Company Overview

Intervir Therapeutics is dedicated to discovering novel drugs to treat viral diseases caused by filoviruses (Ebola and Marburg), arenaviruses (Lassa Fever and Junín), influenza A virus, and rhabdoviruses (rabies). The company has developed a unique approach to identifying NCEs (new chemical entities) using structure action relationships (SAR) that inhibit virus-host interactions required for egress and spread of infectious virus from the cell.

Unmet Need

Therapeutic interventions to treat or prevent viral disease generally include vaccines or specific inhibitors of viral proteins. However, vaccines and inhibitors that target a particular virus or viral protein often ultimately fail due to the rapid development of viral resistance. Intervir’s technology circumvents these limitations and inhibits viral egress by targeting, in part, highly conserved host proteins or pathways required by the virus to efficiently bud and spread within and between hosts.

Technology

Conserved mechanisms of egress are utilized by a wide range of RNA viruses mentioned above and therefore represent important therapeutic targets. Intervir has developed the technology to identify and develop host-oriented small molecule therapeutics that inhibit viral egress by blocking specific virus/host interactions and host protein functions required by the virus for transmission and disease progression.

Team Information

Intervir is a privately held company founded in 2013 as part of UPENN’s UPStart Program. Its technology and science is based on the work of Dr. Bruce D. Freedman and Dr. Ronald N. Harty.

Dr. Harty, Ph.D. is a Professor of Microbiology and Head of the Laboratory of Infectious Diseases and Immunology with more than 20 years of experience in the biology of negative-sense RNA viruses, with a focus on the mechanisms of virus budding/egress and the role that virus-host interactions play during this late stage of virus replication.

Dr. Freedman, V.M.D., Ph.D. is an Associate Professor at the University of Pennsylvania in the Department of Pathobiology with a background in cell physiology and biology. He is also Director of the PennVet Imaging Core Facility and has more than 25 years of experience in the use and application of advanced optical imaging techniques to study subcellular mechanisms of cell function, protein interactions and activity, and signal transduction pathways that regulate immune cell function in vitro and in vivo.

Mr. Fred Banti, Intervir’s CEO, is an international executive and consultant in the Bio/Pharma industry. His experience ranges from R&D to the commercial side. He has worked for multinational large Pharma companies as well as small size public and private companies. He received a B.S. in Biology from Fairfield University and an M.S. with Distinction in Organizational Dynamics from the University of Pennsylvania.