

IOWA STATE UNIVERSITY

SCIENCE

B O U N D

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Des Moines Science Bound

CLASS OF 2017

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LETTER FROM THE DIRECTOR

At Science Bound, we are dedicated to the success of our students. In the Merriam Webster Dictionary, the verb “succeed” is defined as “to turn out well,” or “to attain a desired object or end.” Success, in some ways, is like an iceberg. People can see what is above the water, and that may be very impressive, but it is what’s happening below the surface that stabilizes everything you see above: it ensures that what is above succeeds.

For Science Bound students, one component of what is below the surface of the iceberg of success is an *a priori*, or ahead-of-time, approach. Science Bound students develop good habits like being early for classes and interviews, getting homework done ahead of time, and talking to professors before they need help. As a result of these habits of preparation, they are ready to succeed.

In this issue, you will meet a Science Bound student who is taking an *a priori* approach to her education to ensure her success (page 7). You will also be introduced to a Science Bound family using the same method to help their student stay on track (page 6). Finally, years of *a priori* success were celebrated with the graduation of our Class of 2017 high school and Iowa State seniors (page 3).

We know that none of this would be possible without your *a priori* commitment to these students! We appreciate what you do to ensure their success.

As always, please feel free to contact me if you have questions about Science Bound. Have a great summer!



Dr. Connie Hargrave



Science Bound is Iowa State University's premier pre-college educational program to increase the number of racially and ethnically diverse Iowans who earn degrees in agriculture, science, technology, engineering and mathematics. Science Bound partners with middle and high school students, their families, school districts, and corporate partners in Des Moines, Denison, and Marshalltown.

Dr. Connie Hargrave, Director
Jessica Lambert, Des Moines Site Coordinator
David Mwirichia, Esperanza Pintor-Martinez, and Adam Wade, Student Program Coordinators

Anita Rollins, Manager

Susan Cruz-Rodriguez and Tanner Judd, Communications Interns

Cover Photo: The Science Bound graduating class of 2017 gathers in the atrium of DuPont Pioneer's Carver Center for a final picture together.

25 YEARS

■ Preparing a ■ New Generation for STEM

Each year Science Bound invites new students to participate in the pre-college program with the goal of seeing them graduate and move on to higher learning.

On Thursday, April 27, more than 200 students, family members, and guests celebrated the graduation of 47 students from Des Moines as part of SB's annual Honors Banquet.

DuPont Pioneer continued their strong support of SB by hosting the event at their Carver Conference Center in Johnston, Iowa. The program honored the accomplishments of the program's high school and college graduates, the nationally competitive bridge building team, as well as the science and technology research of select juniors.



An inspiring keynote address was offered by **Dr. Nadilia Gomez Raboteaux**, a research scientist at DuPont Pioneer. After the meal, the group received a welcome address by **Dr. Thomas Ahart**, Superintendent of Des Moines Public Schools. SB high school graduates were then honored (see page 4).

Recent Iowa State graduate and process engineer at Kimberly Clarke, **Yadira Cano Camacho** (ISU Class of 2016, chemical engineering) provided the student keynote address. Fourteen Des Moines SB graduates were then honored for earning their B.S. degree (see page 4).



Also celebrated at the banquet were the Science Bound Students of the Year: **Nawadir (Nosa) Ali** (Callanan, Roosevelt), **Danielle (Abby) Espinosa Gonzalez Bellolio** (Harding, Roosevelt), and **Joseph Murdock** (Roosevelt). The three were recognized for their high grade point averages and participation in extracurricular STEM-development activities.

Top: SB Iowa State University Class of 2017.

Middle: North graduates pose for a picture.

Bottom: (left to right) Dr. Connie Hargrave with Roosevelt Science Bound teacher Chris Sosnowski, graduate, Bailey Irvin, and teacher Amelia Boggess.



Congratulations Class of 2017!

