

NICHOLAS MCBRIDE

Cambridge Scholar, 2007

Degree: Worcester Polytechnic Institute, B.S. Biomedical Engineering, 2007

Research Area: Infectious Disease Research on Mycobacterium Tuberculosis



Nicholas McBride graduated from Worcester Polytechnic Institute in 2007 with a B.S. in Biomedical Engineering and a minor in International Studies. At WPI he was the recipient of numerous academic awards including the Charles & Wenonah Decater Scholarship, a MASSGrant, a Gilbert Grant, a Worcester Polytechnic Institute Scholarship, the Cape Cod Associates Scholarship competition award, the Cape Technology Council Laptop Scholarship competition award, and the President's IQP Award for a flooding and erosion control research project. Nicholas began his research as an intern at the Woods Hole Oceanographic Institution in Massachusetts, where he studied *Alexandrium fundyense*, a dinoflagellate that causes toxic red tides and shellfish bed poisonings across the northeastern seaboard of the United States. In 2005 he worked on the Biomedical Engineering Design Project team, and built a prototype tissue culture incubator for use in real-time microscopy. In 2006 he interned at Total ReCord, Inc. in Massachusetts, and developed assays for quality control of an implantable spinal cord regeneration product. As a college senior, he completed a project combining aspects of biomaterial-tissue interactions, tissue engineering scaffold design, and biomechanics, in order to enhance clinical applications facilitating angiogenesis and myocardial regeneration, and thereby improve survival rates and cardiac function for heart attack victims. Nicholas has traveled extensively abroad, using his engineering skills for service projects in underdeveloped communities. In 2006 he designed rainwater flooding and erosion control systems for impoverished settlers in Windhoek, Namibia, and through Engineers Without Borders he worked on a water system in a remote village in Chiapas, Mexico. In addition to his science, Nick volunteered in the Emergency Medical Service as a certified Emergency Medical Technician in Massachusetts, a WPI Global Ambassador, and a member of the Biomedical Engineering Society, the Society of Hispanic Professional Engineers, the Tau Beta Pi Engineering Honor Society, and Mu Sigma Delta. He is also an avid runner, snowboarder, and curler, and has practiced Tang Soo Do for many years, for which he earned First Dan rank. Nicholas hopes to use his "research in biomaterials to implement novel designs of disposable medical devices that will revolutionize the field of medicine in the developing world" and to "become a leader

in the advancement and production of affordable medical devices, making improved healthcare more readily available worldwide.”