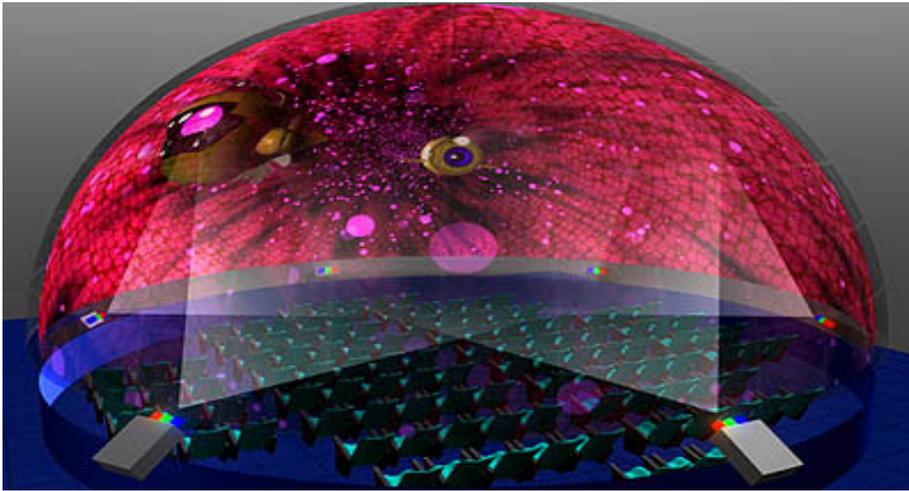
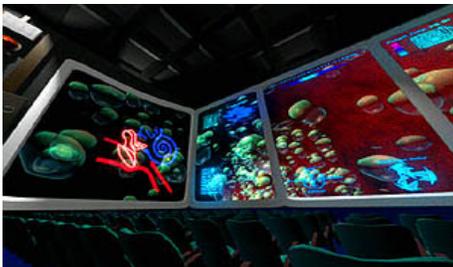


# Home Run Pictures

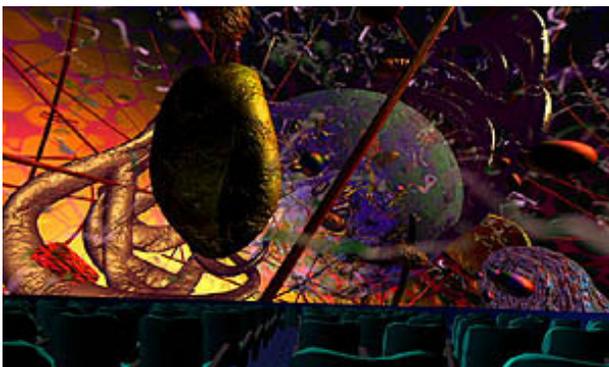
## Production Case History #1 - Microcosm: The Adventure Within



