Record Nr. UNINA9910828719303321 Colloquium on Proteolytic Processing and Physiological Regulation // **Titolo** [edited by Hans Neurath and Charles S. Craik] Pubbl/distr/stampa Washington, D.C., : National Academy of Sciences, 1999 **ISBN** 1-280-20990-9 9786610209903 0-309-56942-7 Edizione [1st ed.] Descrizione fisica 1 online resource (107 p.) Collana National Academy of Sciences colloquium series Altri autori (Persone) NeurathHans <1909-2002.> CraikCharles S Disciplina 572.76 Soggetti Proteolytic enzymes Cell physiology Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Note generali "Reprinted from the Proceedings of the National Academy of Sciences of the United States of America, volume 96, pp. 10962-11061, September 28, 1999, and includes articles based on the National Academy of Sciences' Colloquium on Proteolytic Processing and Physiological Regulation, held at the Arnold and Mabel Beckman Center in Irvine, California, February 20-21, 1999"--P. [2] of cover. Nota di bibliografia Includes bibliographical references. Nota di contenuto COLLOQUIUM ON PROTEOLYTIC PROCESSING AND PHYSIOLOGICAL REGULATION -- NATIONAL ACADEMY OF SCIENCES -- Proteolytic Processing and Physiological Regulation -- A COLLOQUIUM SPONSORED BY THE NATIONAL ACADEMY OF SCIENCES -- FEBRUARY 20-21, 1999 -- Saturday, February 20, 1999 -- Sunday, February 21, 1999 --PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA -- Contents -- National Academy of Sciences Colloquia -- BOUND REPRINTS AVAILABLE -- Proteolytic enzymes, past and future -- Caspase activation: The inducedproximity model -- Structural aspects of activation pathways of aspartic protease zymogens and viral 3C protease precursors --Conversion of Gastric Aspartic Protease Zymogens -- Conversion of Proplasmepsin II -- Autocatalytic Excision of Picornaviral 3C Proteases -- The catalytic sites of 20S proteasomes and their role in subunit

maturation: A mutational and crystallographic study -- MATERIALS

AND METHODS -- RESULTS AND DISCUSSION -- The structure of the human II-tryptase tetramer: Fo(u)r better or worse -- CONCLUSION --Sonic hedgehog protein signals not as a hydrolytic enzyme but as an apparent ligand for Patched -- MATERIALS AND METHODS -- RESULTS -- DISCUSSION -- Structure-assisted design of mechanism-based irreversible inhibitors of human rhinovirus 3C protease with potent antiviral... -- Picornaviral 3C Proteases -- Inhibitors of 3C Protease and the Issue of Serotypic Diversity Among Rhinoviruses -- Irreversible Michael Acceptors as Inhibitors of 3C Protease -- Michael-Acceptor Inhibitors of 3C Protease: Structure-Activity Studies -- AG7088, a 3C Protease Inhibitor with Potent Antiviral Activity Against Multiple Human Rhinovirus Serotypes -- Kinetic stability as a mechanism for protease longevity -- Cysteine protease inhibitors as chemotherapy: Lessons from a parasite target -- METHODS -- RESULTS -- DISCUSSION. How the protease thrombin talks to cells -- How Does a Protease Talk to a Cell? -- Irreversible Activation, Disposable Receptors, and Intracellular Reserves -- A Protease-Activated Receptor Family -- PARs and Platelet Activation -- A Role for Thrombin Signaling in Embryonic Development and Other Processes? -- Summary -- VanX, a bacterial Dalanyl-D-alanine dipeptidase: Resistance, immunity, or survival function? -- Chaperone rings in protein folding and degradation --Architecture-Function Considerations -- Substrate Protein Recognition -- Action of ATP -- Commitment of Substrate -- Prospects for Further Mechanistic Understanding -- A proteolytic pathway that controls the cholesterol content of membranes, cells, and blood -- Two-Step Proteolytic Release of SREBPs -- SREBP Cleavage-Activating Protein (SCAP) -- SCAP as a Sterol Sensor -- Candidate Gene for Site-2 Protease -- Candidate Gene for Site-1 Protease -- Unresolved Questions -- Cellular mechanisms of -amyloid production and secretion -- Reverse biochemistry: Use of macromolecular protease inhibitors to dissect complex biological processes and identify a... --MATERIALS AND METHODS -- RESULTS -- DISCUSSION.