On April 4, 2008, Dr. William L. Duren passed away at the age of 102. A former Tulane student-athlete (A&S ‘26) and professor, noted mathematician, brilliant innovator, and generous benefactor, Duren distinguished himself in every endeavor he undertook throughout his long life. Duren graduated from Tulane University in 1926. A standout in the classroom, he was also an accomplished athlete who played football and won the Southeastern Conference Championship in the high hurdles. After receiving his undergraduate degree, Duren continued his education at the University of Chicago, where he received his master’s degree and doctorate in mathematics in 1930. During World War II, Duren served in the Army Air Force as a civilian scientist. While stationed in Colorado Springs, he worked to improve the gunnery on B-17, B-24, and B-29 bombers. After working with some of the nation’s most brilliant mathematicians in the defense industry, Duren returned to Tulane as chair of the mathematics department. In 1947 Duren was awarded a grant that allowed Tulane to establish a doctoral program in mathematics. Years later, he explained, “I realized that the loss of mathematicians in

continued on page six
As we prepare for the 2008–09 academic year, we are happy to share with you some of the accomplishments of our students, alumni, and faculty in the Summer 2008 Newcomb-Tulane Collegian & Review. In the Collegian, we begin by highlighting the remarkable life and legacy of Dr. William L. Duren (A&S ’26), who established a professorship program that supports unique learning experiences, from field trips to robot-building. We check in with 2007–08 Mellon Professor Tom Sancton, former Paris bureau chief for Time, who returned to New Orleans after Katrina and can often be found playing his clarinet in the jazz clubs he frequented as a teenager. Alumna Erin Healan (NC ’98) and former student Kettie Volz discuss their experiences as co-founders and artistic directors of one of the most prominent dance troupes in New Orleans; current students Lauren Elliott and Chris Holdgraf tell us about a collaborative conference sponsored by Tulane’s newly created chapter of the Roosevelt Institution, a national student think tank. And the Newcomb College Institute recaps a busy year of women’s programming.

We are happy to introduce an expanded Review section in this issue, featuring non-fiction, poetry, and fiction. Professor Stephen A. Nelson of the Department of Earth & Environmental Sciences explains the significance of the sand deposits left in the wake of Hurricane Katrina. Former Collegian & Review editor Sarah Doerries (NC ’92) contributes an original poem. Finally, we close with a short story by Eric Vrooman, adjunct instructor in the Department of English.

We were pleased to hear from so many of you in response to our postcard, and we hope you will continue to keep in touch with us. We also invite you to submit your news, ideas, and original work for possible publication in next year’s Collegian and Review.

Best,
Trina J. Beck
Tom Moody

The Newcomb-Tulane Collegian & Review is published by the Newcomb-Tulane College Office of Curricular Programs.

EDITORS
TRINA J. BECK
TOM MOODY

ART DIRECTOR/DESIGNER
TOM MOODY

TRINA BECK is director of Newcomb-Tulane College Programs and an adjunct assistant professor in the Department of Theatre and Dance. She is actively involved in New Orleans’ performing arts community as an actor, singer, and dancer.

SARAH RICHARDS DOERRIES, M.F.A. (NC ’92) is the associate editor of publications for the Historic New Orleans Collection. She formerly served as editor of the Collegian & Review, assistant dean for Newcomb-Tulane College Programs, and adjunct instructor in the Department of English.

LAUREN ELLIOTT is a rising junior in Newcomb-Tulane College who will be spending her junior year abroad in Oaxaca, Mexico. She originally hails from Atlanta, Georgia.

CATHERINE FRESHLEY is a rising senior in Newcomb-Tulane College from Portland, Oregon. She is double-majoring in economics and English, with a minor in business.

CHRIS HOLDGRAF is a Kansas native who is majoring in neuroscience, with a minor in Spanish. He is entering his senior year in Newcomb-Tulane College.

SARAH LOCKWOOD (NC ’07) is program coordinator in the Newcomb-Tulane College Office of Curricular Programs. A Connecticut native, she is happy to return to her alma mater as a staff member after a year at Offbeat Magazine.

STEPHEN A. NELSON, Ph.D. is an associate professor and the current chair of the Department of Earth & Environmental Sciences. His research interests include volcanology, igneous petrology, thermodynamics and geological hazards.

RACHEL L. SPENCER is the program coordinator for Newcomb Student Programs. Originally from Maryland, she moved to New Orleans in 2007.

ERIC VROOMAN has taught creative writing at Gustavus Adolphus College and Tulane University. His short fiction has appeared in The Kenyon Review, Passages North, The Cream City Review, Ninth Letter, and elsewhere. He currently lives in Minneapolis with his wife and son.

Photo Credits
PAULA BURCH-CELENTANO: pages 3, 4
Courtesy of PETER DUREN: pages 1, 6, 7
CHERYL GERBER: page 12 (Steinem), courtesy of Newcomb College Institute
SUZANNE LECLAIR: page 14, photo 2D
LOUVIERE AND VANESSA: pages 8, 9
STEPHEN A. NELSON: page 14, all except 2D
When Tom Sancton left New Orleans to attend Harvard, he never thought he would live in the city again. Now, four decades, two hurricanes, and one memoir later, the New Orleans native has come home. Sancton, an accomplished journalist, author, and jazz musician, returned to the city in 2007 for a number of reasons, but his position as this past year’s Andrew W. Mellon Professor in the Humanities at Tulane was the selling point.

Sancton’s father attended Tulane and was a journalism professor for a couple of years. “This was my recreation haven,” Sancton said, describing summer days spent on the oak-lined quads or in the old university center that housed a pool and a bowling alley, “I spent a lot of time here.” His own academic relationship with Tulane began after his memoir, Song for My Fathers: A New Orleans Story in Black and White, was chosen as Tulane’s 2006 Reading Project book.

The book, published just prior to Hurricane Katrina, recounts Sancton’s childhood in the city and his training with some of New Orleans’ first-generation jazz musicians. “It’s almost like being a speaker of a dying language or dialect, and you feel like you have a burden to carry it on, and a privilege,” he said of his uncommon training in traditional jazz. By writing the book and continuing to play his clarinet, Sancton said, “I’m celebrating an aspect of [New Orleans’] culture that needed to survive in whatever form it could survive in the twenty-first century, and needed to be understood.” He added, “Katrina gave special meaning to that story.”

