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**NEW MUSIC IN THE BAYOU CITY:** Anthony Brandt is helping to assure that Houston's musical landscape flourishes with contemporary classical sounds through Musiq, a nonprofit group.

## New Sounds For a Global City

Anthony Brandt came from the Northeast in 1998 to teach composition at Rice University's Shepherd School of Music. He arrived with a missionary zeal to convert the city into a place where contemporary classical music thrives.

"Houston wasn't giving the same level of attention to contemporary music as it was to the other contemporary arts," said Brandt, an associate professor of composition and theory. "Houston is a wonderful place for modern dance, modern theater and modern art. So coming to this city, I wanted to make a difference and make modern music part of the city's cultural life."

Brandt enlisted the help of two Rice professors Karim Al-Zand, the Lynette S. Autrey Associate Professor of Composition, and Pierre Jalbert, professor of composition, and some colleagues from the

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## Rice Employee Helps Build School in Rural Ghana

For the past five years, Elizabeth Gbordzoe, transportation manager at Rice University, has been working with her three siblings, Frank, Senyo and Afenyo, to improve the conditions of a daycare and kindergarten school in their home country of Ghana.

Agate Daycare provides daily meals and lessons for approximately 150 rural students. Before the construction of the new four-classroom building, classes were held in a wood shack close to the village of Agate, in the Volta region, the hometown of Gbordzoe and her siblings.

"What really attracted us was the enthusiasm of these little kids," Gbordzoe said. "They really want to go to school. Everybody's so excited to get up and go to school every day. Unfortunately, they don't have anything in their classroom. They have to bring their own chairs to school."

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**Inside:**



**SHINING A LIGHT ON**

**TEACHING PHYSICS:** Teaching assistant Tim Johnson and participants Elisa Cardnell and Richard Hubbard investigate the behavior of holiday lights as part of the circuits lesson in Teaching Physics via Inquiry. See story on Page 5.

University of Houston to create a nonprofit organization that would promote contemporary music in the community.

They secured initial funding from the Cultural Arts Council of Houston and Harris County (CACHH) and the Houston Endowment, and called the group Musiq, because the name suggested something out of the ordinary. Musiq debuted with a concert in 2002 at the Rothko Chapel, and the following year it once again presented only one performance.

Since then, however, Musiq has grown steadily. The group now offers more than 20 performances a year, enjoys a budget of \$250,000 and has established itself as one of the leading contemporary music ensembles in the country. Awards bestowed upon the group include a 2013 Adventurous Programming Award from Chamber Music America/American Society of Composers, one of the highest honors in the field.

the other composers of Musiq consistently offer a broad spectrum of new music,” said Bill Arning, director of CAHM. “The concerts are well attended and the quality of music and scholarship is something that the audience appreciates.”

Recently, Musiq, the Houston Arts Alliance (HAA) and the Blaffer Art Museum worked together in presenting a public art installation “What Time Is It?” by Jo Ann Fleischhauer at the Market Square Clock Tower in downtown Houston’s historic district. To accompany the art, Brandt and Chapman Welch created “C O’Clock,” a musical arrangement that replaced the ringing of bells with a progression of computer-generated chords that rose and set like the sun. The music played through the duration of the six-month exhibition. Musiq also performed a free concert at Market Square sponsored by Houston Downtown Management District.

“Clearly, Tony embraces collaborative efforts and successfully brought music to a space with its own set of inherent challenges,”

composer can transform a simple folk song into an avant-garde piece. Students sing the folk song along with the musicians and then listen as the composer changes the piece into something new.

“I have to say that listening to 500 children singing along with musicians is about the most glorious thing that you can experience,” said Brandt.

The programs have won multiple awards from the National Endowment for the Arts. “Our programs have done well from the start because they are participatory,” said Brandt. “We wanted something in which the kids would be involved from the beginning to the end and they would be part of the music making.”

Each year, Musiq reaches about 6,000 school children through concerts and workshops, and over the years, the group has served almost 100 schools in the Greater Houston area. Brandt believes that Musiq is not only helping children learn about contemporary music, but it is helping them develop their creativity.

