## Contents

Preface to second edition 7  
Preface to first edition 7  
Acknowledgements 7  
Contributors 8  
How to use your textbook 9  
About the companion website 13

### Part 1  
**Principles of ophthalmology**  
1 Introduction: what is ophthalmology? 14  
2 Medical student aims 16  
3 Social and occupational aspects of vision 18

### Part 2  
**Ophthalmic history and examination**  
4 Taking the history and recording the findings 20  
5 Visual acuity in adults 22  
6 Examination of visual fields 24  
7 Other visual functions 26

### Part 3  
**Correction of refractive errors**  
8 Basic optics and refraction 28  
9 Glasses, contact lenses and low-vision aids 30

### Part 4  
**Basic eye examination**  
10 External eye and anterior segment 32  
11 Posterior segment and retina 34  
12 Use of eye drops 36

### Part 5  
**Acute ophthalmology**  
13 Red eye: the conjunctiva 38  
14 Red eye: the cornea 40  
15 Red eye: the sclera and episclera 42  
16 Ophthalmic trauma principles and management of chemical injuries 44  
17 Specific features of blunt and sharp injuries 46  
18 Loss of vision in the inflamed eye 48  
19 Sudden painful loss of vision in a non-inflamed eye 50  
20 Sudden painless loss of vision 52

### Part 6  
**Gradual loss of vision**  
21 Gradual loss of vision 55

### Part 7  
**Sub-specialty—Paediatric ophthalmology**  
22 Visual acuity in children 58  
23 Strabismus (squints) 60  
24 Neonates 62  
25 Infants and older children 64

### Part 8  
**Sub-specialty—Eyelid, lacrimation and orbit**  
26 Common eyelid lumps 66  
27 Common eyelid malpositions 68  
28 Lacrimation (tearing) 70  
29 Basic orbital assessment 72  
30 Orbit disease, thyroid eye disease and facial palsy 74  
31 Ocular oncology 76  
32 Common conditions affecting the external eye 78  
33 Common conditions affecting the cornea 81  
34 Medical uses of contact lenses 84

### Part 9  
**Sub-specialty—External eye disease**  
35 Corneal and laser refractive surgery 86  
36 Cataract assessment 89  
37 Cataract surgery 92  
38 Cataract surgery postoperative care 94

### Part 10  
**Sub-specialty—Corneal, refractive and cataract surgery**  
39 Glaucoma: the basics 96  
40 Detecting glaucoma 98  
41 Medical and surgical treatment of glaucoma 100

### Part 11  
**Sub-specialty—Glaucoma**  
42 Retinal detachment 102  
43 Retinal and choroidal anatomy and imaging 104  
44 Inherited retinal disorders and age-related macular degeneration 106  
45 Diabetic retinopathy classification and typical lesions 108  
46 Diabetic retinopathy treatment 110  
47 Retinal artery obstruction 112  
48 Retinal vein occlusion 114  
49 HIV infection and AIDS 117  
50 Tropical ophthalmology: tropical eye disease 120  
51 Tropical ophthalmology: global eye health 122

### Part 12  
**Sub-specialty—Vitreo-retinal**  
52 Pupil abnormalities 124  
53 Optic nerve disease 126  
54 Cranial nerve palsies and eye movement disorders 128  
55 Visual field defects 130  
56 Giant cell arteritis 132

### Appendix  
1 Red eye—signs and symptoms of different causes 134  
2 The layers of the retina 135  
3 Pharmacological intraocular pressure (IOP)-lowering agents—mechanism of action and side effects 136  
4 Optical coherence tomography (OCT) reports 137  
5 Important clinical trials in AMD 138

Index 139