## Andrew DeHennis Sensors for Medicine and Science, Inc., USA

Andrew David DeHennis was born in Philadelphia, PA. In 1997 he received a BS in Physics from Millersville University achieving Departmental Honors with his senior thesis entitled "X-ray determination of crystal orientation".

After graduation, he took a position as a Software Engineer at Metrologic Instruments, Inc., Blackwood, NJ (now Honeywell Scanning and Mobility ) from 1998-1999 and was the lead software engineer in the development of a patented package dimensioning, bar code scanning, and tracking conveyor belt system. Returning to academia in 1999, he earned his MS degree in 2001 and Ph.D. degree in 2004 in Electrical Engineering from the University of Michigan, Ann Arbor. His thesis work entitled "Remotely Powered, Wireless Monitoring Systems" focused on the development and integration of bulk and surface micromachined sensors that were monolithically integrated with wireless interface circuitry. Applications for these sensors ranged from environmental monitoring to intra-cranial pressure and intra-arterial flow transduction. His thesis research also enabled a monolithic fabrication process integrating pressure, temperature, and humidity sensors. In 2004, he joined Sensors for Medicine and Science, Inc., Germantown, MD where he is currently Engineering Manager. His teams work focuses on the development of a human implantable, wireless, continuous glucose monitoring system (CGMS) with a "grain-of-rice" sized sensor along with a wearable, external monitoring system. Realizing this unique and challenging system has required advances and innovation in RF materials, micro-assembly and packaging, sensor/circuit integration, ASIC design, as well as sensor calibration means and algorithm development. He is the lead R&D engineer working to progress the CGMS sensor platform through the FDA approval process in moving towards commercialization and its future integration into an autonomous, closed-loop artificial pancreas.