

INTERNATIONAL WOMEN'S DAY 2018

*Celebrating
Polar
Women*



| Photo by Andrew Margolin, 2013

Allison Lee

Allison Lee is an avid traveler and scientist pursuing her PhD in oceanography at Scripps Institution of Oceanography.

Her first expedition to Antarctica occurred in 2013 as a researcher aboard a US icebreaker followed by a 2017 trip aboard an IAATO tour vessel as a guest scientist. In an effort to share her research with the Antarctic traveler, she developed the FjordPhyto Antarctic Citizen Science project in partnership with Dr Maria Vernet, IAATO operators, and diligent guides.

She is thrilled to have passengers engage in collecting data that will contribute to our greater scientific understanding of how a changing climate impacts ecosystems along the Antarctic Peninsula.





How long have you been involved in responsible tourism?

At the age of 15 I started traveling in a small footprint way, mostly backpacking and self-guiding when possible. Ten years ago, I visited the Amazon jungle with a Peruvian eco-tourism company and that is when I really become aware of what responsible tourism could look like, especially for hard to reach destinations. In 2013, I learned of IAATO and the responsible tourism efforts and early 2017 I became directly involved with IAATO.

How many days have you spent south of 60?

Eighty-one days. My first visit to Antarctica was as a Research Scientist aboard the U.S. R/V Nathaniel B Palmer in the Ross Sea for 53 days. My second visit was as a guest scientist aboard the M/V Hebridean Sky conducting the Citizen Science Project FjordPhyto with ANTARCTICA XXI passengers along the Antarctic Peninsula for 28 days.

What has been your 'defining moment'?

I suppose I have two defining Antarctic moments; The first in 2013 when my former boss asked

if I would go on a research cruise. I had never been to sea before but because of my love of travel and desire to visit the seventh continent I immediately said yes.

Those 53 days at sea were unforgettable. I felt like I was on another planet. And I decided, as a scientist, that if I were to ever go to graduate school it would be to study biology in Antarctica. Three years later, I did just that.

My second was in 2016; the day I accepted admission to the Master's in Marine Biodiversity and Conservation program at Scripps Institution of Oceanography (SIO) at UC San Diego. I had been a research technician for 10 years prior, mixing lab work with field work on various environmental projects.

I loved the work I did in the lab, but I didn't often get into the field as much as I wished. So, I would spend my vacations looking for projects where I could travel and not just be a tourist, but help on a science project as a "voluntourist". I knew Antarctica as a continent set aside for peace and science, hosting around 4,000 researchers during the austral summer. When I learned that the continent received tens of thousands more

tourists, I wondered if I could find a way to engage the IAATO community in that scientific legacy. I partnered with polar phytoplankton researcher Dr Maria Vernet and with her connections to IAATO we developed the Citizen Science program FjordPhyto, with support from the National Science Foundation. As visitors ride to the landing site in a zodiac, polar guides explain how melting glacial ice contributes freshwater to the marine fjord ecosystem.

This alteration of the marine environment influences the community of species, beginning with phytoplankton at the base of the food web. Visitors then have the opportunity to measure these changes and collect samples in order to help us understand these poorly monitored coastal fjords.

In December 2017, I was invited by ANTARCTICA XXI to be a guest scientist on board and see this project in action. It has been an absolute joy to work with the IAATO community and to see the passengers involved in my research. These samples are now contributing to my thesis work as a student in the PhD program at SIO and I want to thank all of our partners for their efforts launching this citizen science project.

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What does International Women's Day mean to you?

I am glad that communities come together to celebrate the achievements women have made and to remember the struggles women have had (and still have). Women make up 50% of the human population; it seems evident they should have the same rights and opportunities as men.

How have things changed for women in the polar fields since you first joined?

I first joined the polar field in 2013 so I'm still fairly new! Today, 55% of the Association of Polar Early Career Scientists (APECS) are female. It is mind-boggling to think that in the 1950s women were actually banned from coming to Antarctica. In 2016, the Scientific Committee on Antarctic Research (SCAR) organized an event to celebrate the Women in Antarctic Research. I helped with this effort and as a team, we created over 150 biographies of female Antarctic researchers and launched more than 100 Wikipedia pages to raise the visible profiles of female role models for early career scientists.

