

Arizona's Bioscience Roadmap: Progress Report

Q 3-4, 2012

Arizona's Bioscience Roadmap, commissioned and coordinated by the Flinn Foundation since 2002, calls on the state to focus on four strategies to develop a globally competitive bioscience hub. Here are those strategies and selected developments within each during the latter half of 2012.

Build research infrastructure

- The Arizona Board of Regents gives final approval to the construction of the \$100 million University of Arizona Cancer Center-Phoenix clinic at the Phoenix Biomedical Campus, a partnership with St. Joseph's Hospital and Medical Center that will provide outpatient cancer services from the six-story, 230,000-square-foot facility.
- Phoenix Children's Hospital creates a \$50 million institute of molecular medicine to assist children with difficult-to-treat and rare cancers through whole-genome sequencing with the help of Translational Genomics Research Institute. The hospital also partners with Mayo Clinic on a new liver-transplant program, the first in the Southwest focusing exclusively on children.
- TGen introduces the Center for Rare Childhood Disorders to enable whole-genome sequencing to be used to help children suffering from ailments that have been difficult or impossible to diagnose.
- Banner MD Anderson Cancer Center in Gilbert announces a \$63 million expansion project that will nearly double the size of its existing outpatient center. The 111,000-square-foot expansion is set to open in spring 2014.
- Arizona State University receives a \$15 million grant from the U.S. Department of Energy to lead the Algae Testbed Public-Private Partnership alongside national labs and academic and industrial partners.
- The International Genomics Consortium and the University of Michigan announce the formation of the nonprofit Paradigm, which will provide molecular analysis for doctors and scientists.
- The UA Valley Fever Center opens at St. Joseph's Hospital and Medical Center as a partnership between the hospital, UA College of Medicine-Phoenix, and Valley Fever Alliance of Arizona Clinicians.
- Daniel Von Hoff of TGen and Scottsdale Healthcare will co-lead a national "Dream Team" that will benefit from the more than \$81 million pledged for pancreatic cancer research during the entertainment industry's "Stand Up To Cancer" celebrity telethon.
- ASU's Biodesign Institute names Raymond DuBois as its new executive director. DuBois most recently served as a senior administrator at MD Anderson Cancer Center in Houston.

Build critical mass of firms

- Mayo Clinic announces plans for a new \$130 million, 217,200-square-foot cancer center building on its north Phoenix campus. The structure, which will consolidate Mayo's Arizona cancer operations, will be built atop its \$182 million proton-beam therapy building currently under construction.
- Accelr8 Technology Corp., which makes systems to rapidly identify and classify bacterial infections, announces the company's move from Denver to Tucson.
- HealthTell Inc., a company that uses a drop of blood for early screening and diagnosis of multiple diseases including cancer and Alzheimer's, opens at the Innovations incubator in Chandler.
- A two-part trial sponsored by Proacta, Inc. to test a cancer treatment begins at the Virginia G. Piper Cancer Center Clinical Trials at Scottsdale Healthcare in partnership with TGen.

Enhance business environment

- BioInspire, a new incubator specializing in makers of medical devices, launches in Peoria with five start-up companies and later adds a sixth. BioAccel and the city of Peoria offer initial funding, mentoring, office space, and laboratory access to the startup businesses.
- The Arizona Furnace accelerator launches to commercialize ideas developed at the state's universities and research institutions. Furnace selects 10 companies to receive \$25,000 each in seed money supplied by the Arizona Commerce Authority and BioAccel, plus access to incubation space.
- The city of Flagstaff receives a \$4 million grant to help build a new accelerator building next door to the existing incubator, Northern Arizona Center for Entrepreneurship and Technology, with plans to attract start-up companies.
- In a move to help businesses establish themselves in Oro Valley with more speed and ease, the town council approves an Economic Expansion Zone for Innovation Park, home of Oro Valley Hospital, Sanofi, and Roche Group subsidiary Ventana Medical Systems.
- National personalized medicine leaders, including Ventana Medical Systems CEO Mara Aspinall, launch DxInsights, an industry organization that seeks to educate healthcare stakeholders about diagnostics and their impact on medical care and cost.
- The Arizona Commerce Authority identifies six startup companies—including three with medical ties—to receive Innovation Challenge grants of up to \$250,000 each to help them commercialize their products.

Prepare workforce, educate citizens

- UA opens the Health Sciences Education Building on the Phoenix Biomedical Campus, enabling the class size of its Phoenix medical school to increase and Northern Arizona University's Phoenix-based physician assistant and physical therapy programs to begin.
- UA College of Medicine-Phoenix receives preliminary separate accreditation from the national Liaison Committee on Medical Education. The College also adds the Southwest Center for HIV/AIDS to its roster of internship rotations beginning in 2013.
- The Helios Education Foundation donates \$4 million to Science Foundation Arizona's STEM Network, including \$1.6 million for a pilot-schools program to help fund curricula and teacher training in science, technology, engineering, and math.
- Forty-two medical students attend the first classes of Creighton University's School of Medicine Regional Campus at St. Joseph's Hospital and Medical Center in Phoenix.
- ASU begins developing applications for computers, tablets, and mobile devices that will be distributed to Battelle to assist the research organization in promoting STEM education and learning.
- Vail School District in Tucson opens Andrada Polytechnic High School, whose offerings include courses in bioscience and health care, while UA makes plans to develop Esteem High School, specializing in STEM areas and entrepreneurship, at the Arizona Bioscience Park.