

ENGINEERING WORLD HEALTH NEWS

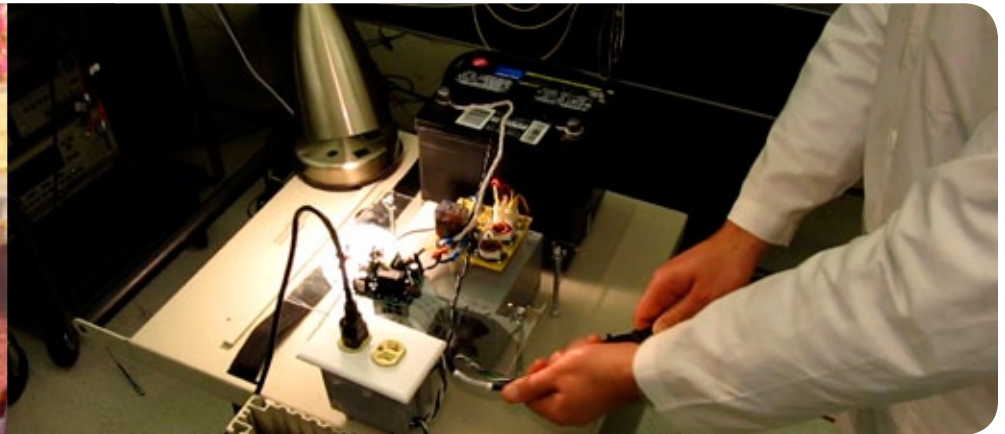
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EWH Design Competition winners announced

A team of Georgia Tech students take first place with their CellSaver design



Left: Waste to Watts co-founders James and Christopher speak to the staff at Karatu Lutheran Hospital in Karatu, Tanzania in 2009



Right: A close-up of the 2nd iteration of the CellSaver prototype sitting at a lab at Georgia Tech.

In September of 2010, Engineering World Health announced the results of its first annual Design Competition. Four students from Georgia Tech, the Waste to Watts team, won with their CellSaver design.

The EWH Design Competition seeks to reward the best teams of students who work on engineering projects directed at the needs of developing country health care. Out of 11 submitted designs in our first competition, our judges picked the top three submissions. The winning team is the Waste to Watts team from Georgia Tech. Their submitted design, the CellSaver, is a low-cost, modular uninterruptible power supply (UPS) whose design uses recycled components. This is a project with a very high potential in resource-poor settings where surgery and essential healthcare procedures are constantly being interrupted by the lack of reliable energy sources. Efforts are being led to make sure this product reaches the hospitals that need it.

In second place came a team of students from ITESM Chihuahua, in Mexico. They designed a low-cost ECG machine which, while performing to the same standards as regular ECG machines, costs only a quarter of the price. The students are now actively working with a technology transfer company with the hopes of distributing 10 devices for use in rural Mexican hospitals very soon.

The third place went to the team from Duke University which created an X-Ray Development Timer. The device offers a method for facilitating quality control and improving the effectiveness of manual x-ray development.

When asked what was the most rewarding aspect of participating in the Design Competition, students answered: "Knowing that each design proposed in the competition was not ideated for selfish or monetary purposes, but to improve the quality of healthcare in countries that need it most."

"We were fortunate enough to be able to invent a device that can help developing world hospitals overcome a debilitating obstacle. The EWH Design Competition seemed a natural fit to vet the validity of our design. [...] The CellSaver can undercut the price point of comparable back-up batteries while lasting for several hours in the event of an outage. As a result, hospitals that use these units can operate critical pieces of equipment when needed and not be limited by power reliability or modest budgets."

— W2W team president
James Molini