

# SCIENCE BOUND News

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## Performance is Priority # 1



### LETTER FROM THE DIRECTOR

I'm intrigued by the media and how it communicates and persuades. There is a credit card commercial right now with the slogan, "membership has its privileges." The commercial then goes on to show all of the perks available for those who use their credit card.

In SCIENCE BOUND "Performance is Priority #1." If you make it your goal to improve your performance – to work smarter and harder to improve academically – I am confident your work will be rewarded. You will find that (if I may borrow from the commercial), "excellence has its privileges!"

This year, I'm defining excellence as a SCIENCE BOUND student with a grade point average of 3.75 or above who also meets the participation requirements. The first 100 young people to meet this challenge for fall and spring semesters will be invited to take an all-expenses-paid trip to Worlds of Fun amusement park in Kansas City, MO.

I know that each of you has the ability to perform at this level. The question is, will you make studying a priority? Will you make asking questions a priority? Will you make being a better learner today than yesterday a priority? Will you make improving your academic performance a priority?

Excellence has its privileges! See you in Kansas City.

Handwritten signature of Connie Hargrave.

**Dr. Connie Hargrave**  
Director



## SCIENCE BOUND 2011 BANQUET

Iowa Governor Terry Branstad celebrated the success of SCIENCE BOUND students and its 20th anniversary at the program's annual banquet in Des Moines in April. Branstad was governor in SCIENCE BOUND's inaugural year and recognized the program's start with a declaration.

During his comments, Branstad challenged the students, families, and teachers to consider the key role they are playing in the future. "Better preparing young Iowans in science, technology, engineering and math is essential for the transformation to truly have world-class schools," Branstad said.

Addressing the students, Branstad shared, "We are recognizing you and honoring you for what you have already achieved. But don't just stop with this recognition. Continue to set ambitious goals as you go forward."

Twenty-four high school SCIENCE BOUND seniors were recognized

from five Des Moines public schools at this year's banquet. Nearly 50 students were recognized for grade point averages of 3.75 and above and 100 percent participation in SCIENCE BOUND. Cole Lopez, a senior at North High School, was awarded the first "Student of the Year" award for his many contributions, dedication to excelling and for making the most of opportunities through SB. The award comes with a book scholarship (see page 7). Seniors Niibari Menegbo, Mary (Becky) Gomez, and Amanda Ingoli (all from North) were recognized for being valedictorians. Each graduating student received a certificate to commemorate their completion of SCIENCE BOUND.

Connie Hargrave, SCIENCE BOUND Director, welcomed the SB students and Jacqueline Stewart, a SCIENCE BOUND class of 2004 graduate and new Des Moines Public Schools middle



*Governor Branstad speaking to students and families at the SB banquet.*

school science teacher, spoke about her experiences in the program. Stewart encouraged the graduates and students still in the program to keep working hard toward their goals.

For the fifth consecutive year, the banquet was sponsored by Smithfield Foods and its Learners to Leaders program. (See related article on page 8).



*Farmland Foods Senior Vice President Todd Gerken (left) receives a plaque from SB's Connie Hargrave in recognition of the company's five years of banquet sponsorship.*



*SCIENCE BOUND graduates, including ISU graduate Yvette Rodriguez (far right) were recognized at this year's banquet.*

## WORLD FOOD PRIZE



SCIENCE BOUND junior Jerson Valenzuela of North High School was among the top students in the country selected to attend the World Food Prize Global Youth Institution in Des Moines this October. To be considered for participation, students from across Iowa and the United States researched global food security

issues in the country of their choice, then submitted papers on those critical topics, which they also presented to renowned experts and scientists.

At the World Food Prize Global Youth Institute, Valenzuela and more than 130 other high school students interacted with

a diverse group of internationally-known World Food Prize Laureates and leaders in food, agriculture and international development. He also had the opportunity to interact with students and teachers from 23 states, the Virgin Islands, and Bulgaria, Mexico, Russia and Serbia.

Valenzuela presented a paper on the theme “The Millennium Goals: Agriculture to Trade” and participated in roundtable discussions with experts in industry, science, academia and policy. His paper examined major issues in global agriculture, agricultural development and food security in other countries.

