Mr. Anderson holds a B.S. in Mechanical Engineering from Syracuse University, L.C. Smith College of Engineering and Computer Science and a M.B.A from Boston University School of Management.

The Juvenile Diabetes Research Foundation (JDRF) Artificial Pancreas Project (APP) is a multi-million dollar, multi-year initiative with a mission to accelerate the development of diabetes management systems that will automate control of blood glucose in patients with diabetes. This initiative was launched in 2006, with the goal to support research and development strategies that will advance technologies that can be developed and commercialized. These technologies will confer the long-term benefits of improved glycemic control by combining novel automated control algorithms and hormone therapies with continuous glucose monitors (CGM) and pump devices. To achieve this goal, JDRF has supported research and development in academia, industry and partnered with regulatory agencies in the United States and abroad.

The JDRF has defined an iterative roadmap to fully automated, multi-hormone Artificial Pancreas systems. In the near term, minimization of hypoglycemia and hyperglycemia exposure may be realized with currently FDA-approved products combined with novel algorithms and employed in a semi-automated manner. Technological advancements in glucose sensing, multi-chambered pumping devices, advanced algorithms, and availability of suitable formulations of hormones such as glucagon and amylin will allow for next generation systems and ultimately fully-automated systems to be developed and commercialized. Recent data from the JDRF APP Consortium of investigators working on novel algorithms has shown tremendous promise using a variety of approaches and strategies. Significant improvements in glycemic control, reductions in hyperglycemia, and reductions in hypoglycemia have been demonstrated using Model Predictive Control (MPC) approaches as well as using modified Proportional Integral Derivative (PID) algorithms. Novel insulin delivery tools, such as microneedles, may improve insulin kinetics and ease of insulin delivery. The evolution of continuous glucose monitoring technologies, perhaps to include sensing mechanisms other than the traditional glucose-oxidase chemistry, will also allow for more aggressive euglycemic targets to be achieved.
Diabetes is a major burden on the individual afflicted with the disease and their family requiring daily intensive monitoring and treatment. Furthermore, diabetes exacts a tremendous toll on the healthcare system in the United States and globally. Approval and delivery of innovative technologies that will be part of a functioning artificial pancreas has the potential to transform the treatment of patients with diabetes, both by minimizing the risk of developing devastating and costly diabetic complications and reducing the burden of the disease.

Wednesday, February 9, 2011
Networking Reception 5:30-6:30pm  Presentation 6:30-7:30 PM
Hartford Hospital Jefferson Building
85 Jefferson Street (Room JB118), Hartford, CT
Free parking at 80 Jefferson Street Lot off of Hudson Street
Directions will be sent when RSVP is received.

**Optional tour available of the new Center for Education, Simulation and Innovation at Hartford Hospital. Please RSVP for this tour.**

NO CHARGE TO ATTEND, BUT RSVP REQUIRED
RSVP to: Terri Wilson – 860-547-1995 or toll free: 877-723-2266
Email: theresa.wilson@beaconalliance.org