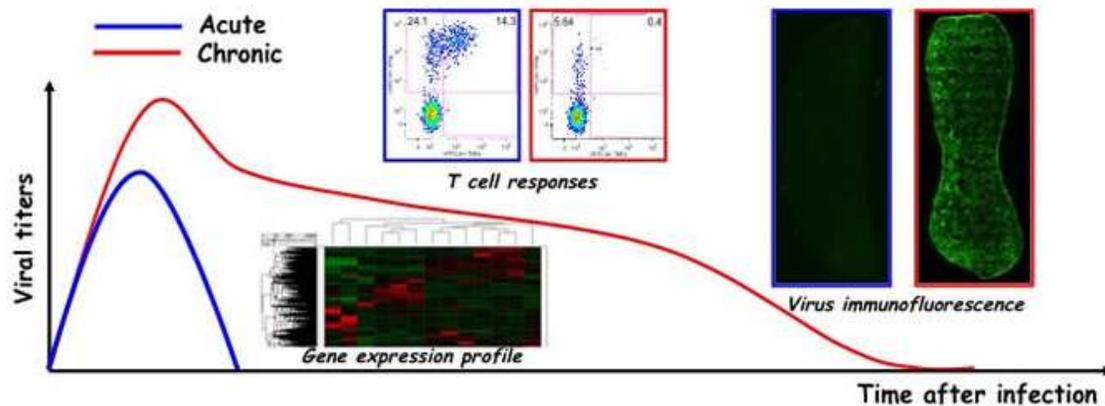


California State University, Fresno Department of  
Biology and Tri-Beta Biology Club presents

## “CD4 T Cell Response During Chronic Viral Infection”

*By Dr. Elina Zuniga, UC San Diego*

Friday, April 17, 2015, 3:00 PM in Science II Room 109



Chronic viral infections represent a unique challenge to their host. Persistently replicating viruses out-compete or subvert the initial anti-viral response, allowing the establishment of chronic infections that result in continuous stimulation of both the innate and adaptive immune compartments. This causes a profound reprogramming of the host immune system, including attenuation and persistence of type I interferons, progressive loss of CD8<sup>+</sup> T cell functions (or exhaustion), and specialization of CD4<sup>+</sup> T cells to promote antibody-mediated immunity and immune regulation. Epigenetic, transcriptional, post-transcriptional and metabolic changes underlie this adaptation or re-calibration of immune cells to the emerging new environment in order to strike an often-imperfect balance between the host and the infectious pathogen. I will talk about a particular signaling pathway that orchestrates CD4<sup>+</sup> T cell responses and is essential for pathogen control during chronic viral infections.

*If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner in the Department of Biology at 278-2001 or e-mail [lgarner@csufresno.edu](mailto:lgarner@csufresno.edu) (at least one week prior to event).*