“Every single culture in the world has its own music, dance and visual arts. Yet in our society right now, we treat creativity as a luxury, we treat it as a gift, we treat it as something that requires special access and opportunity,” he said. “At Musiq we believe that this is not correct; that creativity has to be nurtured, cultivated and developed in every single child.”

Arning said that Brandt encourages young students to go beyond their comfort zones in listening to music. “Tony is a great proselytizer of new music, of the joy of exploring new sounds,” he said.

Our culture, Brandt explained, has been invaded by repetitive music. “In our iPod generation, pop music is refrain, refrain, over and over again. Classical music, on the other hand, is always working the material in search of something different and new,” he said. “Young students need to understand that music can be twisted and shaped in all kinds of ways to create something fresh and unique.

“If you can just do that, you have planted a seed in the child’s mind of what imagination is really about. You can convince them that they are 100 percent capable of being creative themselves.”

**DAVID D. MEDINA**

Director  
Multicultural Community Relations  
Public Affairs

**Our programs have done well from the start because they are participatory. We wanted something in which the kids would be involved from the beginning to the end and they would be part of the music making.**

**— Anthony Brandt**

The turning point for the group, Brandt explained, came in 2006, when it became part of the Residence Incubator Program of the Houston Arts Alliance. Members of the program are given in-depth training for 36 months on how to manage an emerging organization and receive up to \$15,000 a year in funds. With this help, Musiq was able to rent an office space and hire its first part-time executive director.

Musiq performs new and original compositions written by local and national composers and collaborates with other art programs, such as the Contemporary Arts Museum of Houston (CAMH), in creating arrangements that mix dance, film, literature, art, songs and music. The result can be moving, inspiring, some times eerie and bizarre, but never familiar or commonplace.

“Tony is a very innovative composer, and

said Jonathon Glus, president and CEO of HAA. “This type of leading edge, experimental work is exactly what is called for in our 21st-century global city.”

Musiq also provides two educational programs, which are led by Brandt’s wife, Karol Bennett, who teaches voice for nonmajors at Rice. In Musiq Remix, fourth to seventh graders learn how musical pieces are put together as they explore rhythm, meter, orchestration, harmony and counterpoint. The event, free to all public schools, is held at the Hobby Center for the Performing Arts. Before the concert, students attend a Musiq workshop at their school that prepares them for the musical topics to be discussed.

The second program, Around the World With Musiq, is an interactive concert in which students, second to fourth grade, learn how a



Gbordzoe and her family have tried numerous times to raise funds for the project, but have been unsuccessful. They have used their own money to build a concrete school building to house the daycare and kindergarten.

“A few years ago, I told a couple of my colleagues about the project,” Gbordzoe said. “Some gave me a little donation, but since I didn’t have a website, it was hard for me to publicize the project.”

Gbordzoe and her siblings are dedicating this project to their father, who was a teacher and a school principal for more than 40 years in Ghana.

“When he passed away, many of his former students came to the funeral to honor him. We thought, what a beautiful thing he had done for all these students, and this was something we could continue in his memory,” said Gbordzoe.

Gbordzoe’s brother, Frank Kploanyi, explained that the children in these rural areas traditionally go to first grade without any formal pre-school exposure, causing them to lag behind those who study in the city. As a result, the rural students lack the foundation to pass the admission test to get into quality junior secondary schools.

“Each time I visited home on vacation, I saw the deterioration of the facility and was appalled by the condition under which the children studied,” said Kploanyi, CEO of KPL Associates.

“Before we built the new school building, when it rained, the students had to huddle to avoid water leaking from the roof. During heat waves, they moved outside under nearby trees to get shade and enjoy fresh air,” he said.

Gbordzoe was privileged to attend a school that prepared her well for her bachelor’s degree in Ghana and master’s in England. “I know a lot of them can do the same thing if given the opportunity.

“Once they are interested in education at an early age, they’ll try to find every means to go higher than just elementary school,” said Gbordzoe, who worked for the N.Y. State Department of Transportation and then Houston METRO before coming to Rice, where she has been for nearly 16 years.

Agate also is receiving some help from the Knightdale-Wake Forest Alumnae Chapter of Delta Sigma Theta Sorority Inc. The organization, based in North Carolina, has been donating school supplies to the daycare and kindergarten since 2011.

Gbordzoe’s dream is to create a school building that is fully furnished with windows, basic school supplies, a gymnasium and eventually computers.

