

**Rice Sets Another United Way Contribution Record**  
PAGE 3

**Painting a Mathematical Canvas, One Stroke at a Time**  
PAGE 4

**The Science of Communicating**  
PAGE 4

**Math and Science Made Fun Through Robotics**  
PAGE 5

**Helping Create Sustainable Peace**  
PAGE 6

**Mastering Financial Responsibilities**  
PAGE 6

**Heart Transplant For a Home**  
PAGE 7

**Inside:**



**NEW HEIGHTS OF GENEROSITY:** See story on Page 3.



**KEEPING WATCH OVER HOUSTON'S CHANGING DEMOGRAPHIC LANDSCAPE:** Rice sociology professor Stephen Klineberg.

## The Talk of the Town

The annual Houston Area Survey — a major source of information on city demographics and trends in the city — is highly sought after throughout Houston by civic leaders, nonprofit organizations, elected officials and many others. It is a study unlike any other in the world that has tracked a major city for 30 years, and its creation was completely serendipitous.

Rice sociology professor Stephen Klineberg first had the idea of doing a survey with his students about undergraduate life at Rice in 1982. But at that time, Houston was in the midst of an incredible 10-year economic expansion, which had drawn a million people to the city to take advantage of job opportunities.

But with growth came social problems, such as increased traffic, pollution and crime, and Klineberg decided it might be more interesting to conduct a one-time survey about the city. In May 1982, two months after the survey was completed, the oil boom collapsed, costing the city 100,000 jobs and forcing an economic restructure and a demographic revolution.

Klineberg's reaction was, "My God, we better do this survey again." Now in the midst of its 31st year,

*Continued on Page 2 >>*

## STEMscopes Soars in Texas Schools

Rice University's STEMscopes, an electronic science curriculum for Texas students, has become a popular choice for teachers.

STEMscopes was one of a dozen digital curricula approved last summer by the Texas State Board of Education as supplemental material to older science textbooks for students in grades 5–8.

"Our initial projections were that we would capture 20 percent of market share, enough to recuperate our costs and continue research and development," said Reid Whitaker, the director of Rice Online Curriculum K–12, part of the Center for Technology in Teaching and Learning.

"But in fact, we've become the most widely adopted supplemental science program in the state of Texas. Capturing nearly 50 percent of the market share allows us to invest more money into broadening our content and grade levels."

More than 500,000 students and 40,000 Texas teachers are using STEMscopes for all or part of their science curricula this year. Whitaker said the competition for

*Continued on Page 3 >>*

the survey continues to track changes in the demographic patterns, life experiences, attitudes and beliefs of Harris County residents.

“The survey fell into my lap, and what a tremendous privilege it has been to be able to sit back and watch the world change,” Klineberg said. “I get unfairly credited for having the foresight of starting the survey.”

The survey immediately became a hit with the residents of Houston, in part because of the information it contains and because of Klineberg’s dynamic presentations. In spite of giving literally thousands of talks about the survey and its results, Klineberg continues to deliver his analysis with energy and conviction.

“I have had the pleasure of hearing Dr. Klineberg’s presentations for the past 20 years,” said David Ruiz, senior vice president and market manager for Bank of America. “During each delivery, his message and passion resonates in exactly the same manner regardless of the audience — whether it’s a business group, a leadership training class or corporate settings.”

With the support of foundations and corporations, the Houston Area Survey is expanded each year and has added interviews in Houston’s Anglo, African-American and Latino communities. In 1995, 2002 and 2011, the project included interviews in the Asian communities, with one-fourth of the interviews conducted in Vietnamese, Cantonese or Mandarin, the only such surveys in the country.

“Stephen has always been a friend of the Asian community,” said Linda Toyota, president of the Asian Chamber of Commerce. “His survey has brought awareness to Houston about the diversity within the Asian community and its continuous demographic growth in the city. He is always one to reach out and be accessible whenever asked.”

Despite its success, the survey has also become a monster for Klineberg, who receives requests from countless organizations all over Houston. Just in the last year, he gave 98 talks to such groups as Leadership Houston, the American Leadership Forum, the Houston Association of Hispanic Media Professionals, the Center for Houston’s Future and the United Way of Greater Houston. “One of my greatest weaknesses is that I can’t turn people down,” Klineberg admitted. “When I do, it’s



**PRESENTING WITH PASSION:** Stephen Klineberg addresses an audience about the results of the Houston Area Survey.

because I’m already busy.”

