Oceanography

STUDENT NEWS

From the Rep

A few days ago I was browsing YouTube, watching videos of people who have moved to new countries, specifically, countries that have jobs I’m considering. In this case, it wasn’t the location or the job that caught my interest. It was the attitude of the YouTuber and the reason for the move. He was moving internationally (again) because he felt personally stagnant and stuck. He felt the need to challenge himself and get out of his comfort zone to keep growing as a person.

I wondered, when was the last time I challenged myself? It's been quite awhile. My current operating status is “playing it safe” not “challenging and growing.” Over the past couple years, I’ve felt the need to focus on survival. At times, completing the bare minimum has been a monumental task. I’ve had to pare down on activities and events that I enjoy, simply because they would add to my stress and anxiety.

However, I miss being challenged. I miss the feeling of starting to grasp a new concept—that moment when the world suddenly seems that much bigger and more complex and you aren’t quite sure your mind can wrap around this new idea… but then it does, and everything is slightly different now, and new. Those moments and the view from the other side are worth the discomfort it takes to get there. I am reconciled to having focused my energy and efforts on surviving a difficult period in my life (post-PhD transition, anyone?). Now, I’m ready to start taking a few small, slow steps outside my current comfort zone. Anyone with me?

— Stefanie

TOS Student Member Highlight

KELSEY BISSON. Last December, co-chief scientist and fellow graduate student Nicholas Huynh and I led a group of graduate students on a research cruise in the Santa Barbara Channel. Our at-sea team included a group of artists dedicated to collaboration with the scientists. Our funding for sea time came from the Scripps Ships Fund. With additional support from the National Academies Keck Futures Initiative, I was able to invite a musician, illustrator, and videographer aboard.

Art and science collaborations have recently become trendy, but this idea has been around since before the Renaissance. Why art and science? I was inspired to bring an art team on board after reflecting on the boundaries of my own perspective, and how those boundaries confine my ability to problem solve. How does our approach to science shift by viewing it through another perspective? What new thoughts, problems, and solutions might arise?

Having an art team aboard allowed everyone to feel freer to pursue their passions and to view paradigms within our discipline from an outsider’s perspective. This relaxed atmosphere helped us reexamine our motivation and methods so we could unpack the reasons behind our research and refine our goals. This focus was especially critical during our examination of wildfire impacts on ocean biogeochemistry.

Our collaboration is called Project ROAM: Rendering Oceanography through Artistic Mediums. The results from our collaboration include music, film, and art, such as our cruise magazine (https://issuu.com/migrationsmag/docs/finalmigrationszinepages).

REQUIRED READING

GLOBAL WARMING OF 1.5°C — An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty

The report highlights a number of climate change impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C, or more. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C. Coral reefs would decline by 70–90% with global warming of 1.5°C, whereas virtually all (>99%) would be lost with 2°C.

The report finds that limiting global warming to 1.5°C would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of CO₂ would need to fall by about 45% from 2010 levels by 2030, reaching “net zero” around 2050.

Read the full report: http://www.ipcc.ch/report/sr15

TOS Ballot Coming Soon!

Vote for your next Student Rep on the TOS Council, as well as other open Council positions.

TOS plans to send instructions about voting for open TOS Council positions by mid-November. Biographical information for all candidates will be included on the web-based system used for the election. All TOS student members are eligible to vote.