2009 Barron Prize Winners and Honorees

E = **Environmental Project**

WINNERS

Otana (15), California (E)

Otana conducted research on the harmful effects of ozone emitted from some air purifiers — research that ultimately helped ban the sale of these devices in the state of California. She began her research after reading an article about ionizing air purifiers — devices used by her mother, who suffers from severe asthma. When Otana couldn't find any research on the devices' direct pulmonary effects, she designed and carried out eight experiments over two years, and found that even a few hours of exposure to an air purifier caused significant drops in an important measure of pulmonary function. Otana shared her findings with the California Air Resources Board (CARB), which had been charged by the state legislature with regulating indoor ozone emissions.

She then shared her research publicly, at a CARB hearing, with a presentation so compelling that several people waiting to give opposing testimony withdrew altogether. After the hearing, the Board finalized its regulation and California became the first state to ban the sale of certain ozone-emitting air purifiers. Otana is now working hard to educate people about the risks of the devices. She has met with the head of the EPA, serves as a volunteer spokesperson for the American Lung Association, and recently presented her research at the American Thoracic Society Meeting. "I've learned that individuals – even young individuals – really can make a difference in this world," says Otana.

Additional Media Coverage

Sierra Magazine – Mar/Apr 2010 USC News – 11/19/2009 Yes! Magazine – 12/15/2009

Katie (10), South Carolina (E)

Katie has rallied hundreds of community members to assist her in creating several large-scale vegetable gardens in order to help feed the hungry. Katie's project began just over a year ago, at the end of third grade, when she brought home from school a tiny cabbage seedling and planted it. After tending to her cabbage all summer, it weighed in at a whopping 40 pounds! Hoping that it might help feed the hungry, Katie called area soup kitchens until she found one that could use her cabbage, and then delighted in serving her prize produce to 300 people.

Astonished that one seedling could grow to help so many people, Katie decided she wanted to grow more food to feed more people. She planted a backyard garden, and then approached her school for space for a larger plot. The school embraced the idea, with all of the students and faculty pitching in to help plant and maintain the veggies. Katie has asked for donations of seeds, tools, mulch, and other supplies, and has created a t-shirt with her slogan, "No Hungry Children – It only takes a seedling," to raise money for her gardens. This past Spring, Katie and her crew

Katie (10), Continued

planted over 400 donated seedlings and 400 seeds. Just recently, her request for 400 additional seedlings for a Fall planting was increased tenfold by Bonnie Plants, to 4,000 seedlings! So far, she has donated 930 pounds of fresh produce to people in need. Katie dreams of inspiring other kids and adults to start similar gardens, and already, people across the country who have heard of her work have begun doing just that. "Who would have thought I could grow a cabbage so big that I couldn't even pick it up?" asks Katie. "I now know there isn't anything you can't do. All you have to do is try."

Alex (18), New York

Alex founded New York to New Orleans (NY2NO), a non-profit group that has organized 15 trips for nearly 500 students from 35 different New York City high schools to do volunteer work in the Lower Ninth Ward of New Orleans. Alex started his group almost two years ago, following school-sponsored trips to New Orleans that then could no longer be funded by his school. Determined to help other students experience the life-changing volunteer work he'd done in New Orleans, Alex began fundraising in earnest. With those funds, he's been able to provide free trips for many of the NYC youth who participate, and has purchased two big NY2NO buses. His groups of student volunteers have rebuilt homes, cleared lots, created gardens, and reconstructed the one high school in the Lower Ninth Ward. They have also knocked on hundreds of residents' doors, connecting one-on-one to hear stories of survival and courage.

Alex has recently expanded his program by partnering with NYC organizations to tackle the issues of social injustice that the poorest areas of New York City have long-shared with New Orleans. This new initiative applies the lessons learned in NY2NO, by helping NYC students address problems in their own neighborhoods. Alex is also working to bring New Orleans students to NYC, to volunteer in Harlem and the South Bronx. "Grassroots organizing empowers people and is one of the most effective ways of achieving social change," explains Alex. "But what it really takes is time, patience, and the willingness to listen to people and what they have to say – to connect."

Sejal (17), California

Sejal founded Girls Helping Girls, a non-profit organization that trains girls around the world to become problem solvers in their communities. Sejal started her work two years ago, with the mission to empower all girls to fulfill their potential and create innovative and collaborative social change. She partners groups of girls in the U.S. with those in developing countries, to engage in cultural exchange, global education, and social change programs.

Sejal (17), Continued

So far, her group has trained over 5,000 girls in nearly 20 countries and 12 U.S. cities, tackling problems such as poverty, education, and health care. Collectively, the girls have raised over \$30,000 to fund scholarships, school lunch programs, and micro-lending projects for girls and women across Africa. They have also helped establish education and income-generation programs for sex-trafficking victims in India. Sejal shares how her passion for Girls Helping Girls has completely changed her perspective and world view. "My work has taught me that there is no lesson more vital than the understanding that one has the power and the destiny to change her world," says Sejal.

