

RICE at large

From the Office of Minority Community Affairs and the Office of the Associate Provost at Rice University

ISSUE 4 • SUMMER 2007

VISION 2007 BRINGS TALENTED MINORITY STUDENT RECRUITS TO CAMPUS



A record number of minority students visited campus this year as part of Vision Weekend 2007. Now in its 13th year, Vision introduces a select group of talented African-American, Hispanic and Native American applicants to the opportunities available at Rice. This year, 148 students attended the two-day program, which took place February 18–20.

As elite schools compete nationally for the most talented students of color, they seek to attract these highly sought-after students as early as possible. Hosting a program in February is challenging, since the Admission staff reads and evaluates thousands of applications annually — including more than 8,000 applications for the freshman class this year. However, timing is key to wooing the “best and brightest,” and Vision has allowed Rice to make a positive first impression on these recruits.

Involving the entire Rice community, the program is orchestrated primarily by Laura Villafranca, senior assistant director of admissions and coordinator of Hispanic recruitment, with the support of Tamara Siler, senior associate director of admissions and coordinator of minority recruitment, and the rest of the Office of Admission staff. In addition, the minority interests committee, a group of 12 student volunteers, manages many of

the student-related features of the program, including finding the more than 100 Rice student hosts who house the prospective students in the residence halls.

Students attending Vision arrived on a Sunday, with the university subsidizing travel costs for those living outside of Houston. While on campus, students went to classes, met with professors, attended sporting and social events, and took advantage of workshops on financial aid and health professions advising. On Monday evening, they were treated to a formal dinner with faculty and alumni of color. The keynote speaker for the event was David Medina, director of minority community relations and current president of the Houston Hispanic Forum. The program ended with an open-microphone event in the Student Center, which allowed current and prospective students to commune and share their various talents.

Next year's Vision Weekend has tentatively been set for February 17–19, 2008.

— *Tamara Siler*
Senior Associate Director,
Coordinator of Minority
Recruitment
Office of Admission

ENGAGING THE HOUSTON COMMUNITY THROUGH RESEARCH, SERVICE AND LEADERSHIP

Established in 2006, the Center for Civic Engagement at Rice University (CCE) comprises four programs that enable Rice faculty and students to engage the Houston community through research, service, leadership and cultural opportunities.

THE CENTER FOR CIVIC RESEARCH AND DESIGN. This program provides research and design opportunities for undergraduates through traditional courses and independent studies.

Under the guidance of Rice faculty and in collaboration with community partners, students conduct research that addresses the array of challenges facing the Houston community. This year, public policy students worked with the City of Houston to evaluate the impact of Katrina evacuees on crime and developed a survey to assess voters' opinions of the Spring Branch Independent School District. Bioengineering students worked with doctors at the Baylor College of Medicine to develop medical devices designed to improve care for pediatric AIDS patients in Africa. Electrical engineering students worked with Technology for All to maintain and improve the free wireless network available in the Pecan Park neighborhood. Sociology students, led by professor of sociology Stephen Klineberg, worked on the Houston Area Survey.

THE COMMUNITY INVOLVEMENT CENTER (CIC). The CIC sponsors a variety of opportunities for community involvement throughout the year, including Outreach Days, the Urban Immersion Program, the Good Works Volunteer and Career Fair, the ESL Tutoring Program, the International

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MATH TEACHERS HONE THEIR SKILLS AT RICE SUMMER CAMPUS PROGRAM

The Rice University School Mathematics Project (RUSMP) held its 21st summer campus program this June for a host of Houston-area teachers who desire to improve their mathematical knowledge and teaching skills.

During the four-week program, pairs of master teachers — practitioners with in-depth mathematics content knowledge and teaching techniques consistent with RUSMP's philosophy — provided instruction for five program levels.

