10th annual ICCI Cancer Research Symposium
Thursday, May 25th, 2017
Keynote Speaker: Dr. William Eward DVM, MD
Orthopaedic Surgery, Duke University School of Medicine

"Sarcomas in Dogs and Humans: Bringing ‘One Medicine’ from a Hope to a Practical Reality"

It was well over 150 years ago with Rudolf Virchow urged the world to see that “between human and animal medicine there is no dividing line – nor should there be.” Despite Virchow’s foresight, it would be generations before his words were taken seriously. Although sarcomas are seen commonly in dogs, canine sarcomas have been largely ignored by human medical doctors. The price paid is that there has been little progress in the treatment for sarcomas since the 1980s. This talk explores what can be learned by exploring sarcomas across species. Beyond that, we will investigate what the wide and brilliant animal kingdom can teach us about cancer in general? Why do we even have cancer and where in the tree of life is it found? The world of cancer is as vast and strange as the animal kingdom itself. This talk seeks to explore that world a bit deeper. We will review where cancer does and does not thrive within the natural world. We will discuss Peto’s paradox – the inscrutable phenomenon whereby large animals should be more susceptible to cancers, and yet they are not. We will discuss some specific comparative oncology projects in the context of One Medicine – and how we are attempting to make the cancer fight an effort across all types of medicine.

Having spent his childhood in the company of a wide variety of animals, Dr. Eward fulfilled a lifelong dream of becoming a small animal veterinarian in 2000 when he graduated from Auburn University’s College of Veterinary Medicine. He was particularly captivated by his patients with cancer and decided to pursue this interest further. In 2002, he returned to school, receiving an MD degree from the University of Vermont. He currently is on faculty at Duke University with an adjunct appointment at the North Carolina State College of Veterinary Medicine. He spends the first part of the week taking care of humans with cancer and the latter part of the week taking care of animals with cancer. As an Orthopaedic Oncologist, he specializes in preserving and reconstructing limbs that have been jeopardized by a type of cancer called Sarcoma. Given his dual roles in human and animal health, Dr. Eward is committed to using a One Medicine approach to solving the terrible problem that cancer presents to all of us, whether we walk on two legs or four. He runs a lab at Duke that attempts to identify common elements between types of cancer across different species.