“Our goal is to give each child the best start possible, especially in the areas of reading and math,” said Senyo Kploanyi, a senior in-house clinical research associate at PRA, one of the world’s largest clinical trials organizations. “We hope that they will be able to write by the time they get to third grade.”

According to Afenyo Kploanyi, who works as a manager for MyGhanamusic, Agate also is in need of teachers. Anyone interested in teaching in Ghana and particularly at Agate should check with international exchange programs at their universities.

► To learn more about this project, contact Gbordzoe or the Kploanyi family by visiting the Facebook page, Agate Daycare and Kindergarten School-Ghana.



**BUILDING OPPORTUNITY FOR YOUNG MINDS:** Before the new school was built, students attended classes in shacks, had to bring their own chairs and huddled together to avoid leaks in the roof when it rained. But their enthusiasm for learning never dampened. Now, they have a four-room concrete schoolhouse, where they can expand their minds.

**RUBY GEE '14**

Jones College

## An Alternative Spring Break

What comes to mind when you think of spring break? Perhaps thoughts of parties, beautiful beaches or sunshine-filled skies are synonymous with spring break, but for some students at Rice University, the midsemester break offers an opportunity to help in the community.

Through the Alternative Spring Break (ASB) program, students go out and immerse themselves in communities all over the United States. Instead of spending a relaxing week down on South Padre Island, ASB students dedicate their week completely to service and, in turn, learn about different communities and social issues prevalent around the country.

Administered through the Community Involvement Center (CIC) at Rice University, ASB influences the university community in a myriad of ways: it allows students to engage in and learn about the communities around them, teaches students to become self-aware about social issues and, most importantly, teaches them the value of connecting with others on a deeper level. Before embarking on these life-changing experiences, students prepare, in some cases, almost a year in advance, by learning about the community they are visiting or the social issue they wish to address.

ASB is much more than just a service trip. In many cases it is a life-changing experience. Many students return from their ASB experience with new perspectives on social injustice around the United States and often tailor their lives and studies to create change.

Every trip starts with a pair of site leaders. This team identifies a social issue that will be the focus of discussion over spring break. The pair organizes a trip in a manner that promotes issue-based education, direct service and



**TAKING THE TIME TO CONNECT:** Rice sent 17 student groups to cities across the nation to spend their spring break volunteering. Students in Rice's Alternative Spring Break program immersed themselves in a variety of communities and addressed such issues as education disparities, women's right, poverty, hunger, animal rights and ecological preservation.

advocacy. Once site leaders identify the goals of their trip, they recruit, interview and select a group of students to participate. ASB groups generally consist of 12 to 15 students who are

selected from a pool of more than 400 applicants. About half of the trips include a faculty or staff participant. ASB site leaders and their team of participants work together for months leading up to spring break. They spend time building a cohesive group and learning about the social issue to effectively participate in both individual and communal action. This spring, the ASB program has addressed a wide array of issues such as education disparities, women's rights, poverty, hunger, animal rights and ecological preservation.

The site leaders, participants and CIC worked incredibly hard to put together the March trips. This year, Rice sent 17 diverse groups to different communities across the nation. Not only do ASB students exemplify leadership and initiative, but they also embody Rice's passion for unconventional wisdom.

► To learn more about the program, including how to get involved as faculty or staff participant, visit the CIC's website at <http://cic.rice.edu/asb>.





## Celebrating Martin Luther King's Legacy

As they rode on a float, Rice students, alumni, staff and Johnny Whitehead, chief of police at Rice, were greeted with warm applause and cheers from thousands of residents at the annual Original MLK Parade in downtown Houston.

Nearby in Midtown, Akilah Mance '05, chair elect of the Association of Rice University Black Alumni (ARUBA), and E. Jonas Austin '09 waved and spoke to the crowd at the 20th Annual MLK Grande Parade.

More than 20 people, including members from the Black Student Association (BSA), ARUBA and Public Affairs' Multicultural Community Relations, participated in the two parades both held Jan. 20, 2014. The crowd — estimated at 300,000 — was truly appreciative to see Rice. Many yelled, “Yea,

Rice,” gave the thumbs up and made the Owl sign. Some parade-goers commented that they wanted their children to attend Rice, and one parent proudly yelled that his daughter had been accepted to Rice.

