

Into Extreme Medicine

Emily Stratton '08 Explores the Medical Effects of High Altitudes

I graduated from SGS in 2008, then obtained a major in Biology and minors in Chemistry and Anthropology at Pacific Lutheran University (Go Lutes!). I attended medical school at Pacific Northwest University in Yakima, WA. I then completed my residency in Emergency Medicine at the State University of New York (SUNY) Upstate Medical University in Syracuse, New York, a level-one trauma center. During my time there, I worked as the assistant to the Chief Medical Officer at the Javits Center Field Hospital in New York City during the coronavirus pandemic.

I am currently a fellow at the Mayo Clinic in Aerospace Medicine, which is the specialty that focuses on the flight environment and putting healthy people in unhealthy places. It is a field based on human physiology and how humans adapt to such situations as high altitude, low oxygen, and microgravity environments by caring for pilots and astronauts and performing research.

I went to Everest Base Camp in March/April 2019 as a second-year resident physician. We spent some time in Kathmandu, Nepal teaching wilderness medicine to medical students and basic medical care to secondary students. We then did the hike from Lukla to Everest Base Camp over about three weeks, which was around 100 miles roundtrip, but very intense due to the high altitude and needing acclimatization days. It was an amazing experience! We visited remote Himalayan clinics, including the Everest Base Camp ER along the way, and helped to care for people affected by the high altitude.

This trip could be thought of as an analog to space exploration in various ways. It was not easily accessible (only through helicopter or on foot), a different environment with its own physiological effects, and we were working as a team to reach a goal.

In the future, I hope to work in the operational space-side of Aerospace Medicine, supporting launches and caring for astronauts, while still working in the ED. With the upcoming NASA Lunar and Gateway missions and the development of commercial spaceflight, such as SpaceX, Blue Origin, Boeing, and others, it is an exciting time to be in the field.

Currently, I am also obtaining a Master of Public Health Degree through the University of Minnesota and expecting my first child with husband, Sachin Santhakumar, who is also an Emergency Medicine physician.

Anything is possible with some hard work and dedication, and SGS helps to make your dreams come true! I want to give a special shout out to Pete O'Brien, who was a great teacher and cheered me on every step of the way!

— Emily Stratton'08, DO

Emily is a Fellow in the Division of Preventive, Occupational, and Aerospace Medicine at the Mayo Clinic in Rochester, MN.



“It was an amazing experience!” Emily performing high-altitude research at Everest Base Camp during her medical residency



Emily in a mockup of the Space Shuttle cockpit at NASA Johnson Space Center