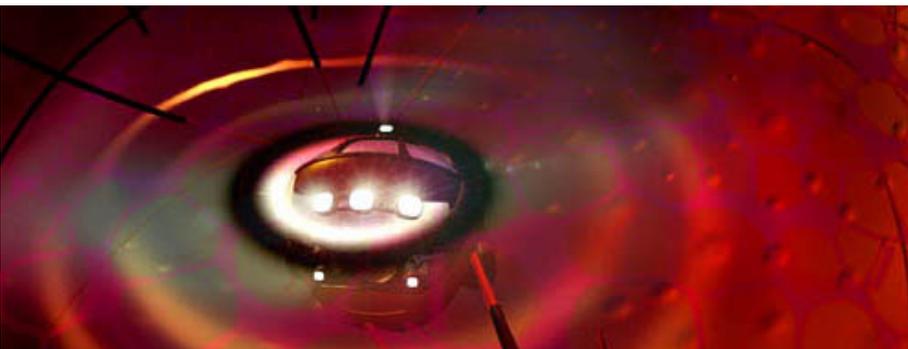
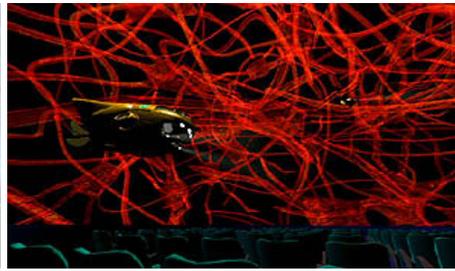
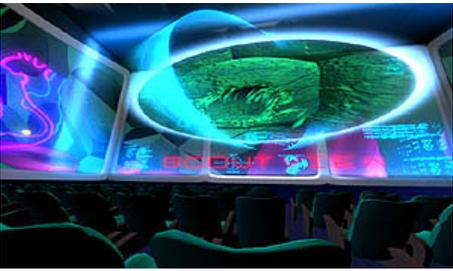
"Microcosm: The Adventure Within" is an immersive presentation employing an all-dome projection format... utilizing multiple video projectors to completely fill a planetarium style dome with imagery... resulting in the audience being immersed in our sci-fi styled story where a miniaturized sub, Alpha, is injected into a patient to seek out a stubborn infection and combat the nasty virus. The format allows the audience to go with the sub's crew and its humorous artificial intelligent-ROV, Scout, into the human body like never before... no longer looking at a traditional screen's "framed" view, but able to look left, right, up... all around as if they were actually sitting in the environment created by the dome's surface... imagine the excitement of riding along on the trip... the imagery projected on a 60+ foot 360x180 degree screen complete with surround sound audio effects.



The creative challenges of creating for the format are many... traditional film-making rules do not always apply. To effectively tell a story in a way that audiences have learned from experience with motion pictures and television, it is necessary to address the audience's frameless "free" viewing of the scene and come up with ways to direct their view to communicate important storyline events. And the dome must not be treated like a circle shaped viewport or the potential of the 360x180 degree immersive environment is lost... and the dramatic view becomes tiresome.



Home Run Pictures also had to develop new proprietary software tools to deal with creating in the all-dome format... off the shelf tools, even those used to create today's motion picture special effects are not designed to deal with the immersive views created by the projection setup. Color and contrast control in a spherical environment where the image reflectes onto itself had to



be overcome. And the management of the massive amounts of rendering and finishing required, while still maintaining creative quality, prompted the development of a specialized production pipeline.

The new projection capability creates an immersive environment that is quite dramatic for the viewer. Starting with the traditional planetarium dome configuration... video projectors are positioned around the base of the dome... These hi-definition projectors are specifically modified to project a properly focused and "vignetted" image on a section of the dome's interior surface... By overlapping the projected areas, a seamless image is created... an image that displays the full 360x180 degree view that would be available if the audience were actually in the environment... These new projection systems further open up possibilities beyond the traditional planetarium realm and are just beginning to be realized.

Home Run Pictures president Tom Casey produced and directed for the production along with lead animators Desiree Roy and Tom Nypaver handling the bulk of the animation effort. Animator Gerry Wagner contributed by creating various display graphics and models. Software tools used varied, but Alias/Wavefront Maya and PowerAnimator were the main animation applications. A network of SGI unix workstations, PC's and Macs were employed. Approximately eight months of rendering on a 12 processor render farm was needed to finish the 15 minute program. Data storage for the finished program and intermediate layered elements was near two TeraBytes and secured against failure by a RAID5 disk array.

For further information contact...

Tom Casey - [tom@hrpictures.com](mailto:tom@hrpictures.com)

Home Run Pictures

100 First Avenue, Suite 450, Pittsburgh, PA 15222

412-291-8200 + <http://www.hrpictures.com>

Home Run Pictures created the immersive presentation, "Microcosm: The Adventure Within" for the Evans & Sutherland Digital Theater Division for licensed distribution to planetariums, museums and science centers worldwide.