EAST

Psalm Amos
 Rogelio Apolonio*
 Isabel Casas*
 Perla Murillo Camarena
 Joseph (Joey) Rangel

HOOVER

Michael DeJesus
 Shandra Gillson*
 QuayVon Gowdy
 DeJaunia Harrison
 Kalé Nichols
 Roman Talbert

LINCOLN

KaVon McGowen
 Cecilia Rodriguez*
 Israel Salcedo-Nevarez
 Giovanni Tenikat*
 Brenda Vega-Gutierrez*

NORTH

Mercedes Castillo Montiel*
 Danielle (Abby) Espinosa-Gonzalez Bellolio**
 Melissa Landeros Galan
 Talissa Vegas
 Meshach Zarwie*
 Princess Zoaryan**

ROOSEVELT

Nawadir (Nosa) Ali**
 Gloria Almendarez
 Shaeloren Deering**
 Noah Henry
 Bailey Irvin*
 Bukhari Mohamed
 Jasmine Moreno
 Joseph Murdock**
 Abdirahman Omar
 Lauren Provost*

Carissa Villaneuva**

Highest High School Cumulative Grade Point Average Honorees

** - 4.0 Plus

* - 3.75-3.99

IOWA STATE UNIVERSITY

Grace Ansah

Biology
 Merrill | Roosevelt

Mericia Boutchee

Food Science
 Harding | North

Yadira Cano Camacho

Chemical Engineering
 Brody | Lincoln

Anna Castillo

Hospitality Management
 McCombs | Lincoln

Mary "Becky" Gomez

Industrial Engineering
 Goodrell | North

Chukwuebuka Junior Kemdirim

Aerospace Engineering
 East

David Ortiz

Environmental Science
 Goodrell | East

Lee Price

Chemistry
 Merrill | Roosevelt

Sierra Singleton

Kinesiology and Health
 Callanan | Roosevelt

Ashley Smith

Child, Adult, and Family Services
 Roosevelt

Cindy Tello

Kinesiology and Health
 Harding | North

Irma Tello

Child, Adult, and Family Services
 Harding | North

Camelle Vercher

Biology
 McCombs | Lincoln

Jacqueline Williams

Civil Engineering with Environmental Emphasis
 Callanan | Roosevelt

RIDGE BUILDING

Science Bound bridge building team (from left) **Xavier Robles** (North), **Rosemary Galdamez** (North), and **Dillon Rover** (North) were the top finalist in the American Association of State and Highway Transportation Officials 2017 National Bridge Challenge. The three traveled to Maine to compete in May and are part of SB's Catalyst Partnership group.



STUDENTS OF THE YEAR

Dr. Hargrave (left) pictured with the high school seniors who were recognized for their outstanding work in Science Bound. (From left to right) **Danielle (Abby) Espinosa Gonzalez Bellolio**, **Nawadir (Nosa) Ali**, and **Joseph Murdock**.



BANQUET

Dr. David Hoffman, who was instrumental in the genesis of Science Bound, and his wife Judith stand for recognition at the Des Moines banquet.



SCIENCE FAIR

More than 80 8th grade Science Bound students conducted research and presented their findings during the "Nothing Less Than Success" Science Fair at Weeks Middle School in January.

Parent Connection: Meet the Rangels



Like many families with teenage children, the Rangels often find themselves running between work, school, athletic events, and other extracurricular activities. Trying to balance these events while keeping up with and encouraging their Science Bound student, **Joey Rangel**, can be difficult.

"Sometimes it is a challenge getting to the meetings on time," said **Jeff Rangel**, Joey's father. "My wife and I both work until 5, then we have to pick up our three-year-old from daycare, and we are usually running late or just on time to the parent meetings. But we try to attend all of them."

Son Joey is a recent graduate of **East High School**. On top of school and SB commitments, he works at an after-school program for children, is involved with his church and school band, and plays tennis for East. To keep him motivated, Rangel and his wife, Megan, do their best to show Joey the importance of getting an education.

