



HELEN WU

Oregon Health & Science University, Molecular Microbiology & Immunology

Degrees:

B.S. in Biochemistry/Cell Biology, University of California, San Diego

Advisor:

Jonah Sacha, PhD

Scholar Award Donor:

Harold & Arlene Schnitzer CARE Foundation

About the Scholar:

Helen's research is focused on HIV/SIV immunology and vaccine development. Specifically, Helen is characterizing a unique set of SIV-specific immune cells (T cells) engendered by vaccination with cytomegalovirus (CMV) vectors, which demonstrate stringent protection against SIV in rhesus macaques. Helen's experiments utilize flow cytometry-based immunological assays that facilitate the identification of restricting MHC molecules as well as assess CD8+ T cell recognition and elimination of SIV-infected target cells.

Benefits to Society:

CMV-based vaccination is a promising avenue of research in HIV vaccine development.

Awards and Honors:

Ruth L Kirschstein T32 PMCB Training Grant Award, National Institutes of Health (NIH), OHSU: October 2014-September 2015.

Ruth L Kirschstein T32 PMCB Training Grant Award, National Institutes of Health (NIH), OHSU: October 2013-September 2014.

Early Investigator Award, 31st Annual Symposium on Nonhuman Primate Models for AIDS, Atlanta, GA: November 3-6, 2013.

Publications and Posters:

"Cytomegalovirus Vaccine Vector 68-1 Elicits Universal, MHC-E-restricted CD8 T-cell Responses Against SIV." –Oral Presentation at 32nd Annual Symposium on Nonhuman Primate Models for AIDS, Portland, OR: November 11-14, 2014.

"Tertiary mutations stabilize CD8+ T lymphocyte escape-associated compensatory mutations following transmission of simian immunodeficiency virus." Benjamin J. Burwitz, **Helen L. Wu**, Jason S. Reed, Katherine B. Hammond, Laura P. Newman,

Benjamin N. Bimber, Francesca A. Nimiyongskul, Enrique J. Leon, Nicholas J. Maness, Thomas C. Friedrich, Masaru Yokoyama, Hironori Sato, Tetsuro Matano, David H. O'Connor, Jonah B. Sacha. *J. Virol.* 2014, 88(6): 3598.

“Defining the MHC restriction of novel, CMV-induced CD8+ T cells.” –Oral Presentation at 31st Annual Symposium on Nonhuman Primate Models for AIDS, Atlanta, GA: November 3-6, 2013.