

at least 20 miles per hour. That was the most excitement I ever had."

On the show the teens also design and fashion a man's business suit that can be converted into a jogging suit; a wind-powered kinetic sculpture that was donated to the DeCordova Museum in Lincoln, Massachusetts; an automated soccer-ball-passing machine; and a machine that produces peanut butter from unshelled peanuts.

The series was funded by the Intel Foundation, NSF, Intel Corp, and Tyco Electronics, with additional monies from the Harold and Esther Edgerton Family Foundation, the Noyce Foundation, and the American Society of Civil Engineers. The Intel Foundation also contributed scholarship funds for the grand-prize winner and bought com-

puters for all eight contestants.

Wallace said series participants, even the younger teens, were learning and applying the same basic principles he teaches in his undergraduate classes. He's hopeful that viewers of all ages will find the show inspirational.

"Having kids succeed with their ideas makes it a lot more accessible," he said of the science, physics, and engineering concepts illustrated in the series. "Having such a diverse range of challenges highlights how many different things you can do within the science and technology field—there's a huge range of possibilities. We want viewers to think, 'Hey, maybe I can do my own project now'—and maybe go into science or engineering for a career."

Karen H. Kaplan

NASA science advisers dismissed when philosophies clash

An apparent clash over the role of advisers on the NASA Advisory Council led to the dismissal of two members of the council's science committee and the resignation of a third in August, according to NAC chairman Harrison Schmitt and one of the affected scientists. The tension between NASA administrators and the scientists is centered on ongoing disputes at the space agency about the balance between the science and manned programs. Although NASA's overall R&D funding is likely to increase by more than 7% in fiscal year 2007, virtually all of that increase is expected to go to developing new manned space vehicles. Science funding would stay flat, which follows sharp cuts that were made to the program last year.

NASA administrator Michael Griffin asked for the resignations of Wesley Huntress, a chemical physicist who spent much of his career at NASA's Jet Propulsion Laboratory in California, and physicist Eugene Levy, provost of Rice University in Houston, Texas. Shortly after the two received phone calls from Griffin asking them to step down, physicist Charles Kennel, former director of the Scripps Institution of Oceanography in La Jolla, California, offered his resignation.

Griffin asked for the resignations after consultation with Schmitt, a geologist, *Apollo* astronaut, and former Republican senator from New Mexico. Schmitt, who was the only scientist to walk on the Moon, was unapologetic about the dismissals. "The most important function of the council is to focus

on the implementation of policy," he said. "It is a waste of time to argue with national policies within the council, or to make recommendations without suggesting how they could be implemented."

Levy said that although he disagrees with the direction in which NASA appears to be headed under President Bush's Moon and Mars initiatives, he was working within the parameters of NAC's science committee, and was chairman of a subcommittee developing plans for science that could be done when humans return to the Moon. "Returning to the Moon is fine," he said, "but we shouldn't lose focus on robotic scientific missions. We were trying to serve the program as it moves forward, but without losing sight of other important issues. Nobody was violating the context of the committee, but nor were we pretending to agree with everything and act as a rubber stamp."

Levy cited two disputes with Schmitt, but said he didn't think they rose to a level to warrant dismissal. In one, Levy argued that the committee should not make a specific budget decision that he felt was the responsibility of NASA management. The other dispute was over the content of a mission statement for returning humans to the Moon. "I've been on advisory committees for 30 years," he said. "What happened here was odd," he said of the dismissals, "especially given how little the precipitating causes were."

Schmitt said he "wants to see us do the best science we can with the constraints we're under." Science research

accounts for a third of NASA's budget, "but the science community doesn't include exploration science as science," and that is wrong, he said. "Historically, there has been the fallacious belief that if you fund human exploration you decrease science funding. That isn't right."

Discussions on the advisory panel must focus on "how you implement national policy," Schmitt said. "It's not a matter of getting advice you don't want to hear, it's getting advice you can't use."

Jim Dawson

news notes

Darwin returns to Kansas. Evolution is back in the Kansas school system, as moderates defeated antievolution candidates in the recent Republican primary for the Kansas Board of Education. The primary results ensure that, whatever the outcome of the general election in November, the conservative board majority that adopted science standards critical of evolution will be replaced with a majority that favors teaching scientific evolution.

