UC Berkeley as the top university in the nation for its contributions to society in its annual college guide and rankings.

Named one of BusinessWeek’s ten “Voices of Innovation” in 2008, Jane McGonigal Ph.D. ’06, director of game research and development for the Palo Alto think-tank, the Institute for the Future, says that alternate reality games (ARGs) are absolutely a business tool.

“ARGs are not escapist entertainment,” says McGonigal, designer of the Center for Public Broadcasting-funded “A World Without Oil,” and “The Lost Ring,” a 2008 Olympics-related game played by millions worldwide — both of which can be viewed at McGonigal’s game design company site, avantgame.com. “They are engines of creativity that are collaborative, give you purpose, the experience of being good at something, and the chance to be a part of something bigger. People want real life to work more like an alternate reality game.”

Golden Bear forward Ashley Walker ’09 this year became the first Cal player drafted by a WNBA team — selected in the first round by the Seattle Storm.

“The support of my teammates, coaches, and family set me up in the best possible position to be a WNBA draft pick,” says Walker, who finished her storied Cal career by guiding the Bears to their first-ever Sweet-16 appearance in the NCAA Tournament. “We worked hard, and the hard work paid off.”
Battling blindness

High axial myopia is one of the world’s leading causes of blindness: A weakened sclera — the eye’s white outer wall — combined with intraocular pressure causes the eyeball to elongate, increasing the risk of retinal detachment, cataracts, and glaucoma.

Corrective lenses, or surgeries like LASIK, offer only a temporary solution for eyes that can continue to change shape. James Su, a graduate student researcher completing his doctorate in vision science, is developing a promising new treatment using a synthetic hydrogel, a biomaterial which is liquid at cool temperatures and stiffens at body temperature. The gel, injected into the eye, conforms to the shape of the sclera, strengthening it from within.

The treatment, currently undergoing experimental testing, could “offer both higher quality of life for individuals, and lower cost of health care,” says Su. “Treating high myopia patients can run up to $5 billion a year per country.” •

Design sensitivity

When a small California Indian tribe reached out to Berkeley for help addressing housing and energy needs, graduate student instructor Ryan Shelby M.S. ’08 saw a “great opportunity for Engineering and Design Analysis freshmen to work on a real-world project.”

First stop was Mendocino County, where Shelby, who is the Alfred P. Sloan Ph.D. student in mechanical engineering, and his students met with 20 members of the Pinoleville Pomo Nation, approaching the project as a partnership: “Everyone was pitching ideas,” says Shelby.

The group brainstormed a yurt-style house design — featuring a circular central kitchen and living space surrounded by five small, attached units — that accommodates extended families and communal gatherings. Tribe members praised the design as echoing their traditional roundhouse, with the added benefit of water reuse systems and solar roof panels to reduce resource consumption.

The six-week freshmen engineering assignment has blossomed into several Berkeley Master’s and doctoral research projects — including Shelby’s — and moved out of the classroom: Using the students’ design work as the base concept, the Pinoleville Pomo Nation secured federal funding to build up to 26 homes on their lands near Ukiah. Housing, tribal leaders say, is key to unifying the Pinoleville Pomo, whose 300 members are scattered throughout northern California.

This fall, the first new resident family will move in. Says Shelby, “This is a project that is directly impacting people’s lives.” •
McNair Scholar Hector Gutierrez ’10 spent the summer with day laborers in Alameda County, researching the often grim issues surrounding illegality and the impact of the nation’s spiraling economy.

“Since I come from an immigrant background, many members of my family have experienced hands-on the same realities — racism, violence, exploitation — that day laborers undergo in their everyday existence,” says Gutierrez, who is recruitment coordinator for Berkeley’s Raza Recruitment and Retention Center.

This year, as part of his senior honors thesis in Ethnic Studies, Gutierrez will create resources to help day laborers learn to navigate the immigration system and understand workers’ rights.

“The voices of these men are too often silenced when considering policies that can significantly affect their upward social mobility,” Gutierrez says.