

# RICE AT LARGE

Engaging with Houston communities.

## A STEM SOLUTION:

The educational need in Houston is great, but R-STEM and Carolyn Nichol are doing their best to help solve the problem.

## A STEM SOLUTION FOR EDUCATIONAL DISPARITY

**Carolyn Nichol was born with the curious mind of an engineer. As a child, she enjoyed taking things apart, and even disassembled her grandfather's odd clock, which ran counterclockwise, just to see how it worked.**

In middle school, she won the science fair by making a solar oven for baking cookies. In high school in North Carolina, she was the only girl in her physics class and was constantly picked on by the boys because she was an outstanding student.

Nichol went on to receive her bachelor's, master's and doctorate in chemical engineering. She now is director of Rice's Office of STEM Engagement (R-STEM). The three main goals of R-STEM are to provide resources to teachers and

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## SUMMER YOUTH CAMP PREPARES STUDENTS FOR COLLEGE

**Luz Deleon remembers the first time she heard the word "valedictorian." She was in second grade, attending an older sibling's high school graduation.**

"I knew I wanted to go to college too, but there was no way my parents could afford it," said Deleon, who is the youngest of eight sisters and brothers. "My parents came from Mexico and it's a very different culture. They didn't want me to go away."

But Deleon was undeterred. She told herself, "I'm going to become valedictorian so that I can get a lot of scholarships and go to college for free." And she did. In high school, she received straight-As all four years, became valedictorian of her class at Houston's Northside High School and received a full ride to Skidmore College, where she's a rising sophomore.

Deleon attributes her success in large part to her early exposure to the concept of high

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## CAROLYN NICHOL

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**“Whether they are elementary students, graduate students or teachers, we provide them with resources so that they can go out and understand the world in a better way.”**

— CAROLYN NICHOL

underserved students, to provide a platform for Rice faculty to do their outreach and disseminate their research results, and to help close the disparity gap in public education.

The office manages more than 15 outreach programs, ranging from two-week intense courses to larger and longer programs. All the programs, however, are designed to engage students and teachers in experiential learning. “Whether they are elementary students, graduate students or teachers,” Nichol said, “we provide them with resources so that they can go out and understand the world in a better way.”

About 200 middle and high school students go through the summer programs at Rice each year, and about 100 middle school teachers attend the professional development courses offered by R-STEM. According to the Texas Education Agency, a middle school teacher instructs about 125 students a year, so the impact that R-STEM is having on students is in the tens of thousands, Nichol asserted.

One group that Nichol especially wants to reach is women. “One of my passions is to get more women into the fields of science and engineering,” she said. “In high school, I was the only girl in physics; in college I was the only woman in chemical engineering at the University of Massachusetts, and I was one of three women in my Ph.D. program at the University of Texas. So I really want girls to go into science and do well.”

To that end, she manages a course called Design, Connect, Create: Physics for Young Women. The two-week, free program caters to high school girls who have completed algebra I and plan to take physics in the fall. Immersive and hands on, the summer camp offers an array of scientific topics to explore such as static electricity, forces and motion. The students also get to listen to guest speakers

— women who have succeeded in their engineering careers.

“To see women conquering the world of STEM was very encouraging to all of the girls,” said Raidah Ahmed ’21, a Rice student who worked as a teaching assistant in the program. “The mission of this program is to encourage these girls to not shy away from the subject and encourage them to pursue STEM regardless of the social perception that STEM is meant for men.”

Another issue that Nichol would like to solve is the educational disparity among students in public school education. “It’s wrong whenever so many kids have little access to high quality education and enrichment,” Nichol said. “But I think we can help them.”

R-STEM has created a program, the Science Technology Engineering Mathematics Fabrication Academy (STEMFab), to help Spanish-speaking students learn about careers in science and technology. The program is free and uses Spanish and English to communicate to students the opportunities available in STEM careers. HISD, a sponsor of the program, selects the students from HISD high schools, including Scarborough, Furr, Milby and Austin. Students learn a basic understanding of computer programming and electrical engineering through rapid prototyping and circuitry. By the end of the two-week camp, students know how to operate a 3D printer and enjoy making objects, especially a printed owl with blinking eyes.

