FINAL Specific Aims Rubric

Student's Name: _____   **Date: _____**

Category	Excellent/ Acceptable **6**	Adequate (Needs minor revisions) **4**	Not Adequate (Needs major revisions) **2**	Poor (Not acceptable) **0**	Score
Intro and Background: Should critically evaluate existing knowledge (knowns) and specifically identify the gaps that the project is intended to fill (unknowns). Importance of the research and the impact of the study on advancing scientific knowledge should be clearly stated	very clearly explains background and gaps in knowledge	clearly explains background and gaps in knowledge but does not relate the two	somewhat explains background and gaps in knowledge, though unclearly or without relating the two	intro section is unclear and does not relate background and gaps in knowledge	
Disease & Gene/Protein Disease and symptoms/phenotype were mentioned. Gene/Protein associated with disease /trait was described and the Gene Ontology (GO terms) were all mentioned. Phylogeny tree, Gene Expression Data, Interaction data is shown.	very clearly explains disease, gene and GO terms are clearly described as they pertain to the goal of the project. Phylogenetic analysis, Gene Expression and Interaction data is described as necessary.	mentions disease, gene/protein and necessary GO terms but does not relate them well. Tree, expression data and interaction networks may or may not be stated but are not related to project given overall goal.	somewhat explains disease, gene/protein and necessary GO terms though unclearly or without relating them at all. Presents a little about the phylogeny, gene expression and interaction data but not clear why given overall goal.	No mention of the disease, gene or GO terms at all. No phylogenetic info, gene expression or interaction data mentioned given overall goal.	
Model Organisms Should clearly state the model organism choice and justify the thought reasons why and how they will be used in your study	Model organism (s) are clearly mentioned and justified clearly	Model organism(s) are stated but may not be clear given background	model organism(s) are stated but it is not clear why they were chosen	model organisms are not stated and not justified	
Objectives and Rationale: Should clearly state the study goals and clarify the thought process used to generate the central hypothesis	objectives and rationale are clearly stated and easy to follow	objectives and rationale are stated but may not be clear given background	objectives and rationale are stated but it is not clear how hypothesis was generated	objectives or rationale are not stated and it is not clear how hypothesis was generated	
Primary Goals	clearly stated goals that reflect intro and objectives given	stated, but goals are not clear given intro and objectives	some stated, but goals do not reflect intro and objectives given or are not clear	goals are not stated	
Specific Aims: Should be relevant to study the question, address the overall hypothesis, and fill in the stated knowledge gaps in the field.	all aims are clearly stated and relevant to background and objectives given	aims stated and relevant but are not clear given background and objectives	some aims stated but not clear or relevant to background and objectives given	specific aims are not stated or are not relevant to background and objectives given	
Hypotheses: Should correspond with each stated specific aim and must be testable using genomic, proteomic & bioinformatic analyses	all clearly stated, match study aims, and testable with genomic, proteomic & bioinformatic analyses	stated, but all may not match study aims. all testable with genomic, proteomic & bioinformatic analyses	some stated but may not be clear, do not match study aims, and are not testable with genomic, proteomic & bioinformatic analyses	hypotheses not stated or not testable using genomic, proteomic & bioinformatic analyses	
Approach: Genomic, Proteomic & Bioinformatic Analyses learned in class or lab	All aims use a range of genomic/proteomic or bioinformatic approaches we learned in class/lab	2 aims use genomic/proteomic or bioinformatic approaches in class/lab	1 aim uses genomic/proteomic or bioinformatic approaches in class/lab	None of the aims use genomic/proteomic or bioinformatic approaches in class/lab	
Rationale: Why each aim is being proposed was stated	Each aim has a clear reason why the question is being asked and approach is being used	2 aims have a clear reason why the question is being asked and approach is being used	1 aim has a clear reason why the question is being asked and approach is being used	None of the aims have a clear reason why the question is being asked and approach is being used	
			Total Score +2pts		**/50**

Strengths & Weaknesses: