

## *ERC CISST Sponsored Robotic System Challenge*

The Robotic System Challenges were a series of robotic competitions held in the Glass Pavilion at the Johns Hopkins University Homewood campus on Saturday, April 1, 2006 from 9am – 4pm. Over 65 of the most gifted high school and middle school students interested in science, technology, engineering and math from across the state of Maryland attended, accompanied by their parents, teachers and friends. Many engineering students from the Johns Hopkins University Whiting School of Engineering and the ERC were involved as judges, volunteers and mentors. This was a wonderful opportunity to influence students who are interested in and capable of pursuing careers in engineering.

The three key components to the success of the day included: 1) The 20 teams that participated in four different challenges, the Petite Slalom, the Mystery Course, Unleashing the Mad Scientist, and Search and Destroy: Robotic Brain Tumor Surgery; 2) Local University and industry representatives displaying robotics and admissions information for the teachers, students, and parents to discuss; and 3) ERC Industry Affiliate sponsorship and donations at various levels.

The Computer Integrated Surgery Student Research Society (CISSRS) Officers conducted the events throughout the day. They acted as judges and delegated duties to the JHU Whiting School of Engineering undergraduate and graduate student volunteers. Although the all-day event was collegial, all of the teams were competitive with each other, but very congratulatory to winning teams. Each participant received a backpack, T-shirt and fun Industry items such as frisbees and water bottles. The first, second and third place teams all received prizes, and all participants received certificates.

The overall goal of the RSC was to educate and excite pre-college students on the different engineering disciplines, with the hope that they will study these disciplines once they matriculate in college. By providing a group of mentors and judges who are currently studying and conducting research in these fields, we have generated interest among the participants very early in the pipeline. The all-day event encouraged leadership, independent thinking, hands-on experience, and the importance of working in teams. We plan to continue to foster these important attributes, as we do with the ERC CISST students.



A teacher from The Barclay Middle School from Baltimore City Public Schools offers some last minute guidance to his student.



Teams line-up their BOE-bots to compete in the Petite Slalom Challenge.