

Contents

SECTION I: Hormones and Hormone Action

- 1 Principles of Endocrinology, 2
Henry M. Kronenberg, Shlomo Melmed, P. Reed Larsen, and Kenneth S. Polonsky
- 2 Clinical Endocrinology: A Personal View, 12
Lynn Loriaux
- 3 Principles of Hormone Action, 18
Mitchell A. Lazar and Morris J. Birnbaum
- 4 Genetics of Endocrinology, 49
Amit R. Majithia, David Altshuler, and Joel N. Hirschhorn
- 5 Health Care Reform, Population Health, and the Endocrinologist, 69
Glenn D. Braunstein
- 6 Laboratory Techniques for Recognition of Endocrine Disorders, 77
Patrick M. Sluss and Frances J. Hayes

SECTION II: Hypothalamus and Pituitary

- 7 Neuroendocrinology, 110
Malcolm J. Low
- 8 Pituitary Physiology and Diagnostic Evaluation, 176
Ursula Kaiser and Ken K. Y. Ho
- 9 Pituitary Masses and Tumors, 232
Shlomo Melmed and David Kleinberg
- 10 Posterior Pituitary, 300
Alan G. Robinson and Joseph G. Verbalis

SECTION III: Thyroid

- 11 Thyroid Physiology and Diagnostic Evaluation of Patients With Thyroid Disorders, 334
Domenico Salvatore, Terry F. Davies, Martin-Jean Schlumberger, Ian D. Hay, and P. Reed Larsen
- 12 Hyperthyroid Disorders, 369
Terry F. Davies, Peter Laurberg, and Rebecca S. Bahn
- 13 Hypothyroidism and Thyroiditis, 416
Gregory A. Brent and Anthony P. Weetman
- 14 Nontoxic Diffuse Goiter, Nodular Thyroid Disorders, and Thyroid Malignancies, 449
Martin-Jean Schlumberger, Sebastiano Filetti, Erik K. Alexander, and Ian D. Hay

SECTION IV: Adrenal Cortex and Endocrine Hypertension

- 15 The Adrenal Cortex, 490
Paul M. Stewart and John D. C. Newell-Price
- 16 Endocrine Hypertension, 556
William F. Young, Jr.

SECTION V: Reproduction

- 17 Physiology and Pathology of the Female Reproductive Axis, 590
Serdar E. Bulun
- 18 Hormonal Contraception, 664
Rebecca H. Allen, Andrew M. Kaunitz, and Martha Hickey
- 19 Testicular Disorders, 694
Alvin M. Matsumoto and William J. Bremner
- 20 Sexual Dysfunction in Men and Women, 785
Shalender Bhushan and Rosemary Basson

SECTION VI: Endocrinology and the Life Span

SECTION VI A: Maternal-Fetal

- 21 Endocrine Changes in Pregnancy, 832
Sarah L. Berga, Joshua F. Nitsche, and Glenn D. Braunstein
- 22 Endocrinology of Fetal Development, 849
Mehul T. Dattani and Evelien F. Gevers

SECTION VI B: Childhood

- 23 Pediatric Disorders of Sex Development, 893
John C. Achermann and Ieuan A. Hughes
- 24 Normal and Aberrant Growth in Children, 964
David W. Cooke, Sara A. DiVall, and Sally Radovick
- 25 Physiology and Disorders of Puberty, 1074
Dennis M. Styne and Melvin M. Grumbach

SECTION VI C: Adult

- 26 Hormones and Athletic Performance, 1219
Fabio Lanfranco, Ezio Ghigo, and Christian J. Strasburger
- 27 Endocrinology and Aging, 1234
Steven W. J. Lamberts and Annewieke W. van den Beld

SECTION VII: Mineral Metabolism

- 28 Hormones and Disorders of Mineral Metabolism, 1254
F. Richard Bringhurst, Marie B. Demay, and Henry M. Kronenberg
- 29 Osteoporosis and Bone Biology, 1323
Francisco J. A. de Paula, Dennis M. Black, and Clifford J. Rosen
- 30 Kidney Stones, 1365
Anirban Bose, Rebeca D. Monk, and David A. Bushinsky