A day before the parade, the BSA organized the Martin Luther King vigil at the Rice Chapel. More than 150 people attended and listened to speeches by John Hutchinson, dean of undergraduates; Ruth López Turley, associate professor of sociology; David Bonner, second vice president of the Japanese American Citizens League; and Courtney Morris, postdoctoral fellow in the Center for the Study of Women, Gender and Sexuality.

BSA members worked tirelessly to make what is the oldest tradition of the organization a rich cultural event that paid homage to King's dream. During the program, Rice BSA member Chelsea Sharpe '14 played a poignant version of the African-American spiritual

“Deep River” on her violin. The vigil was followed by a reception, where Gabe Baker '14, a member of Rice's football team, played the cello. The Melodious Voices of Praise Gospel Choir, composed of BSA members and other students at Rice, began and ended the programs with familiar songs of the civil rights movement.

“The evening's multicultural assembly of speakers and Ruth López Turley's call to action on behalf of the children of the community were especially moving parts of the program to me,” said Monique Shankle '86, a former Association of Rice Alumni board member.

“Their words made me wonder if those of us who made it are doing enough to help those after us rise?” Shankle added. “Of the many ways that we celebrated his legacy this weekend, that is what Dr. King would have wanted most.”

## Physics Teachers Have Inquiring Minds

The Rice School Science and Technology (SST) Program has partnered with the Houston Independent School District in creating a yearlong program, the Rice Excellence in Secondary Science Teaching (RESST) program, that helps middle and high school teachers improve their teaching of physics.

Gigi Nevils-Noe, assistant director of SST, and Jason Hafner, associate professor of physics and astronomy, co-teach the session, Teaching Physics via Inquiry. The two provide physics teachers with exemplar lessons that emphasize research. The program helps teachers transform their lesson plans so that students can have a better understanding of physical phenomena.

Hafner creates a university environment for the teachers in which they build their pedagogical knowledge. The RESST physics team then leads the participants through pedagogy and leadership training, which allows opportunities for everyone to become involved in interactive demonstrations, problem-solving and dynamic discussions. The teachers learn the interactive methods that Rice professors

use and then employ those methods in their classrooms.

Teaching Physics via Inquiry is making its mark on middle school and physics classrooms throughout HISD. “This class has completely changed the way I approach my classroom,” said David Martisek, a teacher from Stevenson Middle School.

Teachers are seeing a change in their students' engagement in the physics classroom. Steve Bartusiak, from Scarborough High School remarked, “Students grow as scientifically literate, confident individuals who are less afraid of math. That is a beautiful thing to experience.”

Participants experimented with current electricity using inexpensive holiday lights as testers. Traditional lessons use batteries and bulbs, but the use of holiday lights creates the opportunity for teachers to get their hands dirty and strip the wires themselves. Once they build basic circuits and make observations, teachers model a lesson in which the students compete in teams to quickly and accurately wire complex circuits.

To investigate the use of circuits to connect physics, engineering and computer science, the program includes an electronics and coding unit using an Arduino® (a small

microprocessor run on open-source code), a laptop and multiple circuit devices. The teachers explore the maker-world of the Arduino® by coding and wiring circuits that blink, whirr and buzz. RESST physics teachers completed ambitious projects with their Arduinos®, including wiring and adjusting code in an interactive Simon Says game, using an ultrasonic sensor to wire a proximity “garage” sensor, and using servos and a laser to create a keyboard driven two-axis laser pointer.

Capstone projects were presented the first two weeks of April to celebrate the accomplishments of the physics participants as educational professionals. Participants shared their successes by presenting a lesson from their RESST course that they taught in their classroom, complete with pictures, video and examples of student work.

Elisa Cardnell, an HISD teacher and a grad student in Rice's Master's of Arts in Teaching Program, said, “The Rice Excellence in Secondary Science Teaching program has been the driving factor behind my style of teaching.”

## TODOS: Mathematics for All

Since its inception in 1987, the Rice University School Mathematics Project (RUSMP) has been bringing together mathematics teachers and school district administrators to Rice University to participate in stimulating conversations and to listen to lectures delivered by distinguished educators.

