

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 third quarter of 2005.

Strategy 1: Build research infrastructure

- [University of Arizona](#) researchers played a leading role in a just-completed international effort to decipher the genetic code of rice. The findings, published in *Nature*, could be used to improve rice varieties to produce higher yields and have greater resistance to disease and drought. Rice feeds half of the world's population, and its demand is expected to double in the next 50 years.
- Mayo Clinic celebrated the opening of its new Collaborative Research Building, a 110,000-square-foot, \$25-million facility on its Scottsdale campus. The building initially will house researchers from Mayo Clinic and the Translational Genomics Research Institute. TD2, a TGen drug-development subsidiary, moved its operations there from downtown Phoenix and TGen's Cancer Drug Discovery Laboratory also relocated from Gaithersburg, Md.
- The Biodesign Institute at Arizona State University received a \$14.8 million grant to develop a pediatric pneumonia vaccine. The grant, from the Bill and Melinda Gates Foundation, supports the work of Roy Curtiss, a top microbiologist whom the university recruited in 2004 from the University of Washington in St. Louis. The grant is the third largest to an individual researcher in ASU history.
- Northern Arizona University and TGen received \$8.5 million in federal grants and corporate support for research of sepsis and community-acquired pneumonia, two of the world's leading killers. The funding is from the U.S. Department of Health and Human Services and Applied Biosystems Group of Foster City, Calif. TGen also landed a \$7 million grant from the National Institutes of Health for continued research into the genetic causes of neurological and mental health disorders.
- ASU professor James Collins was named to lead the National Science Foundation's Directorate for Biological Sciences. He will oversee NSF's \$580 million annual investment in biological research. Collins is a professor of ecology, evolution and environmental sciences.

Strategy 2: Build critical mass of firms

- Covance, a major international drug-development firm, purchased 38 acres in Chandler. The New Jersey-based company has not yet announced plans for the site.

- InNexus Biotechnology, a Canadian drug developer, listed Phoenix as one of three possible sites for U.S. expansion, citing the strength of the nearby Mayo Clinic in Scottsdale.
- The Arizona Board of Regents approved licensing agreements between Arizona Technology Enterprises, ASU's tech-transfer company, and two startup firms stemming from ASU research: Cynexus and MotionEase.
- Tucson-based AmpliMed Corp. reached a licensing agreement with a University of Arizona Foundation spin-off to develop an anti-cancer compound donated to UA by Procter & Gamble.

Strategy 3: Enhance business

- Venture capital deals with three bioscience firms helped Arizona to record its best quarter in attracting VC since 2002. The state's \$68 million in the second quarter of 2005 was bolstered by funding to Chandler-based Sensys Medical Inc. and two Tucson firms, AmpliMed Corp. and High Throughput Genomics.
- Arizona sent a delegation of nearly 50 people to Philadelphia for the international convention of the Biotechnology Industry Organization. The Arizona Pavilion, with 27 exhibiting organizations coordinated by the Arizona Department of Commerce, commanded a more prominent, visible location in the exhibition hall than at past conventions.

Strategy 4: Prepare, educate citizens

- Pima Community College and employers in Pima County will benefit from a federal grant of more than \$275,000 to bolster the bioscience work force in southern Arizona. The Biotechnology Industry Demonstration grant, awarded to JobPath Inc., will be pooled with \$185,000 in matching funds to bolster the local bioscience industry through a summer biotechnology education institute, job training programs and an internship program. JobPath participants are typically asked to pay back what was invested in them either directly or through community work.
- Mesa High School biotechnology teacher Xan Simonson finished in third place at the National Biotechnology Teacher-Leader competition, held in conjunction with the BIO convention in Philadelphia. She is one of two Arizona teachers named finalists.
- Martin Shultz was named chairman of Arizona's Bioscience Roadmap Steering Committee, the body overseeing the implementation of the state's long-term biosciences strategy. Shultz, vice president of government affairs for Pinnacle West Capital Corp., succeeds former Phoenix Mayor Skip Rimsza, the committee's inaugural chairman. The move coincides with an expansion of the committee to include participation of more than 60 statewide institutions from

the private and public sectors, plus the creation of a more formal structure of supporting committees and work groups.

Compiled by The Flinn Foundation.