1.0. Revised Objectives

Currently there are no revisions made to the objectives presented in the Project Plan. As a team the goals were reassessed and determined to still be attainable with in the fall semester.
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.

2.0. Results to Date

Project Milestones

Key milestones expected	Milestone data expected	Task Completion
Construction of entry clone for 318-H1	End of September	
Construction of entry clones for 318-H2 and 318-H3	End of October	In progress
Construction of 318-H1 bait clone	Early October	completed
Construction of 318-H2 and 318-H3 bait clones	End of November	
Two-hybrid screen of 318-H1	Early October	completed
Bacteria/yeast expression of 318-H1	End of October	In progress
Construction of 318-H2 and 318-H3 expression clones	End of November	
Database structure finalized	End of October	completed
Expended database on the web	End of November	Pending completion of test version
Website test beta version finalized	End of October	In progress

The IPRO has a whole has accomplished several of the tasks set forth at the beginning of this semester.

The research team has successfully gathered and organized the data that will make up the website for this IPRO. There are more than 200 genes and proteins with more than 100 diseases making up the database for the research team. The team has been able to put the data together in order to make it easier to read and understand. They have also begun to discuss the web site layout determining the aesthetics for the page.

The Bench-work team that is in charge of the yeast two hybrids has now had practice in the procedure and was able to successfully procure useable yeast culture for the project.

The Bench-work team responsible for the protein-expression has also had practice in the techniques and procedures that are required for this part of the project, but has yet to make any significant progress toward the final outcome desired for the project. As this team's work is dependent on the yeast two-hybrid team, it is first necessary for the other team to finish their tasks before moving ahead.

As far as deliverables are concerned with the project, the team has yet to discuss the poster and power point presentation for IPRO day; and is currently more intent on procuring results from the lab. The website design has been started as it is an integral part of the IPRO's final goals. The rest of the project deliverables will be assessed in next weeks IPRO meetings.

All the work that has been done by the three teams is being documented in lab notebooks for reference by future IPRO's.

3.0. Revised Task / Event Schedule

Work Breakdown

1. Bench Work Team
    A. Protein Expression Team
    B. Yeast Two-Hybrid Team
2. Research Team
    A. Web Design
    B. Database Design

The Yeast Two-Hybrid Team will be culturing yeast with appropriate plasmids for further use by the Protein Expression Team. The Yeast Two-Hybrid Team following the protocol given by Professor Zhang the team has successfully cultured viable products.

The Protein Expression Team will be in charge of targeting specific proteins within the yeast that are of interest to new drugs.

The Web Design Team is responsible for creating the website for the IPRO which will include information on the IPRO, the team members, and also the Database as designed by the other team.

The Database Team will be compiling a comprehensive list of known diseases and the believed protein sequences that are essential for the disease pathology. Once the list has been created this team will organize it and develop and easy to use database for searching by protein or disease.

Estimated Start and End Dates for Tasks

	Start data	End data
Protein expression team:	Second week Fall	Two weeks before IPRO Day
Yeast two-hybrid team:	Second week Fall	Two weeks before IPRO Day
Database team:	Second week Fall	Two weeks before IPRO Day
Web design:	Second week Fall	Two weeks before IPRO Day

Project Deliverables

September 22, 2006	Project Plan Due	Finished
October 20, 2006	Midterm Report Due	Finished
November 22, 2006	Poster/ Website Due	Starting November 10
November 27, 2006	Abstract/ Brochure Due	Starting November 10
November 29, 2006	Presentation Due	Starting November 10
November 30, 2006	Final Report Due	In Progress
December 1, 2006	IPRO Day	

There have been no significant changes made to the task start and end dates. The IPRO team discussed how the project was going and whether there was a need to push back any of the dates for the project and found that things were moving at the expected speed, therefore nothing has been changed in regards to the tasks.

4.0. Updated Task Assignments and Designation of Roles

Due to the relatively small size of this IPRO no changes have been made to the designation of roles. Each of the teams and its members are handling their respective tasks well, completing assignments on time and with accuracy.

Team Member Assignments

Name	Major/ Background	Team	Task
Amit Kamdar	MBB	Protein expression	Protein function,
Joshua Marell	MBB	Yeast two-hybrid	Protein Interaction
John Knox	Biomedical Engineering	Yeast two-hybrid	Protein Interaction
Hyunsuk Kim	MBB	Database	Creating database
Calvin Wu	MBB	Database	Creating database
Lindsey Polich	Biology	Database/Web Design	Creating database/website, Team leader, Time Sheet and Attendance Manager
Floriann H. Stankovich	Biomedical Engineering	Yeast two-hybrid	Protein Interaction
Vrudhdhi Patel	MBB	Yeast two-hybrid	Protein Interaction
Tengchuan Jin	Teaching Assistant	Yeast two-hybrid and protein expression	Bench work team leader.
Ronak Desai	MBB	Protein expression	protein function
Martina Dolejs	Architecture	Web Design	Web design

5.0. Barriers and Obstacles

The team as a whole has found that the most difficult problem to overcome is understanding the project fully. While most of the IPRO team consists of students with majors based in biology, the task set to the team is relatively new material. In order to overcome this obstacle the team sat with the IPRO professor and the Teaching Assistant and learned more about the process in which the IPRO is based. The team now completely understands the procedures and processes and is coming to handle them with more expertise after some practice.

Another problem the team has had to overcome is a lack of funding for the IPRO. IPRO 318 is not sponsored by a company and is in need of money for the materials needed in the lab. In order to complete the tasks set forth the Professor has generously allowed the team to use some of the resources from his other lab courses, but for the IPRO to continue successfully, more materials are needed.

The bench-work team has also had some trouble with the procedures because it is very tedious and time consuming. Each run of the procedure takes at least a week were the yeasts have to be grown. During this time it is hard to continue any work as the yeasts grown are needed for the next step in the process. This problem has been overcome by developing a cycle so that while one set of yeast is being grown another has just finished.

The last problem that the IPRO has encountered is in regards to the research team. The team at first was having trouble compiling the data into a useable source because the gene and protein numbers that were associated with the disease were not matching the numbers in the primary source. Through much tedious compiling the research team was able to match the numbers to its disease.