Pre-K through 12 teachers from 14 school districts and one private school took part in RUSMP's active approach to learning and teaching mathematics. They participated in concept-based learning activities that emphasized motivation, applications and problem solving in real-world situations. Applying problem solving in cooperative learning situations, participants used manipulatives and technology to represent,

explore and derive solutions to mathematics problems. Additionally, teachers learned how to use authentic assessment methods to evaluate student work. The content studied was central to the study of mathematics as described in both the National Council of Teachers of Mathematics "Principles and Standards for School Mathematics" and the "Texas Essential Knowledge and Skills."

During colloquium talks each Wednesday morning, participants were joined by RUSMP alumni and administrators to hear Rice University mathematics professors John Polking and Richard Tapia and former RUSMP participant and master teacher Marla Stanley speak on topics such as *Tropical Mathematics — A New Arithmetic with Interesting Applications, Promoting Students' Appreciation for Math through Applications to Very Cool Activities*, and *The Many Hats of a Teacher*.

In addition to educational and networking opportunities, each teacher who successfully completed the program received a stipend, classroom materials and books, four hours of graduate credit, and 30 hours of credit toward the Texas Association for the Gifted and Talented Level I Certificate. The Summer Campus Program has been, and continues to be, the primary model of sustained, progressive change in mathematics education in Houston-area schools, as noted by participating school districts and charter and private schools.

—Anne Papakonstantinou
Director
Rice University School
Mathematics Project

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Summer Service Trip, and the Alternative Spring Break Program. CIC encourages students to take a leadership role in most of these service activities.

LEADERSHIP RICE. This initiative helps students discover and develop their leadership capacities through both curricular and cocurricular activities. Students in this program work closely with a mentor to hone their leadership skills. Currently, 46

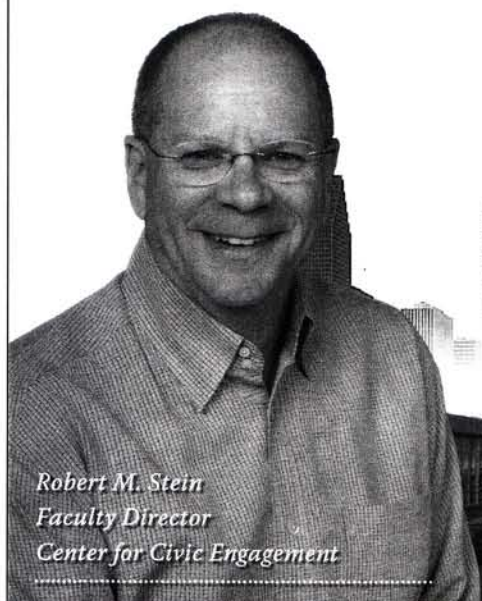
Leadership Rice students are participating in mentorships spanning the private, nonprofit and public sectors. Participating organizations include the City of Houston, Houston Dynamo, the Houston Astros, the United Nations, the National Science Foundation and the Houston Endowment.

PASSPORT TO HOUSTON. This program promotes off-campus student engagement by offering Rice undergraduates free access to METRO bus and rail services. Passport to Houston also provides free or reduced-price tickets to ven-

ues such as the Houston Zoo, Houston Symphony, Houston Grand Opera, Alley Theatre, Museum of Natural Science, and Museum of Fine Arts, Houston.

To learn more about CCE, please visit <http://cce.rice.edu> or e-mail cce@rice.edu.

—Stephanie Post
Executive Director
Center for Civic Engagement



Robert M. Stein
Faculty Director
Center for Civic Engagement



Stephanie Post
Executive Director
Center for Civic Engagement

RICE'S HIGH SCHOOL SUMMER PROGRAM ATTRACTS LARGE POOL OF STUDENTS

The third annual Rice for High School Students: College Credit in the Summer program approximately doubled its enrollment over last year, attracting 13 students from a wide range of Houston-area schools.

Administered by the Glasscock School of Continuing Studies, the program allows outstanding high school juniors and seniors to take one Rice summer school course alongside college students from Rice and visiting institutions. Applicants are selected based on high school grades, level of coursework completed, standardized test scores, and recommendation by a counselor and teacher.