Who inspires you?

I am inspired by adventurous globetrotters and people who are curious about their environment, people who share their stories and experiences with others, who are

vibrantly alive. They remind me, that with enough effort and dedication, you can turn your dreams into realities.

What has been your greatest achievement?

I have the wanderlust gene and am never satisfied sitting still for very long. I could say my greatest achievement was visiting more than 30 countries and all seven continents by the time I turned 30, but you may think that a vapid response. I give that answer, not because I've checked items off a list, but rather, for what I had to accomplish in life to make that happen. I think a lot of people assume you need a lot of money to travel to faraway places, and it's simply not true. I've been traveling since I was 15, saving money, working extra jobs, and aligning my career with research that requires me to be out in the field. The environmental non-profit and conservation sciences are notorious for their underpaid wages. Despite never having made more than a \$42,000 salary, I have managed to go all over the world and have all the basic comforts that keep me happy. I hope that is inspiring to others. I want my friends and family to understand that through strategic planning and serendipity, a million small daily achievements have led to where I am in life today.

Other than the obvious, what must-have items do you always take to Antarctica?

A microscope so I can see all the phytoplankton living in the water! My favorite chocolate bars. A nice outfit for the occasional need to dress up. Addresses so I can send people postcards from the bottom of the world.

What one piece of advice would you give your younger self?

Don't fret about what life will bring you - the good or the bad! As long as you stay curious, optimistic and seize every day, you will be fine. When I was in high school and college, I used to think I had to have it all figured out right then or I was a failure. Maybe it's the school system that instills that anxiety on the youth. I was anxious wondering what career I should have, what five-year plan I should have, what 10-year plan I should have. I needed a life partner, a marriage, a house, kids, and a retirement account. I am 100% for long-term thinking, vision-setting, and goal planning, but my younger self could have just relaxed a little bit! I was so worried thinking about my future self, that I was forgetting to check-in and live in the moment.

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As I got older, things weren't turning out exactly like I had planned and when everything went haywire, I had a lot of reality checks to sort through. Everything got sorted and I had a lot of personal growth. It's all part of being human and figuring out this world. So, I would just tell my younger self to.... chill.

[What would you say to young girls with ambitions to work in Antarctic science and tourism?](#)

Make it happen! Learn about the industry, learn about and meet the women working there. The women I've met who work in Antarctic tourism have strong spirits, practical hands-on skills, good people skills, and are adventurous. They do what they love. I also think women tend to be a little more concerned about how to make relationships work. At least from the young field scientists I've mentored and from my colleagues, I've been asked that question a number of times. If you're traveling all the time, how can you possibly have a partner at home? I still haven't figured that one out, but I would say just do what you love, and the rest will work itself out.

[Name a memorable Antarctic moment for you...](#)

I ran a marathon in Antarctica dressed as a banana the same day I boarded an icebreaker for a two-month expedition at sea. In 2013, when I visited Antarctica for the first time, I flew on the C-130 Hercules from Christchurch, New Zealand to the U.S. McMurdo Station. We had five days on station before the icebreaker came to pick us up for our two-month research expedition in the Ross Sea and someone told me there would be a race. I had a banana costume with me, of course, so I signed up and hit the ice! You can read the full account here

<https://www.systemsbiology.org/wp-content/uploads/2013/12/Antarctica-Marathon-Article.pdf>

[What small change could we all make to better protect the continent?](#)

The continent's greatest threat is global warming and climate change. The Antarctic peninsula is the fastest warming region in the world and the polar regions in general experience more rapid and severe change compared to other places on Earth.

Antarctica may seem so remote and out of sight, yet it is contributing to huge global processes in the atmosphere and the oceans. Everything we do back at home matters in the collective bigger picture. If you can educate yourself on the issues, look into the current research (see The Fifth Assessment Report of the United Nations Intergovernmental Panel on Climate Change) and start making any small changes, do it. How can you have a smaller energy footprint in your daily life? How can you get involved in environmentally friendly causes? Can you influence your politicians in these matters? Can you innovate your business, businesses you work for, or the development of new technology? Can you educate the younger generations? All of these small actions add up to big change. Just start somewhere.