This spring, Miriam Leiva, founding president of TODOS: Mathematics for All, gave the keynote talk “Differentiated Instruction in Mathematics for ALL Students.”

Leiva, who is also professor of mathematics emeritus at the University of North Carolina at Charlotte, urged teachers to strive for equity for English-language learners and for all students through differentiated instruction. She also shared stories of her experiences as an immigrant from Cuba, and emphasized how much of an impact her mathematics teacher made in her life.

Educators who attended the conference appreciated that she also discussed practical strategies to support mathematics learning through language. A participant wrote in the postconference survey that Leiva’s presenta-

tion “was fantastic and provided several ways to let the students figure out the language of math.”

Anne Papakonstantinou, RUSMP director, noted that Leiva passionately supports the RUSMP goal of providing strategies to engage struggling students, English-language learners and underrepresented minorities in learning mathematics.

Following Leiva’s presentation, teachers participated in an activity led by the RUSMP team of Papakonstantinou, Richard Parr, Susan Troutman and Carolyn White in which they deconstructed the language of the revised Mathematics Texas Essential Knowledge and Skills (TEKS). For many teachers, the language of the TEKS can be intimidating.

Dissecting the revised mathematics

curriculum, however, was for many, an “eye-opening” experience that “every teacher should experience,” according to one of the participants. Many of the teachers were surprised by how extensive the changes are in the revised mathematics curriculum and appreciated the opportunity to examine TEKS among supportive colleagues. Teachers vowed to take this activity back to their schools for their entire mathematics departments to do.

Leiva’s presentation was made possible by Houghton Mifflin Harcourt, which also provided a large number of educational resources as door prizes.

**ALICE FISHER**

Instructional Support Specialist  
Rice University School Mathematics Project

## Rice Gives a Hoot

The cool, wet February morning didn’t stop people from buying more than 300 breakfast tacos in front of Willy’s Statue, showing once again that the Rice community does give a hoot when it comes to helping its own.

The breakfast fundraiser was organized by HOOTS, the High Order of the Owl Tailgating Society, a Rice organization that gives scholarships to children of the employees of Facilities Engineering and Planning (FE&P), Housing and Dining, Transportation and Parking, and the Rice University Police Department.

“We want to help their education along,” said Patrick Dwyer, board chair for the group. These funds help to defray the cost related to fees, books, or room and board. Even though children of employees receive free tuition, the parents of these scholarship recipients often work in lower paying jobs and meeting the additional costs can be a challenge.

Originally, HOOTS was created in 1992 to provide opportunities for members of Facilities and Engineering and Housing and Dining to socialize outside of the workplace.

Rice football games provided a venue for the group’s initial gatherings, where members organized tailgate parties before home games and provided food, drinks, snacks and sometimes entertainment.

But Nelson Correa, the first executive director of HOOTS, wanted to do more than throw parties, so he helped establish a HOOTS scholarship program. In 2000, the first scholarships were awarded and a formal structure was created to administer the scholarships, including the establishment of an endowment.

HOOTS continues to host tailgates, but now the purpose is twofold — fellowship and fundraising. The tailgate parties, where donations are accepted, along with other fundraisers and donations to the endowment, provide the scholarship funds.

This year, seven students received scholarships. The recipients included students who attend Rice, as well as Trinity University and Austin College, schools with which Rice has reciprocal tuition-free programs for children of Rice employees.

Johnnie Thomas IV, an HVAC technician in FE&P, is the proud father of Joshua Thomas, a freshman engineering student

at Rice and a HOOTS scholarship recipient. “These funds helped us get Joshua to the next phase of his life,” said Johnnie, who was one of the original HOOTS members. “Joshua’s admission to Rice and the HOOTS scholarship are part of the good experiences that comprise my 30-year work history at Rice.”

Students usually receive between \$1,000 and \$1,100 annually, depending on the funds raised. The recipients are required to keep HOOTS informed on their progress, and they must participate in at least one HOOTS event each year.

“The HOOTS’ scholarship program is widely supported by the Rice community,” said Dwyer. “Our current president, Lucinda Cannady, a former member of one of HOOTS’ coordinating departments [and a current administrator for the Kinder Institute for Urban Research at Rice], still devotes her time and energy to this cause. Like many, she values HOOTS and the students it serves.”