Students chose from more than 20 available courses, enrolling in Bioengineering and World Health, Introduction to Sports Management, Multivariable Calculus, Number Theory, Principles of Economics I, Public Speaking, Scientific Foundations of Kinesiology, and Single Variable Calculus I.



Photograph from New Student Orientation: Featured from left to right, back row: Peter Soloviev, Adam Brzostowski, Violetta Krol, Edwin Fuentes, Michael Wassef, Laura Bielinski, Eric Fisk; front row: Emily Nichol, Charles Chen, Ronald Key, Jonathan Hernandez; not shown: Daniel Petkevich, Jean Payne.

Admitted students represented the following high schools: Aldine High School, Bellaire High School, High School for the Performing and Visual Arts, Kempner High School, Kingwood High School, Lutheran Academy South, Memorial High School,

Northbrook High School, South Houston High School, Strake Jesuit, and Texas Academy of Mathematics and Science. Jonathan Hernandez from Strake Jesuit returned for a second year.

"These students are impressive. We are very fortunate to have such a set of academically motivated students attempting Rice's rigorous courses. We have every confidence that they will thrive," says Siva Kumari, associate dean and executive director of programs for the Glasscock School.

Classes were held between June 4 and July 27 on the Rice campus. Three students received full scholarships to attend.

For more information on this program, please e-mail teachers@rice.edu.

—Kristal Scheffler
Marketing Specialist
Susanne M. Glasscock School
of Continuing Studies

RICE UNIVERSITY TO SPONSOR NSHMBA 18TH ANNUAL CONFERENCE

Rice University's Jesse H. Jones Graduate School of Management will be the first academic institution to sponsor the National Society of Hispanic M.B.A.s (NSHMBA) annual conference, which takes place Oct. 4–6 in Houston's George R. Brown Convention Center.

Titled "Leading with Influence," the conference and career expo will provide M.B.A. students and business professionals from across the nation access to professional development seminars and networking events.

"Rice University and the Jones Graduate School of Management are proud to be the first academic sponsor and lead supporter of NSHMBA's national conference," says William B. Glick, dean of the Jones Graduate School of Management.

"The conference allows invaluable oppor-

tunities for personal and professional growth in a highly charged learning environment," Glick adds.

Attendance at the event has grown every year, attracting a record 6,700 participants last year in Cincinnati. The conference was last held in Houston in 1994.

NSHMBA, a nonprofit organization, seeks to foster Hispanic leadership through graduate management education and professional development. NSHMBA was created in 1988 by a group of Hispanic M.B.A. students seeking to remedy the lack of Hispanics working in corporate management and the public sector and reverse Hispanic underrepresentation and declining enrollment in graduate business schools.

Since then, the organization has grown into 29 chapters and 6,000 members throughout the U.S. and Puerto Rico.

The Houston chapter hopes to improve the development and visibility of Hispanic students, M.B.A.s and professionals in Texas and beyond.

Over the next few years, NSHMBA plans to increase Hispanic enrollment in graduate management programs; assist business organizations in recruiting, developing and promoting Hispanic business professionals; and engage in networking and community events to provide Hispanic professionals with opportunities for career growth, leadership development and entrepreneurship.

—Julia Nguyen
Marketing Specialist
Jesse H. Jones Graduate School of
Management

CORRUL TO ADDRESS CRITICAL URBAN ISSUES

The Center on Race, Religion and Urban Life (CORRUL) recently hosted the Rice University community at a brainstorming session designed to generate research ideas for the Program for the Study of Houston.

The program aims to stimulate the development of a coordinated, multidisciplinary community of research scholars who are addressing critical urban issues in Houston and beyond.

In addition to coordinating and supporting existing studies at Rice, the program seeks to stimulate new lines of research that will contribute to the vitality and well-being of the Houston community as a whole.

CORRUL also recently sponsored a series of guest speakers who shared their research and perspectives on issues of race, gender, religion and urban life with Rice's students, faculty members and staff.

"THE SERIES IS PART OF CORRUL'S ENDEAVOR TO ESTABLISH RELATIONSHIPS ACROSS CAMPUS, THE CITY AND THE NATION."