Jerson and other participants also helped with a hands-on service project packaging meals for Outreach International, a hunger-fighting organization that serves people in Iowa and abroad; toured Syngenta Seeds, Inc. in Slater, Iowa; and took part in an Oxfam Hunger Banquet to experience the realities of global hunger and poverty.

## SB'S STEWART RECOGNIZED WITH ISU ALUMNI AWARD

Charles Stewart, SCIENCE BOUND's first graduate, received the “Superior Achievement Award for Early or Mid-Career Alumni” from Iowa State University's College of Agriculture and Life Sciences in October. The award honors distinguished College of Agriculture and Life Sciences alumni under 40 years old who have excelled in their professions and who are providing outstanding service, leadership and involvement in their community.

Wendy Wintersteen, endowed dean of the College of Agriculture and Life Sciences, presented Stewart with the accolade during

Iowa State's “Honors and Awards” ceremony.

Stewart received his B.S. from Iowa State and his Ph.D. in Plant Biology from Cornell University, New York. He is a research associate for the Salk Institute for Biological Studies in San Diego, California.

The institute's research in molecular biology and genetics, neurosciences, and plant biology is used to develop new treatments for diseases and improve the world's food supply. Stewart has also held postdoctoral fellowships with the National Institutes of Health and the National Science Foundation.



SCIENCE BOUND's Charles Stewart (with award) is joined by his family after being recognized for superior achievement from Iowa State University's College of Agriculture and Life Sciences.



## Learn and Earn

*SCIENCE BOUND students prepare for another morning of learning (above, left) and enhance their math skills (above, right) during the month-long academic boot camp.*

*IPRT scientist Malika Jeffries-EL hosts students in a chemistry laboratory.*



## ISU Saturdays



*SB students engage in robotics activities (left and above) and in a chemistry experience with professor Young-Jin Lee (right).*





## Catalysts Gear Up for Competition

*Catalyst group members prepared to compete in the First Tech Challenge. The first-timers competed successfully in December and advanced to regional competition.*



## Algebra Champions

*King Science and Math Academy hosted more than 60 eighth-grade students for the two-week program. Hands-on manipulatives are used to teach conceptual algebra.*



# IT'S SUMMER IN DECEMBER IN SCIENCE BOUND

“Whether it’s a summer internship or participating in a program sponsored by SCIENCE BOUND, we expect our young people to be engaged in learning over the summer,” said SB Director Connie Hargrave. That’s why staff begin in the fall to plan for summer programs and to gather information about summer opportunities.

“We want to partner with our parents and guardians all year long,” adds Hargrave, “supporting them in their efforts to set high academic expectations for their young person. Connecting families to summer experiences is just one more way we are involved in that.”

And the number of SCIENCE BOUND students taking advantage of summer experiences is growing:

More than 160 students participated in Algebra Champions and Learn and Earn (see pages 4 and 5).

SCIENCE BOUND senior

Cassandra Ortiz (North) participated in the 18th Annual George Washington Carver Internship Program at Iowa State University. Ortiz lived on campus and conducted research with Dr. Diane Birt, a professor of Food Science and Human Nutrition. The GWC Internship program provides high school students from around the country with the opportunity to work with mentors and conduct research, learn research methods, explore careers in science, and understand how to pursue a graduate education.



SB student Yadira Can presents her research at a summer poster presentation at Iowa State University.

Moines daily to participate in the Young Engineer’s Program at ISU.

But formal programs aren’t the only way to get experiences. “We have a number of young people who find opportunities to job shadow in the summer or volunteer,” said Hargrave. “We encourage that, too, and help them find those opportunities when we can.”

**THIS YEAR, LEARN  
AND EARN WILL BE  
HELD JUNE 25 – JULY  
23, 2012.**

Junior Kemdirim (senior, East) and Hedem Rodriguez (senior, North) joined other students like Yadira Cano (senior, Lincoln) (see photos), traveling to and from Des

**SCIENCE  
BOUND**

**IOWA STATE UNIVERSITY**

SCIENCE BOUND is Iowa State University's premier pre-college educational program to increase the number of ethnically diverse lowans who earn degrees in agriculture, science, technology, engineering and mathematics. SCIENCE BOUND works with middle and high schools in Des Moines, Denison and Marshalltown, Iowa.

