

1. Objectives

IPRO 318 is entitled Novel New Drug Targets. The objective for this IPRO is to determine specific proteins that are involved in disease pathology. The team will investigate diseases and their protein sequences in order to determine their function and whether it is suitable for drug targeting. The information collected will be created into an informational website that can be used in further IPRO semesters. With the analyzed data the team will begin testing several relevant sequences to determine drug targeting.

There are multiple objectives and goals the team has set forth this semester:

- Research diseases and their respective protein sequences.
- Compile all the data into an organized database.
- Analyze the data to determine several protein sequences of relevance.
- Begin experimentally testing several protein sequences.
- Develop a logbook of the experiments done and the results including pictures.
- Create detailed information for continuing IPROs to resume testing.

The most important objective for the Fall 2006 team is to create a useable database of the diseases linking them to their protein sequences.

2. Background

This IPRO is relatively new and there was little done before this semester. At the start of the project background information was given on the history and methodology of protein sequences in drug research. This gave the team time to become acclimated to the project. The research team was also given a compiled list of several diseases and their protein sequences; as this list was incomplete and unorganized the team recompiled the list. The team is now starting anew with its research and experiments.

3. Methodology

The team was split into two groups: a research team and an experiment team. The research team intends on completing data mining using the World Wide Web as its main resource. As the research team compiles its results into an organized database the experiment team will be analyzing the gathered protein sequences for interesting entries, which may lead to new drug targeting.

4. Expected Results

IPRO 318 does not expect to create a miracle drug that will cure all diseases. Our expected results are to successfully create and maintain a database of information for research purposes. Our secondary results are to begin testing protein sequences but the team is fully aware that the experiments are not guaranteed to provide any answers.

5. Budget

Not applicable at this time.

6. Project Deliverables and Milestones

September 22, 2006	Project Plan Due
October 20, 2006	Midterm Report Due
November 22, 2006	Poster/ Website Due
November 27, 2006	Abstract/ Brochure Due
November 29, 2006	Presentation Due
November 30, 2006	Final Report Due
December 1, 2006	IPRO Day