Sancton, who was living in Paris when Katrina hit, called the television images of the devastation “cataclysmic” and described the additional agony of being able to recognize the neighborhoods that were underwater. “The place you come from is so anchored into yourself,” he said. “It’s burned into your brain.” Two weeks after Katrina, Sancton returned to New Orleans as a journalist. “I had a vague sense that I had to come back and do something,” he said, though he didn’t know at that time what that would include. The idea of moving back to New Orleans was spawned during a lunch with Tulane President Scott Cowen that eventually evolved into a discussion of the Mellon Professorship. When Sancton was offered the position, he didn’t hesitate to accept it and move back to the city from his home in Paris. “Things just kind of fell into place,” he said. “The book was the catalyst, Tulane was the agent.”

When he returned to Tulane as Mellon professor, Sancton wasn’t quite sure what to expect, but the year was decidedly positive. “They really surprised me,” he said of his students. “It has been an amazing experience.” Sancton said that in addition to being smart and motivated, his students do their reading. He can appreciate this, he joked, considering that he still has reading lists from his undergraduate years at Harvard that he intends to complete.

Aside from teaching a large, introductory journalism class for a couple of years at the American University in Paris, Sancton had no prior experience as a professor. At Tulane, Sancton taught a two-semester course on another genre with which he is quite familiar: the memoir. Writing memoirs presents unique difficulties for college students, Sancton explained. “There’s this old adage ‘write what you know,’ but younger people have experienced a lot less of life, so potential subjects that they really feel confident writing about are limited,” he said. “But one subject that’s not limited is themselves — what
they’ve seen and felt and lived through.”

Many of the students have written about difficult parts of their lives, which Sancton feels can have a therapeutic effect and allow people to “sort things out.” Some of the writing is “almost breathtaking,” he said. “They are writing very personal, very profound human dramas.”

Aside from being impressed by the students’ work, Sancton found himself happy to be in an academic setting after a couple of years of working from home. “It’s a great institution,” he said, “and being part of a noble enterprise has meant a lot to me.”

Though Sancton expects to stay in New Orleans for a while and hopes to continue teaching, adjusting to the city again was not easy. After living elsewhere for all of his adult life, Sancton found that much about New Orleans is different from what he remembers from his childhood, and not just because of Katrina. Returning to the city after being gone for forty years was a surreal experience for Sancton, who said that even the familiar can seem strange after growing accustomed to a different culture. “I always say it’s like being on Halley’s comet or something,” he said. “You come around the earth and then you kind of go around the other side of the solar system, and then you swing back and it’s the same old earth, but you’ve been on the other side of the solar system.”

Specifically, Sancton noted the absence of department stores, restaurants, Pontchartrain Beach and the development of the Riverwalk. “But the biggest change is the people,” he said. “Most of the people that I knew — they’re all gone,” he said, in reference to the elderly musicians he grew up playing music with. “When I go to Preservation Hall I feel these ghosts in there. The place looks exactly the same but they’re not there any more.”

On the other hand, Sancton has found that a lot of things haven’t changed at all, like the live oaks along St. Charles Avenue, Audubon Park, and views of the river. “Part of the experience of coming back here is reconnecting with something that just goes right back to the beginning of my awareness,” he said. “And that’s a very profound experience.”
The 2007–2008 school year was an exciting time for Newcomb-Tulane College and Tulane University. After Commencement, such excitement would normally give way to the slower pace of summer, but not this year: in June, the campus was alive with activity as it hosted seven summer orientation programs, three film shoots, and a number of local high school graduations. Now that July has arrived, things have finally settled down a bit, but not for long. In late August, we will welcome our largest freshman class since prior to Katrina. This will ensure that the total number of full-time undergraduates will remain at or above 5,000, which is particularly good news as we continue our strong post-disaster recovery.

As we prepare for our third year of operation, Newcomb-Tulane College continues to gain prominence. Our mission is to provide exceptional services to our undergraduates and to enhance the education and college experience for all undergraduate students. We are delighted to announce new study abroad scholarships (through the Darden Study Abroad Scholarship Fund) that are the result of a generous gift by Tulane alumnus Toby Darden. These competitive scholarships will allow our students greater access to study abroad opportunities and are critical to our mission of increasing the accessibility and range of opportunities for international study.

Through the Office of Co-curricular Programs, we are also providing additional support for undergraduate research in all disciplines, allowing our students to extend their learning outside of the classroom through research with our faculty. With support such as this, our students are more likely to go on to win competitive national fellowships; this year, two Newcomb-Tulane College students have won Truman Scholarships, and another is the recipient of a Goldwater Fellowship.

In 2008–09, we will continue our efforts to establish and enhance Newcomb-Tulane College as a meaningful home for all undergraduates. We hope you will enjoy this issue of the Collegian & Review, and we look forward to seeing many of you in New Orleans for Homecoming Weekend, October 3–5.
war service, together with the new demand for applied mathematicians in government and industry, had drained our national resources at the Ph.D. level. There was both a need and an opportunity to get into graduate work to the doctorate. So our first postwar move was to establish a Ph.D. program in mathematics, Tulane’s first in arts and sciences.” The program became a model for similar programs subsequently established throughout the South. In 1955, Duren left Tulane for the University of Virginia (UVA), where he served as the Dean of Arts and Sciences and established himself as an innovator. Duren had a natural affinity for mathematics but developed a passion for university administration. One of his most significant accomplishments at UVA involved the restructuring of the admissions process. At the time, SATs were not required for prospective students, but those who did send in their scores were, on average, scoring below 500. Astonishingly, large numbers of these low-caliber students were receiving acceptances to the university. Duren realized this was a ploy to increase tuition-paying enrollment to a point that would allow the administration to cover the costs for new campus construction. Its unintended effect was to severely reduce the university’s graduation rate and harm the overall quality of education. To remedy this pattern, Duren blocked acceptance of transfer students with low grades, and required prospective students to take the SATs and demonstrate foreign language proficiency. Over time, UVA saw a significant improvement in its graduation rate.

