OVC Institute for Comparative Cancer Investigation UNIVERSITY of GUELPH

2016 Cancer Research Symposium

Tuesday, May 17th, Room 1714 OVC LLC

3:40 pm Keynote Address

Dr. Jaime Modiano, VMD, PhD
Alvin and June Perlman Professor of Animal Oncology
Director, Animal Cancer Care and Research Program
Department of Veterinary Clinical Sciences, College of Veterinary Medicine and Masonic Cancer Center
University of Minnesota

"Swimming against the current: a turning point in the battle against hemangiosarcoma"

Hemangiosarcoma (HSA) is a common, lethal tumor of dogs that has a unique breed predilection. This disease can arise in almost any anatomical site, but it is diagnosed most often in the spleen, liver, heart, and skin. While some cutaneous HSAs are treatable, almost all visceral HSAs are incurable. The ontogeny of HSA was originally assigned to cells from the endothelial lineage based on inference from its morphologic appearance. However, accumulating data indicate that HSAs originate from pluripotent bone marrow progenitors. We have developed a molecular subclassification of HSA to provide a foundation for understanding both its intrinsic character and that of the cells that comprise its microenvironment. This has also guided discovery and development of an EGF-bispecific angiotoxin (eBAT), is a novel biological consisting of a dually targeted, recombinant bacterial toxin. eBAT is safe, and it improves outcomes for dogs with HSA in the adjuvant setting. This has prompted its combination with identification of HSA cells in the blood as a novel approach for early detection and chemoprophylaxis. The presentation will begin with a brief historical perspective and review of the pathobiology of canine HSA, it will continue with an update on recent advances in the molecular and cellular features of these tumors, and it will culminate with an overview of the SRCBST clinical trials, the Shine-On study for HSA prevention, and the application of these findings to ongoing work focused on prevention and treatment of human sarcomas.

Dr. Jaime Modiano completed his veterinary training and PhD in Immunology through the Veterinary Medical Scientist Training Program at the University of Pennsylvania, followed by a residency in Veterinary Clinical Pathology at Colorado State University and a post-doctoral fellowship at the National Jewish Center for Immunology and Respiratory Medicine. He served on the faculty of Texas A&M University and the University of Colorado Health Sciences Center before joining the University of Minnesota. Dr. Modiano holds the Alvin and June Perlman Endowed Chair of Animal Oncology and is the Director of the Animal Cancer Care and Research Program of the College of Veterinary Medicine and the Masonic Cancer Center at the University of Minnesota.

The research emphasis in Dr. Modiano's laboratory is to understand how and why cancer happens and to translate basic research into clinical applications that improve the health and wellbeing of companion animals and humans.

Details of the symposium schedule, registration and abstract submission are available on the conference website:
http://ovc.uoguelph.ca/icci/2016-symposium