Ernst Schering Research Foundation
Workshop, Supplement 1

Molecular and Cellular Endocrinology of the Testis

G. Verhoeven, U.-F. Habenicht
Editors

With 55 Figures

Springer-Verlag
Berlin Heidelberg New York
London Paris Tokyo
Hong Kong Barcelona
Budapest

Table of Contents

1 Hormonal Receptors in the Genital Tract
A. Chauchereau, A. Mantel, K. Delabre, M. Misrahi, P. Lescop, M. Perrot-Applanat, H. Loosfelt, M.T. Vu Hai, N. Ghinea, G. Meduri, J.-F. Savouret, and E. Milgrom 1

2 Transplantation of Male and Female Germ and Somatic Cells
R.G. Gosden 15

3 Proliferation and Differentiation of Testicular Interstitial Cells: Aspects of Leydig Cell Development in the (Pre)Pubertal and Adult Testis
K.J. Teerds, M.B. Veldhuizen-Tsoerkan, F.F.G. Rommerts, D.G. de Rooij, and J.H. Dorrington 37

4 Regulation of the Acute Production of Steroids in Steroidogenic Cells
D.M. Stocco and B.J. Clark 67

5 Extracellular Matrix Elements, Cell Adhesion Molecules, and Signal Transduction in the Control of Sertoli Cell Function
M. Dym 99

6 Interactions Between Androgens, Sertoli Cells and Germ Cells in the Control of Spermatogenesis
R.M. Sharpe, C. McKinnell, T. McLaren, M.Millar, T.P. West, S. Maguire, J. Gaughan, V. Syed, B. Jégou, J.B. Kerr, and P.T.K. Saunders *115*

7 Cell Cycle Checkpoints in Male and Female Germ Cells
D.F. Albertini *143*

8 Signal Transduction in Mammalian Spermatozoa
G.S. Kopf, P. Kalab, P. Leclerc, X.P. Ning, D. Pan, and P. Visconti *153*

9 Diversity and Regulation of cAMP-Dependent Protein Kinases
K. Taskén, B.S. Skålhegg, K.A. Taskén, R. Solberg, F.O. Levy, T. Lea, T. Jahnsen, and V. Hansson. *185*

10 The Nuclear Respone to cAMP During Spermatogenesis: The Key Role of Transcription Factor CREM
P. Sassone-Corsi *219*

11 Transgenic Animals and the Study of Gonadal Function
M.M. Matzuk *253*

12 Clinical Relevance and Irrelevance of Molecular and Cellular Research on the Testis
E. Nieschlag *273*