

Contents

Two-Photon Imaging of the Immune System: A Custom Technology Platform for High-Speed, Multicolor Tissue Imaging of Immune Responses	1
Andrew Bullen, Rachel S. Friedman, and Matthew F. Krummel	
Visualizing Intermolecular Interactions in T Cells	31
Nicholas R.J. Gascoigne, Jeanette Ampudia, Jean-Pierre Clamme, Guo Fu, Carina Lotz, Michel Mallaun, Nathalie Niederberger, Ed Palmer, Vasily Rybakin, Pia P. Yachi, and Tomasz Zal	
Multiscale Analysis of T Cell Activation: Correlating <i>In Vitro</i> and <i>In Vivo</i> analysis of the Immunological Synapse	47
Michael L. Dustin	
T Cell Migration Dynamics Within Lymph Nodes During Steady State: An Overview of Extracellular and Intracellular Factors Influencing the Basal Intranodal T Cell Motility	71
Tim Worbs and Reinhold Förster	
Chemoattractant Receptor Signaling and Its Role in Lymphocyte Motility and Trafficking	107
John H. Kehrl, Il-Young Hwang, and Chung Park	
New Insights Into Leukocyte Recruitment by Intravital Microscopy	129
Alexander Zarbock and Klaus Ley	

Visualizing the Molecular and Cellular Events Underlying the Initiation of B-Cell Activation	153
Naomi E. Harwood and Facundo D. Batista	
Tracking the Dynamics of <i>Salmonella</i> Specific T Cell Responses.....	179
James J. Moon and Stephen J. McSorley	
Imaging <i>Listeria monocytogenes</i> Infection <i>In Vivo</i>	199
Vjollca Konjufca and Mark J. Miller	
Inflammation on the Mind: Visualizing Immunity in the Central Nervous System	227
Silvia S. Kang and Dorian B. McGavern	
Multiphoton Imaging of Cytotoxic T Lymphocyte-Mediated Antitumor Immune Responses	265
Alexandre Boissonnas, Alix Scholer-Dahirel, Luc Fetler, and Sebastian Amigorena	
Index.....	289