That will soon change, however, as the Kinder Institute for Urban Research has created a 30-minute film, “Interesting Times: Tracking Houston’s Transformations Through 30 Years of Surveys,” in which Klineberg expounds about the findings while images of Houston appear intermittently on the screen. Klineberg still plans to give talks, but the film will allow him to send staff members to give presentations and thus reach a greater audience. A Spanish version of the film also has been created.

One of the reasons the Kinder Institute was started was to provide a home for the Houston surveys, explained Klineberg, who is now co-director of the institute. “The purpose of the institute is to do transparent, reliable, first-class sociological research, and then to use that research to inform and inspire the community on which it is based,” he said. “And so this film becomes a very important way by which we try to fulfill that mission.”

“The rap against the Houston Area Survey,” Klineberg said, “has been that it’s very interesting, but so what?” The Kinder Institute has responded to that challenge by striving to be a catalyst for the community to find the right avenues for solving problems. “We’re not going to be advocating specific public policies, but rather we will be a convenor of decision-makers.”

For example, recently, the Kinder Institute has convened about 60 leaders from the Anglo, African-American, Latino and Asian communities to meet for a series of workshops to discuss how to build a truly successful, inclusive, united multiethnic society. “No force in

the world is going to stop Houston or Texas or America from becoming more Latino, more Asian or less Anglo in the years ahead. So we might as well figure out how to make it work,” Klineberg said.

Social change has long fascinated Klineberg. He has always felt that understanding the ongoing trends can help people navigate those changes more successfully. He also was drawn to helping people because of his religious background. As a Quaker, he was taught that you should let your life speak. “If you care about social problems, then you should be helping to make them better.”

Klineberg did just that by pursuing an undergraduate degree from Haverford College, a master’s in psychopathology from the University of Paris and a doctorate in social psychology from Harvard. He joined Rice in 1972 after teaching at Princeton and has developed into an excellent professor, winning 10 major teaching awards, including the Lifetime Award for Excellence in Teaching.

To write a major book about the findings from the Houston surveys has been a longtime goal of his. Now, he and Michael Emerson, co-director of the Kinder Institute, will be working on a book together. This will give him the chance to do what he loves best.

“To write a book, you need to get away from the world,” Klineberg said. “I haven’t been able to do that.” He’s been studying a city that is reinventing itself and he wants to be part of the solution. He wants to make the city better.

**DAVID D. MEDINA**

Director  
Multicultural Community Relations

## Rice Sets Another United Way Contribution Record

For 100 years, Rice has been making positive contributions to the city of Houston, and the university has done it once again by raising a record-breaking \$192,081 for United Way of Greater Houston.

“No great city would be great without a safety net to help all of its citizens,” said Jim Crownover ’65, Rice Board of Trustees chairman. “This is a smart way to spend a dollar for the community, and I am so proud of what Rice has done over the last several years.”

For the fifth year in a row, Rice bested its previous year’s contribution to the organization that helps Houstonians in need of food, clothing, shelter and other services. President David Leebron toasted the generous spirit of Rice University at a celebration and check presentation ceremony held in March.

“When it comes to supporting our community, we are not, as the phrase goes, an institution that is content to sit behind the hedges,” he said. “Our people go out, and they make a difference. And they make a difference with their philanthropic dollars.”

Crownover noted that Rice’s consistent growth in contributions has put the university among the top 100 contributors to Houston’s United Way. “What’s amazing about that is

most of the other names are for-profit places,” he said. “It says a lot about Rice. We understand that if our community is not successful, we cannot be successful at Rice.”

Anna Babin, president of the United Way of Greater Houston, thanked Rice for its generosity and emphasized the university’s role in investing in the community through the United Way and its initiatives, such as the Bright Beginnings early childhood education program and services like the Texas/United Way Helpline.

Leebron noted that the record-breaking success would not have been possible without Crownover’s generosity in the campaign. Once again, Crownover offered \$25,000 to match gifts from first-time donors 2-to-1 and matched dollar for dollar any gifts from faculty and staff who donated to last year’s campaign but had not contributed to this year’s campaign. His offer inspired more than 80 members of the Rice community to contribute.

Crownover was among 63 lead donors — those who contributed \$1,000 or more — in this year’s campaign. Together they raised 66 percent of the total amount.

