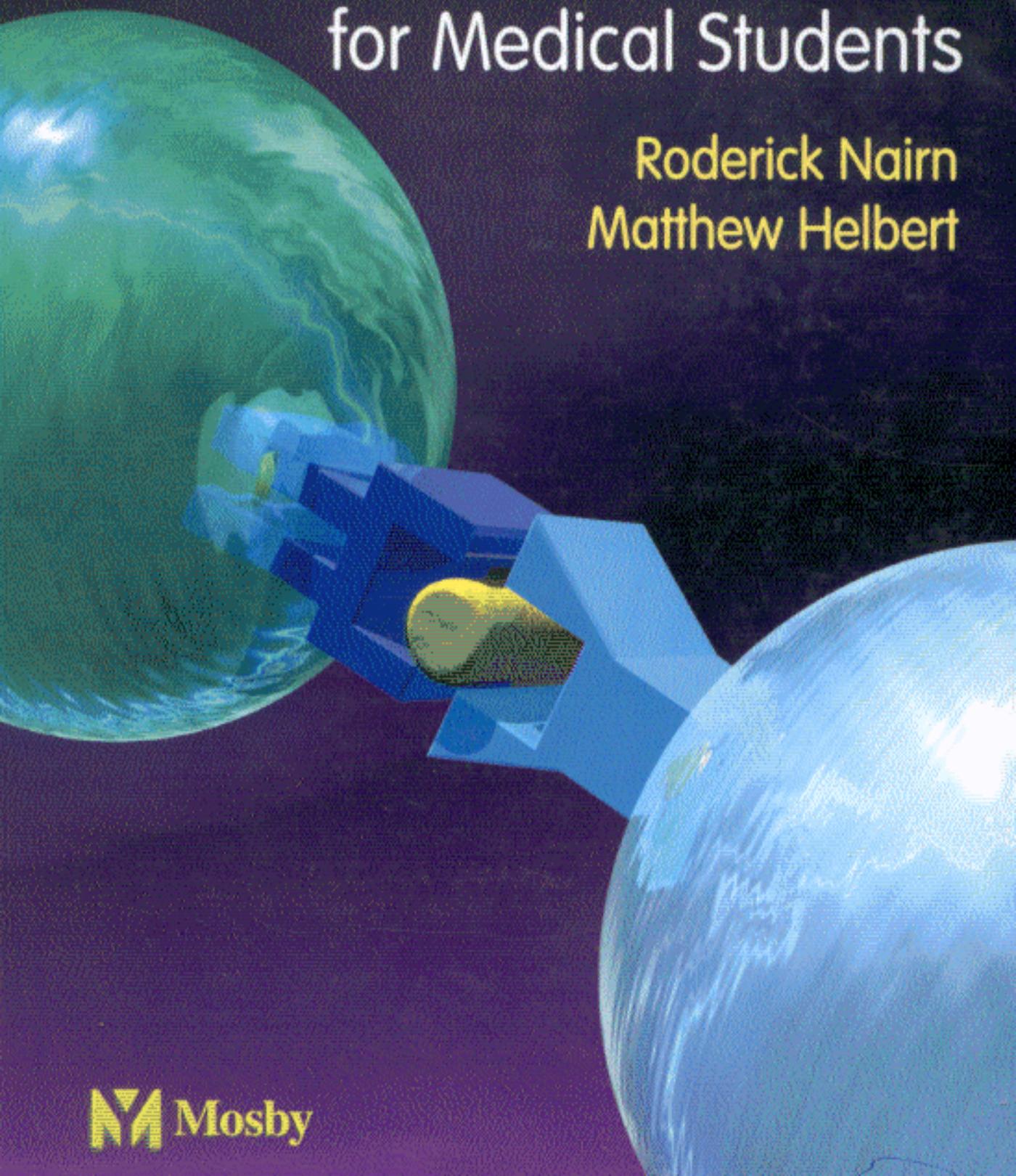


Immunology

for Medical Students

Roderick Nairn
Matthew Helbert



 Mosby

CONTENTS

Section One Introduction

1. Basic concepts and components of the immune system 3
2. Basic concepts 9

Section Two Antigen-recognition molecules

3. Introduction to antigen recognition 19
4. Antigens and antibody structure 23
5. Antibody-antigen interaction 31
6. Antibody diversity 39
7. The T cell receptor 49
8. Major histocompatibility complex 57
9. Review of antigen recognition 65

Section Three Physiology

10. Antigen processing and presentation 71
11. Lymphocyte activation 79
12. Hematopoiesis 89
13. The organs and tissues of the immune system 95
14. B cell development 109
15. T cell development 121
16. Cell-cell interaction in generating effector lymphocytes 133
17. Immunological memory 143
18. Review of immune physiology 151

Section Four Innate immunity

- 19. Constitutive defenses including complement 157**
- 20. Phagocytes 167**
- 21. Killing in the immune system 179**
- 22. Inflammation 191**
- 23. Review of innate immunity 201**

Section Five Immune system in health and disease

- 24. Infections and vaccines 207**
- 25. Hypersensitivity reactions 215**
- 26. Immediate hypersensitivity (type I): allergy 221**
- 27. Autoimmunity 233**
- 28. Antibody-mediated hypersensitivity (type II) 245**
- 29. Immune complex disease (type III hypersensitivity) 253**
- 30. Delayed hypersensitivity (type IV) 261**
- 31. Primary immunodeficiency 269**
- 32. Secondary immunodeficiency 277**
- 33. Transplantation 285**
- 34. Tumor immunology 295**
- 35. Integration of the immune system with other regulatory systems 305**
- 36. Review of immunity in health and disease 311**