Dr. Duren’s legacy lives on here at Tulane in a number of ways. Recently, the School of Science and Engineering created the Pendergraft William Larkin Duren Professorship, one of three Pendergraft Professorships in Mathematics. Dr. Peter Duren, William Duren’s son, visited Tulane’s campus in May to speak at the investitures of these three professorships. While in New Orleans, he was also a guest at a Newcomb-Tulane College breakfast reception that highlighted the William L. Duren Professorship Program.

“I discovered in my work in World War II that I had special talents as a generalist, combining the mathematical way of thinking with administrative duties and other disciplines.”

Years ago, the elder Duren established this program through a generous endowment. Tenured faculty in the liberal arts, sciences, and engineering departments...
are eligible to apply to serve as Duren Professors. The Duren Professorship Program’s objective is to provide for an activity that is more oriented toward the principles of a well-rounded undergraduate education and less discipline-specific. Duren professors are offered maximum flexibility to develop and adopt distinctive pedagogies which are designed to encourage rewarding exchanges between professors and students. In essence, the program provides professors who have an interesting idea for a course or multi-disciplinary program the funding and the flexibility to fulfill their objectives. Recent Duren courses were led by Professors Gaurav Desai and Harry Howard (see sidebar on this page), whose students have appreciated the unique opportunities that Duren courses offer. Much of the program’s success can be attributed to the legacy of its founder.

Duren Professorships Provide Unique Opportunities

English professor Gaurav Desai focused his Duren course on African politics and culture. He encouraged his students to engage in a number of debates on ethnic and national identities, the relationship between Africa and its diaspora, and the other ways in which gender and class inflect political struggles on the continent. The resources provided by the Duren program allowed his class to make a bus trip to Jackson, Mississippi to visit the International Museum of Muslim Cultures. The museum’s exhibit on the “Legacy of Timbuktu” highlighted the history of the golden age of Timbuktu. Professor Desai was also able to meet with his students in small groups, allowing the Duren class to break down typical professor-student barriers and permit greater mentoring.

Another Duren course was conducted by linguistics and cognitive studies professor Harry Howard. His course introduced students to the principles of computer programming by allowing them to program their own small mobile robot in his robotics lab. Professor Howard explains that the lab’s goal is not the mechanical challenge of building robots, but rather the cognitive challenge of making robots do something interesting. With the demise of the computer science program, Howard realized that Tulane’s curriculum would no longer prepare students to collaborate with him in the lab, so he looked to the Duren professorship to provide an ideal venue for designing, testing, and introducing the programming of small mobile robots. The class used the Lego Mindstorms NXT robot and eventually advanced to the 3-D world of Webots.

An upcoming Duren course will be taught by psychology professor Michael Cunningham, who was recently named a Weiss Presidential Fellow for Excellence in Undergraduate Teaching. His course, “New Orleans’ Youth: Resilience and Vulnerability in Tomorrow’s Leaders,” focuses on adolescent development in New Orleans and introduces students to the lives of public school adolescents. Cunningham plans on partnering with one of the local New Orleans schools to develop pamphlets and newsletters about resilience and vulnerability in New Orleans’ youth, which will then be distributed to parents, teachers, and community partners. He hopes his students will gain a greater understanding of why some students are successful, while others in the same classroom or neighborhood have more challenging experiences. In doing so, students will be able to critically examine empirical research and write scientific as well as translational commentaries.

More information about past and upcoming Duren courses is available online at http://college.tulane.edu/duren.htm.
Three dancers stand poised on an empty stage. One dancer makes a tidal surge ahead, only to be pulled back by the undercurrent of another. The third takes the opportunity to rush forward, but will soon find that she is pulled back into an inescapable give-and-take with the other two. They tumble over each other, around each other, past each other. The connection between the dancers never disappears, even when they do not touch. Like waves breaking on the shore, they rise and fall to erratic rhythms, leaping, twisting, turning, their athleticism effortless as water.

Kettye Voltz hit upon the perfect name for her fledgling dance troupe while swimming in the ocean. A recent knee surgery had ended her serious performing career, but Voltz—also a talented choreographer—had just found an artistic partner in Erin Healan (NC ’98), a fellow Tulanian. As the waves lapped her legs, Voltz suddenly thought: Tsunami. The word alluded to the intense and powerful style of modern dance they would create, as well as to the Green Wave that brought them together.

During their time at Tulane, Voltz and Healan knew each other through the dance program, but were never particularly close. They went their separate ways after their Tulane years: Voltz to New York, Healan to Chicago. Both performed with a variety of modern dance troupes, but eventually, both felt the pull to return to their native New Orleans. So they did, and reconnected through a mutual friend. This time something clicked: their initial phone conversation lasted for two hours, and by the end of it they knew a collaboration had begun. Six years later, Tsunami is arguably the most successful modern dance company in New Orleans. While many performing artists struggle to sell tickets, Tsunami’s full-length performances typically play to packed houses.

Dance has had a presence at Tulane since the founding of Newcomb College in 1886; it was introduced as a formal part of the Newcomb curriculum in 1940. Until recently, however, it was only offered as a minor. Voltz majored in theatre with a focus in dance, but Healan decided to take matters into her own hands: with the help of faculty mentor Alice Pascal Escher, she created a self-designed major, and became the first student to graduate from Tulane with a BFA in dance. Healan’s trailblazing efforts helped lead to the creation of a dance major shortly thereafter, and today there are twelve students majoring in dance at Tulane, including a few who have already had successful professional careers. The current roster of Tsunami performers includes two recent graduates of the Tulane dance program: Gary Fernandez, who double-majored in dance and cell biology and is currently attending LSU School of Medicine, and Tierney St. John, a New Jersey native who double-majored in dance and sociology. They perform alongside some of their former teachers; several Tsunami dancers are on the faculty of the Tulane dance department.