Y. Ping Sun, university representative and lead donor chair for Rice’s campaign, thanked the lead donors and all others who contributed for their generosity toward an organization that

can put the money to effective use and serve the community.

“In the last 100 years, Rice grew together with the city of Houston, and we helped the city, and so by contributing generously to the United Way campaign, you, in a way, have helped our city again,” she said.

The \$192,081 raised this year was more than 28 percent over the \$150,000 campaign goal and reflects a university participation rate of 30 percent. The total number of donors was 822, up from last year’s 815.

“The success of this year’s campaign is a real testament to the fact that we care so much about the community that does so much for us,” said Linda Thrane, vice president for the Office of Public Affairs, which led and organized the annual campaign.

President David Leebron was an honorary chair of the campaign. Sidney Burrus, the Maxfield and Oshman Professor Emeritus of Electrical and Computer Engineering, chaired the faculty campaign. Mark Ditman, associate vice president for housing and dining, chaired the staff campaign. David D. Medina, director of multicultural community relations in the Office of Public Affairs, was the campaign manager.

**JENNIFER EVANS**

Senior Editor  
Rice News

## STEMscopes *Continued from Page 1*

adoption in Texas classrooms has been stiff: Rice’s program was the only one among the dozen approved that was developed by a nonprofit organization. Such traditional publishing houses as Prentice Hall, Houghton Mifflin Harcourt and McGraw-Hill, as well as smaller companies, offer other programs.

Whitaker attributed STEMscopes’ popularity to its adherence to state curriculum standards, its versatility and its low cost. “It was created in Texas for Texas teachers, with the help of teachers and Rice University researchers who reviewed the science content,” he said.

School districts sign up for two years and pay \$2.90 to \$5.90 a student for use of the program for 12 months, which amounts to a little more than half the cost of a consumable workbook. Teachers get a program that fits both

their needs and their technical capabilities.

“Some companies took a forward leap to the bleeding edge — meaning they tried to use a platform that required the most advanced hardware,” Whitaker said. But the beauty of STEMscopes is its scalability: It works equally as well for one-computer classrooms as it does for technology-rich classrooms or labs.

STEMscopes is poised for aggressive growth, Whitaker said. The program already covers the core science curriculum for K–8 students, and new components expected to come online in the next year will cover chemistry, physics and biology. “After this year,” he said, “we truly will have a K–12 curriculum.”

“Many of our current district users have indicated they want the high school curriculum once it’s ready. Having a continuity of approach from kindergarten through high school will be a real asset.”

STEMscopes is already used in markets



beyond Texas — a few districts in California and North Dakota are onboard, as are schools in Honduras and Guatemala — and the plan is to expand internationally. Whitaker said the strategy will be responsive to new, national core standards for science education due out early next year, and the Rice team plans to be ready.

**MIKE WILLIAMS**

Senior Media Relations Specialist



## Painting a Mathematical Canvas, One Stroke at a Time

Who would believe that the paintings of Matisse, O’Keeffe and Van Gogh could show up in the mathematics classroom?

The visual arts present an ideal forum through which K–12 students can express their ideas, thoughts and emotions. Students can explore mathematical concepts such as patterns, lines, shapes, scale, dimension and form while engaged in the study and creation of the visual arts. A growing body of evidence indicates that the arts share principles with other academic disciplines, namely, critical thinking, analysis, pattern recognition and risk-taking.

Further, in learning the characteristics of mathematics embedded in the visual arts, students can collaboratively engage in communicating, reasoning and investigating — activities that both the National Council of Teachers of Mathematics and the National Art Education Association advocate.

For the last decade, Robin Ward, associate director for curriculum integration at the Rice University School Mathematics Project (RUSMP), has been dedicated to bringing the teaching and learning of K–5 mathemat-

ics to life by using the visual arts as a tool for learning. Her latest book, “Math + Art = Fun: Activities for Discovering Mathematical Magic in Modern Art,” presents more than 20 activities, each of which showcases a piece of artwork that serves as a springboard to the exploration of a particular mathematical concept.

For example, using the larger-than-life floral artwork of Georgia O’Keeffe, children explore and experiment with the mathematical concept of scale. Similarly, children are encouraged to identify, create and predict patterns using Henri Matisse’s patterned artwork as inspiration. Ward’s goal is to transform the learning of mathematics into a fascinating, colorful, hands-on, applications-based experience.

