INTEGRATED MEDIA SYSTEMS CENTER
A National Science Foundation Engineering Research Center at the
UNIVERSITY OF SOUTHERN CALIFORNIA

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BioSIGHT: Interactive Visualization for Science Education
BRIEF DESCRIPTION OF DEMONSTRATIONS

Immersive Learning Environments
Using interactive 3D technology, BioSIGHT’s Immersive Learning Environments will put students into the picture of what they are studying. The research agenda is to identify fundamental design challenges that directly impact technical constraints, classroom use and pedagogy, content integration, and the motivation to play.

BioSIGHT Interactive Streaming Storyboard Platform
Using visual thinking and learning as the pedagogical approach, BioSIGHT’s Interactive Streaming Storyboard platform allows users to tell stories by integrating from a digital library archive, cutting and pasting the URL of the streaming media source, or importing from a personal web camera.

BioSIGHT Immunology Prototype Module
Interactive visualization module software for high school biology. Model for how to map a curriculum into interactive visualization modules and virtual tools to support inquiry-based (interactive) activities for teaching and learning.

UNIQUE OR DISTINGUISHING CHARACTERISTICS RELATIVE TO STATE-OF-THE-ART
- Software design implements novel pedagogy of technology usage for learning and teaching
- High fidelity content animation development for science education

APPLICATIONS
- Educational software development
- Professional training
- Distance learning
- Learning research with technology applications for education
- Research user centered design issues in immersive environments

RECENT HIGHLIGHTS, LEVEL OF DEVELOPMENT, UPCOMING MILESTONES
- “The Market Opportunity for BioSIGHT: A Platform for Interactive Visualization” is a case study report produced by Eduventures Inc and is available through the Galaxy Institute for Education website (http://www.usc.edu/dept/education/globaled/galaxy/BioSIGHT%20Case%20Study%20Final.pdf)
- Immunology Prototype Module field test conducted in San Francisco, Los Angeles, and Boston high schools. (http://biosight.usc.edu/research/progress/2000_field_test/index.htm)

REFERENCE URL
- BioSIGHT home page: http://biosight.usc.edu

For additional information, please contact the Principal Investigator listed above via email, or contact

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For additional information on the Integrated Media Systems Center (IMSC), please visit our Web site at http://imsc.usc.edu

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