SECTION VIII: Disorders of Carbohydrate and Fat Metabolism

- 31 Type 2 Diabetes Mellitus, 1386
Kenneth S. Polonsky and Charles F. Burant

- 32 Type 1 Diabetes Mellitus, 1451
Mark A. Atkinson
- 33 Complications of Diabetes Mellitus, 1484
Michael Brownlee, Lloyd P. Aiello,
Mark E. Cooper, Aaron I. Vinik,
Jorge Plutzky, and Andrew J. M. Boulton
- 34 Hypoglycemia, 1582
Philip E. Cryer
- 35 Neuroendocrine Control of Energy Stores, 1608
Roger D. Cone and Joel K. Elmquist
- 36 Obesity, 1633
Samuel Klein and Johannes A. Romijn
- 37 Disorders of Lipid Metabolism, 1660
Clay F. Semenkovich, Anne C. Goldberg, and
Ira J. Goldberg
- 38 Gastrointestinal Hormones and Gut Endocrine
Tumors, 1701
Adrian Vella

many additional analyses have now been made. My only regret is that the letter was not submitted earlier. It is interesting to note that many of these analyses were not included, overtly political content was not included, and the letter was not political but dealt with issues that were of interest to the readership. We published a large number of responses to the letter in the following issue of the journal (see Letters to the Editors, 2014, responses).

How does this reflect the editorial policy? In the introduction of *Williams Textbook of Endocrinology*, we state that the editors of both *Endocrinology and Metabolism* and *Cancer* described above were pleased to receive manuscripts during 2014 in a timely fashion. Preparations for the journal are now well under way and are progressing with contributions from editors and referees. The editors are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* and *Cancer*.

David W. Cooper and Michael J. Drucker

Editor-in-Chief and Editor-in-Chief of *Endocrinology*, 1054
Editor-in-Chief and Michael J. Drucker

SECTION IV: Adrenal

- 56 Hormone and Adrenergic Pathophysiology 1518
Luisa Tufveson, Paolo Gianni, and
Carsten L. Ziegler
- 57 Endocrinology and Aging 1534
Suzanne H. Y. Chang and
Anne Marie Neely

SECTION V: Mineral Metabolism

- 58 Hormones and Disorders of Mineral
Metabolism 1554
E. Richard Potts and
Heidi W. Kemper
- 59 Osteoporosis and Bone Biology 1572
Francesco C. A. de Jussie, Daniel W. Glorieux, and
Carmen Y. Rosen
- 60 Polycystic Ovary Syndrome 1592
Kathleen M. Ryan and Jennifer A. Dunn

- 31 Type 2 Diabetes and Obesity 1289
Lorraine A. Jackson and Christopher A. Finnerty
- 32 Metabolic Syndrome 1299
Nicholas A. Fontaine

SECTION IX: Polyendocrine and Neoplastic Disorders

- 39 Multiple Endocrine Neoplasia, 1724
Stephen J. Marx and Samuel A. Wells, Jr.
- 40 The Immunoendocrinopathy Syndromes, 1762
Jennifer M. Barker, Mark S. Anderson, and
Peter A. Gottlieb
- 41 Endocrinology of HIV/AIDS, 1776
Steven K. Grinspoon
- 42 The Long-Term Endocrine Sequelae of
Multimodality Cancer Therapy, 1799
Robert D. Murray
- 43 Neuroendocrine Gastrointestinal and Lung
Tumors (Carcinoid Tumors), the Carcinoid
Syndrome, and Related Disorders, 1833
Kjell Öberg

We would like to thank all those who had agreed to be editors, associate editors, or consultants to *Endocrinology and Metabolism* and *Cancer* during the time of the transition. This includes John Basile as a co-founder, Dennis Murphy, Daniel Drucker as a co-founder, even though Daniel's substantial contribution to the journal ended some years ago.

As editors, we were able to put in place what we believe to be the best system to ensure that a biomedical publication can bring knowledge rather than just opinions or agendas. Each specific agenda of editors and associate editors has been carefully planned and put in place.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.

We, the editors of *Endocrinology and Metabolism* as well as *Cancer*, are committed to produce the highest quality scholarship in *Endocrinology and Metabolism* or unchallenged integrity in *Cancer*.