Ward shares her passion for connecting mathematics and art with teachers through statewide professional development workshops, as well as through local and national conference presentations. She also engages with children in classrooms and in after-school camps. In all settings, she employs a uniquely integrated, literature-based approach to teaching mathematics using the visual arts as a lens for learning. Additionally, Ward’s after-school math camps for girls in grades K–5 attempt

to provide a more conceptual, authentic, problem-solving approach to the learning of mathematics with a focus on building and nurturing confidence in young females’ ability to engage in mathematics.

Whether working with young children to excite them about the beauty and applicability of mathematics or further developing practicing teachers’ repertoire of teaching ideas, Ward’s mantra is “Put on your math goggles!” That is, Ward encourages her participants to enthusiastically look for and see mathematics everywhere in their world. For Ward, the visual arts are fertile ground for doing just that.

So, the next time you head to one of Houston’s art museums, consider donning what Ward has dubbed as your “math goggles” and enjoy discovering the mathematics that permeates so many works of art. As Ward said, “Beauty — and mathematics — is in the eye of the beholder.”

► For more information, visit RUSMP’s website at [www.rusmp.rice.edu](http://www.rusmp.rice.edu).

**RICHARD PARR**

Associate Director for Curricular and Instructional Programs  
Rice University School Mathematics Project

## The Science of Communicating

As researchers are increasingly being called to explain their findings not only to their peers but also to the general public, the ability to communicate effectively to diverse audiences is becoming a critical skill for young scientists.

At Rice, students in ecology and evolutionary biology take a course designed to hone their written and oral communication skills. Last fall, they had an opportunity to put their skills into practice when they invited a group of Bellaire High School students to a biology class, where they gave a series of short, oral presentations about their biological research. The topics ranged from examining the body temperatures of sleeping honeybees to the hormonal basis for why a mother loves her child.

Students wrote a short review on their topic and created a poster summarizing their research. Presenting this same information to the high school students gave them a chance to

experience the challenge of making scientific findings understandable without “dumbing them down.”

After each presentation, the Bellaire students had a chance to ask a few questions and then completed a short survey to provide feedback on the talk. According to Rice senior Amy Ewbank, the response from the Bellaire students was very positive. “It was great to see students who were so interested in the material and asking insightful questions,” she said.

Rice senior Tawfik Jarjour agreed, adding, “I also gained an appreciation of the excitement young people have when it comes to learning about science.”

The Bellaire students found the encounter to be rewarding as well, describing it as an “eye-opening experience,” and “a good chance to observe the type of research done by students at a top university.”

A reception at the end of the event allowed the Rice and Bellaire students to interact. According to the high school students’ teacher, Anna Loonam, this aspect of the event was

especially important for her students.

“I value the experience because it provides an opportunity for my students to interact with college students and gain insight to college life,” she said.

Rice junior Isabella Adamiak found the experience both rewarding and informative. “I was so pleased with our encounter and think it was a great opportunity for learning on both sides. Not only were we able to share a bit of what we are passionate about as young scientists, but we also had the chance to receive feedback on our ability to communicate, a skill I believe is essential to every scientific profession,” she said.

“It was the highlight of the course and I hope that this kind of interaction and friendship between Rice University and the surrounding educational institutions will continue in the future.”

**SCOTT SOLOMON**

Lecturer/Laboratory Coordinator  
Ecology and Evolutionary Biology

## Math and Science Made Fun Through Robotics

Even before robots, the big attraction for Paul Chaguine was building things — from scratch, using Erector sets and LEGOs.

“I think that’s how it starts for a lot of kids who go into engineering. They like building stuff, putting things together,” said Chaguine, a sophomore in chemical engineering at Rice University.

He learned about the Rice Robotics Club while a sophomore at Lamar High School in Houston. The club was founded that year, 2008, by Andrew J. Lynch, now a graduate student in computer science at Rice, who also likes building things and sharing his enthusiasm with others. Lynch received a B.S. in electrical engineering from University of Texas at Austin in 2007 and a master’s degree in mechanical engineering from Rice in 2009.

“The big goal is to get high school kids into college in math, science and engineering. But it’s also about having fun,” Lynch said.

Chaguine is one of three former high students who were part of the Lamar Robotics Club and subsequently enrolled at Rice. The other two are Brian Biekman, a sophomore in

mathematics, and Nelson Chen, a freshman in the engineering division.

