AIM AND OBJECTIVES OF THE STUDY
The aim of this study is to explore the molecular basis of arsenic toxicity and assess the efficacy of pomegranate fruit extract against arsenic-induced hepatotoxicity by reducing oxidative stress, inflammation and cell death.

To accomplish this aim we divided the study in three chapters with the following objectives

**Objectives of First chapter:**

- To confirm liver injury at the selected doses of arsenic
- To analyze the effect of arsenic on the primary immune organ thymus to co-relate immune incompetence against tissue injury

**Objectives of Second chapter:**

1. To explore the molecular basis of arsenic-induced hepatotoxicity
2. To establish the efficacy of pomegranate fruit extract in ameliorating arsenic-induced
   a. Oxidative stress,
   b. Inflammation and
   c. Cell death in hepatocytes

**Objectives of Third Chapter:**

- To examine the protective effect of Green tea and Resveratrol against arsenic induced hepatotoxicity
- To compare the effectiveness of pomegranate, green tea and resveratrol in reversal of hepatotoxicity