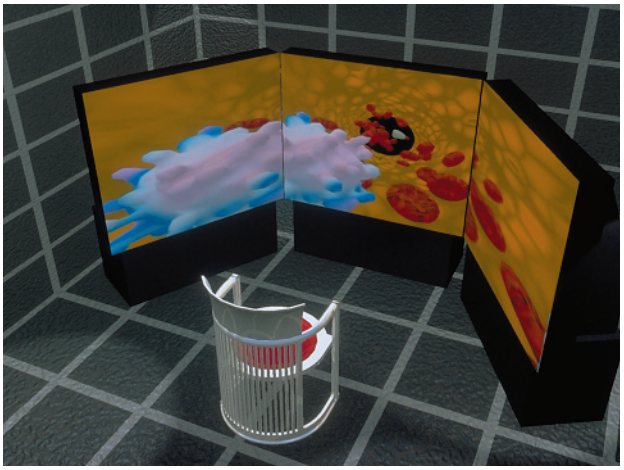
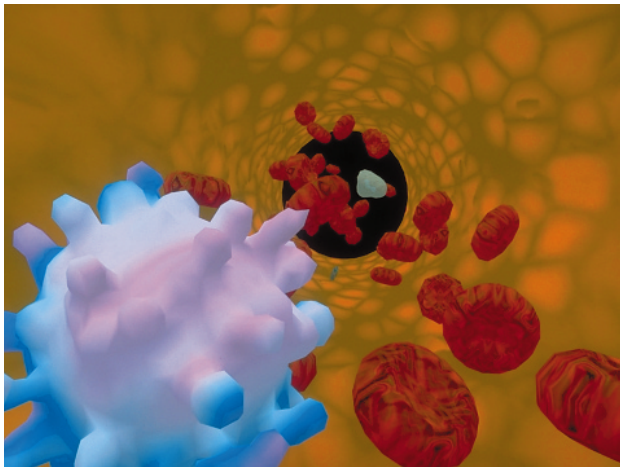
The Virtual Explorer project seeks to create highly interactive virtual environments for stimulating, immersive science learning experiences that are not possible with textbook-based approaches. The current system provides a realistic and content-rich environment for teaching basic immunology.

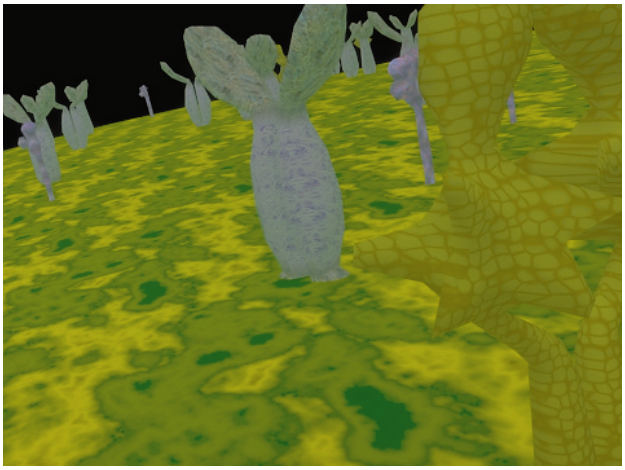
Students navigate through the bloodstream, the lymph system, and infected tissue of a patient, performing the assigned tasks and functions of the immune system from various first-person points of view, and enhancing their integrated understanding of its complex processes.

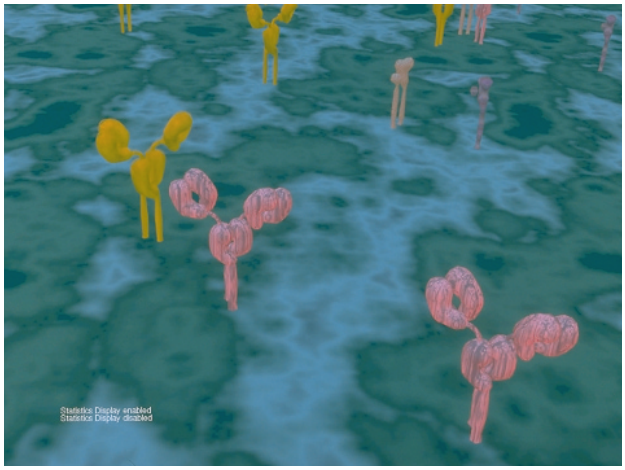
The virtual environment simulates the viewscreen of a nanobot that has been injected into a human body. It includes detailed, biologically accurate models of cells and proteins of the immune system and bloodstream, which are rendered in real-time during the simulation.

Eventually, the Virtual Explorer project will be extended to include additional fields of science education.









CONTACT
Kevin Dean
Senses Bureau
University of California, San Diego
9500 Gilman Drive, 0339
La Jolla, California 92093 USA
kld@chem.ucsd.edu
http://www-wilson.ucsd.edu/ve/

COLLABORATORS
Kevin Dean, Evan Finn, Jeremy Friesner, Bret Naylor, Sarah Wustner, Kent Wilson, and Scott Fisher