The Tulane connection is obviously strong, but it’s only one of many connections that Voltz and Healan have capitalized on. When asked what led to Tsunami’s ongoing collaboration with artists in other media, Voltz explained that “we have friends who do cool stuff.” Two of those friends are Jeff Louviere and Vanessa Brown, a husband-and-wife photography team known as Louviere & Vanessa. Tsunami recruited the pair to document performances with their dynamic photography, as well as create video shorts that are often incorporated into Tsunami’s shows. Another frequent collaborator is Voltz’s husband, Denny Juge, who happens to be a talented filmmaker and web designer; he maintains Tsunami’s impressive website (http://www.tsunamidance.com/), and also contributes short live-action films featuring Tsunami dancers. A recent whimsical contribution, “Can Can,” featured two trash cans on an Uptown street suddenly sprouting legs, dancing together, and falling in love.

Beyond its artistic strengths, a business-savvy approach has helped Tsunami to succeed. Healan earned a master’s degree in arts administration from the University of New Orleans, where she learned grant writing and other crucial skills. She also worked...
for a law firm, which proved helpful when Tsunami incorporated, then applied for—and earned—a non-profit charter. She and Voltz are careful to select dancers who will contribute to the company both onstage and off; dancers must be willing to move furniture and sweep the stage when necessary, as well as hang posters and spread the word about Tsunami performances.

Fortunately, the local press has made the dancers’ job easier by consistently providing excellent publicity. At the time of Tsunami’s first full-length performance in Tulane’s McWilliams Hall in 2003, Healan knew a co-worker who wrote for the Gambit Weekly. This led to a feature article in the Gambit, which Healan credits with drawing sold-out crowds. The buzz generated from that first show has continued ever since. Tsunami has won two Big Easy Classical Arts Awards for Best Modern Dance Production, for 2006’s Orpheus and 2007’s Portraits in a Forgotten City; Orpheus also received a positive review in Dance Magazine, a national publication. Healan and Voltz were recently recognized in the Gambit Weekly “40 Under 40” issue, which recognizes young artists, activists and entrepreneurs for their contributions to the community.

Healan and Voltz were drawn back to their native city even before the levee failures, but their commitment to New Orleans only grew stronger after August 29, 2005. Like most local artists, their natural drive toward self-expression was amplified by their emotional response to the storm. They revived the company as soon as they could, presenting a solo piece in February 2006 and the full-length Orpheus in June. The program notes for Orpheus describe it as “a kinetic dream-world inspired by the ancient story of love, death, loss, descent, and rebirth.” In addition to the Katrina themes that naturally arise, Voltz and Healan see Orpheus as having a special resonance for women, which is appropriate for the mostly female company. They interpret the story through the eyes of Eurydice, giving it a more modern perspective.

Tsunami’s founders will have the chance to explore Eurydice’s story even further with their next project, a collaboration with award-winning film and theatre director Julian Rad. Rad’s Works Productions, a New York-based multimedia organization, will work with Tsunami to revisit Orpheus and reinterpret it for film. While the original concert focused on developing individual thematic elements through a series of separate pieces, the new work will concentrate more on retelling the Orpheus narrative through dance. The project will also provide an opportunity for Tsunami to further hone the specific craft of dancing specifically for film, a unique art form that Tsunami embraced early in its history.

For a city that has always nurtured creativity, New Orleans has never been known for its dance scene. Tsunami is changing that. While providing an outlet—and employment—for dancers and media artists, Tsunami is making a unique contribution to the city’s cultural landscape, and making a real difference in the lives of local performers and audiences.
It is no secret that college students are often some of the most dedicated, creative, and inspired people. Our nights are often lost to endless discussions of politics, philosophy, and social change; we give up precious homework time to volunteer and become involved in the community. Yet we often feel as though our voices are not heard; as though the fantastic ideas and unique opinions we have about the world fall on deaf ears, become lost in the convoluted world of politics, and simply do not matter to those making policy.

But the fact is, those writing policy should be listening to our opinions—it is simply up to us to hold them accountable. The Roosevelt Institution sought to provide an avenue to counter this problem last December with our “Collaborative Conference on Community Development.” We invited students from around the nation, local community leaders, and policy makers to meet one another, share their perspectives, and discuss ideas they had for improving our communities. The conference focused on three aspects necessary for creating sustainable community life: education, affordable housing, and sustainable development. Participants were invited to elect one of these three tracks to follow for the duration of the weekend. The goal of the conference was to provide students with enough knowledge about community development to write their own progressive policy ideas.

The big weekend kicked off with a reception featuring free food, jazz, and a keynote speech by Dr. Edward Blakely, the Executive Director of the Office of Disaster and Recovery Administration. Attendees were treated to a full catered meal by Martin’s Wine Cellar and were able to connect, share numbers, and begin to toss around ideas about the various issues that would be examined during the weekend. The speech given by Dr. Blakely proved to be both an engaging and provocative one, challenging the attendees to address the pressing issues our community is faced with, but also warning us not to forget our roots and culture in the process. It was decidedly a perfect lead-in to what would be an inspiring, informative, and fun weekend.

What ensued was a blitzkrieg of policy research, brainstorming, and new ideas as participants were led through a number of groups and meetings regarding the issues they had shown interest in. The day began with the group parting ways to go on daylong excursions in order to gain a more hands-on experience of New Orleans. The education track paid a visit to the Sophie B. Wright elementary school, one of the most promising and successful charter schools in existence after the storm. The group was taken on a tour by Vice Principal Tiranus Edwards, who was able to give a personal account of the challenges and successes Sophie B. Wright has experienced before and after the storm. Perhaps more importantly, Vice Principal Edwards discussed the structure of the New Orleans school system, one of the most convoluted and controversial entities in operation in this city. Among the numerous issues he emphasized were the need for proper allocation of funding, a strong need for devoted, inspired teachers, and the need for more community involvement in the maintenance and improvement of the school system. Students were able to walk around the interior of the historic school, observing water stains where pipes had burst, windows broken ages ago, and holes in the wall that had existed since the storm closed Sophie B. Wright’s doors for months. The tour had a profound impact on all who attended, and it ended with an informative and intense discussion.
about what had been done, what could be done, and what should be done to save our public school system. When they returned from the on-site visits, the student participants attended panels of local activists, specialists, and leaders who shared their own experience and knowledge with the college students. On the affordable housing panel were local leaders of grassroots organizations, such as Gerald Cloud, the project director of ACORN, and Pamela Callahan, the housing manager for UNITY. Important players in the New Orleans education world, including Vice Principal Edwards and members of the United Teachers of New Orleans, sat on the education panel and participated in discussions with the students. Among those participating in our third panel on sustainable development was Donna D. Fraiche, the Chair of the Long Term Community Planning effort of the Louisiana Recovery Authority.

