

616-092
S 93

STUDY GUIDE AND WORKBOOK

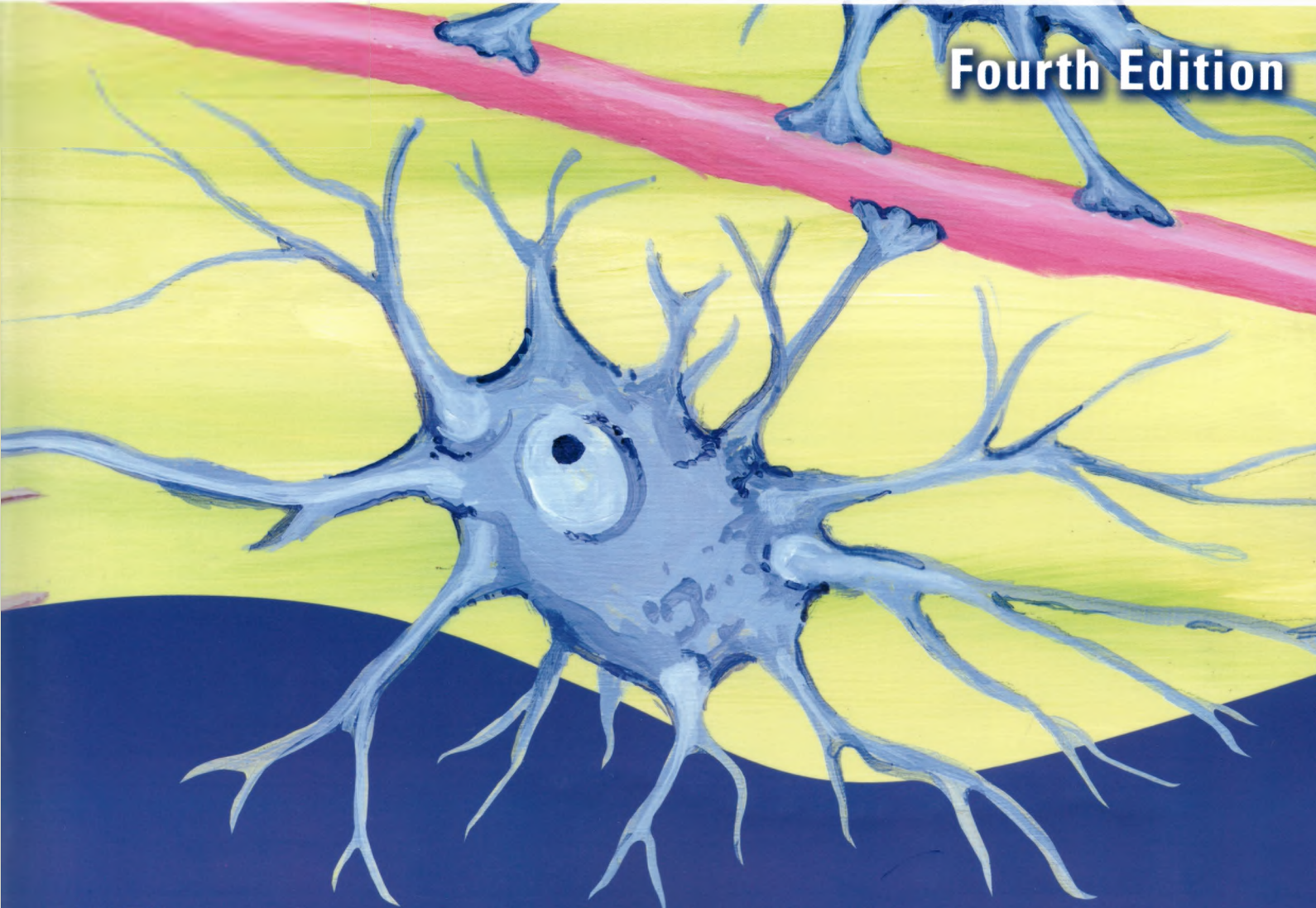
Huether ■ McCance
Brashers ■ Rote

Understanding Pathophysiology

Fourth Edition

MOSBY
ELSEVIER

Prepared by Clayton F. Parkinson



616-092
S 93

Study Guide and Workbook for

Understanding Pathophysiology

Fourth Edition

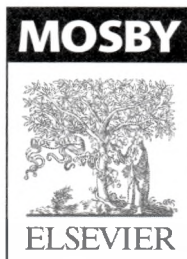
Sue E. Huether
Kathryn L. McCance

Prepared by
Clayton F. Parkinson, PhD
Professor Emeritus
College of Health Sciences
Weber State University
Ogden, Utah

