



## MMI 291 Seminar Series

Current Theme: Interdisciplinary Research

Fall Quarter 2019 – **CRN 51546**

**Friday Seminar – 12:10-1 p.m.**



### “Protection Against Bacterial Infection: Making Good Memories”

#### Research

Protective memory responses emerge following the successful resolution of a primary infection. The cellular basis of this protection is a memory lymphocyte pool that resides in previously infected tissues or recirculates through blood and lymphatic systems. Our laboratory is interested in examining naturally generated memory lymphocytes with a long-term goal of generating these cells during vaccination. We study mouse models of infection with *Salmonella* and *Chlamydia* and focus largely on the specificity and functionality of CD4 T cell responses in protective immunity. Recent data suggest that these mucosal infections generate very different memory responses which may explain the difficulty in generating effective vaccines.

#### Publications

Oanh H. Pham<sup>1</sup>, Hope O'Donnell<sup>1</sup>, Aymen Al-Shamkhani<sup>2</sup>, Tobias Kerrinnes<sup>3</sup>, Rene 'e M. Tsolis<sup>3</sup>, Stephen J. McSorley<sup>1\*</sup>. T cell expression of IL-18R and DR3 is essential for non-cognate stimulation of Th1 cells and optimal clearance of intracellular bacteria

Seung-Joo Lee, Joseph Benoun, Brian S. Sheridan, Zachary Fogassy, Oanh Pham, Quynh-Mai Pham, Lynn Puddington and Stephen J. McSorley  
Dual Immunization with SseB/Flagellin Provides Enhanced Protection against *Salmonella* Infection Mediated by Circulating Memory Cells

Joseph M. Benouna,<sup>a,b,1</sup> Newton G. Peresc,<sup>1</sup> Nancy Wangc,<sup>1</sup> Oanh H. Phama,<sup>b</sup> Victoria L. Rudisilla,<sup>b</sup> Zachary N. Fogassy,<sup>a,b</sup> Paul G. Whitneyc, Daniel Fernandez-Ruizc, Thomas Gebhardt<sup>c</sup>, Quynh-Mai Pham<sup>d</sup>, Lynn Puddington<sup>d</sup>, Sammy Bedouic,<sup>1</sup>, Richard A. Strugnellc,<sup>1</sup>, and Stephen J. McSorleya,<sup>a,b,1,2</sup>. Optimal protection against *Salmonella* infection requires noncirculating memory

September  
**27**



**Stephen McSorley, Ph.D.**  
Director, Center for Comparative Medicine  
Professor, Anatomy, Physiology & Cell Biology

University of California, Davis

**September 27,  
2019 12:10 – 1 p.m.  
GBSF 1005**

**Medical Microbiology &  
Immunology**  
School of Medicine

Seminar Contact:  
Veronica Keys  
530-752-9401  
[vlkeys@ucdavis.edu](mailto:vlkeys@ucdavis.edu)

We hope to see you there!