

Congratulations / Félicitations Dr. Paul Kubes, University of Calgary The 2012 CSI – Hardy Cinader Award Recipient Presentation: "Imaging the Immune System in Blood Vessels: Seeing a Whole New World"

Professor, Departments of Physiology & Pharmacology, Medicine and Microbiology, Immunology & Infectious Diseases, University of Calgary; Director, Snyder Institute of Infection, Immunity and Inflammation; Immunology and Gastrointestinal Research Groups; AHFMR Scientist and CRC Chair

Dr. Paul Kubes began his research as a graduate student at Queen's University in 1984 in the area of Cardiovascular Physiology. In 1988 he moved to Louisiana State University (LSU) Medical Center to start a post-doctoral fellowship trying to understand why there is excessive inflammation associated with heart attacks and strokes. Dr. Kubes took a position as Assistant Professor in 1991 at the University of Calgary and continued to investigate the mechanisms leading to white cell recruitment in cardiovascular disorders. Dr. Kubes and his team identified that an endogenously produced gas, nitric oxide, functions to reduce leukocyte recruitment. This work has subsequently branched out into areas of infection and autoimmunity and he was one of the first to use inhaled NO as a potential therapy. This could impact the fields of cardiovascular disease, cancer and infections: the three major killers globally and locally. Dr. Kubes was appointed as the Snyder Research Chair in Critical Care Medicine and has used the money to develop and operate a translational laboratory that supports critical care clinical trials with molecular lab tests. In collaboration with a number of the critical care physicians, numerous discoveries about the biology of the immune system in sepsis have been published in Science, Nature Medicine, Nature Immunology, Immunity and Journal of Experimental Medicine. More recently his focus is imaging the host responses to infections with particular interest in how the immune system deals with pathogens in blood or Intravascular Immunity.

Dr. Kubes is presently a full professor at the University of Calgary's Faculty of Medicine. In addition to this, he is also an AHFMR scientist, a Canada Research Chair, and the founding Director of the new Snyder Institute of Infection, Immunity and Inflammation. Together with a group of nine other professors at the University of Calgary, and with the help of a substantial grant from the Canadian Institutes of Health Research, he has also created a training program geared towards elucidating the cellular, molecular, and physiologic mechanisms of infectious and immune disease and a clinical program entitled the AHFMR Alberta Sepsis Network. Any patient that enters an Alberta ICU enters this program. Dr. Kubes sits on national and international grant panels and presently sits on numerous editorial boards including *The Journal of Clinical Investigation and Journal of Experimental Medicine*. Awards include the Henry Friesen Award (the top clinical research award), the ASTech leader in Alberta Science Award and the only Canadian to receive the Bowditch Lecture Award.