Following the panel discussions, the students and panelists broke up into small roundtable discussions. In these groups the students and community leaders reflected on the knowledge gained over the weekend and identified the common problems facing sustainable community development. After identifying these problems, they brainstormed some potential solutions. At the end of the conference, these ideas were compiled and sent to all the student participants, so they could continue researching the problems and exploring progressive solutions at their own university’s Roosevelt Institution.

The Roosevelt Institution is a student-led progressive think tank with chapters at numerous colleges and universities nationwide. It focuses on bringing new ideas to the table and brainstorming proposals for policy which will ultimately affect our lives and communities for the better. The Roosevelt Institution has strong connections with politicians operating on every level of the political spectrum and has already written several publications which have led to policy creation at the local and state levels. The chapter at Tulane includes two policy centers: education and sustainable development. These two groups are comprised of inspired students who work together to detail the problems facing our city and to come up with the solutions needed to address them. For more information: www.rooseveltinstitution.org/tulane.
Despite the disbanding of Newcomb College under the Renewal Plan of 2006, Newcomb Student Programs are alive and well under the auspices of the Newcomb College Institute. The NSP staff work to create and implement programs to benefit the undergraduate women at Tulane, including a leadership series, career luncheons, faculty receptions, and the ever-popular Fridays at Newcomb, featuring guests such as the all-female Pinettes Brass Band. NSP maintains the traditions of Newcomb College by continuing the Daisy Chain and Oak Wreath, Big/Little Sister and Town Mom programs, the annual Leadership Conference, and an endowed lecture series. NSP also continues to advise the nine student organizations that have always called Newcomb Student Programs home.

During the 2007–2008 academic year, NSP continued to expand its offerings. Some popular programs included a Newcomb Networking Night with alumnae and students; a Women in Law Career Luncheon; a lecture by The Nanny Diaries authors Emma McLaughlin and Nicola Kraus; and the highlight of the year, a visit from feminist icon Gloria Steinem as the guest of the second annual Powerhouse Speakers Series. Ms. Steinem spoke to a standing-room-only crowd in Kendall Cram Lecture Hall, and also attended a tea with a select group of faculty and students.

By providing enhanced academic and cocurricular opportunities for all Tulane undergraduate women, NSP closely complements the opportunities offered by Newcomb-Tulane College Programs. From the “Newcomb and the City” NOLA Experience track—a pre-orientation program that highlights the accomplishments of local Newcomb alumnae—to the Under the Oaks ceremony during Commencement weekend, NSP’s programming supports Newcomb-Tulane College women throughout their Tulane careers. The women of the Class of 2008 saw the transformation of Newcomb College into the Newcomb College Institute; many of these women have been the backbone of Newcomb Student Programs during this time of change, and their contributions will not be forgotten. As they join the ranks of proud Tulane alumni, the NSP staff looks forward to hearing about their accomplishments, and working with them on alumnae programming to benefit the next generation of Newcomb-Tulane College women.
On the morning of August 29, 2005, Hurricane Katrina made landfall to the southeast of New Orleans as a Category 3 Hurricane. Levees along the Industrial Canal, which connects the Mississippi River to Lake Pontchartrain, were breached by 7:00 AM local time, resulting in flooding of areas northeast of the French Quarter (FIG. 1). A catastrophic failure of the floodwall and levee on the eastern side of the canal devastated the Lower Ninth Ward. Over the next few hours, as the hurricane moved inland, the storm surge pushed water from Lake Pontchartrain into the three drainage canals in the northern part of the city and resulted in the catastrophic failure of levees at three locations, two on the London Avenue Canal and one on the 17th Street Canal (FIG. 1; also see animation from the Times Picayune’s coverage at http://www.nola.com/katrina/graphics/continuous.swf). The failures occurred before the maximum surge level had been reached. The net result of these floodwall and levee failures was that about 80% of the city of New Orleans was flooded to depths up to 15 feet.

Amongst the death and destruction wrought by Hurricane Katrina on August 29, 2005, a neighborhood near the southern levee breach on the London Avenue Canal displayed unique deposits of sand that filled streets, yards, and houses near the breach. The sand deposits contained whole unbroken shells, as would be found on an ocean beach, along with cars and such objects as videotapes, window blinds, clothes, and, since it is New Orleans, Mardi Gras beads (FIGS. 2A, B, C, D). Deposits of sand are rare in New Orleans, let alone deposits that contain the wide variety of items observed in these deposits. More importantly, the sand deposits raised several questions, including where did the sand come from and what role did it play in the levee breach that was partially responsible for the devastation of New Orleans.

It was apparent that floodwaters flowing out of the southern breach of the London Avenue canal were in some way responsible for sand deposits up to 8 feet thick with a volume estimated at 932,000 cubic feet. This is enough sand to cover a football field to a depth of 16.5 feet. The deposit originated from a ~200 foot-long breach that occurred between 7:00 and 8:00 AM on August 29, 2005. The initial torrent of water from the breach was powerful enough to remove a house from its concrete foundation, displacing it ~115 feet to the east and rotating it ~137° counterclockwise before it came to rest after running into a tree (FIG. 3 INSET). But as the torrent of water slowed, the sand it was carrying was deposited, filling the streets, yards, and interiors of homes. A map of the sand deposits shows elongate
lobes spreading up to 1300 feet away from the breach (Fig. 3). The shape of the deposit was clearly influenced by the street pattern and urban structures. Along the back yards of these houses, the sand surface shows two ridges, parallel to each other and to the canal (Fig. 2A). Sand buried vehicles in the front yards (Fig. 2B, C) and was deposited within houses near the breach (Fig. 2D). Sand was also deposited along the streets intersecting Warrington Drive, with thicknesses up to 3 feet (Fig. 2E).

