

# Contents

|                                                                       |      |
|-----------------------------------------------------------------------|------|
| <i>Contributors</i>                                                   | vii  |
| <i>List of Colour Plates</i>                                          | ix   |
| <i>Preface</i>                                                        | xiii |
| <i>Introduction</i>                                                   | xv   |
| R.J. ROBERTS                                                          |      |
| <b>Part 1: Cytophagaceae</b>                                          | 1    |
| 1 Bacterial Cold-Water Disease                                        | 3    |
| R.A. HOLT, J.S. ROHOVEC, J.L. FRYER                                   |      |
| 2 Columnaris Disease                                                  | 23   |
| H. WAKABAYASHI                                                        |      |
| 3 Bacterial Gill Disease and Fin Rot                                  | 40   |
| J.F. TURNBULL                                                         |      |
| <b>Part 2: Enterobacteriaceae</b>                                     | 59   |
| 4 <i>Edwardsiella</i> Septicaemia                                     | 61   |
| J.A. PLUMB                                                            |      |
| 5 Enteric Redmouth (ERM) and other enterobacterial infections of fish | 80   |
| R. STEVENSON, D. FLETT, B.T. RAYMOND                                  |      |
| <b>Part 3: Vibrionaceae</b>                                           | 107  |
| 6 Vibriosis                                                           | 109  |
| B. HJELTNES, R.J. ROBERTS                                             |      |
| 7 Furunculosis                                                        | 122  |
| A.L.S. MUNRO, T.S. HASTINGS                                           |      |
| 8 Motile Aeromonad Septicaemia                                        | 143  |
| R.J. ROBERTS                                                          |      |

|                                                             |     |
|-------------------------------------------------------------|-----|
| <b>Part 4: Pasteurellaceae</b>                              | 157 |
| 9 Pasteurellosis                                            | 159 |
| T. KITAO                                                    |     |
| <b>Part 5: Pseudomonadaceae</b>                             | 167 |
| 10 <i>Pseudomonas</i> and <i>Alteromonas</i> Infections     | 169 |
| V. INGLIS, M.S. HENDRIE                                     |     |
| <b>Part 6: Gram-Positive Fish Pathogens</b>                 | 175 |
| 11 Bacterial Kidney Disease — BKD                           | 177 |
| T.P.T. EVELYN                                               |     |
| 12 Streptococcal Infections                                 | 196 |
| T. KITAO                                                    |     |
| 13 Clostridial Infections                                   | 211 |
| V. INGLIS                                                   |     |
| <b>Part 7: Acid-Fast Fish Pathogens</b>                     | 217 |
| 14 Mycobacteriosis: Nocardiosis                             | 219 |
| G.N. FRERICHs                                               |     |
| <b>Part 8: Rickettsias and Chlamydias</b>                   | 235 |
| 15 Epitheliocystis and Salmonid Rickettsial Septicaemia     | 237 |
| J.F. TURNBULL                                               |     |
| <b>Part 9: The Practice of Fish Bacteriology</b>            | 255 |
| 16 Isolation and Identification of Fish Bacterial Pathogens | 257 |
| G.N. FRERICHs                                               |     |
| 17 Public Health Aspects of Bacterial Infections of Fish    | 284 |
| V. INGLIS, R.H. RICHARDS, K.N. WOODWARD                     |     |
| <i>Index</i>                                                | 305 |