**Meta!Blast - Using OpenSG to Create a Graphical User Interface (GUI)**

**What is Meta!Blast?**
Meta!Blast is an educationally interactive video game that will be used to teach high school and undergraduate students about plant cells. Meta!Blast will be playable in both a 2D and 3D environment.

**What is a Graphical User Interface?**
A Graphical User Interface allows users to interact with the computer in methods other than a text based interface. The OpenSG GUI can utilize buttons, windows, textboxes, mouse clicks, scroll bars, backgrounds, and much more.

**Objective:** To create a GUI using OpenSG for use on the Meta!Blast project.

**Rationale:** A GUI compatible in both a 2D and 3D setting was needed to facilitate the dual nature of Meta!Blast.

**Process:**
1) We identified characteristics desired for the GUI.
2) We created a skeleton library.
3) We expanded this library and added the desired features to form the OpenSG GUI.

**Future:** This GUI will be used to create in-game menus for Meta!Blast. It will also be Open Source and made available to the general public.

Eve Wurtele
**Mentor**

David Kabala

Jonathan Flory
**Student**

Alden Peterson

Lee Zaniweski

---

*Funded by NSF IIS-0552522*