When he was at Lamar, Chaguine enjoyed studying chemistry and liked the engineering aspect of the Robotics Club. “So I just combined my favorite subjects and decided to go into chemical engineering,” said Chaguine, whose father, Petr Chaguine, is a research scientist in the physics and astronomy department at Rice.

Chaguine returns to Lamar almost every school day during “robot season” to work with students. “A lot of kids at Lamar have gone into engineering or something in science because of the Robotics Club. It encourages them in that direction,” said Chaguine, who since November 2010 has worked 20 hours a week in the research and development department at Weatherford International, an oilfield services company in Houston.

Each year, about 15 students at Lamar are active in the club. Lynch and other Rice students work closely with those at Lamar, supervising robot design and construction. Some of the heavier work is done on the Rice campus in the Oshman Engineering Design Kitchen.

“We want to change the culture among the students. We want them to be as excited about robotics, and about math and science, as we are,” Lynch said.

In its second year, the club at Lamar competed in its first For Inspiration and Recognition of Science and Technology (FIRST) Robotics Competition against 63



**BUILDING A CULTURE OF EXCITEMENT:** Rice students work with local high school students to build a robot.



**A WINNING DESIGN:** A robot that can shoot hoops.

high schools from across Texas and won the regional event. Over the last four years, the team, known as the Discobots, has won the Houston Regional competition.

The 2012 FIRST competition, the Lone Star Regional, took place April 5–7 at the George R. Brown Convention Center in Houston. The challenge, known as the Rebound Rumble, was to build a robot that could lift a basketball, throw it through a hoop and cross a bridge that tips at its fulcrum.

**PATRICK KURP**

Science Writer

George R. Brown School of Engineering

**“THE BIG GOAL IS TO GET HIGH SCHOOL KIDS INTO COLLEGE IN MATH, SCIENCE AND ENGINEERING. BUT IT’S ALSO ABOUT HAVING FUN.”**

— ANDREW J. LYNCH

## Helping Create Sustainable Peace

Many believe that ethnic and religious differences create conflicts that can never be solved. But the people at the Institute for Sustainable Peace (ISP) disagree.

Since 2002, ISP has been working to transform cultures of violence into cultures of peace and has made major efforts to reduce and eliminate conflict, both locally and internationally.

ISP is not a part of Rice, but Rice has a strong presence in the organization. A number of Rice undergraduates have worked at the institute as interns and the chief financial officer was a graduate student at Rice. As well, four members of the institute's advisory council are current or former Rice faculty members: Jill Carroll, adjunct associate professor in the Department of Religious Studies; Gale Stokes, the Mary Gibbs Jones Professor Emeritus of History; Richard Stoll, the Albert Thomas Professor of Political Science; and Robert Krueger, former lecturer of political science.

"Working with faculty members and students at Rice has been a distinct pleasure. It is

a privilege to work with faculty who are leaders in their fields," said Randall Butler, executive director. "And I cannot brag enough about our Leadership Rice interns. They bring so much enthusiasm and intelligence to every project."

The organization has engaged in major efforts in the Balkans and the Sudan, as well as facilitating a local Muslim-Jewish dialogue. Each of these efforts is based on the firm belief that sustainable peace can only be achieved by engaging individuals and helping them to see that conflict resolution can only be achieved and perpetuated by personal transformation.

For a community, which can range from a neighborhood to an entire country, sustainable peace means getting the members to work together to meet the needs of everyone who is a part of the group. Problems are solved by turning away from destructive conflict and working with individuals, groups and organizations in the community to create opportunities for creative collaboration that will address the wants and wishes of all members.

ISP accomplishes its mission by working with individual members from diverse back-

grounds who have been locked in a cycle of violent conflict against one another. ISP works with these members to get them to see the good in others and to affirm that whatever happens, violence is not a solution to their problems.

"As we move into reflective dialogue and discover common ground with the 'other,' we begin to see our common humanity," said Butler. "We find we share common values. Often, that is surprising depending on what our prior beliefs are about the 'other.' If we can learn that we share values and therefore recognize our common humanity, then it may even become possible to envision a common future."

All of the Rice members of ISP are committed to the institute's person-to-person approach. This is not a fantasy; it is not wishful thinking. It is a solid and proven approach to building sustainable peace.