“The STEMFab program gives students the opportunity to use their natural artistic and creative abilities while familiarizing themselves with current technology,” said Isaias Cerda, assistant director for STEM and a lead organizer of the program.

Students aren’t the only ones benefitting from R-STEM. Teachers are also brushing up on their science and teaching meth-

ods thanks to ConocoPhillips’ Applied Mathematics Program (AMP!). “This is a unique program because we pair math and science teachers for a professional development course,” Nichol said.

About 80 teachers come together for five days in the summer and eight days during the academic year to study subjects that are seemingly unrelated, such as algebra and biology, and find out how they can work together to solve scientific problems. For example, in one lesson, teachers explored how different cancer treatments impact the growth rate of tumors. Nichol helped launch the program through a generous donation from ConocoPhillips, which also provides staff members as guest speakers to talk about how they use mathematics in their jobs.

“The staff, the energy, overall this was the best professional development that I have been to because it was so hands on,” said Murissa Mayes, an eighth grade teacher at Key Middle School. “I feel confident in implementing what I learned from this experience in my classroom.”

Another teacher, Kaylyn Court, a seventh grade math teacher at Mayde Creek Junior High, said the program “stretched and forced” her to become a better teacher. “With great materials and resources, AMP! allows teachers to really explore and be submersed in the inquiry lesson design and how it can be implemented in the classroom.”

The educational need in Houston is great, Nichol said, but Rice is doing its part to help solve the problem. “It’s a lot of hard work to raise money to run these programs, but when they are in session and you can see the good that we are doing, I just completely forget how hard it is to write all those grants for the programs. It is so rewarding.” ■

— DAVID D. MEDINA

DIRECTOR  
MULTICULTURAL COMMUNITY  
RELATIONS

# GIVING TO LEARN: RICE STUDENTS AWARD \$50K TO LOCAL NONPROFITS

**Last year, Rice became the 22nd partner of the Philanthropy Lab, a Fort Worth-based organization dedicated to supporting philanthropy education at universities. Rice joined a cohort of schools, including Harvard, Stanford and Columbia, that offers an annual course in charitable giving that culminates in distributing real money to local organizations.**

This year, Rice students in Giving To Learn: Philanthropy in Theory and Practice awarded nearly double the amount raised by the 2017 class, presenting \$50,000 to seven Houston nonprofits.

At the April 19 awards ceremony in the Moody Center for the Arts, Danika Burgess, director of curriculum and fellowships for Rice's Center for Civic Leadership, introduced Vida Avery, course instructor and Houston fundraising professional, and the 13 students who spent the semester reviewing proposals and deliberating the merits and missions of the dozens of nonprofits that applied for the grants.

"As philanthropy has filled the void created by decreases in public funding, it is important for a healthy democracy that citizens possess the critical tools to assess allocation and efficacy of these resources," said Burgess. "This course provided students the opportunity to learn about the history and role of philanthropy in America and to serve as grant-makers themselves."

Over the spring semester, undergraduate students Alex Addy, Chris Burbridge, Carolyn Daly, Sydney Franzen, Phil Hedayatnia, Patrick Kowalski, Nayva Kumar, Sara Meadow, Jiatian Qu, Jordan Szymczyk,

Carter Taft, Sonia Torres and Seyvion Waggoner formed three fact-finding groups under the guidance of Avery, the author of "Philanthropy and Higher Education: A Fateful Hour Creating the Atlanta University System."

The students read Avery's writings as well as Bill Gates' 2017 Harvard commencement speech, in which he encouraged graduates to "be activists" and "take on the big inequities" through philanthropy and public policy. The students also read John Winthrop's 1630 sermon, "A Model of Christian Charity," that he delivered to American colonists aboard a ship bound for Massachusetts. Toward the end of the semester, Avery said the groups engaged in a "very passionate" three-hour board meeting to finally select their seven local recipients for the grant money.

"They started out as students and they've grown from learning the history and theory of philanthropy to becoming program officers and board members," said Avery. "They've vetted organizations. They did their due diligence through researching, reviewing and scoring the applications to conducting site visits of the nonprofit organizations that they were interested in. These students have definitely achieved the lab's goals."

