



NSF Advanced Training Program in Antarctica for Early Career Scientists: Biological Adaptations to Environmental Change

Course will be held in Antarctica in July 2016 (Austral winter)

Call for Applications: The United States National Science Foundation (NSF) is sponsoring the 10th Antarctic Biology Training Program at Palmer Station, Antarctic Peninsula, in July 2016. This is an international program, open to all nationalities. Applications are invited from (1) graduate students currently enrolled in a Ph.D. program, (2) postdoctoral researchers, and (3) early-career faculty-level research scientists who are interested in the study of current and predicted environmental change and the biological adaptations of polar organisms. (*Note: Applicants in categories 2 and 3 above must be within five years of having completed their Ph.D. degree. All participants must be able to pass the US Antarctic Program's physical and dental deployment requirements.*)

Course Themes: The emphasis of the 2016 Antarctic Biology Course will be on integrative biology, using a combination of laboratory-, field- and ship-based projects focused on biological adaptations of polar organisms to environmental change. A diverse team of instructors will offer participants the opportunity to study a wide range of Antarctic organisms (e.g., bacteria, algae, invertebrates, and fish), as well as study several different levels of biological analysis (spanning molecular biology, biochemistry, physiology, ecology, and evolution).

Training Impacts: The Antarctic Biology Courses (offered since 1994) have a proven record of introducing participants to Antarctic science under realistic field conditions, and providing opportunities to understand and appreciate the complexities and logistical challenges of undertaking science in Antarctica. Course alumni have leveraged their Antarctic course experience to develop new research directions, incorporate polar science into curricula at their home institutions, and enhance public outreach activities. For participants in the 2016 program, the major impacts will be to 1) introduce new researchers to the unique features of biological processes in an extreme-cold environment; 2) place that understanding of Antarctic biology in the context of evolutionary and environmental change in polar regions; 3) train participants in field and research methods that are unique to the study of biology in Antarctica; 4) foster an appreciation for the importance of the Antarctic ecosystem on global processes; and 5) prepare early-career scientists for success in developing their own independent research programs in polar regions.

Travel and Logistics: Participants accepted to the course will receive some financial support to assist with the cost of travel from their home institution to Punta Arenas, Chile. The transit time from Punta Arenas to Antarctica (Palmer Station) will require 4-to-5 days at-sea (depending on ice conditions) aboard a US Antarctic Program icebreaker. While working in Antarctica, full support will be provided for room & board and science activities. Each participant will be responsible for covering the costs of completing the NSF-required medical and dental examinations (required of all participants in the US Antarctic Program). It is anticipated that travel dates to and from Antarctica will be in late June until early August (exact dates will be set in 2016).

Course Directors: Dr. Donal T. Manahan, University of Southern California (manahan@usc.edu)
Dr. Deneb Karentz, University of San Francisco (karentzd@usfca.edu) (main contact for questions from applicants)

Course Website: <https://www.usfca.edu/arts-sciences/antarctic-biology-training-program>

Online Application: <http://goo.gl/forms/aoNP63pRhF>

Deadline for receipt of completed applications: January 25, 2016.