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**Parents, watch your mail in February and be sure to have your young person talk with his or her SCIENCE BOUND teacher about summer learning opportunities! For more information, contact sciencebound@iastate.edu, or call 515-669-0667.**

### MEET COLE LOPEZ

SCIENCE BOUND was the first program Cole Lopez joined in high school, and it turned out to be one of the best decisions he's ever made. This past April Lopez was honored with the SCIENCE BOUND Student of the Year Award at the annual banquet. Lopez said, "It was very touching for me to receive the award, given that I had put so much time and effort into the program. It in a way was a closure for the high school part of the program and opened a new chapter for me at the university."

Lopez is now studying biological systems engineering thanks to the influence of the SCIENCE BOUND program. "The program gave me the confidence, experience, and skills that I will need to succeed in the future. It has connected me with researchers, professionals, teachers, and program administrators," Lopez said. "I cannot stress enough how helpful the staff in the program has been and how essential I believe they were to my success. Honestly, with all that I have gotten to do through this program, I feel as if it should really be me giving them the award."

Throughout his four years in SCIENCE BOUND Lopez created many lasting memories, but one that will always stick with him is the opportunity to mentor younger students during his sophomore year. Lopez

volunteered to judge a middle school science fair and helped a participant who was having a difficult time. Lopez later found out that the student went on to join SCIENCE BOUND, and that he credits Lopez for his involvement in the program. "Knowing that I made a difference in a student's life, and seeing the capabilities of the upcoming generation, made this experience really stick out in my head," Lopez said.

What is the award winner's advice for current and future SCIENCE BOUND students? "Do not be afraid to apply for anything," Lopez said, "And when you do apply, make your application personal by following up with a phone call or asking questions. As



*Cole Lopez (center) receiving the first SB "Student of the Year Award" with Student Programs Coordinator David Romero and Director Connie Hargrave.*

long as they can put a face with the application, you will have a better shot."

Lopez's future plans are to get involved with undergraduate research, to participate in a research program this summer, and to attend graduate school.

## Parent Co@nnection

### Great Expectations

*"High achievement always takes place in the framework of high expectations."*

*– Charles F. Kettering, engineer and inventor*

- What do you expect of your kids? Finding the right balance of expectations will challenge kids to grow without frustrating them.
- Help kids develop predictable routines. Kids are more likely to be successful when their routines help them thrive.
- Pay attention to your kids' interests. They're more likely to meet high expectations when they're doing things they enjoy.
- Talk to your kids about the goals you've set and achieved. Explain how you overcame obstacles to meet your own goals.
- Have high expectations for homework and schoolwork.
- Don't be surprised if your child focuses more on friendships at this age. Be clear, however, that friendships aren't the only important part of your child's life.
- Help your older teenager find challenging classes that aren't too overwhelming.
- Continue to support your teenager's activities. Help your teen find helpful coaches, teachers, and club leaders who have high expectations and great relationship skills.

# IOWA STATE UNIVERSITY

# SCIENCE

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## A Great Partnership

### Pioneer Hi-Bred and SB: A Partnership with High Yield

During the spring honors banquet, Pioneer Hi-Bred Int'l, which has its international headquarters in Johnston, Iowa, made a presentation to SCIENCE BOUND as a token of its renewed commitment to partnering with SB.

“Pioneer was one of the early supporters of the program through gifts and an endowment,” said Connie Hargrave, SB director. “We are extremely excited to have Pioneer add new monetary, personnel and physical resources to the partnership.”

During the banquet, with Gov. Terry Branstad on hand (*see article on pg. 2*), Pioneer presented a check for \$10,000 to SCIENCE BOUND.

In August, Pioneer hosted nearly 50 SB teachers from Des Moines, Denison and Marshalltown at its Carver Center in Johnston, and in September Des Moines SB families were hosted at the same facility for the fall program kick-off. Pioneer staff also offered a job interview workshop to SB/ISU students in September.

“We are confident this partnership will result in a win-win for Pioneer, our young people and their families,” said Hargrave. “We look forward to continuing to build this relationship into the future.”



Cindy Hesper, Pioneer Human Resources Manager, presented a check for \$10,000 to renew the company's partnership with SCIENCE BOUND.