The new board is expected to rescind a set of state science standards, written last year with the support of intelligent-design advocates, that are used in drafting tests to measure how well students are progressing in science. The standards do not mandate what is taught in classrooms.

The battle for the state school board has been under way since 1998, when conservatives won the majority and voted in antievolution standards. A voter backlash put moderates and liberals back on the board; in 2001 the new board replaced the antievolution standards with ones that were acceptable to the scientific community. Antievolution candidates retook the board in the last election and changed the standards to include concepts of intelligent design.

So although the latest pro-evolution swing in the board is being cheered by officials at the National Center for Science Education, a nonprofit advocacy group, and many educators in Kansas, few observers believe the fight is over. In November 2008, seats held by four moderate school board members will be up for election.

JLD

New BNL director. After several months as interim head of Brookhaven National Laboratory, Samuel Aronson has been named its director, succeeding Praveen Chaudhari, who stepped down from the post in April.

Aronson takes the helm following an uncertain period at the lab. Earlier this year, BNL's Relativistic Heavy Ion Collider faced a shutdown due to a funding

shortfall, but was rescued by a cash infusion from Wall Street investor Jim Simons. Future operating funds for RHIC will be made available to BNL, a US Department of Energy lab, agency officials later said. (See PHYSICS TODAY, April 2006, page 35.) As director, Aronson now heads a multiprogram national lab that employs 2600 and has a \$490 million annual budget and more than 4000 facility users.

Aronson, who joined BNL in 1978 with a background in nuclear and particle physics, said he expects to grow the lab's programs in those fields. He added that during the next decade, nanoscience, nanotechnology, and materials science will be powered by BNL's National Synchrotron Light Source and new Center for Functional Nanomaterials.

In 1991, Aronson headed BNL's Pioneering High Energy Nuclear Interaction Experiment (PHENIX) which investigates collisions of heavy ions and protons. He became chair of the physics department in 2001 and was appointed as BNL's associate laboratory director for high-energy and nuclear physics in 2005, managing the lab's largest directorate and overseeing RHIC and the physics department.

Aronson earned a PhD in physics from Princeton University in 1968. KHK



Aronson

International admissions increase. Admissions of international students into US graduate schools increased 12% from 2005 to 2006, which Council of Graduate Schools president Debra Stewart said indicates a "hopeful sign of a recovery of international admissions." The increase, based on data from 150 of CGS's 450 US members, shows large gains in admissions of students from China (up 20%) and India (up 28%). Admissions of South Korean students increased by 4%, while admissions of Middle Eastern students declined 2%.

A severe tightening of US visa policies in the wake of the September 11 attacks triggered double-digit declines in international applications and admissions to US graduate schools. Those restrictions have been eased over the past year, due in part to cooperation between the US Department of State and the academic community. As a result, international admissions, which had dropped 18% between 2003 and 2004 and increased only 3% between 2004 and 2005, have now jumped by the 12% cited in the CGS study.

The largest increase by field of study was 26% in admissions to engineering programs, with business admissions coming in second at 12%. Admissions of international students to physical-sciences programs were up 5% over last year. Admissions to humanities and arts programs dropped 4%, while admissions to social-sciences programs were down 2%.

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web watch

To suggest topics or sites for Web Watch, please visit <http://www.physicstoday.org/suggestwebwatch.html>. Compiled and edited by Charles Day



<http://ortway.elte.hu/about.html>

Since 1970, physics professors at Eötvös University in Budapest, Hungary, have run the **Rudolf Ortway Competition in Physics**. The problems, which are pitched at the high-school level, are designed to test physical reasoning at its most flexible and imaginative. This year's contest starts on 27 October.

<http://www.ornl.gov/sci/cmsd/main/History.html>

On 11 January 1952, Oak Ridge National Laboratory created a new research division devoted to the solid state. Mike Wilkinson, who directed the division in 1972–86, recounts in his online **History of the Solid State Division** how the division's focus has broadened and flourished over the years.

<http://www.solarstorms.org>

The sometimes violent and damaging fluctuations in Earth's magnetohydrodynamic environment are the subject of **Space Weather**, Sten Odenwald's extensive online tutorial.

