Botany 575 – Desert Ecology and Evolutionary Biology
Tom Givnish and Kate McCulloh • Spring 2016, field trip March 19-27

Deserts are extreme environments that support an unexpected diversity of plant species and adaptations. An historic opportunity to study speciation, community ecology, and photosynthetic and hydraulic adaptations in desert plants, especially winter annuals, is likely this year due to a massive El Niño. We therefore plan to visit a wide range of desert habitats in southern California this spring, conducting research there during a 8-day field trip from March 19th to 27th. This experience will be complemented by an introductory set of lectures and planning sessions before we leave, and by lab work, analyses, and writing and submitting papers for publication after we return.

This course is open to undergrads and grad students. We will meet 1:00 – 2:15 pm on Wednesdays. Those involved in the speciation/population genetics project will spend additional time in the lab after the field trip, extracting DNA and readying it for next-generation sequencing. Everyone will be involved in data analysis and write-up. We estimate costs ca. $600/student, including roughly half the airfare and camping fees, and all food. A generous gift by an anonymous donor to the Department of Botany has made this once-in-a-lifetime opportunity possible, contributing to air and land transportation costs, as well as supplies. The course should be highly educational AND fun! All students will need to be in good physical condition and register for Botany 575 for Spring 2016.

We expect substantial interest in this course, and will almost surely have to restrict enrollment (we have funds for approximately 24 students). This course is being recommended as a (voluntary) lab for Botany 802 (Plant Physiological Ecology), to be offered by Kate McCulloh this spring. To be considered for the course, please answer the questions below and email the form to givnish@wisc.edu and kmcculloh@wisc.edu.

Applications due December 1 – http://botany.wisc.edu/Botany-575