Clearing of much of the sand in the streets near the breach was accomplished by late December 2005, and provided the initial vertical exposure of the deposits. By late February 2006, front yards were entirely cleared, creating exposures along the front of the houses. As no sand occurs in the breached levees, it is clear that the sand originated from elsewhere. So where did it come from?

In order to understand the ultimate origin of the sand, it is first necessary to briefly explore the geologic history of New Orleans. Five thousand years ago the future location of New Orleans was offshore of the southern coast of North America (Fig. 4A). As sea level rose due to the continuing melting of continental glaciers, a sand spit began growing extending from what is now southwestern Mississippi toward the present day location of New Orleans (the Pine Island Barrier Island in Fig. 4B). At about the same time, the Mississippi River began building the St. Bernard delta complex eastward (Figs 4C and 4D), eventually burying the Pine Island beach sands (Fig. 1). Drainage from the north was thus cut off to enclose what would become Lake Pontchartrain (Fig. 4D). About 2,000 years ago, the Mississippi River shifted its course back to the southwest of New Orleans and abandoned the St. Bernard distributary channels, some of which were filled to become what are now the Metairie Ridge and Gentilly Ridge (Fig. 1). The Mississippi River shifted its course back to its present day position about 1000 years ago, and New Orleans was founded on the natural levee of one of its meander bends in 1718. By the late 1800s, the city had spread along the ridges of the former distributary channels, with cypress swamps in
between the populated zones. In the early 1900s pumps were installed to drain rainwater into Lake Pontchartrain (elevation of ~2 feet above sea level), and later to drain the swampy areas, providing more habitable land for the growing city (more details in Nelson⁶). The London Avenue, Orleans, and 17th Street drainage canals normally contain water at the elevation of Lake Pontchartrain and run between levees with elevations of about 4 feet above sea level. These levees are capped by concrete floodwalls, built in the 1990s, that rise to an elevation of 12.5 feet above sea level. The floodwalls are anchored by steel sheet pile currents that extend into and below the levees in order to supply support for the floodwalls and keep them from tipping over and to prevent seepage of water under the levees. Katrina’s storm surge pushed water from the lake into the canals up to 9 feet above sea level and hence, the floodwalls were not overtopped. Yet the levees and floodwalls failed at three locations (FIG. 1).

The floodwalls were built under the supervision of the U.S. Army Corps of Engineers. During the design phase of floodwall project, bore holes were drilled to sample the material at depth beneath the levees⁷. From these borehole samples, a geological cross section of the east bank of the London Avenue Canal was constructed (FIGURE 5). The artificial levee fill, made up mostly of clay, occurs at the top. This overlies a 5 to 10 foot thick layer of clays that contain peat and wood fragments (particularly at the northern end of the canal under the west-side breach), consistent with deposition in the swamp that was present here prior to about 100 years ago. Underlying the swamp deposits are the 30 to 40 feet thick Pine Island beach deposits (FIG. 5). The base of this beach sand overlies the silty clay deposits of the ancestral Lake Ponchartrain. The canal bottom is at a depth of 12 feet below sea level. The levee breaches on the London Avenue Canal occurred along stretches of the canal where the Pine Island sands are

---

**FIG. 3.** Map, based on field mapping, showing the distribution sand deposits in the area around the southern breach of the London Avenue Canal. Houses referred to in the text and other figure captions are numbered. Displaced house is indicated in black and shown in inset.

---

**FIGS. 4.** Development of the Pine Island Barrier Island deposits as sea level rose between 5,000 and 4,000 years ago. Dotted lines indicate the current locations of Lakes Maurepas and Borgne and the present trace of the Mississippi River.

- **4a.** Site of New Orleans (black star) was offshore
- **4b.** A sand spit developed
- **4c.** Bernard Delta began building eastward
- **4d.** Growing St. Bernard Delta reached and buried the sand spit, resulting in the formation of Lake Pontchartrain (modified from Otvos⁴ and Snowden and others⁵).
exposed in the canal bottom. The Pine Island sands, because they are so permeable to water, allowed the water, pushed by the added weight of water in the canal during the surge, to flow under the levee and sheet piling, causing the levee to collapse catastrophically, and then erode the sand from beneath the bottom of the canal (Fig. 6). The currents then carried this sand into the neighborhood resulting in the deposition of the breach deposits. If the steel sheet pilings had been driven down to the clay layer about 45 feet below sea level, it may have prevented this underflow of water through the sand and thus prevented the catastrophic failure of the levee and floodwall. The shallow depth to which the sheet piles were driven was clearly a design flaw that resulted in the failure of the levee and floodwall at this locality.2,3

Depth soundings done by the U.S. Army Corps of Engineers a few days after the storm indicate the depth of erosion extended to 30 feet below sea level. From the depth soundings the volume of the eroded hole can be determined to be about 39,000 cubic feet, which only accounts for about 39% of the volume of the sand deposit. Therefore, a significant amount of erosion must have occurred on the bottom of the canal both upstream and downstream from the breach. This raises concerns regarding the stability of the New Orleans drainage canal levee system, considering the extent of the Pine Island sands in the subsurface beneath all of the drainage canals (Fig. 1). This concern is diminished somewhat by the fact that in the year after Katrina, the Army Corps of Engineers installed closeable gates on each of the drainage canals near their mouths at Lake Pontchartrain. This should prevent storm surge from entering the canals from the lake during future hurricanes, and thus, if the floodwalls fail again only canal water will flood into the city. The consequence of such a failure, while still serious, is preferable over having Lake Pontchartrain drain into the city as it did following the failures during Hurricane Katrina.2,3

![Figure 5. Geological cross-section along the east bank of the London Avenue Canal based on soil borings from Eustis Engineering and the U.S. Army Corps of Engineers.](image)

**FIGURE 5.** Geological cross-section along the east bank of the London Avenue Canal based on soil borings from Eustis Engineering and the U.S. Army Corps of Engineers.8

**FIGS. 6.** West to east (left to right) cross sections across the London Avenue Canal at the site of the southern breach.

