Although immunotherapy is becoming one of the cornerstones of modern cancer therapy, the majority of patients still fail to experience durable responses. This is further compounded by our inability to predict or assess response owing to unusual response patterns unique to immunotherapy. Recently, the scientific community has begun to explore the possibility that the inclusion of companion species (companion dogs) in clinical trials of novel immunotherapeutic agents, combinations of agents, and the assessment of response to immunotherapy may hold promise. This stems from the fact that companion dogs have intact immune systems and heterogenous tumour/tumour microenvironments which may better recapitulate the human condition. Several examples of current cancer immunotherapy trials in pet dogs will be presented to illustrate potential advantages and pitfalls of the comparative approach.

Dr. Vail received his DVM from the University of Saskatchewan in 1984 and subsequently completed an internship in small animal medicine and surgery at Colorado State University prior to practicing in his native Edmonton for two years. He followed up with a residency in Medical Oncology at the Animal Cancer Center at Colorado State University, completed in 1990. He is currently Professor and Barbara A. Suran Chair in Comparative Oncology at the University of Wisconsin-Madison and a member of the UW Carbone Comprehensive Cancer Center. Dr. Vail has published over 150 peer-reviewed scientific manuscripts and 50 book chapters in the field of veterinary and comparative oncology. David is co-editor of the textbook Small Animal Clinical Oncology. He has served in the past as President of the Veterinary Cancer Society, the Canine Comparative Oncology and Genomics Consortium (CCOGC), Chairman of the Scientific Advisory Boards for both the Morris Animal Foundation and the American College of Veterinary Internal Medicine Foundation, and North American journal editor for Veterinary and Comparative Oncology. He is a founding member of the Comparative Oncology Trials consortium. Dr. Vail has been honored as the recipient of both the Mark L. Morris Sr. Distinguished Research Award and the Pfizer Award for Veterinary Research Excellence.