“Advisors should be more than class registration codes taped to a door,” thought Dr. Alan Wilson as he walked past his advisor’s office as an undergraduate student. Originally a pre-med student, Wilson had little guidance from mentors or advisors when he chose classes, or when he switched his major to ecology, much less advice on starting undergraduate research. His own dedication to undergraduates stems from a simple premise – he wants them to have more mentorship than he did at their age. “I didn’t want to be a similar bad advisor to my students,” said Wilson. “I work to engage undergraduates in research as best I can.”

Wilson, who shares a joint appointment as an Associate Professor in Fisheries and Allied Aquacultures and Biological Sciences, was the 2014 recipient of the Provost’s Award for Faculty Excellence in Fostering Undergraduate Research and Creative Scholarship, a prestigious award that rewards outstanding mentors of undergraduates. His record of excellent mentorship began when he pursued his master’s degree in Fisheries and Wildlife at Michigan State University. “We had three undergraduates in my lab when I began my master’s degree,” said Wilson. “It was exciting to see them enthusiastic about the research and we continued to host three students every summer.”

Wilson’s knack for undergraduate mentorship was evident – two of his original undergraduate research assistants went on to get master’s degrees, and one will be graduating with a Ph.D. in aquatic ecology this year. “Some students have a spark,” Wilson said. “With the right encouragement, it becomes a big fire.”

Wilson has worked to fan that fire ever since, working with undergraduates during his Ph.D. program at Georgia Tech, his postdoc at the University of Michigan, and in his faculty position at Auburn University. While at Auburn University, he led a Research Experience for Undergraduates (REU) in aquatic ecology that was funded by the National Science Foundation. The focus of his research was to find ecosystem-friendly ways to reduce the number of algal blooms, which can negatively impact water quality. “I love seeing undergraduates be successful in the lab and head toward their careers,” said Wilson. “Undergraduates bring energy to the lab – their exuberance is great.”

Working with undergraduates is not without its challenges. “Some undergraduates are not a good fit,”
Wilson. “But students should know that not every research experience will work out, and it is good if not better, to learn about what you don’t want to do now. Going outside and getting into a pond isn’t for everybody.” Wilson’s lab, by his own admission, requires a lot of hard work and a willingness to get your hands dirty. “The best students, by far, were the pre-vet and animal sciences students. They dove right into the work,” said Wilson. For his REU, Wilson sought to find undergraduates early in their academic career. “That means I work with freshmen and sophomores, which is definitely more work because they don’t know much about research methods yet,” said Wilson. “However, because they’re so young, they could also fall in love with the research and work in the lab for years.” Wilson likes to bring undergraduates to research early because he believes it gives them valuable skills. “I would be a better researcher now if I had done undergraduate research,” said Wilson. “I know that.”

When seeking mentorship as an undergraduate, Dr. Wilson was met with a closed door. His undergraduate researchers have quite a different experience – they go to the lab, pull on their boots, and join Dr. Wilson in a pond to do their research. “At the end of the day, I’m glad I get to work with students,” said Wilson. “But we need to get better about engaging all undergraduates in research. We all need to do better.”

Wilson’s dedication to undergraduates was rewarded last year when he won the Provost’s award for undergraduate mentorship. “I suspect this will be the most meaningful award I’ll get while working at Auburn University,” said Wilson. “It’s important to me, but it also shows that Auburn University cares about people who care about engaging undergraduates in research.”

Wilson is now on leave from Auburn, working at the National Science Foundation on a temporary appointment as a program director for the Population and Community Ecology program. “Now I get to see the other side of hosting REUs,” said Wilson. “After I finish my appointment, I will be able to help my colleagues at Auburn and other schools navigate the process of finding funding for their own undergraduate research projects,” said Wilson.