Larry Kauvar, J Antivir Antiretrovir 2014, 6:2
http://dx.doi.org/10.4172/1948-5964.S1.020

OMICS Group Conferences
Accelerating Scientific Discovery

4th World Congress on
Virology

October 06-08, 2014 Hilton San Antonio Airport, TX, USA

Cloning high quality antiviral antibodies from the native human antibody repertoire

Larry Kauvar
Trellis Bioscience, USA

The native human antibody repertoire has long been recognized as an attractive source of therapeutics, particularly for infectious diseases. In the past, however, it has been a difficult source to exploit due to the limited lifetime of human B-cells ex vivo. Trellis has developed a microscopy based assay platform that overcomes the prior limitations and further adds multiplexing into the primary assay. Superlative antibodies have thereby been discovered for influenza, RSV and CMV. These mAbs are all high affinity (sub-nM) and broadly neutralizing across all clinical strains. Moreover, they have low toxicity risk arising from reactivity to human antigens, and are generally easy to express as recombinant proteins. Coupled to rapid manufacturing technologies under development by others, this platform may allow recovery and scale up of countermeasures to emerging pathogens in a time frame suitable to stop an epidemic.

Biography

Larry Kauvar, PhD is an entrepreneur and scientist who founded Trellis Bioscience where he serves as Senior VP, Chief Scientific Officer. He was previously the founder and Chief Scientific Officer of Telik, a development stage small molecule drug company focused on oncology, and is a co-founder of Promedior, a development stage biologics company focused on fibrosis. He holds >40 US patents for drug discovery methods and tools as well as multiple specific compounds. He is one of the inventors of CellSpot™, Trellis' core technology for discovery of native human monoclonal antibodies. Dr. Kauvar received his undergraduate degree in mathematics from Harvard in 1973, his PhD from Yale in Molecular Biophysics and Biochemistry in 1978, and conducted postdoctoral research at Caltech and UC San Francisco before founding Telik.

LKauvar@trellisbio.com