CHAPTER 35

MEDICAL SCIENCES BIOPHYSICS

Doctoral Theses

01. SHOBHA KUMARI Structure Determination of *Bacillus Licheniformis* Gamma GLutamyl Transpeptidase in complex with various inhibitors. Supervisor : Dr. ManishaGoel Th 23696

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1. Introduction 2. Structural understanding of gamma glutamyltranspeptidase: An overview 3. Experimental procedutes 4.Cloning, expression and purification of BIGGT 5.Structure of gamma glutamyltranspeptidase in complex with acivicin 6.Structural of gamma glutamyltranspeptidase in complex with azaserine 7.Structure of gamma glutamyltranspeptidase in complex with DON 8.Discussion and conclusions 9. Summary. Bibliography. Publications.

02. VERMA (VedVrat) **Designing Novel Inhibitors Against Bacterial Gamma GlutamylTranspeptidase using Insilico Approaches.** SUPERVISOR: DR. ManishaGoel Prof. Rani Gupta <u>TH 23595</u>

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1. Introduction 2. GGT virulence factor to a promising drug target: An overview 3. Phylogenetic and evolutionary analysis of functional divergence among GGT subfamilies Exploring the role of divergent sites in the binding cavity of HpGGT and HsGGT 5. In-silico prediction of high specificity and high affinity inhibitors against HpGGT: implications of Divergent site involvement 6. Summary 7.Bibliography 8.Publications.