458041

Universitatea de Stat de
Medicină și Farmacie
"Carol Davila" București
Facultatea de Științe Medicale

sl. 3



Contents

PART ONE/BASIC CONCEPTS OF PATHOPHYSIOLOGY

UNIT I/THE CELL

- 1 Cellular Biology, 1
- 2 Genes and Genetic Diseases, 4
- 3 Altered Cellular and Tissue Biology, 10
- 4 Fluids and Electrolytes, Acids and Bases, 17

UNIT II/MECHANISMS OF SELF-DEFENSE

- 5 Innate Defenses: Inflammation, 24
- 6 Adaptive Immunity, 27
- 7 Hypersensitivities, Infection, and Immune Deficiencies, 30
- 8 Stress and Disease, 45

UNIT III/CELLULAR PROLIFERATION: CANCER

- 9 Biology of Cancer and Tumor Spread, 51
- 10 Cancer Epidemiology, Manifestations, and Treatment, 61
- 11 Cancer in Children, 67

PART TWO/BODY SYSTEMS AND DISEASES

UNIT IV/THE NEUROLOGIC SYSTEM

- 12 Structure and Function of the Neurologic System, 71
- 13 Pain, Temperature, Sleep, and Sensory Function, 75
- 14 Concepts of Neurologic Dysfunction, 83
- 15 Alterations of Neurologic Function, 94
- 16 Alterations of Neurologic Function in Children, 106

UNIT V/THE ENDOCRINE SYSTEM

- 17 Mechanisms of Hormonal Regulation, 111
- 18 Alterations of Hormonal Regulation, 114

UNIT VI/THE HEMATOLOGIC SYSTEM

- 19 Structure and Function of the Hematologic System, 128
- 20 Alterations of Hematologic Function, 131
- 21 Alterations of Hematologic Function in Children, 145

UNIT VII/THE CARDIOVASCULAR AND LYMPHATIC SYSTEMS

- 22 Structure and Function of the Cardiovascular and Lymphatic Systems, 151
- 23 Alterations of Cardiovascular Function, 154
- 24 Alterations of Cardiovascular Function in Children, 175

UNIT VIII/THE PULMONARY SYSTEM

- 25 Structure and Function of the Pulmonary System, 181
- 26 Alterations of Pulmonary Function, 184
- 27 Alterations of Pulmonary Function in Children, 197

UNIT IX/THE RENAL AND UROLOGIC SYSTEMS

- 28 Structure and Function of the Renal and Urologic Systems, 203
- 29 Alterations of Renal and Urinary Tract Function, 206
- 30 Alterations of Renal and Urinary Tract Function in Children, 215

UNIT X/THE REPRODUCTIVE SYSTEMS

- 31 Structure and Function of the Reproductive Systems, 220
- 32 Alterations of the Reproductive Systems, Including Sexually Transmitted Infections, 223

UNIT XI/THE DIGESTIVE SYSTEM

- 33 Structure and Function of the Digestive System, 238
- 34 Alterations of Digestive Function, 241
- 35 Alterations of Digestive Function in Children, 256

UNIT XII/THE MUSCULOSKELETAL AND INTEGUMENTARY SYSTEMS

- 36 Structure and Function of the Musculoskeletal System, 262
- 37 Alterations of Musculoskeletal Function, 265
- 38 Alterations of Musculoskeletal Function in Children, 279
- 39 Structure, Function, and Disorders of the Integument, 285
- 40 Alterations of the Integument in Children, 296

ANSWERS TO PRACTICE EXAMINATIONS, 303