

#### Medical Microbiology & Immunology

MMI 291 Seminar Series

Emerging Challenges in Microbiology and Immunology



### **MMI 291 Seminar Series**

Current Theme: Interdisciplinary Research Fall Quarter 2022 – CRN 41473

Friday Seminar – 12:10-1 p.m.



## "Poxvirus recombination: Mechanisms and applications"

#### Research

Dr. David Evans is a virologist with diverse interests in poxvirus biology as well as a former research administrator. His career has focused on the study of poxviruses with special expertise in virus recombination. anti-poxviral drugs, and replication. His work is supported by a network of collaborations and commercial contracts and his academic studies have been funded by Canada's MRC and CIHR since 1990. Dr. Evans has also demonstrated a longstanding interest in research translation. His study of the enzymes catalyzing vaccinia virus strand joining reactions led to the invention of a recombineering technology that underpins InFusion® cloning kits, and more recently his research has focused on developing oncolytic viruses for treating cancer as well as methods for assembling synthetic and recombinant Orthopoxviruses. He has applied for, or holds, international patents relating to these and other technologies. Drs. Evans has also accumulated many years of service on grant panels. He was a longstanding member of the WHO smallpox advisory committee and also consults privately.

#### **Publications**

**Evans, D.H.** (2022) Poxvirus recombination. Pathogens. 11(8) 896. https://doi.org/10.3390/pathogens11080896.

Shenouda, M., Noyce, R.S., Lee, S.Z., Wang, J.L., Lin, Y.C., Favis, N.A., Desaulniers, M.A., and **Evans, D.H**. (2022) The mismatched nucleotides encoded in vaccinia virus flip-and-flop hairpin telomeres serve an essential role in virion maturation. PLoS Pathogens. 18(3):e1010392. <a href="https://doi.org/10.1371/journal.ppat.1010392">https://doi.org/10.1371/journal.ppat.1010392</a>.

Paszkowski, P., Noyce, R.S., and **Evans, D.H.** (2016) Live-cell imaging of vaccinia virus genetic recombination. PLoS Pathogens. 12(8):e 1005824. doi: 10.1371/journal.ppat.1005824.

# September 30



David Evans, Ph.D., F.C.A.H.S.

Professor
Dept. of Medical Microbiology &
Immunology
University of Alberta

September 30, 2022 12:10 – 1 p.m. ZOOM Meeting

Medical Microbiology & Immunology School of Medicine

Seminar Contact: Autumn Vega 530-752-9401 advega@ucdavis.edu

We hope to see you there!