Jonathan (18), Pennsylvania

Jonathan founded Helping Hunger, a student-driven organization that has "rescued" nearly 7,500 pounds of food from caterers and restaurants, and transported it to soup kitchens and homeless shelters. Jonathan's project started small, when he began recovering otherwise wasted food from his school cafeteria and delivering it to a homeless shelter in Philadelphia. When he and two friends tried to grow the project, they had trouble finding restaurants willing to donate food, for fear of liability. Jonathan discovered the Emerson Good Samaritan Food Donation Act, passed by Congress in 1996, and with this information, was able to convince more businesses to participate. He then got busy figuring out how to involve more students in the process of transporting food to those in need.

He created a Google volunteer sign-up form, which is exported to a Google spreadsheet and then a Google map, allowing him to quickly determine how to best match volunteers with businesses for food pick-up and shelters for deliveries. With this system in place, Jonathan can now rescue and transport twenty times as much food as he could on his own. He has also expanded his cadre of young volunteers to include groups who cold-call businesses for food donations, recruit students by making school presentations, and coordinate the logistics of food pick-ups and deliveries. His goal is to see Helping Hunger spread to many more schools and involve many more students. "I've come to believe that if you really want to change the world for the better, and you work hard to achieve that goal, then there will always be people to help you along the way," says Jonathan.

Additional Media Coverage

Philadelphia Inquirer – 10/22/2009 Curious Parents – 1/2010

Ardasha and Apoorva (16 and 14), California (E)

Adarsha and Apoorva co-founded Project Jatropha to promote the use of the Jatropha plant – a shrub with oil-rich seeds – as an eco-friendly and economically sustainable source of biofuel in rural India. The two cousins, who visit their grandparents in India each summer, became alarmed as they witnessed the environmental degradation caused by the farming of tobacco there. Farmers must burn large volumes of wood in order to cure the tobacco leaves – wood usually

Ardasha and Apoorva (16 and 14), Continued

acquired from agents who illegally harvest it from the nearby national park, a pristine wildlife sanctuary that is home to the Asian elephant and tiger.

Adarsha and Apoorva realized that by giving farmers Jatropha as an alternative to growing tobacco, they could protect the local environment and contribute to the global need for clean, alternative energy. They have distributed 1,000 Jatropha seedlings to area farmers, and have demonstrated for them biofuel extraction, giving farmers the fuel to run their irrigation pumps. They have committed to buying back seeds harvested from the plants to produce biofuel at a friend's biotech lab, and ultimately plan to use money from the sale of the fuel to promote their project. In the meantime, they have fundraised and purchased 12,000 more Jatropha seedlings, which they have distributed to fifty more farmers. During each summer visit to India, the cousins spend a great deal of time meeting with farmers, village women, and schoolchildren, educating them about their project and the need to protect the environment. "We cannot continue to abuse the environment without dire consequences," says Adarsha. "But if environmentally enthusiastic youth get involved, we can still save the planet for future generations."

Emily (17), South Carolina

Emily founded the Need To Read Book Club (NTRBC), a group of reading enthusiasts that has raised over \$17,000 in order to buy and distribute over 4,000 new children's books. Emily began her club five years ago, simply as a way to connect with other middle school students who were passionate about reading. She soon added a Reading for Others component, wherein club members find sponsors willing to donate money for every 100 pages read. Her initial NTRBC club read 24,000 pages, raising \$2,400 to buy 400 new books for kids who frequented a local soup kitchen. From there, Emily grew her program by involving other middle schools, as well as Boys and Girls Clubs and children's shelters.

She watched, delighted, as beneficiaries of the donated books became avid readers themselves, who then wanted to read for donations so as to buy books for other kids. Emily had unwittingly initiated a reading chain and since then, kids have "paid it forward" again and again. NTRBC is now a non-profit organization, and Emily is working hard to expand it nationwide. She has created an extensive web-based version of the program, as a way to easily share its format and activities with teachers. This Fall, a South Carolina school district will adopt her program in five of its schools. "NTRBC is much more than a service hobby for me," says Emily. "It's a large part of who I am, and is a passion I intend to continue."

Additional Media Coverage

Relate Magazine – 9/25/2009

Becca (18), Utah

Becca founded AstroTots Space Camp for Little Dippers, a free science camp for disadvantaged girls that is offered in cities across the U.S. and in several foreign countries. An aspiring astronaut, Becca started her program at age 10, following her experience at Space Camp, as a

Becca (18), Continued

way to share her passion for science with other girls. For each camp session, which serves 25-50 girls ages 4 to 10, Becca develops the curriculum, secures a location, fund raises for materials, and recruits volunteer teachers. Campers rotate through fifteen interactive science stations, including rocket-building using rubber bands and seltzer water.

Since its humble beginnings in Becca's backyard, the camp has become wildly popular; even with doubling both her staff and the number of campers she can accept, Becca often has to turn away 100-200 girls each session. She now takes her camp on the road, traveling to community centers in inner cities, often at the invitation of community organizations excited to fund the camp for local girls. She has even organized camps in Russia, Germany, and Mexico, and has plans to expand to England and France. "I'm often asked what made me able to accomplish the things I have at my age," says Becca. "My answer is simple. I was willing to try. I'm someone who thinks 'I can."

