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**Project Developed by the Learning Without Limits Science Club in West Branch Wins Gold Medal in National Science/Community Service Competition Held at Walt Disney World®**

*Students initiate movement to encourage businesses to upgrade to T8 lighting systems.*

AUBURN, N.Y.—June 18, 2010—Bright ideas, solid research and teamwork won four students from the Learning Without Limits Science Club in West Branch, Iowa, a Gold Medal and a \$2,000 Savings Bond in the Christopher Columbus Awards, a nationwide program that challenges middle-school students to explore opportunities for positive change in their communities.

Eighth-graders Tyler Haub and Justin Roth, seventh-graders Lilly Brown and Julia Diemer, and their coach, Hector Ibarra, made it to the finals last month by developing an awareness campaign around the benefits of retrofitting T12 lighting systems with energy-efficient T8s.

The students became interested in lighting and the amount of energy it takes to light homes, businesses, streets and mass transit systems following a visit to Washington, D.C., where they observed rows and rows of inefficient T12 light fixtures on the subterranean D.C. Metro. While more modern T8 lighting systems are about 33% more efficient than T12s, the team discovered that 30-35% of U.S. businesses, like the D.C. Metro, still use T12s.

The students studied both T12 and T8 lighting systems and conferred with experts in various fields related to the installation of T8s and the disposal of T12s. They also carefully calculated the potential cost impact for a business or organization interested in converting from a T12 to T8 system, using real-world data from a local animal clinic and grocery store. The team then set several goals—to educate the public and local business owners about the benefits and feasibility of retrofitting their lighting systems, to work with policymakers to craft a bill that requires businesses to use more efficient lighting, and to present a three-phase plan to representatives from the D.C. Metro that would allow them to secure funding to retrofit the subway lighting system.

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FEATURING THE COLUMBUS FOUNDATION COMMUNITY GRANT

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A panel of community leaders, scientists and experts in science education judged this idea as one of the top eight entries in the U.S. More than 600 students and coaches participated nationwide.

### **Team Wins a Trip to Walt Disney World®**

The team and their coach won an all-expense-paid trip to the *Walt Disney World®* Resort, where they competed in the **Christopher Columbus Awards' National Championship Week**, and participated in the **Christopher Columbus Academy**, a custom-designed educational program conducted by scientists, engineers and educators, the program reveals the science and technology behind the thrills and excitement of *Epcot®* and the *Magic Kingdom®*.

### **Positive Community Change**

The Christopher Columbus Awards challenge teams of middle-school students to explore and discover opportunities for positive change in their communities using science and technology. The program is now in its 14th year and has attracted more than 18,000 students from diverse backgrounds all across the U.S. The program is sponsored by the Christopher Columbus Fellowship Foundation ([www.columbusfdn.org](http://www.columbusfdn.org)) and is endorsed by the National Middle School Association.

Past winners have included a team from San Diego that has secured a provisional patent for a specialized seat cushion design that uses sensory feedback to train people to maintain a healthy posture while sitting at a computer, and a group of students from Illinois who developed a multifaceted recycling awareness campaign that has increased recycling in their community by 60% in just four months.

### **Strong Participation from Girls, Minorities**

The program attracts many students who may not typically enter a science competition. More than half of the entrants are girls, and nearly a fourth are from diverse ethnic and cultural backgrounds, statistics that are higher than those of most science competitions. The Christopher Columbus Fellowship Foundation believes the teamwork aspect and community focus draw a broader range of students to enter.

### **About the Sponsor**

The Christopher Columbus Fellowship Foundation is an independent Federal government agency created by Congress in 1992 to encourage and support research, study and labor designed to produce new discoveries in all fields of endeavor for the benefit of mankind. The Foundation has established *Frontiers of Discovery—Work in Progress and Discover the Future*, programs that recognize “cutting edge” innovations, innovative ideas of America’s youth, and honor teachers. These programs include the *Agriscience Awards*, *Christopher Columbus Awards*, *Homeland Security Awards* and *Life Sciences Awards*.

For more information on the Christopher Columbus Awards, call 800-291-6020 or visit [www.christophercolumbusawards.com](http://www.christophercolumbusawards.com).

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