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For Immediate Release

**WINNERS IN WORLD'S LARGEST K-12 SCIENCE AND TECHNOLOGY COMPETITION
TO PRESENT FUTURE TECHNOLOGIES IN WASHINGTON, DC**

--ExploraVision Winners Envision Solutions to Health Care Issues and Medical Advancements, Others Could Help Solve the World's Environmental Problems; All-Girl Teams Take Half of This Year's Prizes--

WASHINGTON, DC, June 11, 2010 – Today the national winning student teams in the 18th annual Toshiba/National Science Teachers Association ExploraVision Awards Program, the world's largest K-12 student science and technology competition, will share their innovative ideas for future technologies at a special Science Showcase at the National Press Club in Washington, DC. Press is invited to interview students and other participants during a Media Open House starting at 10:30 AM. The program's eight National Winners for 2010, including four First Place and four Second Place student teams, looked to the world around them to propose ideas for technologies that could make the future better, healthier and more eco-friendly. **(See enclosed document for complete list of winning entries.)**

At the Science Showcase, the students will present to members of the press, their peers, parents, educators, National Science Teachers Association (NSTA) executives and members and high-level Toshiba executives including **Atsutoshi Nishida**, Chairman of the Board & Director of Toshiba Corporation and **Yoshihide Fujii**, Chairman and CEO of Toshiba America, Inc.

The formal program is scheduled to begin at 12:30 PM. Speakers will include **Steve Robinson**, Special Advisor, Office of Elementary and Secondary Education, U.S. Department of Education; **Michael Lach**, Special Assistant, STEM Education, U.S. Department of Education; **Sharon Barner**, Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and

Trademark Office; **Dr. Arthur Eisenkraft**, Co-Creator, ExploraVision; **John Anderson**, President, Toshiba America Foundation; and **Dr. Francis Eberle**, Executive Director, NSTA.

At the Gala Awards Banquet scheduled for 6:45 PM, speakers will include Emmy Award-winner **Bill Nye the Science Guy**; **Ambassador Ichiro Fujisaki**, Ambassador Extraordinary and Plenipotentiary of Japan to the United States of America; **Atsutoshi Nishida**, Chairman of the Board & Director of Toshiba Corporation; **Dr. Alan McCormack**, President, NSTA; **Dr. Arthur Eisenkraft**, Co-Creator, ExploraVision; and **Dr. Arthur Desrosiers**, Past ExploraVision Winner from 1994.

Bright Ideas for a Better 2030!

In the Toshiba/NSTA ExploraVision Awards Program, students select an existing technology and envision what it might be like 20 years in the future. This year's winning students envisioned a wide range of innovative technologies that could make the world a better place in 2030, from environmentally friendly ways to generate biofuels from algae to medical breakthroughs that could restore sight to the blind. The 24 ExploraVision national winning students on the eight winning teams were selected from 4,551 team entries, representing the participation of 13,949 K-12th grade students from the U.S. and Canada who submitted entries to this year's competition. Members of each of the four First Place ExploraVision teams will each receive a US Series EE Savings Bond valued at \$10,000 at maturity that may be used to offset increasing education costs. Students on Second Place teams will each receive a US Savings Bond valued at \$5,000 at maturity.

The Toshiba/NSTA ExploraVision Awards program, funded by the Toshiba Corporation, the Toshiba America Companies, Toshiba of Canada, Ltd., and the Toshiba America Foundation and administered by the National Science Teachers Association, is open to all K-12 U.S. and Canadian students who are citizens or legal residents.

For more information or an application for 2011, visit www.exploravision.org or e-mail exploravision@nsta.org. Follow ExploraVision on Twitter [@exploravision](https://twitter.com/exploravision) or on Facebook at Facebook.com/ToshibaNSTAExploraVision.

About Toshiba

The Tokyo-based Toshiba Corporation is a leading innovator and diversified manufacturer and marketer of advanced electronic and electrical products, spanning information and communications equipment and systems, Internet-based solutions and services, electronic components and materials, power systems, industrial and social infrastructure systems, and household appliances. Toshiba employs over 14,000

people in North America and Toshiba America, Inc. is the holding company for six Toshiba operating companies in the United States.

Toshiba's U.S.-based companies and some of their chief products are as follows: Toshiba America Electronic Components, Inc. (Semiconductors, Flash Memory-Based Storage Solutions, LCDs, and Custom Chips); Toshiba America Information Systems, Inc. (Laptop Computers, and Hard Disk Drives, Telephony Products); Toshiba America Business Solutions, Inc. (Copiers, Facsimiles, Printers); Toshiba International Corporation (Motors, Motor Controls, Uninterruptible Power Systems from 1KVA to 3000KVA, Power Generation Equipment, Automation, LED Lighting); Toshiba America Medical Systems, Inc. (Computed Tomography, Magnetic Resonance, X-ray and Ultrasound); Toshiba America Consumer Products, L.L.C. (Flat Panel LCD TVs, and portable products); Toshiba America Nuclear Energy Corporation (Advanced Boiling Water Nuclear Reactors) and Toshiba of Canada, Ltd. (Made up of four operating divisions).