Rachel (14), Texas

Rachel has written a book profiling non-Jews who rescued Jews during the Holocaust and through book sales, has raised \$13,000 to help support elderly non-Jewish rescuers. Rachel was first inspired to embark on her project during a family trip to Sweden, where she stumbled upon the Raoul Wallenburg Memorial, and learned of this young Swede's heroic efforts to save Jews during the Holocaust. Several months later, Rachel had the opportunity to witness the reunion between a Holocaust survivor and her Lithuanian rescuer, who had not seen each other in sixty years. At that point, Rachel decided she had to make the stories of these inspiring, heroic rescuers better known.

As her Bat Mitzvah project, she began researching and compiling the stories of 36 non-Jewish rescuers, and created a book called Stories of Moral Courage in the Face of Evil. For the past three years, Rachel has traveled the country, speaking about these unsung heroes and promoting her book. She has donated all proceeds to the Jewish Foundation for the Righteous, in order to support elderly non-Jewish rescuers, most of whom are living in anonymity in Europe. "I've learned about people who, in the face of evil, refused to stand idly by," says Rachel. "I hope that I would be able to act with a similar kind of morality and bravery."

Sujay (16), New York (E)

Sujay has invented a technique using genetically-modified bacteria to convert cellulose into ethanol at a fraction of its current cost. Passionate about creating clean, alternative energy, Sujay has volunteered for the past five summers in the Chemical Engineering Lab at the University of Rochester. He has developed a new technology to extract and clone a single gene sequence from a certain bacteria, which can make cellulose-to-ethanol conversion more environmentally friendly and efficient. He has taken his idea to DuPont, working as their youngest intern ever, where he discussed a way to use his new technology in commercial ethanol production.

Sujay (16), Continued

Sujay shares his passion for science and the environment with other students as a spokesperson for the National Environment Education Foundation and the Weather Channel, encouraging kids to pursue science and help address environmental problems. He has also founded ReSight, Inc., a non-profit group that provides sight-saving eye surgeries for children in Southern Asia. So far, Sujay has raised nearly \$20,000 to help six children with macular degeneration regain their eyesight. He is working to expand his program to Haiti. "My work has taught me that having faith in one's dreams and goals is critically important," says Sujay. "And it has taught me that anyone, of any age, can make a difference in someone's life."

Additional Media Coverage

Democrat and Chronicle – 10/16/2009

HONOREES

Kyle and Brady (18 and 16), California: Kyle and Brady co-founded "My Own Book: Sharing the Joy of Reading," an organization that sends teams of teenage volunteers to visit K-3 classrooms in disadvantaged areas.

Connor (18), Virginia: Connor founded the "John H. Bell LiveStrong Jamboree," a twenty kilometer bike ride and fundraiser in honor of his father, who was killed in a tragic biking accident two years ago. In the first year the event raised \$8,000 and Connor looks forward to continuing it in the years to come.

Riley (16), Colorado: Riley created "Breaking the Chain," a non-profit group that strives to break the bonds of illiteracy and poverty for children around the world. Riley raised nearly \$60,000 to not only build schools in Kenya but to also fund desks, books, and teachers.

Avery (17), New York: Avery founded "RelightNY," an organization that has raised \$200,000 in order to buy and distribute over 60,000 energy efficient light bulbs (CFLs) to low-income families in all five boroughs of New York City.

Abbe (18), Massachusetts: Abbe worked to design and implement a cafeteria composting program which has reduced cafeteria waste by 75% at her high school. Her program has turned 35% of cafeteria food into compost and 40% into recycling, with a 98% compliance rate among students.

Anna (17), New York: Anna created a 740-foot handicapped-accessible nature trail in her hometown.

Ben (18), Michigan: Ben founded "Volunteer Africa," a non-profit organization that works to connect American volunteers with communities in Ghana

Gabrielle (18), California: Gabrielle created "Shooting Stars," a gang-prevention program that provides basketball coaching and leadership training for at-risk girls ages 12 to 14.

John (17), California: John founded "Kids Cheering Kids," a non-profit group that engages young people in projects and programs that support the lives of children in difficult circumstances.

Alec (14), California: Alec created "Kids vs. Global Warming" to educate young people about climate change and to empower them to take action.

Stefan (13), California: Stefan created the "Stefan Lyon Foundation," a non-profit raising funds to build schools in Kenya. Stefan authored and sold three children's books to support this effort.

Gabriela (18), Vermont: Gabriela developed and implemented an energy-efficient lighting retrofit at her high school, replacing 1,600 light bulbs and reducing the school's electric bill by \$7,300 annually.

Erika and Mike (17), New Jersey: Erika and Mike are cousins who created "Breast Friends Forever," a non-profit organization that has raised nearly \$100,000 to support local women fighting breast cancer.

Makenzie (18), Maryland: Makenzie created "Children to Children," a non-profit organization that has provided duffel bags and stuffed animals to over 70,000 children in foster care.

Megan (18), Alaska: Megan worked with Alaska Youth for Environmental Action to educate people about global warming and the lifestyle changes they can make to help reduce the problem-affected areas in Sri Lanka.