

Collections • Prostate Cancer

Life-sciences fund makes first 7 loans The money, from the tobacco settlement, is aimed at promoting local biotechnology firms and jobs.

By Porus P. Cooper **INQUIRER STAFF WRITER**

POSTED: April 20, 2003

New methods to determine blood type and detect prostate cancer are among the first seven projects to gain investments from BioAdvance, the Philadelphia region's life-sciences greenhouse.

The seven will get loans totaling \$3.14 million, money that came from Pennsylvania's share of the national settlement with tobacco companies, BioAdvance officials said Friday.

BioAdvance, an agency funded last October, is one of three such state-sponsored pools of investment dollars. The others are in Harrisburg and Pittsburgh.

Each agency is sharing equally in \$100 million set aside by the state from the tobacco settlement to promote biotechnology companies and jobs.

"We have money for a couple of years and then we must make sure some of [the money invested] comes back to fund new ventures," said Barbara S. Schilberg, chief executive of the Philadelphia greenhouse.

The seven projects, involving six small companies and the department of pathology and laboratory medicine at the University of Pennsylvania School of Medicine, received loans ranging from \$307,000 to \$500,000 at 8 percent interest.

BioAdvance will exchange the debt for stock if a company raises \$2 million in new investment, Schilberg said.

The Penn project to detect blood type is seeking to improve and automate a key medical process mostly done manually by overstressed technicians using a century-old method, said Donald L. Siegel, director of the blood bank and transfusion medicine section.

Using the wrong blood type for a patient can have catastrophic results. "There is no room for error," Siegel said.

But he and his collaborators did not start out looking to improve the typing of blood. As often happens in the laboratory, the project emerged as a detour from the original journey.

Siegel's team was using a new, molecular method of producing antibodies to study autoimmune diseases when "it kind of dawned on me" that the same method also could decide blood type, Siegel said.

Blood type (A, B, and so on) is determined by its reaction to antibodies such as anti-A, and so on. The antibodies come from plasma taken from human donors, Siegel said. His method would sharply reduce this need for plasma donations, he said.

Siegel's project received \$463,000 from BioAdvance.

Mark Stearns, chief scientific officer at MacroArray Technologies Inc. of Villanova, said his company would use the \$500,000 it got to help pay for a nationwide study of its urine-based test for prostate cancer needed to gain regulatory approval.

Early research suggests the test may be more reliable than the widely used PSA test, which is blood-based, said Stearns, who is also a Drexel University academic.

MacroArray is also trying to develop a targeted treatment for prostate cancer, he said.

It has been a good three months for Stearns. The BioAdvance money comes on the heels of \$250,000 raised from the Ben Franklin Technology Partners program and \$750,000 from a group of individual investors called Loosely Organized Retired Executives.

One side benefit from this fund-raising, he said, is that larger venture-capital investors, whose interest was once hard to get, are calling him now.

He said MacroArray will need them. The company is looking for an additional \$3 million.

The other companies and projects that gained BioAdvance investments:

Eagle Vision Pharmaceutical Corp., of Exton, (improved diagnostic imaging); Gelifex Inc., of Philadelphia, (spinal implants to ease lower back pain); Integral Molecular, of Philadelphia, (technology to simplify drug discovery); RetinaPharma Technologies Inc., of Jenkintown, (improved testing for glaucoma); and Spliceomix Inc., of Malvern, (vaccines and targeted treatment for cancer).

Early-stage investments in life-sciences are hugely risky, but promise big returns, said John J. Park, general partner at Cardinal Partners, a \$200 million Princeton investment firm heavily invested in health care and medical devices and services.

"These companies require very large sums of money. You have to build a good syndicate of coinvestors," Park said.

Philadelphia's edge is its "critical mass" of academic research, he added. "Most of these companies come out of university laboratories."

Contact staff writer Porus P. Cooper at 215-854-4761 or pcooper@phillynews.com.