**Title:** Ecology and Conservation of Common Terns (*Sterna hirundo*) Breeding in the North American Great Lakes Region

**Abstract:** The common tern (*Sterna hirundo*) is a long-distance migratory waterbird that breeds in both freshwater and marine environments in many parts of the world. Although it is the most wide-spread tern species in North America, populations have experienced extreme fluctuations during the last half century, with significant declines documented in the Great Lakes region and other inland breeding sites. The Common Tern is listed as threatened or endangered in most U.S. states bordering the Great Lakes. Because of their reliance on coastal habitats, population declines have often been attributed to direct and indirect effects of human activity, such as habitat loss, modification, and degradation. To effectively conserve threatened species, it is imperative to identify where in the annual cycle the population is being limited. For migratory species, this requires detailed information about how birds move across a landscape and how those movements potentially influence survival and fitness. The goal of my dissertation research was to identify potential risks to the population at different life stages and at different spatial and temporal scales by using a variety of tracking methods to study the movement of individual birds throughout their annual cycle. My talk will focus on two studies: (1) documenting connectivity among terns breeding at inland colonies in North America, and (2) assessing how movement influences dietary exposure to mercury. Results from these studies have filled gaps in knowledge about basic life history of common terns breeding in the Great Lakes and have identified multiple potential risks to this breeding population. In my presentation, I will broadly describe methods and highlight results from each study.

