Thrust Area of Research

- Development of biomolecules by r-DNA technology
- Regulation of gene expression
- Development of diagnostic tests
- Vaccine development
- Molecular virology (Human viruses)
- Genomics/proteomics of cancers and development of biomarkers for their early detection
- Molecular biology of non-infectious diseases
- Proteomics of host-pathogen interactions
- Enhancement of secondary metabolites through genetic engineering and in vitro culture, metabolic engineering of medicinal plants for better yields of medicinal compounds
- *In vivo* and *in vitro* conservation of medicinal plants
- Transgenics of vegetables, floriculture and oil crops

Recently the department has developed international research programmes (Indo-US Vaccine Action Programme) with Emosy University, USA and Centre for Disease Control (CDC), USA on infectious diseases.