Adv. Practical Comp. Concept for Bioinformatics Final Project Documentation – Sebastian Kyllmann

**Design and Development of a Web Tool to Visualize Drosophila Olfactory Proteins**

Tool Background

I am currently gearing up to begin a PhD in Biological Sciences at the University of Nebraska Lincoln. The potential thesis project I might undertake would use machine learning software to analyze drosophila body patterns from video data. These behavioral data would then be related to protein function, with an emphasis on olfactory proteins. I have chosen to use Drosophila data from FlyBase for this final project so that I may familiarize myself with FlyBase, with olfactory genes, and with the bioinformatics tools we have been studying this semester.

A dataset of approximately 700 olfactory genes from various Drosophila species was downloaded from FlyBase. The GO ontology “sensory perception of smell”, with accession number 0007608 was chosen to obtain the results.