Rangel's own path to an education was different than his son's. He entered the workforce right out of high school and didn't go to college until his children were older. He struggled with balancing work, raising children, and going to college all at the same time. Because of this, he appreciates the opportunities that Joey has.



Jeff Rangel (left) with Science Bound graduate son, Joey.

"I didn't have the parental support that these Science Bound students have, or the resources," Rangel said. "This is why I am so happy that there is a program like this that my son can participate in."

"He has a strong community of friends at East High who are involved in Science Bound, and they keep him motivated to do well, even when times are getting tough," Rangel said.

"I am so happy that there is a program like this that my son can participate in."

Rangel believes that opportunities with SB are important for his son now and for years to come. For instance, one of the lessons the Rangels hope Joey learns is that hard work pays off. They want him to know that, in order to get to where he wants to be, he needs to make a plan and execute that plan. The Rangels also appreciate the peer support that is part of SB.

He also hopes that the messages he, his wife, and SB have instilled in his son will be beneficial.

"I hope he will be a contributor to society and someone who will go above the status quo," said Rangel. "When students have a good work ethic, their possibilities are endless!"





SB Puts Zoaryan on Secure Path for FUTURE SUCCESS



When **Princess Zoaryan's** parents brought their family to America from Liberia in 2003, they had one goal; give their children an opportunity to get an education and be successful. Now, nearly 15 years later, Princess is a graduate of **North High School**.

Zoaryan is interested in the medical field and will be attending her dream school, Iowa State University, in the fall.

"It's the best school fit for me because it gives me many opportunities in the field that I want to be in and I can work with a lot of professionals," said Zoaryan. "They're very

Zoaryan hopes to leverage the financial benefits of the scholarship in a way that allow her to pursue opportunities while she's in school. Said Zoaryan, "I want to be able to do internships in the summers between semesters at hospitals and clinics to get great experiences in working with people or patients before I actually decide if I want to be a doctor."

She also understands that the program has helped her in other areas of life.

"I've become more professional in talking to adults and others and stepping out of my comfort zone to do things that I wouldn't usually do," she said.

"Science Bound is the best thing that could ever happen to anybody because it gives you the opportunities to figure out what you want to do and become academically and personally."

open to helping students become successful and figure out what field they want to go into."

Zoaryan continued, "At first I was interested in engineering because that's what my dad did back home. I was following his footsteps but I didn't actually realize what I wanted to do until last year."

In order to pursue her passions, Zoaryan knew that SB provided what she needed to succeed.

"I realized that Science Bound was actually a great opportunity for me to meet other people and go to Iowa State and see what I can do in the future" she said. "Also, to know how I can be prepared for college and how to pay for college because of the scholarship that they offered me."

Zoaryan also has advice for current Science Bound students. "Don't follow negative thinking, because Science Bound is the best thing that could ever happen to anybody. It gives you the opportunities to figure out what you want to do and to become a better person academically and personally," she said.

Zoaryan looks forward to walking across the stage at Iowa State's graduation one day, making her parents' dream come true.

"Just knowing that I've worked hard all these years for my parents and that they saw potential in me, all the hard work will have paid off," Zoaryan said.

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Science Bound Does STEM Right!

Science Bound received the Governor's STEM Advisory Council Seal of Approval in January, 2017.

The seal is bestowed on successful STEM programs and events that occur organically around Iowa and align with, and support, the STEM Council's goals. According to the Council, Science Bound "exhibits the key components and critical aspects of exemplary STEM education and strongly contributes to the Council's mission to inspire and prepare the next generation of innovators for Iowa."



The Governor's STEM Advisory Council was created as an Executive Order from Governor Terry Brandstad to prepare students from K-12 to enter the fields of agriculture, health, finance, information technology, advanced manufacturing, and other STEM-related fields. The goal of the Council is to provide competitive economic advantage to Iowa communities.