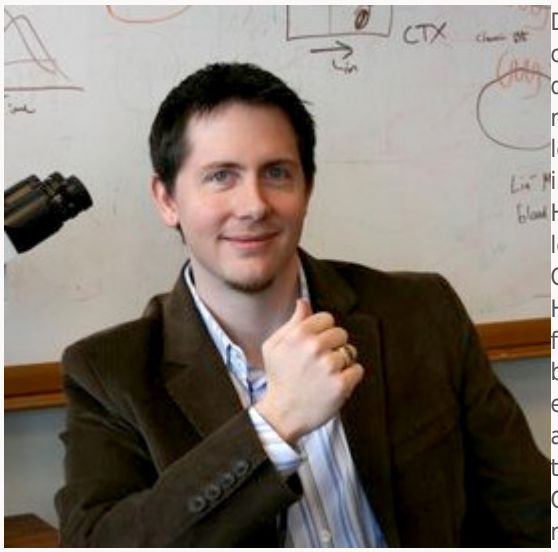
Brian A. Zabel, PhD



Dr. Brian Zabel has over twenty-five years of experience in the field of chemoattractant receptor biology, leukocyte trafficking, and antibody discovery. Overall, he has published nearly 70 papers in solid peer-reviewed journals (h-index: 36; i.e. at least 36 publications each cited at least 36 times, excluding self-citations). He has published 30 papers investigating the diverse biological roles of chemerin and its receptors. He published two of the first papers discovering chemerin as a novel leukocyte chemoattractant that binds G-protein coupled receptor (GPCR) CMKLR1 expressed on macrophages, NK cells, and dendritic cell subsets. He led the group that identified CCRL2 as a second heptahelical receptor for chemerin and published one the first papers characterizing the CXCL12 binding and signaling pathways for CXCR7, a heptahelical receptor expressed selectively by cancer cells. Additionally, Dr. Zabel co-authored a paper identifying GPR15L as a novel T cell chemoattractant that binds to the GPCR GPR15. He published one of the first papers 'de-orphaning' CCR9 and its binding partner CCL25 identifying a key role for this receptor/ligand pair in T cell gut homing and thymic development. He has generated monoclonal antibodies against numerous chemoattractant receptor targets, including CCR9, CMKLR1, and CCRL2. Dr. Zabel mentored Dr. Kareem Graham and Dr. Tommy Burke as part of NIH Diversity Supplements to his NIH NIAID R01 AI079320, both of whom have gone on to have successful careers in medical research.

Dr. Brian Zabel is a VA-funded Principal Investigator at the VA Palo Alto Health Care System; a Senior Research Scientist at the Palo Alto Veterans Institute for Research; and the Senior Director of Discovery Immunology at LakePharma, Inc. Dr. Zabel received BS degrees in Biology and Mathematics from the Massachusetts Institute of Technology in 1997 and a PhD in Immunology from Stanford University in 2004. His PhD thesis and postdoctoral work focused on the identification and characterization of novel white blood cell attractant chemerin and its receptors in homeostasis and inflammatory disease. His academic laboratory focuses on understanding mechanisms of leukocyte recruitment and the potential to redirect leukocytes for therapeutic purposes in cancer immunotherapy and autoimmune disease. Dr. Zabel is particularly interested in translational medicine, a pursuit fostered by the SPARK program (Stanford University) and various biotech industry interactions (Curia Global, Inc., LeukoSite, Inc., ChemoCentryx, Inc., CombImmune, Inc., Rogne Bioscience, Inc., ChemPartner, Inc.). Dr. Zabel holds 11 US patents, has published more than 60 peer-reviewed research papers, review articles, and book chapters, and is a recipient of the Hugh McDevitt Prize (2004), the Albert Rose Established Investigator Award (2014), and numerous grants from the NIH (NIAID R01), DoD (CDMRP), TRDRP, VA Merit, and private foundations (e.g., NPF, PFF). He serves on multiple Institutional Animal Care and Use Committees and NIH, NASA, and VA BLR&D Study Sections.