Contents

Section I. Hyperlipidaemia and Atherosclerosis 1

Chapter 1: Reverse Cholesterol Transport 3
Jim W. Burgess, Philip A. Sinclair, Christophe M. Chretien, Jonathon Boucher and Daniel L. Sparks

Chapter 2: The Role of LCAT in Atherosclerosis 23
Dominic S. Ng

Chapter 3: Howdy Partner: Apolipoprotein A-I-ABCA1 Interactions Mediating HDL Particle Formation 39
Sereyrath Ngeth and Gordon A. Francis

Chapter 4: Role of the Scavenger Receptor Class B Type I in Lipoprotein Metabolism and Atherosclerosis: Insights from Genetically Altered Mice 53
Bernardo Trigatti

Chapter 5: The Role of Scavenger Receptors in Signaling, Inflammation and Atherosclerosis 70
Daisy Sahoo and Victor A. Drover

Chapter 6: ABC Transporters and Apolipoprotein E: Critical Players in Macrophage Cholesterol Efflux and Atherosclerosis 92
Kathryn E. Naus and Cheryl L. Wellington

Chapter 7: Provision of Lipids for Very Low-Density Lipoprotein Assembly 121
Dean Gilham and Richard Lehner

Chapter 8: Oxidatively Modified Low-Density Lipoproteins and Thrombosis 150
Garry X. Shen
### Chapter 9: The Clinical Significance of Small, Dense Low-Density Lipoproteins
*Manfredi Rizzo and Kaspar Berneis*

Page 168

### Chapter 10: Bile Acids: At the Crossroads of Sterol, Fat and Carbohydrate Metabolism
*Luis B. Agellon*

Page 186

---

### Section II. Diabetes and Hypertension Induced Atherosclerosis

Page 203

- **Chapter 11:** Lipoprotein Metabolism in Insulin-Resistant States
  *Rita Kohen Avramoglu, Heather Basciano and Khosrow Adeli*
  Page 205

- **Chapter 12:** The Roles of Protein Glycation, Glycoxidation, and Advanced Glycation End-Product Formation in Diabetes-Induced Atherosclerosis
  *Imran Rashid, Bronwyn E. Brown, David M. van Reyk and Michael J. Davies*
  Page 247

- **Chapter 13:** Molecular and Cellular Mechanisms by Which Diabetes Mellitus Promotes the Development of Atherosclerosis
  *Geoff H. Werstuck*
  Page 284

- **Chapter 14:** Hypertension and Atherosclerosis: Advanced Glycation End Products—A Common Link
  *Sudesh Vasdev and Vicki Gill*
  Page 305

---

### Section III. Hyperhomocysteinemia and Atherosclerosis

Page 327

- **Chapter 15:** Homocysteine Metabolism
  *Enoka P. Wijekoon, Margaret E. Brosnan and John T. Brosnan*
  Page 329

- **Chapter 16:** Role of Hyperhomocysteinemia in Atherosclerosis
  *Stephen M. Colgan, Donald W. Jacobsen and Richard C. Austin*
  Page 358

- **Chapter 17:** Molecular and Biochemical Mechanisms of Hyperhomocysteinemia-Induced Cardiovascular Disorders
  *Karmin O, Yaw L. Siow, Patrick C. Choy and Grant M. Hatch*
  Page 380
Biochemistry of Atherosclerosis
Kaur, S.C. (Ed.)
2006, XVI, 572 p., Hardcover
ISBN: 978-0-387-31252-1