Speakers included Kimberly Brown, a postdoctoral fellow in Rice's Center for the Study of Women, Gender and Sexuality, who spoke on the struggle of African-American mothers in history; Joel Huerta, a lecturer in Rice's English department, who presented "Barrio Street Graphics: Cantina Signboards and Murals"; and Kerry Ann Rockquemore, associate professor of sociology at the University of Illinois at Chicago, who presented "Life on the Color Line: Multiracialism, Whiteness and Passing in Post-Civil Rights America."

Michael Emerson, the Allyn R. and Gladys M. Cline Professor of Sociology and the founding director of CORRUL, says the purpose of the speaker series is to focus on research done in areas of interest to CORRUL.

"It exposes us — and the community — to topics we might not have been exposed to otherwise," Emerson explains. "The series is part of CORRUL's endeavor to establish relationships across campus, the city and the nation."

Please visit www.rice.edu/CORRUL for more information on upcoming activities and CORRUL initiatives. CORRUL's first seasonal newsletter will be available this summer.

— Valeria Gutierrez
Administrative Coordinator
Center on Race, Religion and
Urban Life

ANNUAL GIRL SCOUT DAY RETURNS TO CAMPUS

For the past four years, the Rice chapter of the Society of Women Engineers (SWE) has sponsored an annual Girl Scout Day, conducting science and engineering workshops on the Rice campus for more than 100 Houston-area Girl Scouts.

According to the national SWE, women comprised only 10.6 percent of engineers in 2000. The Rice SWE hopes Girl Scout Day will introduce more girls to science and engineering and encourage their pursuit of these subjects in their academic and professional careers. The girls participate in six interactive workshops, and topics include polymers, bridge building, circuits, petro-

"IT WAS A GREAT OPPORTUNITY FOR THE GIRLS TO LEARN MORE ABOUT ENGINEERING AND SEE WOMEN ACHIEVING AND EXCELLING IN A MALE-DOMINATED PROFESSION."

spectives, chromatography and aerospace. Each workshop is lead by two Rice SWE students and a professional SWE member from a Houston-area company such as Caterpillar, ExxonMobil, Dow and Valero.

By interacting with female engineers, the younger generation of women learns that science and engineering vocations are within reach. "The program was excellent," says one Girl Scout's mom. "It was a great

opportunity for the girls to learn more about engineering and see women achieving and excelling in a male-dominated profession."

The next Girl Scout Day is scheduled for Nov. 10, 2007. Contact swe@rice.edu for more information.

— Miinkay Yu
Rice Senior
President of Rice SWE



More than 100 Houston-area Girl Scouts attended last year's SWE-sponsored Girl Scout Day. The annual event returns to campus on Nov. 10, 2007.

SPECIAL OLYMPIANS AND RICE CHINESE INTERNATIONALS DEVELOP UNIQUE FRIENDSHIP

Rice University's Office of International Students & Scholars (OISS) hosted Houston-area Special Olympics athletes and Rice Chinese students and scholars for a luncheon and international cultural exchange in May.

The four athletes who participated in the exchange are students at the Briarwood School and will be competing with the Special Olympics Team USA in Shanghai, China, in October.

Special Olympics is a nonprofit international organization that "empowers people with intellectual disabilities to realize their full potential and develop their skills through year-round sports training and competition." The Special Olympics athletes' oath is, "Let me win. But if I cannot win, let me be brave in the attempt."

Held at Rice's Cohen House, the luncheon included a lively cultural dialogue based on questions prepared by the athletes for their new Chinese contacts. Rice's Chinese internationals discussed topics ranging from culinary and cultural differences between China and the U.S. to how they occupy their spare time. Parents of the athletes, Texas Special Olympics Vice President Kelly Coffey, and Lily Lam and Adria Baker of the OISS also attended the event.

