Alex Hangsterfer's job rocks! Alex is responsible for managing the geological collection that holds about 7,500 deep ocean cores, more than 3,500 deep sea dredges, and approximately 40,000 slides of marine microfossils in the main rock and core collections, and about 10,000 samples of rocks and fossils in the teaching collection.

What inspired you to work in your current field?
I fell in love with the ocean from an early age…from going to the beach and swimming in the waves and collecting rocks and shells, to visiting aquariums and learning all about the animals that live in the sea, to learning about the ocean and all of its inhabitants in school…and knew that I wanted a job in oceanography someday!

Please describe the path that led you to where you are now:
I grew up right outside of Philadelphia, which is where I went to school through high school. After the first time I went to the Baltimore Aquarium when I was very young, and walked in and just screamed with joy after seeing the beluga whales, I knew I wanted to be a Marine Biologist (or at least that’s how it all
started for me), so always had that as a goal from an early time in my life. In middle school, I really started to love science and math and art. I worked really hard to get the best grades possible in middle school and was able to go into advanced placement (AP) science classes in high school. I took as much math and science as I could, as well as majoring in art to help balance the technical with the creative, and also inspire creativity when tackling math and science problems. I participated in Physics Olympics in high school, which was an after school program where we trained in different events, such as catapult and bridge building, parachute drop and problem solving, and then we competed throughout the year with other schools on our area. I also took AP Biology and Chemistry and as much math as I could to help me build as strong of a transcript as possible. My family didn’t have enough money to send me to any school I wanted, so I wanted to be able to have strong enough grades to be eligible for an academic scholarship. I applied for acceptance to Roger Williams University in Bristol, RI for a degree in Marine Biology and was accepted with a full academic scholarship. Along the way, interned at the Marine Biological Laboratory (MBL) in Woods Hole, MA working on tracking sources of contamination of New England waterways by means of DNA sequencing. A few years into getting my degree, I decided to take Physical Chemistry instead of Botany and Phycology and just was swept off my feet as to how excited I was about the subject. This course inspired me to take more chemistry courses and expand my degree to an American Chemical Society (ACS) accredited degree in Environmental Chemistry (with an ocean focus) and Biology, with a minor in Philosophy (to, again, be balanced 😊 ). This took me an extra semester of school, but gave me the time and focus to know what degree I really wanted to get and to also apply for graduate school. I was accepted to Scripps Institution of Oceanography graduate program. I graduated with my undergraduate degree in December and my program at Scripps Institution of Oceanography did not start until September, so I was pleased to be offered a job in Woods Hole for that time period. My internship experience at the MBL in Woods Hole lead to an employment opportunity at Wood Hole Oceanographic Institution (WHOI) working in an Organic Chemistry lab isolating organic contaminants that were thought to be harming or killing marine mammals, that lead to my first co-authorship on a publication in a science journal. My graduate work at Scripps Institution of Oceanography was focused on biogeochemistry of gas hydrates, working closely with deep-sea sediment cores. I was fortunate enough to have the chance to go to sea several times as a student to collect more core samples and also to dive with the submersible DSV Alvin (the one that discovered the Titanic!). I received my Master’s degree in oceanography, with a focus on geochemistry, and was offered my current position as Geological Collections Manager, acting as a curator and manager of an extensive collection of marine sediment cores, deep-sea rocks and a large collection of microfossils from all over the world’s oceans….and have been having a blast ever since! 😊

What experiences helped prepare you for your career?
Engaging in internships and outside the classroom experiences as much as possible; keeping my areas of interest broad as to learn as much as possible and not get too focused in any single area; letting myself change or modify educational and career goals as felt right to do as I went through all levels of my schooling; jumping on opportunities to travel as to see different parts of the country and world and learn as much as I can about different areas, which helped me to decide where in the world I wanted to live and work; going away to college; having a strong connection and communicating with my family.

Please share any funny/inspiring stories or favorite things about your career:
I am technically the Geological Collections Manager, but I have a pet cat in my lab, who acts more like the manager…making me the assistant! But he does provide a nice distraction for graduate students who have very busy schedules 😊

Do you have advice for middle school and high school students interested in a career in science?
Take as many different classes in math and science that you can. Get excited about how cool our world is and how much we can learn about it by going into a career in science. Never stop learning or asking questions! Teachers are there to help guide you, so when you find ones that you really connect with, use them as a mentor to help you get to the next level. Get the best grades you can and get to go to your college of choice. Challenge yourself and don’t get put off if you don’t understand something. Science is hard but fulfilling and you can really make a difference in people’s life, in the environment, as a teacher and much more if you decide to pursue science as a career.

Are there any resources you would recommend for students looking at a career in ocean and earth science, especially at UCSD and SIO?
Check out Scripps Institution of Oceanography and Birch Aquarium public lectures and events and the “Career in Oceanography” tab of the Scripps Institution of Oceanography website (both can be found at the Scripps Institution of Oceanography website: http://sio.ucsd.edu ).
It’s never too early to come tour UCSD/Scripps Institution of Oceanography! UCSD offers public tours of the campus (http://ucpa.ucsd.edu/resources/tours/).
Take a look at after school opportunities at the Ocean Discovery Institute in Pacific Beach, a great place to have fun while leaning more about ocean sciences! (http://oceandiscoveryinstitute.org/)
Check out the Ocean Institute up in Dana Point. This is a great place to visit and possibly take classes! (http://www.ocean-institute.org/)

Favorite quote?
"Believe you can and you’re halfway there." ~Theodore Roosevelt