## Title: Make your mark: ID for free-roaming dogs and cats to improve population control and community health

## **Hosts: Margaret Frey**

## Date: September 24, 2014, 12:00 – 1:00 PM

*Abstract*: Join us for a topical lunch to learn about a just-launched project to develop and design a marker to identify-dogs and cats, with a focus on free-roaming animals who have been sterilized without surgery and/or vaccinated against rabies. The lunchtime discussion will have applications to the fields of veterinary medicine, animal sciences, wildlife management, engineering, textiles, and more.

*The need*: Worldwide, there are an estimated 500 million dogs, and outside the U.S., many of them are free-roaming or stray. In the U.S. alone, there are an estimated 95.6 million pet cats, and estimated tens of millions of additional free-roaming, unowned, often-feral cats. Without intervention, animals will reproduce at exponential rates, which can threaten human well-being (dog bites, rabies, and other zoonotic diseases) and ecological health. Culling has proven both ineffective and inhumane, prompting efforts to reduce populations and disease through sterilization and rabies vaccination.

*The challenge*: New non-surgical sterilization tools will greatly increase capacity to control animal populations and reduce disease, but they prompt a key question: how do we know that an animal is spayed, neutered, or vaccinated? This project builds on prior work conducted by the non-profit Alliance for Contraception in Cats & Dogs (ACC&D) to develop an ear marker that can be applied humanely, safely, inexpensively, and without anesthesia—and has the capacity to give us information to improve public health, veterinary medicine, ecological conservation, and animal welfare. Information coding and design, medical device invention, and RFID all play a role.

*The value*: Literally, lives saved! Although this project was inspired by the challenge of identifying vaccinated and non-surgically spayed/neutered dogs and cats, the results may have applications for wildlife tagging and monitoring, as well as marking and tracking of animals raised for food.