Biotech progress report

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According to the Flinn Foundation's Arizona Bioscience Roadmap, there are four main strategies the state needs to focus on to develop a strong bioscience hub. Here are those strategies and how Arizona fared in the fourth quarter of 2005.

Strategy 1: Build research infrastructure

- The city of Phoenix offers a \$25 million loan to help pay for renovation of the three historic buildings that will house the Phoenix campus of the University of Arizona medical school in partnership with Arizona State University. The funds come from the New Market Tax Program to assist underdeveloped areas. The city also approved a bond package requiring voter approval that would include \$3 million for campus construction costs.
- Mayo Clinic adds a heart-transplant center to its local arsenal and performs its first transplant. In addition to being the only such program in the Phoenix area, it also will offer surgery for advanced heart failure, cardiac-rehabilitation services and the use of artificial hearts.
- Researchers at UA's BIO5 Institute nab \$6.2 million of a \$29 million grant from the National Science Foundation (NSF) to four institutions to map the corn plant genome. The project comes only weeks after the successful decoding of the rice genome, in which UA played a key role.
- The Translational Genomics Research Institute opens a clinical research lab at Scottsdale Healthcare, funded by a \$4.55 million grant from the Virginia G. Piper Charitable Trust and partners with St. Joseph's Hospital and Medical Center to open a pediatric neurogenomics center.
- ASU debuts a supercomputer, ranking as one of the world's 175 fastest, that will help researchers at the Biodesign Institute to study the structure of viruses and explore ways to improve the delivery of medications.
- Arizona research institutions receive major grants, including:
- \$21.6 million to the Arizona Cancer Center from the National Cancer Institute (NCI) to study colon cancer.
- \$15 million to TGen from NCI for new treatments for pancreatic cancer.
- \$9 million to TGen from the Flinn Foundation for unrestricted research.
- \$8.9 million in federal grants to NAU and TGen for methods of screening radiation victims.
- \$6.2 million to ASU from NSF to create a new center for nanotechnology.
- \$4 million to Southwest American Indian Collaborative Network, a collaboration whose participants includes the Arizona Cancer Center and TGen, from NCI to reduce cancer health disparities among American Indians.
- \$3.9 million to the Biodesign Institute at ASU from the National Institutes of Health for spinal chord injuries and other neurological disorders.

• \$2.5 million to UA BIO5 from NIH in honor of Vicki Chandler's winning of the Director's Pioneer Award, a first for Arizona.

Strategy 2: Build critical mass of firms

- InNexus Biotechnology moves its headquarters to Scottsdale, citing the Mayo Clinic and Arizona's Bioscience Roadmap as key factors. The company will bring 40 jobs and is considering the Valley among the contenders for a manufacturing facility that would employ an additional 150 people.
- Covance, a global drug development firm, purchases acreage in Chandler with intent to build a testing facility that would employ at least 400. The company requires rezoning approval from the Chandler City Council before moving forward.
- Aventis Pharmaceuticals, an affiliate of Sanofi-Aventis, a France-based firm with operations in Tucson, opens a regional office is Scottsdale.
- Molecular Profiling Institute, a firm created by TGen and the International Genomics Consortium to commercialize TGen discoveries, receives \$7.5 million in private investment.

Strategy 3: Enhance business environment

- Biotech and pharmaceutical firms continue to improve in attracting venture capital, helping to boost Arizona VC to its highest levels since 2002.
- Entrepreneur magazine names Phoenix the top large city nationally for starting a new business.
- The Arizona BioIndustry Association adds professional staff for the first time via a grant from the Flinn Foundation, intended to strengthen the infrastructure of the trade association and to build its leadership capacity in developing Arizona's bioscience sector.
- The biosciences are well represented at the Governor's Celebration of Innovation, winning awards for Startup Innovator of the Year (DMetrix), Small Company of the Year (Intrinsic Bioprobes), and Innovator of the Year in Academia (Center for Infectious Disease and Vaccinology, Biodesign Institute at ASU).

Strategy 4: Prepare work force, educate citizens

- Civic leaders spend four days at the Arizona Town Hall discussing the state's opportunities to advance the biosciences. Town Hall officials plan to share a final plan with audiences throughout Arizona.
- A new Web site, Arizona BioBasics, provides fundamental information about Arizona bioscience in plain language. The site, accessible at www.arizonabiobasics.com, is geared to lay audiences with basic questions

about the state's efforts and resources. Another site is launched that presents information geared to tech companies starting or expanding in Arizona -- www.azbiztechdev.com.

Compiled by the Flinn Foundation.