



MIT IDEAS Competition

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Press Release
May 5, 2006

Winners of the 5th annual MIT IDEAS Competition announced

The winners of the fifth annual MIT IDEAS Competition were announced at the May 4 Awards Ceremony at MIT. The competition, a joint project of the MIT Public Service Center and the Edgerton Center, encourages and celebrates innovations that benefit communities worldwide. IDEAS winners use the award funds to implement the projects they develop, often leveraging additional resources to expand the benefits to the communities they serve. Find out more at <http://web.mit.edu/ideas>

A **\$7,500 Award** sponsored by the Lemelson-MIT Program was presented to the “Aerovax” team, who developed an innovative way to address health concerns worldwide by creating a safer, more portable vaccination system that addresses issues including lack of medical infrastructure, lack of water and power, and the possibility of needle cross-contaminations. The Aerovax team first met each other at an IDEAS networking dinner last fall!

The team members are Esmeralda Megally, an MBA student at the Sloan School of Management (from Brussels, Belgium); Anton Aboukhalil, a PhD candidate at the Laboratory for Computational Physiology at MIT (from Montreal, Canada); Zahra Kanji, an alumna of the MIT Electrical Engineering Department (from Cambridge, MA); Neel Varshney, a senior Medical Degree (MD) student in the Harvard/MIT Health Sciences and Technology (HST) program, (from Cambridge, MA); and Jose Gomez-Marquez a major in Mechanical Engineering and Science Policy at the Worcester Polytechnic Institute (from Cambridge, MA).

Another **\$7,500 Award** (sponsored by the IDEAS Competition) went to “FirstStepCoral”, who have developed a unique combination of technologies to address an important environmental concern that has immediate human impacts as well. The team has developed a system to harness tidal energy to provide stimulation for coral reef regeneration, and they have also established the critical relationships that will enable the system to function effectively in the long term.

The team members are Gerardo Lao, PhD candidate from the Department of Materials Science and Engineering at MIT; Illac Diaz, Fellow in the MIT Department of Urban Studies and Planning; Neil Ruiz, Ph.D. Candidate in Political Economy at MIT; Antonio Cueva, a marine biologist; Rhoderick Samonte, project facilitator (all from the Philippines); Daniel Walker, graduate student in Mechanical Engineering at MIT; Thomas J. Goreau, co-inventor of the Biorock™ process of coral regeneration (from Cambridge, MA); and Ed Kurth, technology partner and supplier of Gorlov Helical Turbines (from San Antonio, TX).

A **\$5,000 Award** sponsored by the Lemelson-MIT Program goes to “Turn Pure”, a team that has impressive corporate vision as well as a potentially effective technology that may help to address a problem that contributes to the deaths of thousands each day. Their water purification technology offers an effective mechanism for quickly purifying water, a bottle at a time. In order to get the technology into the hands of people in the developing world, they intend to market their product to recreational, travel and military markets to off-set the cost of large-scale, low-cost distribution.

The team members are Gary Long, a staff member at MIT’s Lincoln Laboratories (Cutchogue, NY); and MIT Mechanical Engineering Seniors Justin Holland (Tampa, FL), Chandan Das (Tyler, TX), and Patrick Schroeder.

A **\$5,000 Award** sponsored by ITA Software was presented to “All Heal”. This team has developed a technology that may enable healing for some of the 12.5 million people worldwide who have chronic wounds. The devices the team has prototyped could drastically lower the cost of “negative pressure” healing technology, and make it available to clinics in developing countries.

The team members are Danielle Zurovcik, a Masters student in the MIT Mechanical Engineering Department (from West Newton, PA); Chad Foster, a PhD candidate in Mechanical Engineering at MIT (from Minnesota); Professor Alex Slocum, faculty member in the Mechanical Engineering Department; and Dr. Robert Sheridan, Co-Director of the Sumner Redstone Adult Burn Unit at the Massachusetts General Hospital.

Another **\$5,000 Award** (sponsored by the IDEAS Competition) went to “Peanut Revolution”. This team has developed a new technology that will enable small farmers in the Philippines to increase production of shelled peanuts (a dietary staple) and form micro-enterprises around this economically important crop.

The team members are Illac Diaz, Fellow in the MIT Department of Urban Studies and Planning and Neil Ruiz, Ph.D. Candidate in Political Economy at MIT, (both from the Philippines); Debbie Watkins, a senior in the Department of Economics; Jock Brandis, inventor of the Malian Peanut Sheller (from North Carolina); Chriselle Cudiamat, director of a non-profit organization in the Philippines; and William Medrano, Head of the Bureau of Agricultural Research, Department of Agriculture, Philippines.

A **\$2,500 Award** sponsored by the MIT Graduate Students Office goes to a team predominantly comprised of MIT graduate students, “Safe Pilot”. The team has developed a creative system for using low-cost infra-red distance sensors attached to an existing cane to enable blind people to detect and safely pass by obstacles in their path that are beyond the reach of the traditional cane, such as tree branches.

The team members are sisters Esmeralda and Elizabeth Megally, both MBA students at the Sloan School of Management (from Brussels, Belgium); Jose Gomez-Marquez, a Mechanical Engineering and Science Policy student at the Worcester Polytechnic Institute; Sam Davies, a PhD candidate in the Computer Science and Artificial Intelligence Lab at MIT; Mariam Megally, of Starbucks Global Strategy in Seattle; and Beatrice Guillaume, consultant on disability issues (from Belgium).

Finally, the **\$2,500 IDEAS Baruch Award** sponsored by the Baruch Family Fund to support a team in which the students are predominantly MIT undergraduates was presented to “Rowing Wheelchair”. This team developed a new type of wheelchair that is propelled by a rowing action that circumvents issues that impede other wheelchairs, developing a more maneuverable and compact chair that also uses low-cost, readily available bike parts and can handle inclines successfully so that wheelchair riders in the Australian bush can traverse their rugged terrain.

The team members are Joel Sadler, an MIT Mechanical Engineering senior (from Kingston, Jamaica); Professor Rae Langton from the MIT Department of Linguistics and Philosophy; her brother, Stephen Langton, a designer and inventor (from Maleny, Queensland, Australia). They were advised by Amos Winter, a PhD candidate in Mechanical Engineering; Professor Richard Holton from the Department of Linguistics and Engineering; and Chris Russell, a wheelchair rider whose needs inspired the project.

In addition to the award sponsors, the IDEAS Competition receives vital funding and in-kind support from Ford, Hewlett-Packard, Bose, the Silicon Spice Founders Fund, Medtronic, and JetBlue Airways.