An increase in charitable giving to the course itself enabled the students to give more than last year's \$28,000, thanks to donations from the Hilda Rich Circle of Giving, the Houston Jewish Community Foundation, and Rice alumnus and noted philanthropist Purvez Captain '93. The Philanthropy Lab also offered funding for the course and hosted its annual ambassador conference in Dallas this summer for students from all partner institu-

tions. There, Rice students pitched their chosen grantee for further funding and debated with other student ambassadors the best way to disperse an additional \$150,000 in grant money.

At this year's conference in June, Rice students Sara Meadow and Jiatian Qu championed Houston's TXXRX Labs, a nonprofit hackerspace in the East End that offers courses and access to a rapid prototyping lab, woodshop, machine shop, electronics lab and a variety of other tools in its 30,000 square foot space. The Giving to Learn class awarded TXXRX Labs \$7,960 to expand its programs into Second Ward high schools through their Made to Market program. The six other Houston-area awardees were:

**Air Alliance Houston:** Awarded \$4,720 to conduct air testing projects in Super Neighborhood 41 in Fort Bend County, where a recent oil well blowout has left officials concerned about hydrogen sulfide emissions in the surrounding area.

**BakerRipley:** Awarded \$5,000 to use in its immigration and citizenship program, which helps guide immigrants and refugees through the naturalization process.

**BridgeYear:** Awarded \$9,750 for its work in connecting underserved communities with high-paying, high-growth careers that are accessible through local community colleges and vocational programs.

**Children at Risk:** Awarded \$8,195 to fund the publication of its annual Growing Up in Houston Guide, a leading resource on important issues, including local research regarding parenting, education, food insecurity and human trafficking.

**Partnership for the Advancement and Immersion**



**CHARITABLE COURSE:** Rice students raised \$50,000, which they distributed to several nonprofit organizations in Houston.

**of Refugees:** Awarded \$6,375 to extend its Global Learners summer program from two to three weeks, giving middle school-aged refugee students more time for educational and personal growth before starting school in the fall.

**The Montrose Center:** Awarded \$8,000 to fund a shelter for survivors of intimate partner violence through Houston's foremost LGBTQ+ community center. ■

— KATHARINE SHILCUTT  
MEDIA RELATIONS SPECIALIST  
PUBLIC AFFAIRS

**"As philanthropy has filled the void created by decreases in public funding, it is important for a healthy democracy that citizens possess the critical tools to assess allocation and efficacy of these resources."**

— DANIKA BURGESS



## YOUTH CAMP

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school at the Texas Diversity Council (TXDC) Summer Youth Program at Rice.

Deleon attended the free, weeklong camp four years in a row. This year, she returned as an intern for the TXDC to mentor younger students, many of whom are first-generation, college-bound students from the Greater Houston area. They aim to complete all four years of the Summer Youth Program, because in addition to reaping the benefits of the intense college-prep work that takes place each June, all students who attend the camp for four consecutive years receive a \$1,000 scholarship.

"We want these kids to understand that anyone can go

**"We want these kids to understand that anyone can go to college. And you don't have to wait until you're in 12th grade to talk about it."**

— DENNIS KENNEDY

### COLLEGE BOUND:

Houston students from various high schools learn what it takes to get into college.

to college," said Dennis Kennedy, founder and chairman of the National Diversity Council, which has helped to sponsor the camp. "And you don't have to wait until you're in 12th grade to talk about it."

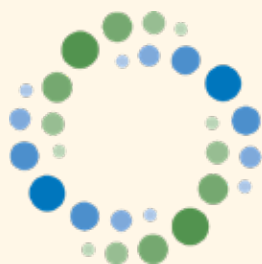
Partnering with Rice nearly a decade ago was a goal

Kennedy said, "and provide them role models, so they can see other people who look like them who are achieving."

David Medina '83, director of Multicultural Community Relations in Rice's Office of Public Affairs, first partnered with Kennedy and the National

that writing is one of the most important things that students can learn in high school."

Eight years later, Medina has seen the camp triple in size and watched with satisfaction as it's already paid dividends to those who come back year after year. "I'm very proud of the students



**NATIONAL DIVERSITY COUNCIL**  
An inclusive community, a better nation

for Kennedy, and that process meshed with one of the goals of Rice's Vision for the Second Century, Second Decade (V2C2): to coordinate educational programs and engage with Houston as an academic partner.

