



MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Fall Quarter 2019 – **CRN 43601**



Friday Seminar – 12:10-1 p.m.

“New Mechanisms Controlling Self Versus
Non-Self Discrimination by TLRs”

Research

As a graduate student in the lab of Alexander Rudensky, Gregory Barton developed new transgenic mouse strains to address the importance of MHC-bound self-peptides in T cell selection (Barton and Rudensky Science 1999; Barton et al PNAS 2002). Through this training he gained expertise in cellular immunology, T cell biology, and antigen presentation. For his postdoctoral training he worked in Ruslan Medzhitov's lab, where his work focused on innate immunity. He carried out the first studies demonstrating the importance of Toll-like receptors (TLRs) in controlling induction of adaptive immunity (Schnare*, Barton* et al Nature Immunology 2001), and also began studying how TLRs with specificity for nucleic acids avoid responses to self DNA and RNA (Barton et al Nature Immunology 2006).

Currently his lab research focuses on various aspects of immune regulation. We are working to define determinants of immune responses, during homeostasis as well as during infections or inflammatory disorders.

Publications

Ansaldo et al, Science 2019 (PMID: 31221858)
Kreuk et al, eLIFE 2019 (PMID: 31433298)
Roberts et al, Immunity 2018 (PMID: 29150239)

October
11



Gregory Barton, Ph.D.
Professor
Molecular and Cell Biology
University of California, Berkeley

October 11, 2019
12:10 – 1 p.m.
GBSF 1005

Medical Microbiology
& Immunology
School of Medicine

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We hope to see you there!