

Davidson Fellow
Scott Boisvert

\$10,000 Scholarship Recipient



Personal Info

Age: 17
Chandler, Arizona

School, College and Career Plans

A rising senior at Basha High School, Scott plans to major in biological/health sciences, and pursue a M.D./Ph.D. degree and a career as a physician scientist.

Davidson Fellows Submission (Science)

In his project, "Growth of Amphibian Pathogen *Batrachochytrium dendrobatidis* in Response to the Chemical Properties of Aquatic Environments," Scott demonstrated a link between amphibian aquatic environments and the growth of a pathogenic fungus, *Batrachochytrium dendrobatidis*, which has contributed to the loss of over 32 percent of amphibian species worldwide. Using ion chromatography and ion-coupled plasma spectrometry, Scott studied how the water chemistry of a habitat affects the growth of the microorganism. Scott's project has broad implications for understanding the pathogen's propensity to infect an amphibian host and controlling the spread of infection, benefiting conservation efforts.

Biography

Scott has always pursued opportunities to expand his studies. He has participated in gifted and talented programs throughout elementary school and junior high, and established the work ethic needed to excel in high school. Throughout Scott's high school career he has taken honors, Advanced Placement, and community college courses and tailored his education toward a strong math and science focus.

Scott was prompted to pursue his Davidson Fellows project after learning about the worldwide decline of amphibian species his interest in conservation. Though he had support from his family and university mentors, he still had to overcome obstacles in his research, chief among them was funding. When his mentor's grant was cut, his high school administration provided the additional funding he needed to complete his research. He feels that seeking out new resources, consulting professionals in the field and at times, understanding your limitations are also important factors in conducting research.

Last summer Scott completed an internship at the Translational Genomics Research Institute (TGen), an experience that has confirmed his interests in clinical research. Scott also plays varsity tennis and enjoys backpacking and mountain biking.

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cont.

Honors/Awards

- 2010 Davidson Fellow
- 2010 American Museum of Natural History Young Naturalist Award
- 2010 U.S. Stockholm Junior Water Prize State Award
- 2010 Intel International Science and Engineering Fair (ISEF) Second Place Environmental Science; Navy and Marine Corps Scholarship
- 2010, 2009 Arizona Junior Science & Humanities Symposium First Place Award
- 2010, 2009, 2008 Arizona State Science and Engineering Fair Grand Finalist Award
- 2010, 2009, 2008 Hamilton Invitational Science and Engineering Fair Best of Fair Award
- 2009 Arizona Governor's Celebration of Innovation: Future Innovator of the Year Award
- 2009 U.S. Stockholm Junior Water Prize National Finalist Award
- 2009 Helios Education Foundation: Helios Scholar
- 2009 Intel ISEF Third Place Microbiology, Second Place United States Air Force Award
- 2008 Intel ISEF Fourth Place Microbiology; Second Place United States Air Force; Fifth Place American Society for Microbiology
- 2008 Dr. Voie Stuart Chase Coy Scholar-Athlete Award
- 2007 Discovery Channel Young Scientist Challenge Semifinalist Award
- 2007 Boy Scout National Honor Society Order of the Arrow Award

Community Activities

Scott is a Boy Scout and currently completing his Eagle project. He is also a juryman for the Arizona Teen Court Association which empowers youth in their communities to help change negative and delinquent behavior in their peers. Scott is Co-President of the LINK Crew which helps incoming freshmen transition to high school. Additionally he is in the National Honor Society, Key Club, Math Club, and an intern with the Science is Fun Outreach Program.

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