

Organic growth

## Pasadena Bioscience Collaborative spurs innovation

By Kevin Smith, Staff Writer

Posted: 12/31/2011 08:28:26 PM PST



Scientist Mark Sharpley, of Cohbar, harvests proteins in the development of drugs for metabolic diseases Tuesday, December 13, 2011 at Pasadena Bioscience Collaborative as Bruce Blomstrom, president of the collaborative, and Wendie Johnston, director, stand-by. The Pasadena Bioscience Collaborative serves as an incubator for bioscience companies, and it has grown from one company to 14. (SGVN/Staff Photo by Sarah Reingewirtz)

PASADENA - Walk through the door of Pasadena Bioscience Collaborative and visions of pristine work areas bathed in shimmering blue light as depicted on network TV shows quickly dissolve.

Because unlike those TV programs, the collaborative is...well, a little funkier.

But make no mistake, the work that goes on here has broad ramifications in both the pharmaceutical and health care industries.

Bruce Blomstrom, the PBC's president, puts it this way:

"We're at a point where the cost of research is very low - but the ideas are very big," he said.

The facility, at 2265 E. Foothill Blvd., serves as an incubator for early-stage life science companies in the San Gabriel Valley. And it's grown considerably since it was established in 2003.

"We started out with one company and 500 square feet of space, but now we have 14 companies and we're using 10,000 square feet of space in two buildings," Blomstrom said. "Most of the companies are aimed at the pharmaceutical industry."

The objective, he said, is to help the companies develop their products to the point where they can be licensed.

Once a product receives licensing, another more well-funded company can take the product, conduct the necessary clinical trials and eventually bring it to market.

And the process can be costly.

"The cost of a new drug is estimated to be about \$1 billion," said Blomstrom, who has been involved in executive management at major health care organizations for 30 years. "A number of drugs fail before they get approved."

The PBC operates on an annual budget of about \$100,000, providing each company with its own dedicated work space, as well as shared access to a variety of laboratory facilities and equipment. The collaborative is considered a "wet lab," which means that companies can work with drugs, chemicals or other biological matter in liquid solutions.

Much of that work is done under overhead hoods, which provide ventilation to keep harmful fumes away from work areas.

"This is one of the most creative projects in the state," PBC Director Wendie Johnston said. "I love being here. I enjoy the day-to-day working with people, knowing about their projects and helping them in any way I can."

Johnston is in charge of a grant for California community colleges that is earmarked for workforce development. One of the projects she handles is a collaboration with the PBC. In that capacity, she helps secure interns, helps refine resumes and also helps the PBC companies network and secure much-needed funding.

The PBC is located in an enterprise zone and it has become a self-sustaining venture. Its operating revenue comes from the rents the companies pay for space and from a small annual stipend the city provides to the collaborative.

The 14 companies who work there get funding for their research through a variety of avenues, including government grants, angel investors, venture capital investors and friends and family.

The PBC's current roster of companies target everything from gene-based HIV technology to cancer therapies.

Neumedicines Inc. is a prime example. The privately held drug discovery and development company is focused on innovative therapies for the treatment of hematopoietic deficiencies and cancer.

Neumedicines recently signed a contract worth up to \$273 million to fund advanced development of the company's HemaMax, a product designed to treat hematopoietic syndrome of acute radiation syndrome.

The contract was awarded by the Biomedical Advanced Research & Development Authority.



Biologist Hajer Brahem, of Ophidion, whose face is reflected in the glass of a hood, works on gathering samples for experiments in the development of cognition enhancement drugs Tuesday, December 13, 2011 at Pasadena Bioscience Collaborative. The Pasadena Bioscience Collaborative serves as an incubator for bioscience companies, and it has grown from one company to 14. (SGVN/Staff Photo by Sarah Reingewirtz)

Cancer patients and others in the vicinity of a nuclear accident or nuclear weapon can be exposed to high doses of radiation and suffer a variety of adverse symptoms, including gastrointestinal and neurovascular disorders. HemaMax is designed to treat radiation poisoning.

Advantageous Systems LLC (ADS) is a start-up medical device company that's incorporating nanotechnology and biotechnology to create a minimally invasive device for blood tests that won't rely on needles or pinpricks.

The device also checks for blood glucose levels, HIV/AIDS, other bacterial infectious agents, and certain cancers and autoimmune diseases.

"It works with material," CEO Adam Stein explained. "The material goes through your skin

without you even knowing it and it's able to latch onto things and test for bacterias, viruses and diseases."

ADS works in units of nanometers. Stein put that in perspective by saying that one nanometer next to a human cell would be akin to the size of a human fist next to the Empire State Building.

"We're pretty close to licensing," he said. "And we have a number of other products in the clean-tech area for water treatment applications. The collaborative is one of the best things in California. It got us going. It allows you to leverage equipment you'd otherwise have to buy."

Johnston figures the collaborative will ramp up over the next few years.

"I think we'll get larger and help more companies," he said. "We'll end up with more companies in Pasadena. We have a company now that is looking for additional office space adjacent to us, so there is a growth mechanism here."

For more information on the Pasadena Bioscience Collaborative, call Bruce Blomstrom at 626-507-8487 or visit [contact@pasadenabiosci.org](mailto:contact@pasadenabiosci.org).

[kevin.smith@sgvn.com](mailto:kevin.smith@sgvn.com)

626-962-8811, ext. 2701