► For more information on the Institute for Sustainable Peace, visit the website at [www.sustainablepeace.org/](http://www.sustainablepeace.org/).

**RICHARD STOLL**

Albert Thomas Professor of Political Science

## Mastering Financial Responsibilities

This spring, staff members from more than 20 Houston-area nonprofit organizations are learning the tenets of sound financial management. Offered by the Center for Philanthropy and Nonprofit Leadership (CPNL) at the Susanne M. Glasscock School of Continuing Studies, the new Nonprofit Finance Certificate program seeks to fulfill a great need within the nonprofit community.

Director Angela Seaworth, CPNL director, said that she and the CPNL strategic visioning task force realized that the operational staff of nonprofits did not have access to the same type of professional development that other professions, including fundraisers, have.

"Our foundation partners in the community shared that some nonprofits continually struggle with financial statements" as well as reporting, policy, planning, analysis and

strategy, Seaworth said. Additionally, there are challenges to understanding the roles and responsibilities of all the individuals who share fiscal responsibility in a nonprofit, "so we wanted to create a program to support the nonprofit staff who manage finances — the nonprofit CFOs."

Participants are learning about such topics as financial management theories, roles and policies; internal controls; risk management; cash management; financial statement preparation and analysis; financial planning and strategy; government funding; financial reporting; and evaluation.

"Our goal is for nonprofits to operate from a position of strength, and financial acumen and strategy are critical," Seaworth said. "We want to make sure anyone handling the finances at a nonprofit organization can receive the training they need so their organization can operate more effectively."

Seaworth said the program was designed by a nationwide consortium of individuals engaged by the CPNL, including seven practicing nonprofit CFOs representing health and

human services, arts and culture, education, and health care; five tax and audit professionals; and five nonprofit finance scholars.

Instructors include chief financial officers of four local organizations: Kathy Fountain, Catholic Charities of the Archdiocese of Galveston-Houston; Margaret McConn, Rockwell Fund; Michael Pawson, Houston Symphony; and Stephen Sachnik, Houston Museum of Natural Science. Four local CPAs also serve as instructors: Amanda Adams and Kay Walther, Blazek & Vetterling; and Leslie Berardo and Alyssa Hill, Gainer Donnelly & Desroches.

Seaworth said the program, which has been approved for 50 CPE hours by the Texas State Board of Public Accountancy, will be offered again in spring 2013.

► For more information, visit [www.cpnl.rice.edu](http://www.cpnl.rice.edu) or call 713-348-6009.

**CAROL MCBRAYER HOPKINS**

Communications Specialist  
Susanne M. Glasscock School of  
Continuing Studies



## Heart Transplant For a Home

No renovation is simple, but a new project that originated at Rice University's Rice Building Workshop (RBW) aims to make the complete replacement of a home's central services as quick and painless as possible.

The In-House OutHouse prepackages essential services — a full bathroom, a working kitchen and heating and air conditioning — into a prefabricated unit that can be inserted into an existing house or serve as the central core for new construction.

water and electrical service connections) on the inside and a kitchen sink, stovetop, oven and cabinets on the perimeter, with space for a refrigerator.

"Other than framing a new opening for the core, we don't touch the structure of the house at all," Daley said. "That's huge."

