



Ohio, for starters

It's a fact, Ohio isn't perceived by the rest of the world as a bastion of bioscience and biomedical entrepreneurship.

Many in this business—including some Ohioans—associate “bioscience in Ohio” with global brands and massive companies that have headquarters here. Like Battelle, Cardinal Health, Cleveland Clinic, P&G Pharmaceuticals, STERIS, Abbott Nutrition, Invacare, and so on. That's not a bad thing. It's just not a whole story thing.

From 2004 to 2007, an average of 55 new bioscience-related companies began operation in Ohio each year. A few were relocations from other states or countries, but most were started by—wait for it—entrepreneurs in Ohio. They started their companies here and were quickly surrounded by resources to help them succeed, from incubators and networking groups to private equity sources and legal expertise.

Rather than continue with more stats and figures that support Ohio's entrepreneurial climate, let's introduce you to just a few of Ohio's emerging bio-stars.

Polgenix

Launched in 2006, Polgenix's vision is all about the eye. The Cleveland company is engaged in drug discovery and diagnostic development based on scientific discoveries related to the retina's function. Their drug discovery activities are focused on high-value and clinically-important G protein-coupled receptors. Simultaneously, they've devised novel instrumentation that provides safe, real-time, in vivo imaging of the human eye's functional components.

Founder Krzysztof Palczewski, currently chair of Case Western Reserve University's Department of Pharmacology, is the inventor of the discoveries and patents underlying each platform. Thus far, Polgenix has been funded through SBIR awards and partnerships with pharmaceutical companies. According to CEO Joe Jankowski, the funding supports eight employees, five of which are full-time.

Jankowski is quick to point out that expertise and resources available in their backyard have contributed to Polgenix's early success. “Relationships with both Case Western Reserve University and BioEnterprise have been invaluable, particularly in allowing us to so quickly ramp up after launch.”

Asked what Polgenix might look like in five years, Jankowski has double vision. He forecasts both a pharmaceutical service company engaged in myriad developmental partnerships and a VC-backed device company developing retinal imaging technologies.

CleveX

Skin cancer is the most common form of cancer in the U.S. According to CleveX President & CEO Gary Smith, there are 6 million skin lesions excised and biopsied in this country alone. Therein lies the target market for CleveX and the benefits of their technology.

Columbus-based CleveX creates and markets innovative skin biopsy, closure and repair technology which enables clinicians to more quickly diagnose and treat skin cancers, including melanoma. The company's ExiClip, a small device that removes skin lesions and closes the site in a single action, received 510(k) clearance in May 2007.

The ExiClip idea was conceived by co-founder Jill Banbury, a plastic surgeon formerly affiliated with the Cleveland Clinic. Co-founder Warren Williamson, also founder and president of Cincinnati's IDx Medical, translated the idea into a product.

CleveX's progress to date has been funded by seed and founder investments, as well as angel investors, namely Ohio TechAngels. Smith anticipates a B-round of VC funding, between \$3 million and \$5 million, in early 2009.

He said the company also has received timely and coordinated support from TechColumbus, BioOhio, BioEnterprise, CCF Innovations, and the Ohio Department of Development.

"Starting a company is a contact sport," Smith said, by way of double entendre. "Our friends and advisors from TechColumbus, BioEnterprise, and BioOhio have allowed us to establish far more key contacts with business partners and investors than would have been possible by ourselves."

Akebia Therapeutics

With two drug development programs licensed from Procter & Gamble Pharmaceuticals, CEO Joseph Gardner said the company's origin can be traced to P&G's 2006 decision to discontinue internal drug discovery efforts in order to focus on licensing later-stage product candidates. Soon thereafter, Cincinnati-based Akebia Therapeutics started business in February 2007.

Akebia is a venture-backed pharmaceutical company with a focus on treatments for anemia and peripheral artery disease. Currently pre-clinical, the company's therapies are at least five years from market. Including Gardner, who formerly managed medicinal chemistry, core technologies and intellectual property at P&G Pharmaceuticals, Akebia employs four full-time and three part-time staff. They are currently seeking additional talent.

The company's seed round was funded by national and local investors, including Triathlon Medical Ventures, Blue Chip Venture Company, CincyTechUSA, Fort Washington Capital, and Queen City Angels. Closure of an A round involving three additional VCs will be announced in late spring.

Gardner said that locating in Cincinnati made sense, "considering the P&G connection, and it has facilitated valuable relationships with nearby contract research partners like Girindus and CTI." Its Ohio location even helped it land a grant from the Cleveland-based Global Cardiovascular Innovation Center.

PrognostiX

A 2004 start-up based on Cleveland Clinic technology, PrognostiX discovers, develops, and commercializes proprietary molecular biomarkers that aid in disease diagnosis and treatment. Within a couple years, its first product—CardioMPO—had received FDA approval and was on the market.

The ELISA-based CardioMPO Test measures myeloperoxidase (MPO) levels in human plasma and helps clinicians evaluate patients presenting with chest pain that are at risk for major adverse cardiac events, including heart attack or need for revascularization. PrognostiX also has a number of other novel biomarkers in the R&D pipeline.

"Locating in Ohio was a natural fit, as the technology was licensed out of the Cleveland Clinic," said President & CEO George Trutza. "With offices on the Clinic's CCF Innovations campus, we can take advantage of all their resources, such as access to world class researchers and clinicians."

PrognostiX launched with funding via grants and angel investors. And with Cleveland Clinic, Case Western Reserve University, and several other major research institutions in northeast Ohio, Trutza said that finding employees has never been a problem.

Bexion Pharmaceuticals

Founded in Cincinnati in June 2006, Bexion Pharmaceuticals is focused on a goal everyone can agree on: developing cures for cancer. Bexion has a first-in-class biologic product with data-driven potential for treatment of a broad range of human cancers.

"Our initial interests are gliomas and prostate cancer," commented President & CEO Ray Takigiku. "Our technology has rescued mice with gliomas, where no other therapies have previously worked, and we have a remarkably good safety profile."

Three full-time staff are charged with commercializing the technology invented by Dr. Xiaoyang Qi and licensed from Cincinnati Children's Hospital Medical Center. Seed funding came through the Tomorrow Fund, a Cincinnati Children's owned and operated investment fund, and a Phase 1 SBIR grant. Bexion is currently seeking Series A funding to complete the IND and Phase 1 clinical trial.

Although several years away from having a commercial cancer drug, Bexion expects to market a preclinical tumor diagnostic imaging reagent this year. Takigiku said that the company has benefited from multi-disciplinary support network. Its scientific

advisory board and board of directors, as well local bioscience incubator BIOSTART all have contributed to Bexion's successful start.

Different targets. Different stages of progress. Different paths. But each of these companies contributes to the proof that Ohio knows how to rear its young bioscience companies.