

IRIS FANG

109 Annabel Rd | North Wales, PA 19454 | 215-609-0918 | ifang1@swarthmore.edu | irisfang13@gmail.com

EDUCATION

B. S. (Expected) May 2015 Swarthmore College, Swarthmore, PA 19081; GPA
(current): 3.72; Bachelors of Science in Biology (intended)

H. S. June 2011 North Penn High School, Lansdale, PA 19446

PROFESSIONAL EXPERIENCE

Marine Ecology Intern 6/22/2014 - 8/22/2014

Smithsonian Environmental Research Center, Edgewater, MD 21037

Supervisor: Dr. Denise Breitburg (breitburgd@si.edu)

Completed research project studying diel cycling hypoxia in the Chesapeake Bay. Combined vertical water column profiling and continuous monitoring to study patterns in dissolved oxygen and pH. Assisted in data and specimen collection for other concurrent offshore projects, including deploying YSI sondes overboard and seining. Presented results to fellow researchers, interns, and general public, totaling about 80 people, conservatively.

Responsibilities:

- Collecting data using YSI 600QS and 6600 model sondes in the field
- Calibrating of YSI 600QS daily
- Vertical profiling with YSI 600QS two times per week
- Collecting offshore data with YSI 600QS two to three times per week
- Weekly calibration, data upload, and deployment of two YSI 6600 sondes
- Data entry, analysis, and proofing
- Preparing field gear for land and boat use daily

Marine Biology Teaching Assistant 9/2/2013 - 12/9/2013

Department of Biology, Swarthmore College, Swarthmore, PA 19081

Supervisor: Professor Rachel Merz (rmerz1@swarthmore.edu)

Facilitated weekly discussions focuses on primary research papers. Helped students apply concepts and methods learned in lecture to independent research projects. Collaborated with Professor Merz and other teaching assistants to design more effective discussion meetings for students.

Responsibilities:

- Attending all lectures
- Reading and understanding two to three primary research papers per week
- Meeting with Professor Merz and three fellow teaching assistants weekly to discuss papers prior to small student group discussions
- Facilitating discussion among students in small groups of five to six
- Encouraging all students to actively participate in discussion
- Proctoring weekly quizzes

Atmospheric & Oceanic Science Extern

1/14/2013 - 1/8/2013

Atmospheric & Oceanic Sciences Program, Princeton University, Princeton, NJ 08544

Supervisor: Dr. Jorge Sarmiento (jls@princeton.edu)

Completed week-long Externship program hosted by Swarthmore College alumni. Collaborated with fellow Swarthmore students, Dr. Sarmiento, and Princeton Atmospheric & Oceanic Sciences (AOS) research staff member Carolina Dufour (cdufour@princeton.edu) to investigate seasonal changes in Arctic and Antarctic sea ice area and determine accuracy of sea ice models.

Responsibilities:

- Mapping and analyzing empirical and modeled sea ice extent data using Matlab
- Collaborating with two fellow Swarthmore students and two Princeton staff members to brainstorm research questions
- Presenting findings to Princeton AOS researchers

TECHNICAL SKILLS

- Microsoft Office: Word, Excel, PowerPoint, Publisher
- Adobe Creative Suite: Photoshop, InDesign, Flash
- Data analysis and statistics programs: Morphologika, Kaleidagraph, JMP, Geneious
- Experience using Windows, Mac, and Linux OS

- Coding experience: Python, C, C++, Matlab
- Calibrating, programming, uploading, and deploying YSI 600QS, 6600 sondes
- Experience seining

RELEVANT COURSEWORK

- **Biology (lab included):** History of Life, Biomechanics, Comparative Vertebrate Anatomy, Invertebrate Biology, Cell Biology
- **Biology (no lab):** Themes in Biology (senior capstone)
- **Computer Science (lab included):** Data Structures and Algorithms, Introduction to Computer Systems, Introduction to Computer Science
- **Chemistry (lab included):** Organic Chemistry I, General Chemistry: Honors
- **Statistics:** Data Analysis and Visualization (in progress), Introduction to Statistics
- **Environmental Science:** GIS (in progress)
- **Math:** Single Variable Calculus