



From left: Aaron Fidler, Jaxen Call, Ricco Call, Lucien Jellison, Braeden Ward, and Dr. Billy Hudson at the Experimental Biology conference.

Science Scholars

DEDHAM: Four middle school boys from Dedham—Jaxen Call, Ricco Call, Lucien Jellison, and Braeden Ward—have recently returned from the American Society for Biochemistry and Molecular Biology's annual meeting, an international conference that was held in Boston, where they showcased the groundbreaking work they have been doing in discovery science. The impact of their studies could play a pivotal role in cell regeneration. And no, this isn't a theoretical simulation.

"This turned out to be much bigger than we thought it would be," says Rhonda Tate, who teaches middle school science at the Dedham Middle School. Tate partnered with Vanderbilt University a couple of years ago to bring their "Aspironaut" program—an outreach program that allows students in middle and

high school to engage with science—to Maine.

Through the pilot project, the boys were given the opportunity to conduct actual scientific research. Working with a PhD student from Vanderbilt, the boys harvested sea anemones from Northeast Harbor on Mount Desert Island. After running several tests, the students detected the presence of sulfilimine chemical bonds in the anemones' tissues. These bonds work to hold cells together and allow animals, such as starfish, to regenerate tissues. The boys' discovery could have the potential to change our understanding of cell regeneration.

"Learning about science is not just about being observers, but being observers and contributors," Tate says.

—Kaylie Reese

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