

## Research Internship

# Analytical method development for Protein (Lectins)

Keywords: Basidiomycetes fermentation | protein | lectin

### Project Description

Biomolecules such as protein play a vital role in different industry due to their various applications in pharmaceutical industry; in food or cosmetic industries. Lectins in particular are also used as ligand in affinity resins for capturing glycoproteins or carbohydrates

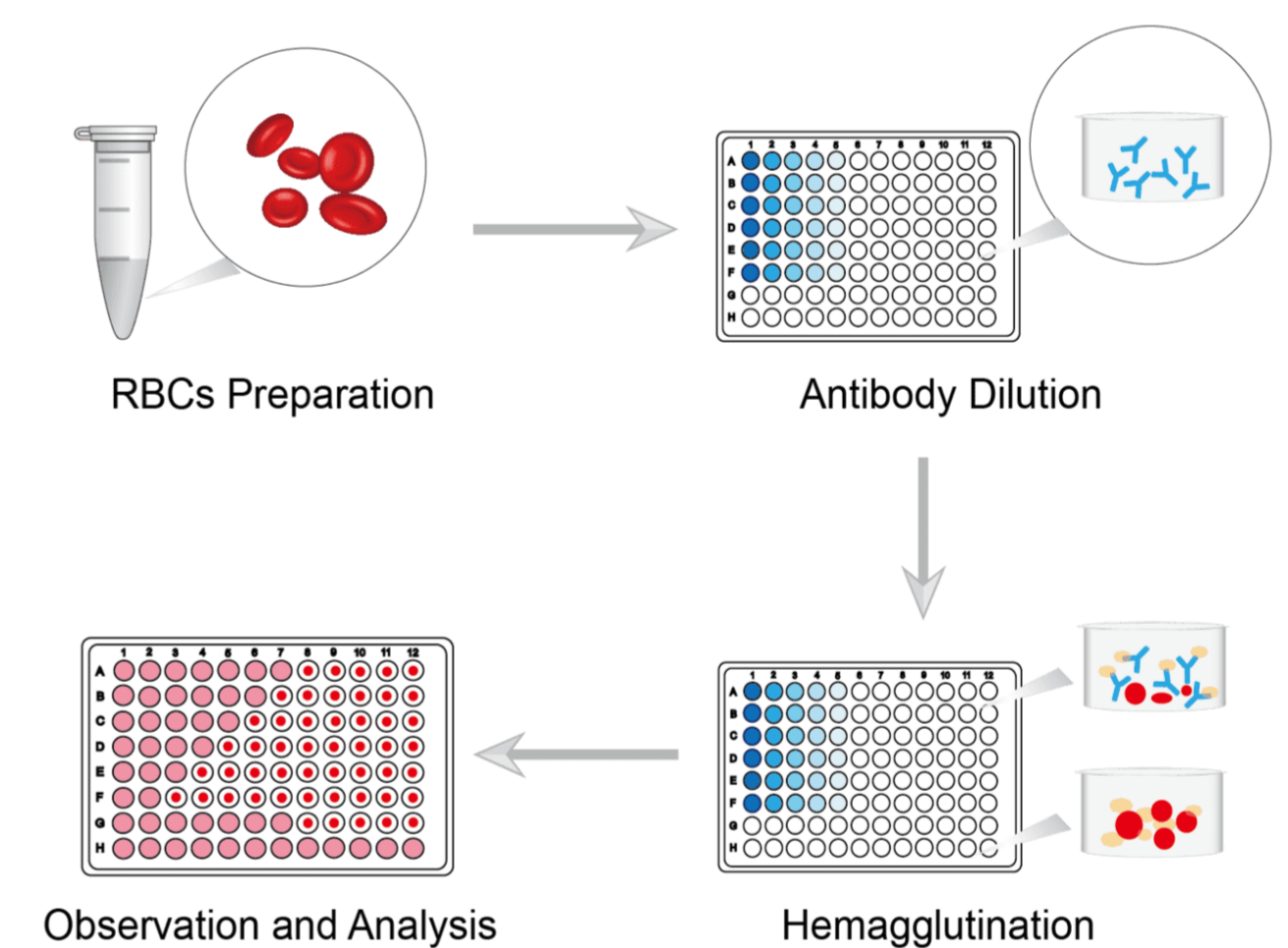
Lectins from filamentous fungi are good sources for such applications as they are novel in structure and also in varied structures and such fungi can be grown in eco-friendly and sustainable ways. But the analysis of such molecules require different assay such as hemagglutination or hemagglutination inhibition is limited due to their complex nature.

This project aims to develop and optimize the hemagglutination and hemagglutination inhibition assay for analysis of the lectins from filamentous fungi. It also aims to screen different ligands and erythrocytes suitable for agglutination



### Tasks

1. Literature review
2. Cultivation in shake flasks for fungi production
3. Development of a method for analyses of protein
4. Optimization for a protocol for analysis of different proteins



*Protocol development for Assay*

### Profile

- Structured and independent work
- Motivation to work as a team
- Master student in biotechnology (IBT, MBT), biochemistry, biology, chemistry or similar
- **Start date:** as soon as possible or in Mar
- Language: English