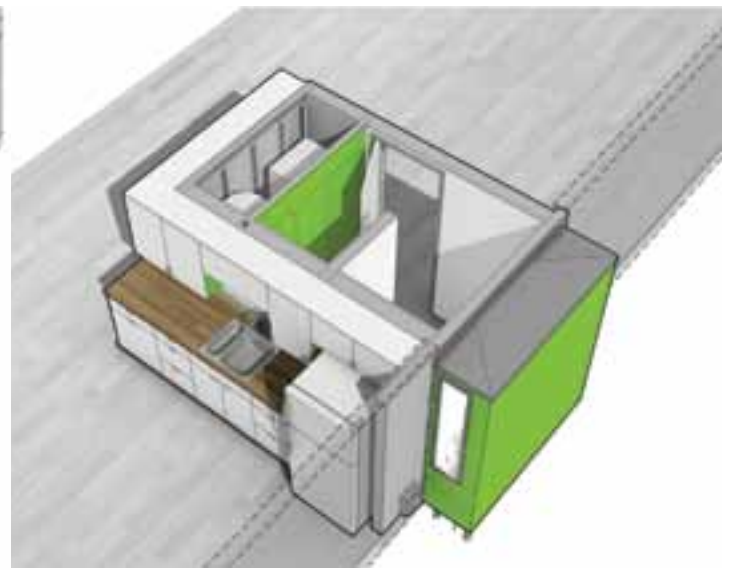
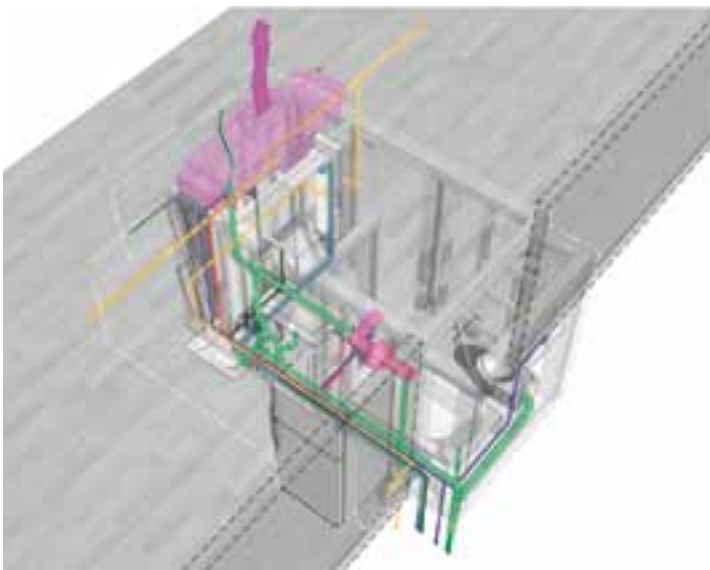
Construction of the prototype will take place over several months in a work yard at Project Row Houses. "From there, we can test the whole deployment," Daley said. "We will still have to get it inspected off-site, which the city has been pretty receptive to, and truck it to the house."

Once the core is ready for installation,

feeds) or give it a bit of a signature. The nice thing in this case is, it's both."

The project sprang from two RBW courses centering on the "core" concept. "We had 11 teams of graduate and undergraduate students, and their projects ranged from the very small Emergency Core (for disaster relief) all the way up to this one, the core of an affordable house," said Danny Samuels, also a professor in the practice of architecture at Rice and RBW co-director.

Samuels and Grenader have long been interested in the concept of cores, with examples of their approach in other projects that include ZeRow House and the New Core/



**A CORE TRANSFORMATION:** In-House OutHouse, featuring a full bathroom, kitchen, and heating and air conditioning, will be installed in a Houston home as one compact unit.

This spring, Andrew Daley, Jason Fleming and Peter Muessig, who recently graduated from the Rice School of Architecture, built a prototype core. It will eventually be placed in a home at Project Row Houses in Houston's historic Third Ward, the site of several Rice-born projects.

"A typical site-build of a kitchen and bathroom could put you out of your home for six months to a year, but this could literally take only a couple of weeks," said Daley. "We wouldn't have to do any demolition until the core is almost ready — or fully ready — to be deployed."

The Project Row House home has a bathroom but no real kitchen. The new core will bring in a consolidated bathroom with a service area (water heater, air handler, and

Daley, Muessig and Fleming will prepare the house by removing the existing bathroom and literally lay the tracks on which the new unit will slide into place.

One distinguishing feature is that the core unit juts out from the side of the home. The overhang serves several purposes: It makes space for windows on either side of the bathroom and simplifies the process of hooking up water and electric services.

"We thought moving this one piece out was exceptionally inventive," said Nonya Grenader, a professor in the practice of architecture at Rice and RBW co-director. "This comes up in the workshop time and time again, the notion that one small move can really distinguish a project and offer a kind of innovation (in this case, centralizing service



Existing Row House project.

"This shares the same philosophy, that so many row houses would be useful, except they've been stripped of services — bathrooms and kitchens," Grenader said. "You can make a large stock of houses viable if you can reboot them with new services."

**MIKE WILLIAMS**

Senior Media Relations Specialist



Rice University  
Multicultural Community Relations—MS 700  
P.O. Box 1892  
Houston, TX 77251-1892

Nonprofit Org.  
U.S. Postage  
PAID  
Permit #7549  
Houston, Texas



# AT LARGE



**WHERE MODERN ART MEETS MATH:** See how the visual arts are helping children experience and learn mathematic principles. See story on Page 4.

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

