**Identification of Data Sets**

Identify set of Human genes with Go terms related to synapse

Identify miRNAs that are predicted to regulate these Hu genes

Identify which of these miRNAs show expression enriched at the synapse

Identify set of Drosophila genes with Go terms related to synapse

Identify miRNAs that are predicted to regulate these drosophila genes

Identify which of these miRNAs show functional involvement in Synapse morphology

**Compare and Contrast Data Sets**

1) Compare and contrast Drosophila and Human gene sets from same go terms

2) Compare and contrast Drosophila and Human miRNAs predicted to regulate genes from synaptic go terms

3) Compare and contrast Drosophila miRNAs predicted to regulate genes from synaptic go terms with those miRNAs from Drosophila shown to function in synapse morphology from NMJ screen

4) Compare and contrast Drosophila miRNAs shown to function in synapse morphology with miRNAs identified from human predictions that are also shown to be enriched in synaptic expression

4

3

Overlap set of miRNAs

Filter miRNAs expressed at synapse

Filter miRNAs identified from functional screen

2

Predicted miRNA Regulators

Predicted miRNA Regulators

Synapse

1

Drosophila

Synapse

Go Terms

Go Terms

Human