"We wanted to bring them to a campus, such as Rice,"

Diversity Council to launch the Summer Youth Program in 2010. "We started the program because we wanted to teach underserved high school students how to write well so that they could get into college and succeed in their careers," said Medina of the writing intensive camp. "I think

who stayed with the program for four years, went to college and returned to the summer camp as volunteers to help other students succeed," Medina said.

This summer, 60 students from middle and high schools arrived on campus early each morning for days packed with



writing workshops, practice exams for the SAT and ACT, presentations on financial aid and the admissions process, leadership activities, campus tours and much more.

“Most of these gifted students come from lower-income households and, with a little guidance, have the potential to be the first in their families to attend college,” said Laura Alvarado, senior director of operations for the Texas Diversity Council. “The program is designed to provide lessons and activities that will equip these students for a successful transition into college and through to graduation.”

For the past four years, Samantha Vela was ferried to and from campus by her grandmother for the weeklong summer camp, where Vela soaked up everything she could about securing funding for college.

Now heading into her senior year at the High School for Law and Justice, the oldest of four was determined to show her younger siblings that college is a possibility for all of the Vela sisters. She’d been busily



**WRITE ON:** Students learn the finer points of writing an essay as they prepare to apply for college.

applying for more scholarships and was recently nominated for a Posse Foundation Scholarship, which provides four years of full tuition at the foundation’s partner universities. If it weren’t

initially what to study in college, Vela now knows she wants to be a mechanical engineer — a career she didn’t know existed until an engineer came to speak at last year’s camp. The engineer and Vela met for coffee after camp was over, and this meeting sparked an interest that’s grown even more in the year since, as the two have stayed in touch.

Deleon saw her own experience at the Summer Youth Program come full circle from a green eighth-grader to a successful veteran of the college application process. Now, she’s an intern and mentor with two semesters under her belt and plans on returning to Houston after school to study neuroscience in the Texas Medical Center and start a nonprofit.

“A few weeks ago, I was talking to one of the parents in the program and she was really worried because she and her husband didn’t go to college but they wanted their son to be able to,” Deleon said. “I felt a connection.”

Although it took a while for

her own parents to come around to their youngest daughter going away for school, they ultimately realized how happy Deleon was, thriving on campus and pursuing her Ph.D. dreams, thanks to the program.

“They know that I work hard and I’m responsible and it’s really paying off,” said Deleon. “And seeing other parents learn more about college makes me really happy, too.” ■

— **KATHARINE SHILCUTT**  
MEDIA RELATIONS SPECIALIST  
PUBLIC AFFAIRS



**TESTING, TESTING:** Students in the summer camp learn how to prepare for the college admissions test by taking practice tests.

for the Summer Youth Program, Vela said, she’d have no idea such foundations even existed.

Vela found her first year in the program daunting. “And then I saw how they were going to help me out here, how they were going to be able to answer all of my questions. And being a first-generation, I had so many questions,” she said.

Although she didn’t know



# GROWING THE NEXT GENERATION OF COMPUTER SCIENCE LEADERS

**The Rice University School Mathematics Project (RUSMP) hosted a fair at Rice to encourage local students to study computer science and pursue careers in technology.**

Richard Parr, RUSMP executive director, said the hands-on activities during the April event helped develop enthusiasm for computer science education and careers among all the secondary school students attending the event.

Middle school students played games and watched demonstrations of technologies developed by high school students, then voted on their favorite projects. The high school projects included robots

that could move and manipulate objects, clothing accentuated with light-emitting diodes (LEDs), and computer and mobile games.

Nine students from South Early College High School brought games developed as part of their assignments for the AP computer science course taught by Angela M.S. Edwards.

Edwards said her students get excited about creating games and puzzles through programming, and the outcome makes the classwork seem more real to them. The opportunity for students to test their projects at Rice encouraged many of her students to reach a level of success in their class assignments that other deadlines did not achieve.



"The feedback they got at Rice was gratifying, and I heard many students mention tweaks they planned when they came back to school. The day after the CS fair, three of the students were in my room during lunch to work on their projects," Edwards said.

