

Contents

High-Dimensional Single-Cell Cancer Biology	1
Jonathan M. Irish and Deon B. Doxie	
Studying the Human Immunome: The Complexity of Comprehensive Leukocyte Immunophenotyping	23
Angélique Biancotto and J. Philip McCoy	
High-Dimensional Analysis of Human CD8⁺ T Cell Phenotype, Function, and Antigen Specificity	61
Evan W. Newell and Wenyu Lin	
Mass Cytometry to Decipher the Mechanism of Nongenetic Drug Resistance in Cancer	85
Harris G. Fienberg and Garry P. Nolan	
A Practical Guide to Multiplexed Mass Cytometry	95
Nevena Zivanovic, Andrea Jacobs and Bernd Bodenmiller	
Analysis of Protein Interactions in situ by Proximity Ligation Assays	111
Björn Koos, Linda Andersson, Carl-Magnus Clausson, Karin Grannas, Axel Klaesson, Gaëlle Cane and Ola Söderberg	
Cytobank: Providing an Analytics Platform for Community Cytometry Data Analysis and Collaboration	127
Tiffany J. Chen and Nikesh Kotecha	
Computational Analysis of High-Dimensional Flow Cytometric Data for Diagnosis and Discovery	159
Nima Aghaeepour and Ryan Brinkman	

Shooting Movies of Signaling Network Dynamics with Multiparametric Cytometry	177
Manfred Claassen	
Hyperspectral Cytometry	191
Gérald Grégori, Bartek Rajwa, Valery Patsekin, James Jones, Motohiro Furuki, Masanobu Yamamoto and J. Paul Robinson	
Index	211

High-Dimensional Single Cell Analysis
Mass Cytometry, Multi-parametric Flow Cytometry and
Bioinformatic Techniques
Fienberg, H.G.; Nolan, G.P. (Eds.)
2014, X, 215 p. 68 illus., 67 illus. in color., Hardcover
ISBN: 978-3-642-54826-0