**Fig. 6a.** Water entering the canal from Lake Pontchartrain to the north has filled the canal and raised the water level, started to push the eastern floodwall and sheet pilings, and has started pushing water through the Pine Island beach sands in the bottom of the canal.

**Fig. 6b.** After collapse of the levee and floodwall, the torrent of water has scoured the canal bottom to 30 feet below sea level. The catastrophic failure of the levee at this location could have been prevented if the sheet piling had been driven to intersect the relatively impermeable clays at ~45 feet below sea level.2,3
References Cited


CANAL BOULEVARD, NEW ORLEANS

BY SARAH RICHARDS DOERRIES

Six A.M. This is the rain's hour, not mine. For three days I have waked for it, stood from bed, walked stiffly as if hypnotized to the front porch, where I leave the shutters open to light my work: the sorting and packing of a move that has become the latest rhythm of my life. Peering out this morning, glass grey and thick with dust, I saw a yawl, broad-sailed and dark, steering down the neutral ground. A vague mist swelled its bloated wooden hull, imbued the specter ship with bluish light. The crew, not seen, was singing, taking lovers in the crow's nest, drinking, straddling the arched back of the figurehead's beauty. I woke and saw the world stir. Underneath the grass, crape myrtle, liriope, azalea, a canal is flowing—to the lake, to the river, to the gulf, to the sea—carrying with it this ship, this familiar house, its relics I give up, buoying by design life's dull weight, the ballast of my necessary journey.
On the path to enlightenment, Siddhartha received rice cakes, sexual favors, and jobs from complete strangers. He could say, “Everything is necessary, everything needs only my agreement, my assent, my loving understanding; then all is well with me and nothing can harm me,” and actually mean it.

Siddhartha wouldn’t have spent forty minutes looking for a parking spot in midtown Manhattan, then risked a ten-minute fire-hydrant violation to eat ramen in his mother’s college roommate’s apartment. He would have found a way to park the car vertically or maybe gotten a lift on someone’s donkey—even though it was January fifth and snow had crusted into cobblestones. That was the difference between us, or one of them.

Before retrieving my manual-windows-era Buick from the impound lot, I had to work a shift at CrisisLine. Playwrights should get MBAs if they want to live in New York, not volunteer, but I was hoping to meet centered, selfless people. A beautiful courtesan or a wise ferryman, like Siddhartha encountered, would have been great. Unfortunately, I didn’t smoke. The other three trainees did—every chance they got, three floors down.

At CrisisLine, we were instructed to build trust by reflecting callers’ emotions: “It sounds like you’re feeling… frustrated/hurt/afraid.” Ask too many questions and callers will think you’re prying. Give advice and they’ll assume you’re judging. Let callers choose a corrective path at their own speed and they will be more apt to implement meaningful change.

“My sister just found out she’s got HIV. I guess I’m wondering if she’s, you know, going to die.” Before I got a chance to reflect my first caller’s emotion, he said, “That’s her now at the door” and hung up. “Owing to the fact that I got Graves’ Disease,” my second caller began, “white blood cells attack my eyes, creating scar tissue, which causes bulging eyes and eyelids that won’t fully close. So this morning when I woke up, my eyelash was stuck to the pillowcase. That’s right. Stuck. Ever peel your eyeball off your pillow while your kid is screaming ‘Mocolate Mancakes, Mamma! Mocolate Mancakes!’ Vernon wants chocolate chip pancakes for every meal. The reason why I’m calling, though, is my husband, who found out he’s not Vernon’s biological father. My sister told him that I’d found a sperm donor who looked like him. She was mad that I hawked her motorcycle, which was mine really, but I’d lent it to her for so long, she felt it was hers.”

“Wow,” I said. “You sound overwhelmed.”

“That’s it? I need a divorce lawyer maybe or a good endocrinologist. Something. I called the CrisisLine not the ObviousLine.”

“I’m sorry,” I said. “My car got towed this morning.”

“At least your husband didn’t hit you in the hip with a car then accuse you of pretending to be hurt!”

“Sounds like you’re still pretty angry about that.”

“Sounds like you’re reading from a script. Don’t they give you some training or something that might actually help people?” Deep breath. “I’m not just mad at my husband now, I’m mad at you. What did you say your name was?”

I’d made it to New York, after driving twenty-eight hours and months of living at home and saving my video-store salary, but I hadn’t really arrived. Arrival happens when you and your environment move and change at the same pace. All signs suggested I still had a ways to go.

My mother’s college roommate left things atop the twin bed in the guest room/office where I slept: knitting projects she’d pulled out of cedar-smelling storage bags, clippings of faucets from home decorating magazines, receipts for tax filing. Whenever a friend called, I was expected to vacate the room, so she could use her new web cam. No matter where I stood or sat or slept, what I said or didn’t say, I impeded her progress. So I started hanging out in McDonald’s, working on plays longhand, skimming employment ads, and eating off the dollar menu. When you’re broke, New York isn’t much different than North Dakota.

North Dakota’s theater directors’ names are in the phonebook though. In New York, I couldn’t even get agents’ assistants to meet with me. One receptionist wrote “Unsolicited!” on my play before buzzing me out the door. The only face-time I’d gotten was with a man on the subway, who coughed wetly in my face and said, “Now you’ve got it.”

Siddhartha listened to a river for years, the “om” sound of universal oneness. I could have avoided the broken water main on the way to the impound lot, but I didn’t. Water gushed above the sidewalk and underneath the door of a dry cleaner’s, a strip club, and at least one apartment building. Steam rose off the water and hung like fog. I listened but the river couldn’t be heard above the honking of cabs and trucks, stuck behind a stalled car. I took off my shoes and wool socks, and entered the water, withstanding the cold until I reached a knee-wall beneath a chain link fence. A guy wearing a leather motorcycle helmet monkeed his way along the fence from the other direction. When
we met in the middle, I ducked my head and balled up as best I could. He could’ve climbed above me, but he quietly refused, so I dropped back into the water to let him pass. Instead of “Thanks,” he said, “You don’t live on this block, do you?”

