

Multivariate High Dimensional Visualization and Analysis of Microarray Data
Incorporating Simultaneous Spatial and Temporal Components

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There are several visualization tools available for scientists that allow for modeling, simulation and visualization of complex biological systems data. The functionality and features of these tools vary depending on the layer (cellular, molecular, *etc.*) of the system to be explored. My BBSI research effort will focus upon developing a different way of visualizing complex microarray datasets that have multiple variables of interest. We will use The *T. cruzi* parasite as the initial development data; however if implemented correctly, the resulting tool could be used to visualize datasets that contain more than 5-dimensions or variables of interest and may include time as well. This presentation will detail the systems approach used in the analysis of existing, available visualization tools, as well as outline the approach we plan to take towards visualizing multivariate data.