

Uni team wins fourth national ExploraVision title

Six Uni students, working with Uni Biology teacher Dave Stone, took first place honors nationally in the 2016 Toshiba/NTSA ExploraVision competition. This is the tenth Uni team to place first in the region (ten states and Canada), and the fourth team to place first in the overall competition.

Toshiba/NSTA ExploraVision competition involves small groups of students collaborating in the development of a future technology prototype. The students do background research, discuss what would be necessary for their proposed technology to become a reality, assess both positive and negative potential impacts of the project, and develop papers, video presentations and web sites.

The 2016 winning team, made up of juniors Joy Chen, Rima Rebei and Sarah Zhang, Sophomore Aditya Yedatore and Senior Katie Tender (mentor), won for their BEISight (Bionic Eye Implant for Sight) project. The technology is a visual prosthesis designed for long-term use by people with deteriorating retinas. It would replace the majority of the eyeball with a partially removable prosthetic containing a clear solar panel, two cylindrical cameras, and an image-to-electrical signal converter that sends signals across magnets to an electrode array implanted in the epiretinal membrane.

Biology teacher Dave Stone says the ExploraVision model encourages his students to take ownership of knowledge they've acquired and collaboratively apply that knowledge, combined with their creativity, to solve real world problems.

Each first-place team member received a \$10,000 savings bond. Members of the top two teams in each grade level division, their families, teacher-advisor, and an optional community advisor are awarded all-expense paid trips to Washington, D.C., to attend the Toshiba/NSTA ExploraVision Awards Ceremony and to meet state and national government officials.