted with this."

Natural products are compounds derived from living organisms, such as plants and microorganisms. About 45 percent of all Food and Drug Administration-approved products — including treatment for bacterial and fungal infections, high cholesterol, high blood pressure, cancer and central nervous system disorders — were originally derived from natural products.

The Merck natural products library, one of the most diverse in the world, has extracts encompassing approximately 60 percent of all known plant genera in the world. IHVR and Merck officials said they could not put a value on the library, labeling it as "priceless."

The IHVR's screening center will start out with a staff of eight. That number is expected to blossom to as many 60 people over the next few years.

Space for the Merck collection, which will require 10,000 cubic feet of freezer storage, will be created by renovating space at the institute's Doylestown home at the Pennsylvania Biotechnology Center of Bucks

County. Block has led the effort to establish the center, and serves as president of the research and education facility/new business incubator.

The IHVR is making an initial investment of \$600,000, and will contribute a total of \$1 million over time, to create the nonprofit screening center. Block said researchers will be assessed a still-to-be determined fee to access the natural products in person at the center or through research kits the IHVR will sell.

“This will allow the screening center to be self-supporting and fund its own [liver disease] research,” Block said.

He credited state Sen. **Chuck McIlhinney**, R-Bucks, for working behind the scenes to help IHVR secure the collection once Merck let it be known it was looking for somebody to take possession of its natural products library.

“This collection will not only create a great benefit for our medical community, but also will promote greater investment in the state’s budding biotechnology industry,” McIlhinney said. “I look forward to seeing the IHVR put this collection to good use as a valuable medical, educational and economic development tool.”

Merck exited the natural products drug-discovery business in 2008 and closed down its 50-year-old natural products research facility in Madrid, Spain.

Representatives of the pharmaceutical company noted, at the time, the costs involved in finding chemical compounds in the environment was “significant” and time consuming. The industry’s drug discovery efforts had already shifted toward a greater use of computer-aided synthetic chemistry.

Merck’s last drug derived from a natural product was Candidas, a fungus treatment introduced in 2002. Merck’s antibiotic Cefoxitin and its cholesterol-lowering statin Mevacor are also examples of natural-product-based drugs.

“Merck’s natural products library will now be available to a wider scientific community with the hope it will assist others in the discovery of new therapies for patients,” said **Tony Ford Hutchinson**, Merck’s senior vice president for vaccines research and development. “Our agreement with IHVR will also keep this extensive 30-year library collection alive and well.”

Block said he first learned about the opportunity to acquire the natural products library from a Merck executive, **David Ring**, who lives in Doylestown.

William A. Kinney, IHVR’s director of technology innovations, and **Christopher Ball**, the former CEO of PanLabs and an adviser to the biotechnology center, put together the business plan that Merck accepted.

Kinney, who has a doctorate in medicinal chemistry, is eagerly awaiting the Merck donation.

“So many drugs have come from this collection,” said Kinney, who is serving as project manager for the screening center. “I’ve always been a big believer in natural products.”

Block called the donation of the natural products and creation of the center at the Pennsylvania Biotechnology Center one of the most exciting projects with which he has been involved. “We are a regional center that serves as an incubator for new businesses,” he said. “Now we will be a global center for research too.”