About NSTA

The Arlington, VA-based National Science Teachers Association (NSTA) is the largest professional organization in the world promoting excellence and innovation in science teaching and learning for all. NSTA's current membership includes more than 60,000 science teachers, science supervisors, administrators, scientists, business and industry representatives, and others involved in science education.

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ExploraVision 2010 National Winners

2010 First Place Winners

Grade K-3

Willow Grove Elementary, San Diego, CA

Sign Language Interpreter

The Sign Language Interpreter converts hand-created signing into verbal words to help deaf people better communicate with people who do not understand sign language. Electrodes on the signers' fingertips sense movement and send signals to a tiny computer inside a finger ring that translates the signals into recognizable sounds.

Website: <http://dev.nsta.org/evwebs/2237Q/>

Grade 4-6

Scofield Magnet Middle School, Stamford, CT

Community Algae BioReactor

The Community Algae Bioreactor (mCAB) is a miniature renewable energy processing unit that creates biofuels from algae while cleaning water and reducing CO₂ levels. The closed-system **mCAB** uses plastic tubes lined with nanosand to remove fast-growing, easily-harvested "super algae" with a high and constant oil content from wastewater and then extracts oil from the algae for fuel production.

Website: <http://dev.nsta.org/evwebs/2126R/>

Grade 7-9

Forest Ridge School, Bellevue, WA

EPPIC - Ecological Paper Printer and Ink Collector

The EPPIC (Ecological Paper Printer and Ink Collector) laser printer system recycles and reuses printed paper and its ink created by binding an organic renewable pigment to a graphene sheet with a large surface area made using nanotechnology. EPPIC extracts the ink from the paper by reducing the graphene surface contact area and then reuses the collected ink and paper to make new prints.

Website: <http://dev.nsta.org/evwebs/1755F/>

Grade 10-12

University Laboratory High School, Urbana, IL

NIBEye: Neural Interfaced Bionic Eye

The NIBEye: Neural Interfaced Bionic Eye creates a visual prosthesis using principles behind biocompatibility. The functional prosthetic eye is conceptualized to restore sight to the blind through the integration of biocompatible alloys, lotus effect hydrophobic corneas, multi-focal intraocular lenses, stretchable silicon retinas, cortical stimulation, Brain-Machine interfaces, and biobatteries.

Website: <http://dev.nsta.org/evwebs/4150A/>

2010 Second Place Winners

Grade K-3

Tampa Christian Community School, Tampa, FL

Smart Touch First Aid Kit

The Smart Touch First Aid Kit provides specialized treatment for injuries and emergencies by packaging medical supplies, instructions, and communication devices in one kit. Touch screen, GPS, wireless internet, and cell phone components are used to identify the injury, activate video treatment instructions, connect the caregiver with medical or emergency staff via videoconferencing, and provide directions to hospitals.

Website: <http://dev.nsta.org/evwebs/1359A/>

Grade 4-6

Fairmont Private School, Anaheim, CA

A. C. E.

Automatic Correcting Eyeglasses (A.C.E.) contain computer-controlled lenses and micro electromechanical systems (MEMS) ultrasonic sensors to continuously track the cornea and measure refractive errors from eyes and adjust the shape and distance of the lenses accordingly to correct vision. A.C.E. eliminates the need for renewing prescriptions while monitoring and alerting the wearer of more serious problems through wireless data transmission.

Website: <http://dev.nsta.org/evwebs/4202N/>

Grade 7-9

Ma'ayanot Yeshiva High School for Girls, Teaneck, NJ

REGENX: Human Limb Regenerative Protein Cocktail Injections

REGENX investigates human cellular differentiation to develop a bioengineered approach to limb regeneration using induced stem cell technology. Functionally-timed Human Limb Regenerative Protein Cocktail Injections containing an individual's own tissue and introduced into the site of an amputation dedifferentiate adult somatic cells back to stem cells to redevelop tissue and limbs.

Website: <http://dev.nsta.org/evwebs/746K/>

Grade 10-12

Stuyvesant High School, New York, NY

I-CEE: IKVAV - Scaffold Center-Surround Eyesight Enhancement

I-CEE (IKVAV-Scaffold Center-Surround Eyesight Enhancement) employs advances in ophthalmology and material science to treat age-related macular disease and retinitis pigmentosa. I-CEE consists of color-filtering photovoltaic cells—acting as photoreceptors that convert photons into electricity—housed

in a pentapeptide IKVAV scaffold base to promote cell adhesion, aid in neural growth, and link the eye's natural system to I-CEE to restore color vision and improve resolution.

Website: <http://dev.nsta.org/evwebs/2868V/>