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Preface

Many diseases, or at least the symptoms of diseases, arise from a deficiency or excess of a specific metabolite in the body, from infestation of a foreign organism, or from aberrant cell growth. Selective inhibitors of enzymes can normalize an excess or deficiency of a specific metabolite in the body and can destroy foreign organisms and aberrant cell growth. Because of this, enzymes are very important targets for drug design. This Symposium-in-Print presents 17 approaches to the design, or elucidation of the mechanism of action, of enzyme inhibitors/ inactivators. Four of the papers deal with inhibitors of HIV-1 protease, an important approach to the design of anti-AIDS agents, two are related to inhibition of $C_{17(20)}$ lyase (breast and prostate cancer), and the remaining 11 papers are concerned with inhibition of other enzymes: elastase/cathepsin G/proteinase 3 (emphysema), parasitic protease (parasitic diseases), acetylcholinesterase (Alzheimer's disease), methyltransferases (cancer), steroid 5α-reductase (benign prostatic hyperplasia), acyl CoA:cholesterol acyltransferase (atherosclerosis), protein tyrosine phosphatase (cancer), GABA aminotransferase (epilepsy), farnesyl:protein transferase (pancreatic and colon cancer) and nitric oxide synthase (septic shock, cerebral ischemia, arthritis). These papers combine a mix of structure-based approaches and mechanism-based approaches. Please join me in thanking each author for the outstanding work that they have presented (you can applaud in your offices).

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