

*As schools struggle to offer enough hands-on science, other institutions are stepping up and expanding an academic program they hope will train some of the next best scientists. NY1's Lindsey Christ filed the following report.*

A few floors above the dinosaur bones, scientists are doing serious research at the American Museum of Natural History, though some of them are just 16 years old.

"Today, we are genotyping microsatellites," said one student. "They are short, repeating base pairs in the non-coding regions of the DNA.

In simpler terms, they are studying poop from snow leopards, tigers and jaguars. But nothing is simple about the research.

"They're working with real scientists in real laboratories with the benefit of the best equipment, the collections of this institution, and they're working on real projects," said Ellen Futter, president of the American Museum of Natural History. "Everything from searching for exoplanets in outer space to working with ancient ants in fossilized amber that's 52 million years old."

Before getting into the research program, students spend a year taking advanced after-school science courses at the museum. Then, they're paired with mentors and spend a second year in the lab.

The free program is funded by the Pinkerton Foundation.

"We were extremely enthusiastic about the Museum of Natural History science mentoring program, and that led us to say something that a funder rarely says to an institution, which is, 'Would you like more money?'" said Rick Smith of the Pinkerton Foundation. "And the museum said something that is even more rare, which was, 'no.'"

The museum couldn't handle many more students, though it did agree to expand from 50 to 60. But working with the foundation, it decided to partner with other scientific institutions, like Columbia's Mind, Brain, Behavior Initiative. So starting next year, more than 200 local high school students will be part of the mentoring program, working here and at five other research centers.

"These are very high achieving students who are from underserved areas, so it is a particularly important opportunity for them," Futter said.

"I was actually interested in doing research at my high school, but they had cut their research program there," said one student, who is studying DNA in Wyoming mountain lions.

Next year, she'll study biology at Johns Hopkins University, and in few years, she hopes to be back in the lab, running her own projects.