MSU’s Beckman Scholars Program (BSP) is so effective that the undergraduate students involved are sometimes mistaken for postdocs, based on their impressive presentation skills and knowledge about their subject areas.

Laura McCabe, professor of physiology and radiology, and director of the MSU Beckman Scholars Program, said the goal of the scholarship program is “to provide top NatSci students with an intensive interdisciplinary research experience, combined with one-on-one faculty mentoring.” With leadership from the Department of Physiology, the program has accomplished that—and more.

“In February 2014, MSU was selected as a host institution for BSP, a highly sought-after invited program for accredited universities and four-year colleges in the United States. High-achieving students in the sciences are invited to apply for the scholarship at the end of their sophomore year, and must have prior research experience. Two or three students are selected each academic year. To date, five students in the College of Natural Science have been named Beckman Scholars (see sidebar), and faculty in the Department of Physiology continue to lead the program in a positive direction.

MSU’s BPS integrates four research areas: Molecular Metabolism and Disease (MMD); Enterics Research Investigational Network (ERIN); Evolution and big data sets (BEACON); and Neuroscience. Each student selects an area of research and a faculty mentor; 10 faculty members are currently involved.

“The idea behind having these four diverse groups is so students can observe scientists from various disciplines interacting and working together,” McCabe said. “Students get to see a broad range of approaches from an interdisciplinary aspect, so they will know how to integrate into labs in the future, with others and do ‘team science’.

“When we select faculty mentors,” McCabe added, “we look for individuals who have a track record of outstanding mentorship, excellent student publications and outstanding research funding.”

One of those top faculty mentors is Julia Busik, associate professor of physiology.

“My undergrads are doing research. They really contribute,” Busik said. “The Beckman Scholars understand that this is not just coming into a lab to work for a couple of hours and be told what to do; this is their project, and they need to go out and find all the resources they can.

“The BSP is a training grant,” Busik added. “It’s important to have this kind of money, and the Beckman Scholars feel good about being funded.”

“I meet with the BSP students almost every week,” McCabe said. “Each student tells the group what they’re doing in the lab. It’s great to see them develop and know their research well enough to be able to talk to others about it.”

For more about the Beckman Scholars Program at MSU, visit: https://natsci.msu.edu/students/undergraduate/beckman-scholars-program/

2015-16 Beckman Scholars

Sanna Fraleigh, a physiology major from Ann Arbor, Mich.; and Kiera Fisher, a biomedical laboratory science major from Kalkaska, Mich.

2014-15 Beckman Scholars

Rebecca Cass Benjamin, a neuroscience major from Webberville, Mich.; Jacob Gibson, a biochemistry and molecular biology major from Spring Hill, Fla.; and Sara MacLachlan, a zoology major from Pittsburgh, Pa.