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COVER A transmission electron micrograph (magnification $\times 16,000$) of a human neutrophil that is degrading particles of antibody-coated, insoluble elastin in the presence of human plasma. Although endogenous plasma proteinase inhibitors cannot regulate neutrophil-mediated proteolysis at sites of tight cell-substrate contact, subjacent substrates can be protected from the attacking neutrophils by secretory leukoprotease inhibitor, a structurally unique proteinase inhibitor normally concentrated in human mucous secretions. See page 178. [Photograph by Andreas R. Huber, Sandra Regiani, Bruce Donohoe, and Stephen J. Weiss]

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