

# CONTENTS

|   |     |
|---|-----|
| Preface to the Series   | vii |
| Preface   | ix  |
| Contributors  | xi  |
| 1 Autoimmune Diabetes Mellitus in the BB Rat<br><i>John P. Mordes, Rita Bortell, Herman Groen, Dennis Guberski,<br/>Aldo A. Rossini and Dale L. Greiner</i>                 | 1   |
| 2 The NOD Mouse and its Related Strains<br><i>Hiroshi Ikegami and Susumu Makino</i>   | 43  |
| 3 Obesity/Diabetes in Mice with Mutations in the Leptin or Leptin<br>Receptor Genes<br><i>Lieselotte Herberg and Edward H. Leiter</i>                                       | 63  |
| 4 The Zucker Diabetic Fatty (ZDF) Rat<br><i>Richard G. Peterson</i>   | 109 |
| 5 KK and KKA <sup>y</sup> Mice<br><i>Shigehisa Taketomi and Hitoshi Ikeda</i>   | 129 |
| 6 The Obese Spontaneously Hypertensive Rat (SHROB, Koletsky Rat):<br>A Model of Metabolic Syndrome X<br><i>Richard J. Koletsky, Jacob E. Friedman and Paul Ernsberger</i>   | 143 |
| 7 Characteristics of Wistar Fatty Rat<br><i>Hiroyuki Odaka, Yasuo Sugiyama and Hitoshi Ikeda</i>  | 159 |
| 8 The New Zealand Obese Mouse: A Polygenic Model of<br>Type 2 Diabetes<br><i>Sofianos Andrikoopoulos, Anne W. Thorburn and Joseph Proietto</i>                              | 171 |
| 9 The NSY Mouse: An Animal Model of Human Type 2 Diabetes<br>Mellitus with Polygenic Inheritance<br><i>Hironori Ueda, Hiroshi Ikegami, Masao Shibata and Toshio Ogihara</i> | 185 |
| 10 The Goto-Kakizaki Rat<br><i>Claes-Göran Östenson</i>   | 197 |

|    |   |     |
|----|---|-----|
| 11 | The OLETF Rat<br><i>Kazuya Kawano, Tsukasa Hirashima, Shigehito Mori, Zhi-wei Man and Takashi Natori</i>  | 213 |
| 12 | The JCR:LA-cp Rat: An Animal Model of Obesity and Insulin Resistance with Spontaneous Cardiovascular Disease<br><i>J.C. Russell and S.E. Graham</i>                             | 227 |
| 13 | The Neonatally Streptozotocin-Induced (n-STZ) Diabetic Rats, a Family of NIDDM Models<br><i>Bernard Portha, M.H. Giroix, P. Serradas, J. Movassat, D. Bailbe and M. Kergoat</i> | 247 |
| 14 | Galactosemic Animal Models<br><i>W. Gerald Robison Jr.</i>  | 273 |
| 15 | The Rhesus Monkey ( <i>Macaca mulatta</i> ): A Unique and Valuable Model for the Study of Spontaneous Diabetes Mellitus and Associated Conditions<br><i>Noni L. Bodkin</i>      | 309 |
| 16 | <i>Psammomys obesus</i> : Primary Insulin Resistance Leading to Nutritionally Induced Type 2 Diabetes<br><i>Ehud Ziv and Rony Kalman</i>  | 327 |
| 17 | The C57BL/6J Mouse as a Model of Diet-Induced Type 2 Diabetes and Obesity<br><i>Ann E. Petro and Richard S. Surwit</i>  | 343 |
|    | Index   | 357 |