

# Contents

|           |                                                                                                  |            |
|-----------|--------------------------------------------------------------------------------------------------|------------|
| <b>1</b>  | <b>Development of the Retina</b> . . . . .                                                       | <b>1</b>   |
|           | Federico Gonzalez-Fernandez                                                                      |            |
| <b>2</b>  | <b>Anatomy and Physiology of the Retina</b> . . . . .                                            | <b>39</b>  |
|           | Göran Darius Hildebrand and Alistair R. Fielder                                                  |            |
| <b>3</b>  | <b>Electroretinographic Testing in Infants and Children</b> . . . . .                            | <b>67</b>  |
|           | David G. Birch, Eileen E. Birch, and Rand Spencer                                                |            |
| <b>4</b>  | <b>Retinopathy of Prematurity (ROP)</b> . . . . .                                                | <b>85</b>  |
|           | James D. Reynolds                                                                                |            |
| <b>5</b>  | <b>Optic Nerve Malformations</b> . . . . .                                                       | <b>117</b> |
|           | Edward G. Buckley, Mathew Gearing, Jin Jing,<br>and Tamer Mahmoud                                |            |
| <b>6</b>  | <b>Inborn Errors of Metabolism Affecting the Retina</b> . . . . .                                | <b>147</b> |
|           | Scott E. Olitsky                                                                                 |            |
| <b>7</b>  | <b>Phacomatoses</b> . . . . .                                                                    | <b>159</b> |
|           | Evelyn X. Fu and Arun D. Singh                                                                   |            |
| <b>8</b>  | <b>Persistent Hyperplastic Primary Vitreous (PHPV)</b> . . . . .                                 | <b>191</b> |
|           | Bruce M. Buerk, Mithlesh C. Sharma, and Michael J. Shapiro                                       |            |
| <b>9</b>  | <b>A Language for Retinoblastoma:<br/>Guidelines and Standard Operating Procedures</b> . . . . . | <b>205</b> |
|           | Alejandra Valenzuela, Helen S.L. Chan, Elise Héon,<br>and Brenda L. Gallie                       |            |
| <b>10</b> | <b>Coats' Disease</b> . . . . .                                                                  | <b>235</b> |
|           | Franco M. Recchia and Antonio Capone                                                             |            |
| <b>11</b> | <b>Pediatric Hereditary Macular Degenerations</b> . . . . .                                      | <b>245</b> |
|           | Jack M. Sullivan, David G. Birch, and Rand Spencer                                               |            |

|           |                                                                                                   |     |
|-----------|---------------------------------------------------------------------------------------------------|-----|
| <b>12</b> | <b>Generalized Inherited Retinal Dystrophies</b> .....                                            | 295 |
|           | Shahrokh C. Khani and Airaj Fasiuddin                                                             |     |
| <b>13</b> | <b>Vitreoretinal Dystrophies</b> .....                                                            | 315 |
|           | Magdalena F. Shuler, Jack M. Sullivan,<br>Bernard R. Hurley, and J. Arch McNamara                 |     |
| <b>14</b> | <b>Macular Choroidal Neovascularization<br/>and Defects in Bruch's Membrane in Children</b> ..... | 345 |
|           | Jonathan E. Sears                                                                                 |     |
| <b>15</b> | <b>Proliferative Retinopathies in Children</b> .....                                              | 351 |
|           | Philip J. Ferrone and Steven Awner                                                                |     |
| <b>16</b> | <b>Infectious Diseases of the Pediatric Retina</b> .....                                          | 361 |
|           | Mohamed Hussein and David K. Coats                                                                |     |
| <b>17</b> | <b>Abusive Head Trauma/Shaken Baby Syndrome</b> .....                                             | 409 |
|           | Brian J. Forbes and Alex V. Levin                                                                 |     |
| <b>18</b> | <b>Pediatric Retinal Trauma</b> .....                                                             | 423 |
|           | Michael A. Samuel and Khaled A. Tawansy                                                           |     |
| <b>19</b> | <b>Pediatric Uveitis</b> .....                                                                    | 433 |
|           | Christopher Hood and Careen Y. Lowder                                                             |     |
|           | <b>Index</b> .....                                                                                | 459 |