Kristopher Hoskin and Isaiah Stubblefield brought iterations of ColorSleuth, a game in which players earn points for clicking on squares that change color. The two students designed their projects with various levels of complexity.

In Hoskin's version, the player can usually identify a pattern

selection, which helps build confidence. In Stubblefield's game, the patterns evolve quickly and more randomly, challenging the player to develop nimbler thinking and responses.

The fair also included a keynote speech by Illya Hicks, Rice professor of computational and applied mathematics. Rice graduates, Molly Reilly '18 and Mayu Tobin-Miyaji '18, also made presentations.

"Even though the fair was scheduled during the last week of spring classes, I didn't mind," Tobin-Miyaji said. "It seemed like

# IT'S NOT BUSINESS AS USUAL FOR HIGH SCHOOL STUDENTS



a nice way for students like me in computer science to show representation.”

Other exhibits were provided by Texas Instruments Inc., Technology Education and Literacy in Schools, Makers of STEAM and Team Cherrypick, a winner at the recent George R. Brown Engineering Design Showcase for its program to capture and organize highlights from live volleyball games.

“Since 1987, RUSMP has been promoting Rice University’s excellence beyond the hedges in prekindergarten to grade 12 education by providing support to precollege institutions across the state,” Parr said. “RUSMP continues to be the primary catalyst of sustained, progressive change in education in Houston-area schools and across Texas, offering numerous programs for leaders, teachers and students.” ■

— **CARLYN CHATFIELD**

COMPUTER SCIENCE ALUMNI  
RELATIONS SPECIALIST

## **Students at Akins High School in Austin are learning how to start a business, thanks to the Rice Alliance for Entrepreneurship and Technology-Austin Chapter (RAA).**

For the past two years, RAA members have volunteered at Akins to prepare students for the Startup Superstars Entrepreneur Competition, which is sponsored by the Greater Austin Hispanic Chamber of Commerce (GAHCC). The annual competition challenges high school students at six of Austin’s Title I schools to create a new business plan and pitch their vision to a group of business professionals.

Teams of one to three students compete at their schools for a chance to advance to the citywide competition that takes place at the Zach Scott Theatre during the South by Southwest Education Conference and Festival. The winning team walks away with a college scholarship.

RAA’s mission is, “to be a catalyst for launching successful tech ventures through entrepreneurship education, mentoring and networking connections.” So, when Vanessa Gonzalez, education chair of the Austin Hispanic Chamber, approached the Rice Alliance to provide volunteers, the group was more than eager to help. Valerie Lussenhop, former president of the Rice Alliance, began working with GAHCC and Akins High School business teacher Andrew Hebenstreit in 2017.

In 2018, the students, teacher and RAA mentors took what they had learned from the previous year and re-doubled their efforts to come up with excellent ideas, business plans and pitches. Eight teams began developing business plans in January.

To inspire the students, the RAA invited Nelly Garcia, a Forbes 30-under-30 award recipient, to

share her story about how she, as an immigrant, established Rocheli Patisserie, a bakery, in Austin. The teams and mentors worked diligently for eight weeks, improving their business ideas, filling out their business plans and practicing and refining pitches. Ideas were varied. One team wanted to improve the standard taco truck. Another team wanted to help ailing elderly people by creating a smart pill box.

Teams pitched their ideas to judges from the Rice Alliance, Southwest Angel Network and GAHCC. Although all the teams made great strides and impressed the judges, the winning pitch came from GGX Fitness. Giselle Garcia came up with the idea of creating a gym specifically for Hispanics as a way to improve their health and decrease their rates of diabetes.

According to her plan, the gyms would be located in predominately Hispanic areas, play Latin music and always be staffed by Spanish speakers. Unlike other gyms that serve Hispanics, Garcia’s gym would provide dance classes, such as Zumba and Salsa, and offer traditional weight equipment.

For her efforts, the RAA awarded Giselle a \$2,000 scholarship and the opportunity to represent Akins at the citywide pitch contest, competing against five teams. Giselle also won the Austin citywide competition and an additional \$3,000 scholarship from GAHCC.