The exchange was beneficial to both the athletes and the Rice Chinese students and



Pictured left to right – Jichun Zhang, PhD; Dong Xu; Jianhang Zhou; Marcus Gary; Yuling Jia; Hillary Kern; Ashley Billard; Amanda Mickan.

scholars. Athletes and their parents were prepared for their trip to China, while the Chinese participants learned more about Special Olympics and the extraordinary people who participate. The OISS luncheon was underwritten by an anonymous local business that appreciates both Special Olympics

and the importance of positive intercultural exchange.

— *Adria Baker, PhD*
Director
Office of International Students
and Scholars

MULTIMEDIA COMMUNICATIONS CENTER GOES GLOBAL

The wireless communications industry is rapidly expanding with increasing multidisciplinary collaborations. The Department of Electrical and Computer Engineering's (ECE's) Center for Multimedia Communications is at the forefront with a new Wireless Open-Access Research Platform (WARP). The WARP project receives funding from the National Science Foundation and Xilinx Inc.

Wireless network developers and researchers will use the platform to explore new concepts for mesh networks, cooperative coding and fully integrated, operational, programmable deployed networks. WARP provides low-cost, high-performance hardware for academic labs, enabling them to inexpensively build in-house testbeds with multiple nodes. A free open-access repository

archives all aspects of WARP and contains design libraries, flexible daughter cards and application examples. The resulting experimental platforms can be field-deployed without large investments.

ECE researchers Ashutosh Sabharwal, Behnaam Aazhang, Joseph Cavallaro and Edward Knightly, Xilinx Inc. Digital Signal Processing Chief Architect Chris Dick, and dedicated graduate students compose the team. They have traveled across the globe, teaching faculty and students who conduct digital and wireless communications research how to use the platform.

The two-day, hands-on sessions have taken place at the Indian Institute of Technology Delhi, at the Indian Institute of Technology Madras, and at Texas Instruments India and the Indian Institute of Science,

both in Bangalore. The team also has traveled to Japan and Taiwan, conducting the workshops and presenting at MATLAB Expo. Eighteen participants from seven universities attended the workshop at Rice in October 2006, and 22 participants from seven universities and two companies — Samsung and Xilinx Inc. — attended the March 2007 workshop.

Currently, the University of California, San Diego; Polytechnic University; the University of Illinois at Urbana-Champaign; and the University of California, Irvine are using WARP hardware for their wireless research.

— *Marilyn Howard-Sparks*
Communications Manager
Department of Electrical and
Computer Engineering

MORE THAN ONE WAY TO WRAP

Through a collaboration between Rice's Department of Computational and Applied Mathematics and Worthing High School, inner-city students are gaining practical and fun math and science research skills useful in solving real-world problems.

The Worthing Rice Apprenticeship Program (WRAP) brings students from Worthing High School, an urban underserved magnet school for biotechnology, to Rice each week throughout the academic year for 90 minutes of homework assistance, college counseling and mathematical research with Rice student mentors. The first 30 minutes are spent eating and getting help on homework. The next hour is spent on math, science and computing fundamentals in preparation for original research. By the end of the fall term, the apprentices and mentors have chosen a research project. During the spring term, subgroups solve facets of the research problem and pool their results into a final poster and slide presentation.

The apprentices have tackled the following projects between 2003 and the present:

- **THE GAME OF LIFE.** The apprentices coded using MATLAB and demonstrated many of the denizens of John Conway's Game of Life. They studied the Recursive Universe, in particular the existence of a self-replicator, and contrasted their findings with predictions of Boolean gene nets.
- **HIV/AIDS IN THE HOUSTON COMMUNITY.** After reading about epide-



Graduate student Jay Raol, right, instructs students in the Worthing Rice Apprenticeship Program, an immersive mathematics training program that helps minority high school students relate to math by focusing on real problems. The students researched nutritional choices of fellow students at Worthing High School. They also designed their own survey, administered it schoolwide, wrote computer programs to analyze the responses, prepared posters and written reports of the findings and then presented the results to 75 magnet program peers at Worthing.

model and to fit its crucial unknown parameters to data from the Houston Department of Health. The apprentices' highly charged final presentation to Worthing's junior and senior classes combined straight talk about sex and responsibility with instruction on model building and coding Euler's Method and least squares in MATLAB.

