

Research, Career Paths, Friendship, and Kaleidoscope™ Standard Tattoos



Dr Ann Aguanno (middle) with her students Jessica Stevens (left) and Devin Columbus (right).

Devin Columbus and Jessica Stevens recently graduated from Marymount Manhattan College, a small liberal arts school in New York City. While there, they worked in Dr Ann Aguanno's research lab studying the CDK5 enzyme and how its presence or absence affects the mammalian nervous system.

At the start of their college years, neither student had any idea that lab research would become such a significant part of their undergraduate experience. Stevens entered as a theater major, but switched to biology after an influential anatomy class. Columbus, on the other hand, enjoyed AP biology courses throughout high school, so majoring in biology was the natural next step. When Aguanno made a request for research students, it seemed merely like a good resume building opportunity for both Stevens and Columbus, but the experience became so much more than that.

Aguanno is enthusiastic about undergraduate research training. She believes that many of her colleagues unfortunately don't invest the time necessary to train undergraduates. "Just having them make up solutions is a good way to drive someone out of science. It takes a good year to get to the point where they are going to be productive and go forward in research," she says.

"I have this cool science thing that I will always have to commemorate these four years in love with science in my life."

To assist with the early training process, Aguanno has implemented a peer mentoring program in which existing students help those just starting out in the lab. As part of her time in the program, Columbus developed a protocol for training new undergrads. The hope is to not only apply this mentoring activity in the Aguanno lab, but to share it with other research labs in liberal arts colleges that don't benefit from a larger graduate research program.

Columbus and Stevens have participated in all aspects of biological research, from autoclaving glassware and making solutions to designing experiments and preparing posters. This training afforded them a greater understanding of the field and a richer overall experience. Their efforts culminated in attendance and participation at conferences, where Stevens says that she quickly recognized the difference between the experiences she had compared to students coming from other schools.

Both Columbus and Stevens agree that their lab work was a pivotal part of their undergraduate career. At the 2009 Experimental Biology Conference in New Orleans, the last conference of their undergraduate careers, they decided that they wanted to get a permanent symbol to commemorate their time in the lab — a tattoo.

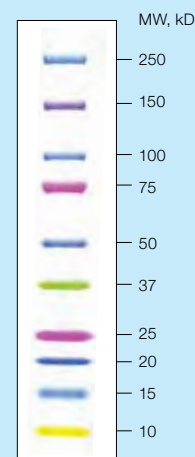


Precision Plus Protein Kaleidoscope standard tattoos (Devin Columbus, left, Jessica Stevens, right).

Stevens explains that when they were trying to decide on the perfect tattoo she instantly said, "Kaleidoscope." For her, the Precision Plus Protein™ Kaleidoscope™ standard is symbolic of her first four unsuccessful attempts at running a protein gel and it didn't work — and the excitement of seeing the protein marker separate for the first time, knowing that she had done it right. Running gels was one of the first techniques they learned together, so the Kaleidoscope protein standard was a fitting representation of the memory.

When people see each tattoo they ask what it means, and Columbus and Stevens are reminded of the work they have done, the knowledge they have gained, and the connections that they made as undergraduates. Stevens summed it up by saying, "I have this cool science thing that I will always have to commemorate these four years in love with science in my life."

To see a video of our interview with Devin Columbus, visit www.myTetraCell.com/video/.



The Kaleidoscope standard is a member of the Precision Plus Protein™ family of standards.

It features:

- 5 bright colors
- 10 sharp, recombinant bands from 10 to 250 kD
- Ability to monitor electrophoresis and western transfer
- Accurate MW estimation
- Lot-to-lot migration consistency

For more information on the Precision Plus Protein family of standards, please visit www.bio-rad.com/pppstandards/.