The cashier’s window had been hit by gunshots—three sunbursts of cracks. The guy in front of me in line, wearing a Metallica shirt and leather jacket, flipped off the cashier and shouted, “The DMV blows!” before jump-kicking the door. I hoped that would make the cashier, a middle-aged woman with dusty black skin and bifocals, look more kindly on me, a Midwesterner wearing a white turtle-neck and brown sweater. “That was rude and totally uncalled for,” I said, thumbing in Metallica’s direction.

“Ticket and license,” she said over the intercom, tapping the metal tray under the glass.

“I was wrong to park by the fire hydrant on Fifty-third Street. I understand the need for parking regulations, tow trucks, and impound lots.” I handed her the license and ticket. “But I want my car back without harm—to it or to me.”

I closed my eyes and said, “Ommmmmm,” until I was out of breath.

“Not a problem, Mr. Ommm.” She lifted fingers individually to examine her nails. “Long as you pay for it.”

I thought of the boy and his sister with HIV, the woman hit by her husband’s car and whose eye stuck to the pillow, the man angry enough to spit on me. With both hands, I laid my debit card in the cashier’s tray, an offering to all those I’d been unable to help. The ticket and fees amounted to most of the money I had left. “You have my loving understanding,” I said.

She looked as if I’d offended her in a new and particularly foul way.

Deviating from Siddhartha’s script, I added, “And beautiful nails. They remind me of dark summer fruit. The way cherries and plums take sunlight down into their depths, all the way to the pit.”

She nodded her way out of a hairy-eyed scowl. “You’re an odd one, Mr. Ommmm,” she said, lifting her head and peering at me through the lower half of her glasses. “But thanks. Your car is in D-14.”

In the shadowy parking garage, the car looked hand-smeared with mud, and someone had rubbed out a cigarette butt in the cup holder. The plates were North Dakota, though—roaming bison and “Discover the Spirit” motto—and my key fit.

If I drove straight back to Fargo, I’d be leaving nothing behind except a duffel bag of clothes that probably wouldn’t even be accepted by Manhattan’s Goodwill—not black enough, or tapered enough, or baggy enough, or maybe too pillly. I’d only been gone a few months, so I could probably get my job and room back. My mom wouldn’t mind putting off her dream of a first-floor bathroom another year or two. But what would I do with all the spare hours, after such a quick and thorough defeat?

The sound of straining metal drew me from my reverie. In red brake light, the Metallica guy appeared to be levering open my trunk. My first impulse was to reverse the car into him, perhaps because the suggestion had been planted in me by the CrisisLine caller, but I got out instead. He was mostly hair and jacket, drug thin. He screamed, “DMV scum!” but backed away as I approached.

“The DMV just took most of my money,” I said. “This car, old and tired as it is, is my only possession of value.”

“It was just a paint can opener, man,” Metallica said. “Here.” He tossed it toward me and it skittered on the cement. “Maybe you can bend it back.”

I knelt on the pavement and put my hands on the trunk. Closing my eyes, I ran my hands over the bent metal. I wanted to feel the anger he’d felt, the desire to rupture a hard surface and observe the impact.

“No, man, the opener went under the minivan.” His feet scuffed toward me.

I exhaled all that I held inside—the hopes and expectations I crafted during slow hours at the video store; the CrisisLine calls from people desperate enough to reach out to, rely on, and curse strangers; the tall, sleek, hard city of New York. It began as a low moan, then blurred and pulsed like a siren, and became the sound of all traffic, full of urgency and irritation and impeded progress.

“Whoa.” Metallica tapped the back of the minivan to get my attention. He looked frightened, not of harm from me, but of harm done to me. “Easy, dude. You’re going to be alright.”

Once I had taken and exhaled a few soundless breaths, Metallica walked down the ramp, half-watching me, his legs gaining energy and pace from the decline. He gave each car trunk a pat as he passed.

Exiting the parking ramp, I encountered another booth, more bullet-proof glass. An old, gray-haired Puerto Rican guy got off his stool and pattered over to my car. After inspecting my receipt, he pointed past the razor-wire-topped gate and said, “Go with the green.” All along the highway red brake lights and white headlights glowed. All waiting for me to cross back into the city. The parting of a river. A direction to go in now that I’d gotten up to speed.
Newcomb-Tulane College is the academic home for all of Tulane’s undergraduate students, who are taught by faculty in the School of Architecture, the A. B. Freeman School of Business, the School of Liberal Arts, the School of Public Health, and the School of Science and Engineering. Newcomb-Tulane College comprises several student-service offices: the Academic Advising Center, the Center for International Studies, Co-curricular and First-year Programs, the Honors Program, ROTC, Teacher Preparation and Certification, and the Office of the Dean.

Newcomb-Tulane College’s main offices are located in Robert C. Cudd Hall on the historic St. Charles campus. Built in 1901, the distinctive Dutch Gothic (or Italian Renaissance Revival, according to some sources) building originally served as the university refectory, or dining commons. Since then, the building has served in a variety of capacities, providing classroom and office space and acting as the home for several different departments. Over the years, a number of piecemeal additions and adaptations obscured most of the building’s architectural interest. In the 1990s, a group of donors provided the funds to restore the building and remodel the interior as the home for Tulane College, formerly the men’s undergraduate liberal arts college. The building was reopened and placed on the National Registry of Historic Places in 1999. In 2006, following the university’s post-Katrina restructuring, Robert C. Cudd Hall became the administrative home of the newly created Newcomb-Tulane College, housing the Office of the Dean and the Office of Co-curricular Programs.

In the more than 150 years since its founding, Tulane University has subscribed to a few basic principles: a belief in the enduring value of liberal arts and professional education, a conviction about the importance of extracurricular activities and accomplishments, and a justifiable pride in the achievements of its talented students, dedicated faculty, and distinguished alumni.