Selenium is an essential micronutrient found naturally in many foods and is available as a dietary supplement. Many of the biological effects of dietary selenium are exerted through the actions of a family of proteins called selenoproteins. Human health outcomes involving the immune system are regulated by selenium and selenoproteins. These include allergic asthma, vaccine responses, and immunity against pathogens and infection. One selenoprotein in particular, selenoprotein K (SelK), is required for optimal immune cell activation and function. In this presentation, Dr. Hoffman will talk about his studies linking dietary selenium intake and human diseases involving the immune system, and the role that SelK plays in these processes.

Dr. Peter Hoffman completed his Ph.D. in Immunology and Microbiology at the University of Colorado Health Science Center, Denver, Colorado in 2002. Currently, he is an Associate Professor in Cell and Molecular Biology at the University of Hawaii John A. Burns School of Medicine. He has authored over 40 peer-reviewed publications and his research focuses on dietary selenium.