“I loved the evolution of Giselle’s project,” Garica said. “I saw the drive and determination Giselle had, and seeing her pitch at the finals, very confident of herself, very well prepared, and with excel-

lent public speaking skills, was the cherry on top of the cake. That is exactly what Startup Superstars is all about: helping underserved students reach their full potential through the help of mentors such as the Rice Alliance.”

For Giselle, winning the competition made her feel accomplished and inspired her to pursue a career in business. “This was a great learning experience and a wonderful opportunity to network with entrepreneurs,” Giselle said. Giselle will be attending Texas A&M University in the fall.

The success and feedback from the participating students invigorated the volunteers and ensured that the Rice Alliance will support next year’s class of students who dream of becoming entrepreneurs. ■

— **JUAN THURMAN ’97**

PRESIDENT, RAA



**THE RIGHT PITCH:** Austin high school student Giselle Garcia won the startup entrepreneur competition by creating a gym specifically for Hispanics.



## RICE AND BLACKSHEAR ELEMENTARY TEAM UP FOR LITERACY DAY

**Close to 40 volunteers from Rice University, the University of Houston and the Mayor's Hispanic Advisory Board spent the morning of May 21 reading to students from Blackshear Elementary as part of the school's Literacy Day.**

Volunteers regaled the students, ranging from pre-K to fifth grade, with stories and poetry aimed to bolster the children's love of reading and improve their literacy. Blackshear is a HISD Montessori magnet school located in Houston's historic Third Ward.

Blackshear Elementary's principal, Alicia Lewis, emphasizes the importance of literacy at her school. "It's one of our main goals," Lewis said. "We want students to like books. The huge role technology plays in our lives today takes away from time spent reading

books. Each student walking away with their own book today is very powerful."

Rice's Office of Multicultural Community Relations in Public Affairs organized the event, collecting books and cash contributions, which resulted in a donation of 500 books and healthy snacks — one for every student at the school. The Urban League generously donated more than 200 books. Teachers, staff and the principal also received gifts of appreciation from Rice.

Michael Taylor, an account executive with Rice Athletics, was excited for the opportunity to work with students inside their classroom. "Rice Athletics works with children a lot on campus, which is amazing," Taylor said. "But this was a great opportunity to get involved in another way and meet children in their element at



**LEARNING TO LOVE LITERATURE:** Public Affairs staff members spent the morning reading to students at Blackshear Elementary School.

**"We want students to like books. The huge role technology plays in our lives today takes away from time spent reading books. Each student walking away with their own book today is very powerful."**

**— ALICIA LEWIS**



**BOOK LOVERS:** Alex Byrd, associate professor of history at Rice, hopes that by reading to students at an early age they will learn to love books and become lifelong readers.





school.”

Amy McCaig, senior media relations specialist in Rice’s Public Affairs, picked two of her favorite childhood books to read to a second-grade class: “Make Way for Ducklings” and “The Story of Ferdinand.”

“As a lifelong reader, it was such a joy to read some of my favorite children’s stories in the classroom and see the kids’ faces light up in the way I suspect mine did when hearing these same stories many years ago,” McCaig said. “I hope these children will grow to love reading as much as I do, and I look forward to participating in similar events in the future.”

“The Story of Ferdinand” describes a bull who would rather smell flowers than engage in bullfights. When the class was asked what they thought about Ferdinand, a student answered, “He liked being quiet and just smelling flowers.”

Andrea Karow, events specialist in Public Affairs, was one of the organizers of the event. She said she was pleasantly surprised by the support of Rice faculty, staff, alumni and community leaders.

“I was touched to hear from so many members of the Rice and Houston community who wanted

to help,” Karow said. “Those who couldn’t donate their time, helped gather books, and those who donated their morning, showed up with enthusiasm and passion.”

Multicultural Community Relations is looking forward to making Rice’s participation in Literacy Day at Blackshear an annual event. ■

— KENDALL SCHOEMANN

STAFF WRITER  
PUBLIC AFFAIRS

**“I was touched to hear from so many members of the Rice and Houston community who wanted to help. Those who couldn’t donate their time, helped gather books, and those who donated their morning, showed up with enthusiasm and passion.”**

— ANDREA KAROW

**LITERALLY ENGAGED:** Several volunteer groups from Houston came together to help Blackshear Elementary students increase their love for reading and bolster their literacy.





