Research and academics are as much about stamina and resilience as they are about intellect," says UAF psychology professor Tim Lower. "The undergraduate students I've had the pleasure to work with have demonstrated their internal drive to not only succeed themselves, but to produce knowledge that will, in its own way, add to the betterment of humanity."

One such outstanding undergraduate is John Scanlin. Scanlin worked on two studies under Lower's mentorship: What the world needs now: Identifying the relative degree of specific Maslovian needs and degree of species-level self-identification in interstellar messages submitted by a multinational example, and Earth Speaks: Identifying common themes in interstellar messages proposed from around the world. Scanlin presented both projects at the 2010 AbSciCon, an international astrobiology science conference, held this year in Texas.

"My experience doing research at UAF offered me a unique perspective and learning opportunity that the classroom just can't provide," said Scanlin, who received a bachelor of arts degree in psychology in August. In his first project, What the world needs now, Scanlin asks, "If scientists engaged in the Search for Extraterrestrial Intelligence detect a signal from an extraterrestrial civilization, one of the most pressing issues facing humankind will be 'Should we reply, and if so, what should we say?'"

The project is related to Scanlin's second project, Earth Speaks, which incorporates information from the larger online Earth Speaks program, developed by SETI and led by principal investigator Dr. Douglas Vakoch. The SETI program includes text messages, pictures and sounds submitted by members of more than 50 countries commenting on the messages they would want to send an extraterrestrial civilization. Scanlin's project examines the messages and looks for information based on various culture-specific details such as access to clean water, social and political equality, spirituality and spiritual concerns, love and disease or poverty.

Scanlin and Lower developed the project with the help of a 2010 Alaska EPSCoR faculty buyout award, which lessened Lower's teaching load and gave him the time he needed to collaborate on the effort. Lower's degree is in cross-cultural research psychology, and he uses that experience to develop high-interest research topics that either capture the students' imaginations or are particularly relevant to students' lives. "It's sort of like using football analogies to teach a person who is interested in sports about math," explains Lower. "We examine some pretty interesting and, at times, sensitive topics, but we do so in an inclusive, open and honest manner."

Scanlin echoes this sentiment when recalling his own experience as a student.

"I was never the most studious student in the classroom," he says. "But research allowed me an outlet to learn, synthesize and explore psychology in a way that just can't be gained anywhere else in the education process."

For Lower the most rewarding and exciting aspects of the research have been the ability to see students realize their own, previously hidden, potential. Scanlin adds, "I am more focused and confident about what I want to do with my degree because of some of the principles I learned during the research process. I hope that in the future, UAF can offer its students similar opportunities so that others may also enhance their educations."

A version of this article first appeared in the University of Alaska Fairbanks' 2010 "CLA Special Edition" magazine.

---

Is Anybody Out There? by Brooke Sheridan

Photo courtesy John Scanlin

Alaska EPSCOR is funded through NSF award #EPS-0701898 & the State of Alaska