



Science of Signatures Advanced Studies Scholars Program 2014



Speaker: Duncan W. McBranch, Ph.D., Deputy Principal Associate Director, Science, Technology, and Engineering (PADSTE)

Title: Building a Start-up Company

Abstract: Various aspects of building a start-up company will be discussed.

Bio: Duncan is the Deputy Leader for the Science, Technology, and Engineering (STE) directorate at the nation's premier national security science Laboratory, with over 4,000 staff and \$1.2B in operating budget. He directly manages the Laboratory's strategic investments in STE, including technology transfer; the Los Alamos internal directed R&D program, research library, student and postdoctoral research programs, and educational centers and research institutes. He also serves as the program leader for our DOE science and energy programs, industry collaborative research, and NIH. In the last five years, under the Laboratory's Energy Security strategy, funding in this portfolio grew from \$160M to \$230M. As Division Leader for Technology Transfer (2005-2007), Duncan led the interface to industry, the commercialization of inventions, and the spinout of regional technology businesses, from across the Laboratory. As TT leader, he revitalized our approach to working with industry. As a result of new strategies and initiatives, Los Alamos is now a leader within all Department of Energy national laboratories for our strategic interactions with industry through Cooperative R&D agreements (CRADAs), and novel mechanisms for bringing venture capital investment to accelerate start-up generation and build a regional ecosystem of innovation (our Venture Acceleration Fund and LabStart). Previously, Duncan led teams solving complex research, technology, and business problems for over 15 years. This includes founding a biotechnology company (QTL Biosystems), to develop rapid assays for the life sciences markets and handheld detection solutions for environmental pathogen detection. Duncan began his technical career at Los Alamos as a Director's Postdoctoral Fellow, and then led a research team investigating polymeric materials for nanotechnology with applications in optics and electronics. He has published more than 70 articles in technical journals in materials, chemistry, and biotechnology, and is an inventor with patents across a broad range of applications. Duncan earned undergraduate degrees in physics and mathematics (Whitman College) and a Ph.D. in materials physics (University of California, Santa Barbara).