**RUBRIC BGGN-213: FOUNDATIONS OF BIOINFORMATICS**

The find-a-gene project assignment

http://thegrantlab.org/bggn213/

Dr. Barry Grant

**Scoring Rubric**:  
[45 total points available]

**Q1** (4 points)  
Protein name 1

Species 1

Accession number 1

Function known 1

**Q2** (6 points)  
Blast method 1

Database searched 1

Limits applied 1

Search output list (top hits) 1

Alignment of choice 1

Evalue and other alignment stats 1

**Q3** (3 points)  
Protein sequence of choice matches Subject above 1

Name in header 1

Species 1

**Q4** (3 point)  
Blastp output list with identities & Evalue 1

Top alignment shown with alignment statistics 1

Results indicates a “novel” gene found 1

**Q5** (3 points)  
MSA labeled with useful names 1

MSA trimmed appropriately (i.e. no gap overhangs) 1

Pasted MSA fits report page width (i.e. font, format) 1

**Q6** (1 point)  
Figure illustrates sequence clustering pattern 1

**Q7** (10 points)  
Heatmap figure included in report 5

Heatmap is legible (i.e. no labels obscured) 5

**Q8** (10 points)  
PDB identifiers from multiple species reported 5

Annotation of PDB source, resolution and technique 4

Annotation of Evalue and Sequence Identity 1

**Q9** (4 points)  
Structure figure provided 2

Uses white background for molecular figure 1

Figure of high resolution (i.e. not just snapshot) 1

**Q10** (1 point)  
Evidence of ChEMBEL searches 1