James Russell peered through the microscope, squinting his eyes in determination. The Massillon science teacher used tweezers to carefully search debris captured with a sifter.

"There's one!" he exclaimed proudly, holding up the tweezers to show his prize: A small bug.

"Here's another!" he said as he plucked another specimen.

Russell is one of 36 Stark County math and science teachers who became students again this summer. He hopes to instill in his Washington High students the same enthusiasm he felt during his internship at EnviroScience Inc. in Stow.

"I'm looking for anything new I can try with real-world applications for the kids," said Russell, who has been teaching for five years.

The internship program, now in its second year, is one of several efforts funded through a five-year, $7.5 million grant Stark County received from the National Science Foundation. The program has grown -- with more businesses and teachers participating this year.
"This gives teachers more credibility in the classroom," said Cindy Class, who coordinates the internship program as part of her job with the Stark County Educational Service Center. "This way, students are able to see how what they're learning is applied in the workplace."

The interns, who teach in grades 5 to 12, will do lesson plans based on their experiences that will be posted on a Web site accessible to other teachers. Each teacher received $1,000 for taking part in the two-week internships -- most of which have been completed.

The 29 businesses offering the internships this summer varied widely. Teachers crunched numbers at the Canton auditor's office, cared for animals and plants at the Akron Zoo, examined ultrasounds at Mercy Medical Center and made lockers at Republic Storage Systems Co.

One had to sign a nondisclosure agreement to go behind the scenes at Lockheed Martin Corp., where scientists conduct research for the aerospace and defense industries.

Six of the teacher interns were repeaters from last year, including Cindy Giavasis, a middle school science teacher in Canton. She interned at the Akron Zoo last year and worked at two local veterinary clinics this year.

"I think it's great experience personally and professionally," she said. "I think there is a lot to offer to bring into the classroom."

Giavasis saw a lot during a week at Stark Animal Hospital in Canton and another at Metropolitan Veterinary Hospital in Copley Township. She watched as veterinarians removed a non-cancerous tumor the size of a grapefruit from a chocolate Labrador and sat in while they amputated a German shorthaired pointer's leg.

"I'm fascinated by that," Giavasis said. "It didn't bother my stomach at all."

Russell didn't get squirmy during his internship either, even though he worked in the field collecting bugs. He and EnviroScience workers will analyze the bugs to help determine the water quality of the Geauga County stream where they were found.
Jamie Krejsa, who worked closely with Russell, said his assistant has done well.

"He's very knowledgeable," said Krejsa, vice president and director of ecological services for EnviroScience, which he described as a national "bio-monitoring firm."

Russell, 28, is eager to share his experiences with his physical science and biology students. He said they often ask, "When will I ever use this?"

He now has an answer.

Illustration: PHOTO: BOB DeMAY / Akron Beacon Journal photos: two photos

(1) Science teacher James Russell has an internship this summer. "I'm looking for anything new I can try with real-world applications for the kids," he said. (2) Science teacher James Russell of Massillon's Washington High School examines stream samples at EnviroScience.

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