- **HOW TO EVACUATE HOUSTON.** Apprentices observed the poor preparation for Hurricane Katrina and the chaos

Time and again, the students' research answers their initial questions concerning the purpose and relevance of studying math and science. They often find that studying math helps them build a model in order to better understand, manipulate or control something in their own lives. Because of this, WRAP not only augments their math and science skills, but also irrevocably changes their perceptions of the subjects.

Contact Rice professors and faculty mentors Steven Cox at cox@rice.edu and Illya Hicks at ivhicks@rice.edu for more information.

— Steven Cox, PhD
Professor
Computational and Applied
Mathematics

TIME AND AGAIN, THE STUDENTS' RESEARCH ANSWERS THEIR INITIAL QUESTIONS CONCERNING THE PURPOSE AND RELEVANCE OF STUDYING MATH AND SCIENCE.

miology, three female apprentices were stopped in their tracks by the realization that the only Houston population with an increasing incidence of HIV/AIDS comprised young female African-Americans. That information provided the motivation needed to build a dynamic

surrounding Houston's evacuation for Hurricane Rita. They studied the city's demographics and highway system and then built and coded a greedy algorithm on top of a graph theoretical model for evacuating the Houston area from south to north.

FARMERS MARKET MOVES TO THE RICE UNIVERSITY CAMPUS

While many businesses are farming out work, Rice University is farming in — literally.

The Houston Farmers Market that had been doing business in the parking lot of Christ the King Lutheran Church across from Rice Stadium moved to the Rice campus in the spring.

Each Tuesday from 3:30 p.m. to 7 p.m., vendors selling organic produce, baked goods, Texas cheeses, goat milk, honey, hormone-free meats and other specialties display their products on the parking lot by Entrance 9 on University Boulevard. Rice shuttle buses make stops there.

"The market had outgrown its space on the church parking lot, and Rice agreed to let the group move across the street as part of the university's Vision for the Second Century goal of becoming more engaged with Houston," says Mark Ditman, associate vice president for housing and dining at Rice. The relocation allows space for more vendors and provides maximum visibility to encourage neighborhood participation.

"The mission of the Houston Farmers Market is to support local farmers and small-business entrepreneurs, encourage



"THE MISSION OF THE HOUSTON FARMERS MARKET IS TO SUPPORT LOCAL FARMERS AND SMALL-BUSINESS ENTREPRENEURS, ENCOURAGE WELLNESS, AND PROVIDE ENVIRONMENTALLY FOCUSED EDUCATIONAL PROGRAMS."



"THE MARKET HAD OUTGROWN ITS SPACE ON THE CHURCH PARKING LOT, AND RICE AGREED TO LET THE GROUP MOVE ACROSS THE STREET AS PART OF THE UNIVERSITY'S VISION FOR THE SECOND CENTURY GOAL OF BECOMING MORE ENGAGED WITH HOUSTON."

wellness, and provide environmentally focused educational programs," says Ann Swain, director of Rice's Faculty Club. "The promotion of agricultural sustainability is timely, and Rice is doing its part to encourage the development and maintenance of farmland for future generations." Swain says the Faculty Club uses products from the market.

Having the market on campus gives Rice students, faculty and staff members another venue for educational forums. For example, environmental groups can set up tables in order to distribute information about sustainability efforts. And the Rice Arboretum will provide tours and seminars identifying indigenous Texas plants and trees. Swain says Rice chefs might be asked to give cooking demonstrations at the market.

The market already works with a local volunteer organization that develops gar-



dens in low-income school districts to teach children both how to grow organic vegetables and the value of healthful nutrition. The market also collaborates with food banks throughout Houston and is committed to the development of solar energy and biodiesel fuels.

The Houston Farmers Market does not have to pay for use of the space at Rice, but it is responsible for insurance and post-event cleanup. Parking is free for patrons during their visit.

— B.J. Almond
Director
News and Media Relations

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David D. Medina *Director, Minority Community Affairs*

