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# Progress Report for Positioning Arizona for Success in the Biosciences

## *Preliminary Economic Development Work Group Recommendations*

- Capital Formation/Incentives
- Entrepreneurial Assistance
- Facilities

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# Executive Summary

## INTRODUCTION

The Flinn Foundation commissioned *Arizona's Bioscience Roadmap* in April 2002 and released the study results in December 2002. This statewide Roadmap laid out a set of strategies and actions to position Arizona in selective fields of the biosciences, both in research stature and commercialization and consequent economic impact of this research. Four strategies and nineteen proposed actions were contained in the Roadmap.

In early 2003, Flinn formed selective work groups for several of these key economic actions related to the commercialization of this research and insuring its contributions to the state's economy in the future. Among the actions selected for further review and positioning were those related to financing biosciences firms (capital formation/incentives); entrepreneurial support in the formation of biosciences firms; and facilities for biosciences firms.

Co-chairs were appointed for each work group with staff support provided to each work group by Sandra Johnson, Associate Director of the Flinn Foundation, as well as by the Battelle Memorial Institute, retained by the Flinn Foundation to assist in both the development of the *Arizona's Bioscience Roadmap* and its implementation.

While building Arizona's research base is a prerequisite to creating a set of industries in the biosciences, ways also must be found to form the capital base necessary to finance the startup enterprises that will commercialize the research. The *Arizona's Bioscience Roadmap* pointed out that Arizona must have an indigenous venture capital base for biosciences if it is to leverage outside later-stage venture investments. It must have adequate wet labs and facilities for both researchers and firms and space for incubation and acceleration. And Arizona must have the kind of support to encourage bioscience firm formation and growth in Arizona, thereby increasing the birth rate of new bioscience firms and reducing their death rate.

The Capital Formation Work Group focused its efforts on examining ways to encourage private investors to increase capital available for Arizona-based bioscience enterprises; to increase the size and number of venture funds located and investing in Arizona bioscience deals; and to increase partnerships of industry and higher education. The Entrepreneurial Assistance Work Group looked at what existing support and assistance was available to bioscience entrepreneurs, identified missing gap and ways to fill these gaps. The Facilities Work Group examined current and projected need for multi-tenant and single-tenant space for bioscience firms and research space for research organizations.

## **Work Group Reports and Recommendations.**

Outlined below are the recommendations of each of the Work Groups. The full report for each group describes their method of approach, benchmarking, and best practices information, and includes data and other information documenting the problems and issues facing Arizona.

- **Capital Formation/Incentives Work Group Recommendations.**
  1. Modify Arizona's R & D Tax Credit adding a "super credit" for research expenditures pursuant to sponsored-research agreements with an Arizona university.
  2. Establish an Arizona Venture Investment Tax Credit.
  3. Form an Arizona Fund of Funds (including creation of a BioSeed Fund).
- **Entrepreneurial Assistance Work Group Recommendations.**
  1. Establish a Biosciences Circuit-Rider Serial Entrepreneur-in-Residence.
  2. Consider establishing a Statewide Arizona Biocollaborative (long term).
- **Facilities Work Group Recommendations.**
  1. Complete a full market analysis of space needs and demands.
  2. Finance bioscience leasehold improvements through a pool or fund.
  3. Identify funding sources and provide operating support for incubator space and incentives to encourage accelerator space in each of Arizona's major cities.
  4. Encourage private developers to develop multi-tenant and single-tenant space suitable for bioscience firms as demand continues.
  5. Encourage the Arizona Board of Regents and the state's public research universities to develop streamlined procedures and policies so bioscience firms have access to university facilities, labs, and specialized equipment.
  6. Establish a Smart Shell Biosciences Facilities and Equipment Program and Revenue Authority for Arizona (long term).

## **Conclusion.**

These recommendations will require the support of and widespread collaboration among many groups and organizations throughout the State of Arizona. The Flinn Foundation has established the Arizona's Bioscience Steering Committee to play several roles including:

- Catalyze and steer private and public actions in support of Roadmap implementation for both scientific platform and economic development work group recommendations
- Educate and inform opinion leaders on Arizona's opportunities, progress, and needs in the biosciences

- Identify progress, remaining gaps, and encourage action
- Serve as stewards of the Bioscience Roadmap

If these economic development recommendations are addressed, Arizona will have capital, facilities, and entrepreneurial support elements in place to complement the scientific platform recommendations that together are critical to the successful implementation of the *Arizona's Bioscience Roadmap*.