# SPACE DAY IN SPACE CITY

**To celebrate 55 years of partnership between Rice University and NASA Johnson Space Center, about 600 middle school students from Houston-area school districts experienced a touch of outer space April 28.**

It was a big day for the students as they attended a Rice baseball game, participated in STEM experiences, toured campus and engaged with a range of cool NASA exhibits. The day began in Tudor Fieldhouse with exciting talks by Melanie Saunders, acting deputy director of the Johnson Space Center, and David Bring, senior staff scientist at the Lunar Planetary Institute.



The baseball game was a treat but space-themed activities and trivia throughout the game made it extra special. The game got going with a message to the students from astronaut Ricky Arnold onboard the International Space Station.

Students also enjoyed stepping into a space suit and touching a 3 billion year old moon rock that was brought to Earth on Apollo 17. The major highlight of the day, however, was probably NASA's "Driven to Explore" mobile

exhibit. The exhibit has audio-visual displays that highlight NASA's ongoing research to ensure the safety of space missions and NASA's plans for future exploration, including the designs for next generation space vehicles.

NASA's education tables and handouts were available to the students and everyone at the game. The all-day event was organized by Rice Space Institute, Rice Athletics, the Rice Office of STEM Engagement (R-STEM), NASA and the Lunar Planetary Institute. The more than five decade relationship between Rice and NASA continues today, and plans are underway for another Space Day in 2019.

— **DAVID ALEXANDER**  
PROFESSOR OF PHYSICS AND ASTRONOMY  
DIRECTOR  
RICE SPACE INSTITUTE



**A TOUCH OF OUTER SPACE:** A middle-school student tries on a space suit, while celebrating the partnership between Rice and NASA.





# THE RICE SCHOOL ROCKS

**The Rice University School Mathematics Project (RUSMP) organizes events for its partner schools that enrich students' understanding of STEM. From coding experiences, Measurement Olympics, eclipse parties and robotics competitions, students learn to appreciate the importance of science and technology in their lives.**

The latest STEM event took

cally asked questions and then answered Mayes' questions about rocks. Students who answered correctly won a prize. Many students said that they wanted to be geologists and earth scientists as a result of his talk.

"Roshaud's dynamic presentation gave the second graders real-world images of rocks and crystals that will serve them well as they begin their unit on geology," said Carolyn White, RUSMP

**"Roshaud's dynamic presentation gave the second graders real-world images of rocks and crystals that will serve them well as they begin their unit on geology."**

— CAROLYN WHITE



place at The Rice School/La Escuela. Second-grade students at the school kicked off their geology unit with a visit by rock and crystal expert Roshaud Mayes. He spoke with 122 students about rocks and crystals, their origins and uses, and how he got hooked on geology. After he described the rocks and crystals by size, texture and color, the students examined them.

He captivated the students with his stories about the history of the various rocks, how they were formed and their importance in culture. Students enthusiasti-

ally asked questions and then

answered Mayes' questions about rocks. Students who answered correctly won a prize. Many students said that they wanted to be geologists and earth scientists as a result of his talk. "Roshaud's dynamic presentation gave the second graders real-world images of rocks and crystals that will serve them well as they begin their unit on geology," said Carolyn White, RUSMP

— ANNE PAPAKONSTANTINO

DIRECTOR  
RICE UNIVERSITY SCHOOL  
MATHEMATICS PROJECT

**A ROCK STAR:** Roshaud Mayes, an expert on rocks and minerals, spoke to elementary students about rocks and crystals, helping them understand geology.



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# RICE AT LARGE

FROM THE OFFICE OF PUBLIC AFFAIRS AT RICE UNIVERSITY  
**DAVID D. MEDINA**, DIRECTOR, MULTICULTURAL COMMUNITY  
RELATIONS

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**RICE AT LARGE** is a quarterly newsletter that showcases the university's outreach programs. Each issue of the newsletter includes a series of stories that raise the awareness of Rice's engagement with the city and beyond. Rice At Large has a circulation of 2,500 and is sent to members of the Rice and Houston communities, including alumni, educators, business and political leaders, program funders and others with whom the university would like to engage.