

## Contents

<i>R. Zwillig:</i> Astacin and the astacins: A Re-View.....	11
<i>W. Bode, F. Grams, P. Reinemer, F.-X. Gomis-Rüth, U. Baumann, D.B. McKay, and W. Stöcker:</i> The metzincins: A new superfamily of zinc endopeptidases.....	29
<i>J.S. Bond, P. Marchand, J. Tang, and W. Jiang:</i> Structure and membrane association of mouse and rat meprins .....	45
<i>J.A. Eldering, J. Grünberg, and E.E. Sterchi:</i> Biosynthesis and subunit assembly of PABA-peptide hydrolase (human meprin) .....	57
<i>R.J. Beynon, S. Oliver, L. Stateva, R.P. Evershed, and D. Robertson:</i> Soluble forms of kidney meprin- $\alpha$ .....	73
<i>G.D. Johnson, and L.B. Hersh:</i> Expression of meprin subunit precursors in mammalian cells .....	85
<i>U. Baumann, and D.B. McKay:</i> Crystallographic studies on serralysins .....	97
<i>F. Tonello, G. Schiavo, O. Rossetto, and C. Montecucco:</i> Tetanus and botulism neurotoxins .....	105
<i>D.S. Auld:</i> Structure/function studies of zinc proteases .....	119

<i>A. Yiotakis, J. Jiracek, St. Vassiliou, A. Lecoq, and V. Dive:</i> Phosphinic peptides for the development of potent and selective zinc metalloprotease inhibitors .....	133
<i>W. Stöcker, I. Yiallouros, D. Köhler, S. Gredel, R. Zwilling, V. Dive, W. Bode, F.-X. Gomis-Rüth and F. Grams:</i> Structural basis for the function of astacins and related zinc peptidases .....	147
<i>F. Grams, W. Stöcker, I. Yiallouros, R. Zwilling, V. Dive, M. Pieper, H. Tschesche, and W. Bode:</i> Binding of transition state analogue and other inhibitors to astacin and related proteases .....	165
<i>R.L. Wolz:</i> Substrates and inhibitors of astacin and meprin .....	179
<i>G. Marqués, and M.B. O'Connor:</i> The paralogous genes <i>tolloid</i> and <i>tolloid-related-1</i> have distinct stage and tissue specific functions during <i>Drosophila</i> development .....	191
<i>R.W. Padgett, A.L. Finelli, C. Savage, T. Xie, and S-H.Cho:</i> The <i>tolloid</i> -like genes in invertebrates .....	211
<i>L. Dale:</i> Bone morphogenetic proteins in amphibian development .....	235
<i>S. Yasumasu, and K. Yamagami:</i> HCE and LCE, two component proteases of the hatching enzyme of the Medeka, <i>Oryzias latipes</i> .....	247
<i>G. Geier, E. Jacob, W. Stöcker, and R. Zwilling:</i> Genomic organization of the zinc-endopeptidase astacin .....	259