Katie Sciuto

www.katiesciuto.com www.linkedin.com/in/ksciuto

Biomedical engineer with 9+ years of research experience in cardiac electrophysiology and image processing.

- Accomplished in tackling diverse challenges at the world class level as a researcher, professional stuntwoman, and aerial skier
- Highly experienced in teaching, mentoring, and coaching across broad ranges of abilities, knowledge, ages, and personalities
- Exceptionally organized and detail oriented with a professional demeanor and drive to excel

Education

Dec 2018 — **PhD, Biomedical Engineering - Cardiac Electrophysiology and Biophysics,** 3.95 GPA
University of Utah, Salt Lake City, UT

May 2012 — **BS, Biomedical Engineering Major / Chemistry Minor,** 3.67 GPA
University of Utah, Salt Lake City, UT

Experience

Aug 2012 – present — **National Science Foundation Graduate Research Fellow / Graduate Research Assistant**
Cardiovascular Research and Training Institute - Zaitsev Laboratory, Salt Lake City, UT

- Identified critical mitochondrial events leading to cell death in the aftermath of sudden cardiac arrest
- Developed a perfusion system that renders tissue transparent, leading to high resolution 3D image reconstruction of cardiac muscle and fibrosis using two-photon microscopy
- Published 3 first-author and 3 coauthored manuscripts, presented novel findings at multiple conferences
- Secured funding for 3 years by being awarded a prestigious National Science Foundation fellowship
- Mentored an undergraduate in confocal microscopy research, culminating in the student's honors thesis

Aug 2011 – Dec 2016 — **Head Teaching Assistant / Teaching Assistant**
Bioengineering Department - University of Utah, Salt Lake City, UT

- Taught undergraduate students neural and cardiac electrophysiology and anatomy, computer modeling using Matlab, biomechanics, and bioelectricity related to the cardiovascular system
- Supervised laboratory sections while engaging students individually to enhance comprehension, foster problem solving, and cultivate a passion for engineering

Sept 2009 – Jul 2012 — **Undergraduate Research Assistant**
Cardiovascular Research and Training Institute - Poelzing Laboratory, Salt Lake City, UT

- Investigated cardiac electrical propagation & gap junctions with optical mapping & immunohistochemistry
- Published 2 coauthored manuscripts and presented findings at 5 conferences
- Mentored students in optical mapping research methods, leading to one student's PhD dissertation project

Sept 2006 – Oct 2009 — **Office Manager**
Youth Winter Sports Alliance, Park City, UT

- Created the company website and implemented online event registrations and auction service
- Directed multiple aspects of the annual gala event, raising a record quarter million dollars in 2009
- Responsible for all accounting operations (e.g., budgets & payroll), board meeting preparation/minutes, marketing & event graphic design, technical support, newsletter development, and database management

May 2005 – Mar 2010 — **Administrative Assistant & Freestyle Ski Coach**
Axis Freeride / Fly Freestyle, Park City, UT

- Managed daily operations, customer service, and sales of camps and athlete training programs
- Coached children and adults of all ages and athletic ability (novice to competitive) in freestyle skiing while maintaining a healthy, safe, and positive training environment

Sept 2001 – Aug 2002 — **Laboratory Assistant**
US Geological Survey, Anchorage, AK

- Processed DNA from animal tissue samples, resulting in work acknowledged in a published manuscript

Specialized Skills

Knowledge & Expertise
Cardiac Electrophysiology
Confocal & Two-Photon Microscopy
Optical Mapping
Image Processing & Data Analysis

Tools & Technologies
Matlab
ImageJ
Microsoft Office Suite
Adobe Photoshop & Illustrator

Interpersonal Skills
Team-Centered Leadership
Written & Verbal Communication
Adaptable Under Pressure
Complex Problem Solving

Achievements & Activities

- **Publications:** http://tiny.cc/ksciuto-publications
- Screen Actors Guild Member & Professional Stuntwoman (2006 – pres.)
- 2007 United States Freestyle Ski Team Member - Aerials
- Bench to Bedside, Graduate Student Engineering Chair
- Undergraduate Research Scholar Honors
- Tau Beta Pi, Engineering Honors Society