BIOTECH PROGRESS REPORT

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According to the Arizona's Bioscience Roadmap, commissioned and coordinated by the Flinn Foundation, 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 2007.

Strategy 1: Build Research Infrastructure

- The state budget passed by the Legislature and signed by Gov. Janet Napolitano includes \$100 million for Science Foundation Arizona over four years and \$25 million for the Phoenix Biomedical Campus. The biomedical campus funds will support programs of the University of Arizona College of Medicine-Phoenix in partnership with Arizona State University, plus the design of two new buildings to house education and research programs of the three state universities.
- Maricopa County commits a second round of \$5 million to the International Genomics Consortium, following on its initial commitment of the same amount in 2002. The funding requires benchmarks to be met, including a total staffing of 90 employees by 2011.
- UA's Arizona Cancer Center forms the Skin Cancer Institute to promote a multidisciplinary, collaborative approach to tackle the disease, uniting laboratory researchers, clinicians, and health educators. The Tucson-based institute will have a branch in Scottsdale.
- Carondelet Health Network announces plans to open a 25,000-square-foot, 42-bed neurological institute at St. Joseph's Hospital in Tucson. The program will provide care for patients with severe brain and spinal injuries, and will help ease Tucson's shortage of neurosurgeons.
- Researchers at the Biodesign Institute at ASU receive nearly \$9 million in grants to develop a cancer vaccine. The project will involve collaboration with other institutions, including Mayo Clinic's Scottsdale campus.
- TGen announces three major findings involving identification of genes that play a role in ALS (Lou Gehrig's disease), cancer, and Alzheimer's disease. The projects are in collaboration with local and national academic and industry organizations.

Strategy 2: Build Critical Mass of Firms

• The City of Phoenix plans an \$80 million, 270,000-square-foot building in downtown Phoenix to house a range of tenants engaged in biomedical and

research enterprises. Plaza Companies of Glendale will develop the 2.6-acre parcel at Van Buren and Seventh streets, next to the Phoenix Biomedical Campus. Construction would begin in late 2008 and be completed within two years.

- UA completes a land swap with KB Homes, paving the way to construction of a 65-acre biosciences park in south Tucson. When completed, the Arizona Biosciences Park will comprise nearly 3 million square feet of office, lab, educational, and residential facilities. In return, KB Homes receives 124 acres at the UA Science and Technology Park for future residential development.
- Ventana Medical Systems is targeted for takeover by pharmaceutical giant Roche, the world's largest maker of diagnostic tests. Roche makes an unsolicited \$3 billion bid that Ventana subsequently rejects. Ventana, an international cancer-diagnostics company, employs 660 at its headquarters in Oro Valley and about 950 worldwide.
- Systems Medicine, a TGen affiliate with offices in Scottsdale and Tucson, is purchased for \$20 million in stock by Seattle cancer-therapy firm Cell Therapeutics. The deal will provide Systems Medicine greater capital for developing anticancer drug Brostallicin while remaining in Arizona.
- Cancer Treatment Centers of America chooses Goodyear for its fifth hospital facility, expected to provide 420 jobs with an average annual salary of \$50,000. The for-profit chain had earlier selected Phoenix though ultimately favored Goodyear due to tax incentives.
- ImaRx Therapeutics, a Tucson-based drug developer, goes public via a \$15 million initial public offering. The 8-year-old firm with 32 employees joins Ventana Medical Systems as the city's two bioscience firms traded on a major index.

Strategy 3: Enhance Business Environment

- Science Foundation Arizona awards nearly \$10 million in grants to eight research collaborations through its Strategic Research Group program, designed to advance major collaborations between Arizona researchers and industrial partners. SFAz also funds eight research programs statewide totaling about \$2 million through its Small Business Catalytic program, which seeds investments in innovations that may have high-impact commercial outcomes.
- The 2007 Arizona Bio Expo attracts more than 220 to downtown Phoenix to hear presentations by state and national leaders in science and business. Nearly 300 attend the third-annual Excellence in Bioscience Awards Dinner, where eight local individuals and organizations were honored. The events are hosted by the Arizona BioIndustry Association.

- Gov. Napolitano honors two Tempe medical-device makers—Kinetic Muscles Inc. and Cranial Technologies—with Arizona Innovation Awards. She launched the program earlier this year to promote innovation, math, science, and technology in Arizona.
- Gov. Napolitano concludes her yearlong chairmanship of the National Governor's Association with a final report, "Investing in Innovation," presenting best practices nationally. A spread is devoted to Arizona's bioscience sector.

Strategy 4: Prepare Workforce, Educate Citizens

- Classes begin at the new medical school in downtown Phoenix, the University of Arizona College of Medicine-Phoenix in partnership with Arizona State University. Twenty-four medical students comprise the first class at the school's facilities in three remodeled buildings of the historic Phoenix Union High School.
- Sarah Whitley, a graduate of UA and Phoenix's North High School, is named the medical school's first Apogee Scholar. The scholarship, created by Apogee Physicians, is valued at roughly \$80,000, covering tuition, books, and fees over four years of study.
- Science Foundation Arizona awards grants of \$3.2 million to nine projects to advance K-12 education in Arizona in science, technology, engineering, and mathematics. The program encourages collaborative approaches with industry, nonprofits, or local governments.