**JAN WEST**

Assistant Director  
Multicultural Community Relations  
Public Affairs

## Be a Scientist and Save the World

Since 1998, the Richard E. Smalley Institute for Nanoscale Science and Technology at Rice has worked closely with the Gifted and Talented Mentorship Program in the Fort Bend Independent School District (FBISD). This program brings 12 top students to Rice annually to hear the Smalley Institute story and gives them the opportunity to see what goes on in Rice's research labs.

Students in this program are required to do internships in their fields of interest, and Rice regularly gets one of those students. This year, two students were placed from the program, each in a different group.

"Rice University has provided amazing opportunities for selected, research-minded students," said Naomi Brown, the gifted and talented mentorship instructor. "Mentorship students continue to refine advanced-level project development with forward-thinking Rice University faculty."

The Rice-FBISD relationship clearly benefits both parties. For example, in addition to the lab work performed by the student, Rice gets a steady stream of top talent: Since 1998, 21 students have interned at Rice in the sciences, engineering and public policy. Of these, six are attending or have graduated from Rice, with others going to the Massachusetts Institute of Technology, the University of Texas at Austin, Harvard and the California Institute of Technology. Four additional students who interned elsewhere have attended Rice. After finishing at Rice, some students have gone to graduate school at Baylor College of Medicine, Harvard and Johns Hopkins.

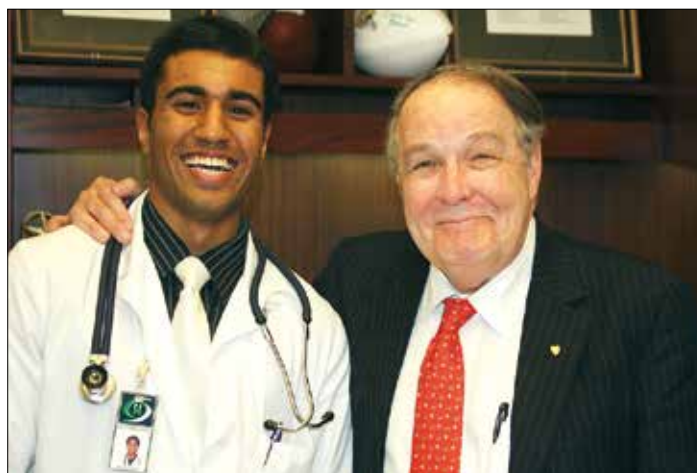
"As an intern, I had the opportunity to participate in a number of projects and work directly with Ambassador Djerejian and his staff," Marc Sabbah '13, a former Baker Institute intern and Rice graduate, said. "It was a truly extraordinary experience and encouraged me to attend Rice for my undergraduate degree. Now, I enjoy giving advice to new Fort Bend mentorship students. I encourage them to apply to Rice and watch incoming classes receive the long-lasting benefits of the program."

FBISD students have interned at the Baker Institute with Ambassador Edward Djerejian and in laboratories led by professors Pulickel Ajayan, Richard Baraniuk, Matthew Baring, Enrique Barrera, Andrew Barron, Kate Beckingham, Cecilia Clementi, Jane Grande-Allen, Tom Killian, Antonios Mikos, Patricia Reiff, Volker Rudolf, Junghae Suh, Isabel Thomann, Klaus Weissenberger and Lon Wilson.

The collaboration also benefits Rice graduate students by offering them the opportunity for professional development, both in their ability to present to people who are outside their fields and in their practice of management and leadership. Fort Bend interns always end up inspiring — as much as being inspired by — their student mentors, because of their intelligence, drive and enthusiasm.

### JOHN MARSH

Director of Operations  
Richard E. Smalley Institute for Nanoscale  
Science and Technology



**INSPIRATIONAL INTERNSHIPS:** Top students from FBISD are given the opportunity to serve in an internship at Rice in the sciences, engineering and public policy. They have interned with the Baker Institute and in laboratories led by Rice professors. Several of the students have gone on to attend Rice and other elite universities.



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# AT LARGE



**INSIDE THIS ISSUE:** Rice joins the community in celebrating Martin Luther King's legacy. See story on Page 5.

**David D. Medina**, Director, Multicultural Community Relations, Office of Public Affairs

