Ashley Lynn Corrigan

Graduate Institution: University of California-San Diego

Graduate Discipline: Atmospheric Chemistry

Hometown: Foley, MN

Relevant SC Research: Biological and Environmental Research

Research Interest:

My research focuses on biogenic organic aerosols: their chemical composition and role in the climate system. I have sampled biogenic aerosols in Finland, Brazil, southern California, and in 2013 I will be sampling in the southeastern United States. The goal of sampling in different ecotones is to determine if difference exist in biogenic organic aerosols and how these differences would affect the ability of the aerosol to form cloud condensation nuclei. Measurement techniques used include: Fourier transform infrared spectroscopy, aerosol mass spectroscopy, and single particle microscopy (STXM-NEXAFS). Most recently I participated in a cloud study that took place on Mount Soledad in La Jolla, California, with a second platform measuring on the Scripps Institution of Oceanography pier. The goal of this study was to determine the effect black carbon plays in cloud formation and aerosol difference seen in cloud (Mount Soledad) and below cloud (SIO Pier).

About Me:

I received my B.A. in biochemistry and biology at University of San Diego in 2005. My undergraduate research advisor, Dr. David De Haan, challenged me to think at a more critical level, which has proven to be an invaluable attribute in graduate school. My undergraduate research studying the formation of secondary organic aerosol from glyoxal began my research career in atmospheric chemistry. Currently, I am a third year graduate student in Dr. Lynn Russell's lab at Scripps Institution of Oceanography in San Diego, CA, where I am focusing on the chemical composition of biogenic organic aerosols.

In the future I would like to pursue a teaching career at a primarily undergraduate institute (PUI), as my undergraduate research experience at University of San Diego is the reason I am in graduate school today. I want to continue to bring awareness and enthusiasm to undergraduate research and inspire undergraduates to choose careers in research oriented fields.

In my spare time I enjoy hiking and backpacking throughout southern California and Utah. I am also very dedicated to animal rescue and volunteer with The Barking Lot in San Diego, CA. Since August 2011, I have fostered 10 dogs and transported 200+ dogs from high kill shelters in Los Angeles to our non-profit rescue.