

# WEAVING A WEB OF SUPPORT AND GUIDANCE

BY CASEY DEMCHAK

Creating a successful bioscience company isn't for the faint of heart. What is required is a tremendous amount of guts, determination, money, and most importantly — great science. Combining these elements into a strong asset and taking it from the lab to clinical trials and on to market launch is no simple task. It requires crossing a chasm or “valley of death” that can drain the life from promising new technologies.

Here in Colorado, through a collective effort involving state government and a web of highly dedicated institutions, there is an amazing array of work being done with the shared goals of helping young companies thrive and further developing the state's bioscience industry and overall economy.

## EARLY-STAGE SUPPORT

Early-stage drug discovery is being assisted by the University of Colorado's Colorado Initiative in Molecular Biotechnology (CIMB), which is developing the Integrated Novel Therapeutic Discovery Center (INTDC). This innovative facility will help researchers identify and validate novel drug targets and promote multidisciplinary collaborations. INTDC will ultimately help investigators transform their ongoing biological research.

This is also the goal of the University of Colorado at Denver School of Pharmacy. Its High-Throughput Screening (HTS) core facility leads to drug discoveries that have shown success in increasing the chances of realizing novel therapeutics. With technological advances in genomics, proteomics and

molecular biology, many research institutions now have the opportunity to impact drug discovery and development through specialized expertise and/or proprietary libraries.

Also assisting in early-stage drug development is the Colorado State University's Colorado Center for Drug Discovery (C2D2). As a statewide resource, C2D2 addresses a severe hurdle — supporting the discovery of pharmacologically validated drug candidates with patent-protected chemical matter by focusing their resources on chemical optimization with an eye toward drug candidate formulation.

C2D2 uses a selective solicitation process to identify Colorado research institution drug discovery projects that would be a good fit for their assistance. “The appeal of C2D2 is that all of our principals are experienced biopharma scientists,” says C2D2 Co-director Terry Oppenorth, Ph.D. “So we have a lot of experience to help move things forward because we have seen many of the problems that can arise during drug discovery.”

C2D2 Co-director Joe Guiles, Ph.D., adds, “What we do with programs we've selected is guide their research — acting more as a consultant. We listen to the scientists and what their goals are, and then we advise them on what we feel is realistically feasible and achievable. So far, the various academic bodies we have worked with have been very receptive to our suggestions.”

## NURTURING DEVELOPING COMPANIES

Technologies that have begun to show promise, but still need help crossing the so-called “valley of death” have a potential

partner in the Colorado Institute for Drug, Device and Diagnostic Development (CID4). Through initial funding from the state of Colorado and the Fitzsimons Redevelopment Authority, CID4 is a source of funding and entrepreneurial expertise that can help transform new bioscience technologies into commercial success stories. CID4 does this by identifying and funding innovations with strong potential and by backing them with their extensive management expertise.

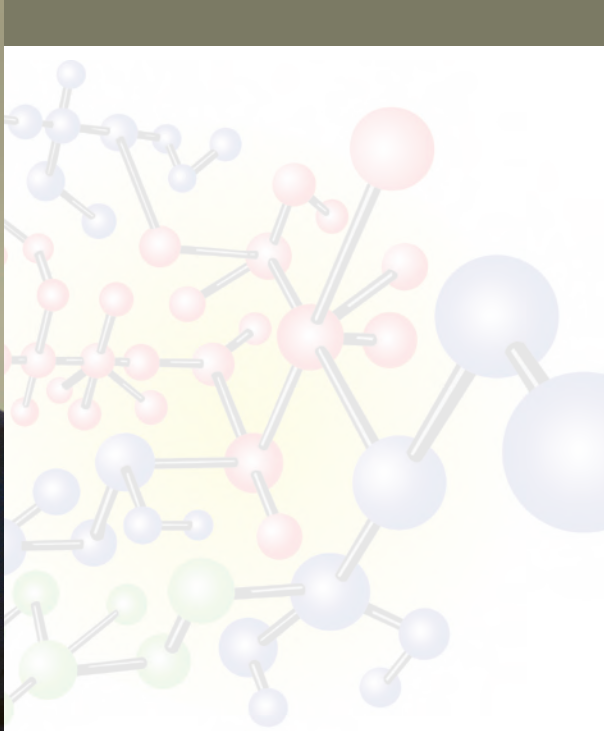
“The mission at CID4 is simple,” says CID4 CEO Kevin Smith. “We aim to take big ideas that show promise and turn them into drugs or devices that create jobs and further the statewide growth of Colorado's bioscience infrastructure.”

Through its application process, CID4 seeks to take on two or three projects per year, with equal consideration to drug and device development. CID4's funding structure varies depending on the project, but it always includes equity for the technology founders and a commitment to seeking additional outside funding for the companies that are formed.

Two companies were formed or selected through CID4's first technology solicitation in Spring 2010. One was PeptiVir, which is looking at creating a vaccine approach to treating influenza and other viruses. The second company was Sophono, which has licensed the rights to a hearing device that was approved in Europe and CE markets.

## MOVING CLOSER TO MARKET

Companies that have developed to a point where their technology is viable and their



*Kevin Smith, President and Chief Executive Officer of CID4, with Richard Duke, CID4 Founder and Chief Scientific Officer, at headquarters in the Colorado Science + Technology Park at Fitzsimons. Photo by Kathleen Lavine and the Denver Business Journal.*

basic business structure is in place also have allies to help them grow and attract more funding.

The Colorado State University Research Innovation Center (RIC) provides premiere incubator space for new companies and serves as a vehicle for performing collaborative translational-stage research with CSU's community of life-science investigators. The new 56,000-square-foot facility is a hybrid life-science accelerator and academic research building. Approximately 18,000 square feet of the three-story building is the life-science accelerator. The entire facility is designed to help start-up and established

companies conduct R&D and other business operations.

The center opened in September 2010 and is the home of C2D2 and four startup companies, two of which are university startups. The other two companies are external startup companies that were drawn to the center by its unique model that mixes academic researchers in the same space as business entrepreneurs.

Fitzsimons BioBusiness Partners (FBBp) is another key organization helping young Colorado bioscience companies get their footing. FBBp is a division within the Fitzsimons Redevelopment Authority, and it is responsible for nurturing sustainable bioscience businesses to establish a global position for the industry at the Colorado Science + Technology Park at Fitzsimons.

"FBBp was created to support the needs of Colorado bioscience companies so they could gain traction and begin to thrive," says FBBp Director Michael Artinger, Ph.D. "We

help them define the best applications of their technology and work with them to put in place the resources they need to execute their strategy."

In addition, FBBp helps companies raise funding through angel or venture capital investors. It can also help connect new players with big pharma, diagnostic or medical device companies that might be interested in creating partnerships.

One of the companies that has benefited from the services offered by FBBp is Sharklet™ Technologies, which developed the world's first technology to inhibit bacterial growth through pattern alone. Sharklet Technologies had a great year in 2010 when it received the Colorado BioScience Association Rising Star Award. The Company also earned the Dorsey & Whitney Venture Showcase Award at the 2010 BioWest conference.

#### **LOOKING AHEAD**

Through the combined work of so many great organizations, Colorado's bioscience industry has reason to feel optimistic about its future. Within the bioscience community there is a unique realization that the state is much stronger when government, universities and industry institutions collaborate on economic development issues.

By garnering continued support from state government and the entrepreneurial spirit that has built the industry, Colorado has an excellent opportunity to take its place as one of the nation's elite centers for bioscience discovery and development.

