377f The Institute for Collaborative Biotechnologies: a Powerful Alliance between Academia, Industry, and the Army

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In 2003, the University of California, Santa Barbara (UCSB), in partnership with the Massachusetts Institute of Technology (MIT), the California Institute of Technology (Caltech), the Army Research Office (ARO), and a number of industrial partners, began operation of the Institute for Collaborative Biotechnologies (ICB).

The ICB is chartered as a University Affiliated Research Center (UARC) to provide basic research, development, science and engineering capabilities deemed essential to the Army and the Department of Defense. In addition, by means of the UARC contract, the ICB may also perform research sponsored by other government agencies for programs which are within the scope of its core competencies.

The Institute for Collaborative Biotechnologies is composed of interdisciplinary teams of molecular biologists, chemists, physicists and materials scientists, working together with mechanical, electrical and chemical engineers. Their overall mission is to elucidate and harness the power of complex biological mechanisms, in order to accelerate the development of advances in biologically-based or biologically-inspired sensors, electronic, optical and magnetic materials, information processing techniques and network control systems.

The ICB's technology transitioning strategy is to build strong three-way working collaborations with Army laboratories and industry partners, in order to keep both current and future technology needs in focus, and to accelerate the transition from discovery to prototype development, commercial production and acquisition. Resources for these activities comes from Army basic research (6.1) funding, Army applied research (6.2) funding, Defense Advanced Research Projects Agency (DARPA) projects, other Federal and State agencies, Small Business Innovation Research (SBIR) grants, and collaborative research projects with ICB industrial partners.

The presentation will discuss the challenges encountered, the synergies realized, and the lessons learned during the first two years of operation of this unique and powerful collaboration between academia, industry, and the Army.