

### **SPECIFIC AIMS**

1. To assess the extent to which silymarin regulates the expression of HCV core and HCV NS5A mRNAs in CNS3 and 9-13 cells.
2. To assess the extent to which silymarin regulates the expression of HCV core and HCV NS5A proteins in CNS3 and 9-13 cells.
3. To compare the effects of Silymarin and Interferon on HCV core and HCV NS5A gene expression in CNS3 and 9-13 cells.
4. To assess the extent to which silymarin regulates HO-1 gene expression in Huh-7, CNS3 and 9-13 cell lines.
5. To investigate the possible mechanism by which Silymarin down-regulates HCV proteins, assuming there is down-regulation.
6. To investigate the possible mechanism by which Silymarin regulates HO-1 gene expression, assuming there is regulation.