AIMS AND OBJECTIVES
“Success is a state of mind. If you want success, start thinking of yourself as a success.”

Dr. Joyce Brothers (psychologist)

AIMS AND OBJECTIVES

The following objectives were undertaken during this study:

- Identification of ~60 kD protein in the OMV proteome.
- Purification of native GroEL protein (XnGroEL) from the X. nematophila cell lysate as well as from culture supernatant.
- Biochemical characterization of XnGroEL protein.
- Isolation of groEL gene from Genomic DNA library.
- Cloning of groEL gene and expression of recombinant protein in E. coli BL21(DE3) cells.
- Purification of recombinant XnGroEL protein.
- Evaluation of both native as well as recombinant XnGroEL insecticidal activity.
- Cloning of XnGroEL domain encoding nucleotide sequences, expression and purification of truncated proteins.
- Evaluation of insecticidal activity of XnGroEL domain proteins.
- Interaction of XnGroEL with Brush Border Membrane Vesicle (BBMV) proteins.
- Chitin binding activity of XnGroEL protein.
- 3D homology modeling of X. nematophila and design of mutations.
- Effect of mutations on protein bioactivity.