Homecoming 2002 Festivities Held in City Park

This year’s new homecoming location proved to be a huge success. The move to Tad Gormley Stadium required extensive planning by the homecoming committee and all were pleased with the results. The feedback from alumni and guests indicated that everyone had a great time.

The day started at 11:00 a.m. at the Pavilion of Two Sisters with the annual meeting of the Society of Tulane Engineers (STE). President Tommy Meehan presided over the meeting and Dean Nick Altiero unveiled the 2002 Hall of Fame Inductees’ plaques and presented the Alumni Award recipients.

2002 Hall of Fame recipients Doc Laborde and Griff Lee were in attendance, accompanied by their family members.

Also in attendance was the 2002 Outstanding Alumnus, William “Bill” Cavanaugh III.

The business portion of the program included the rotation of officers and the election of a secretary. David D. Gereighty moved up to President and Celia Z. Blum was elected to the office of secretary. Look for Mr. Gereighty’s “President’s Corner” in this issue for other business brought before the annual meeting.

At the conclusion of the meeting, members and guests joined the Emeritus Club members for cocktails and lunch where Dean Altiero was the luncheon speaker. After a brief walk to the stadium for the 2:30 p.m. kickoff, fans cheered the Green Wave to a victory over Navy.

Homecoming 2003 will be held on October 11. Plans are still being finalized but it looks like we’ll be going back to City Park for 2003.

The 2002 Outstanding Alumnus is William “Bill” Cavanaugh III. Bill is a 1961 graduate in mechanical engineering and has been in the energy industry since 1969. Before starting his career in energy, he served an eight-year tour with the U.S. Navy, primarily in the nuclear-powered submarine program, receiving an honorable discharge in 1969, with the rank of Lieutenant Commander.

Cavanaugh is chairman and CEO of Progress Energy, a diversified energy holding company serving 2.8 million electric and natural gas customers in the Carolinas and Florida. Prior to joining Progress Energy (formerly Carolina Power & Light), he was with Entergy Corporation.

Cavanaugh was recently elected a member of the National Academy of Engineering for his contributions to excellence in the generation of electricity from nuclear power.

The Harold A. Levey Award, established in 1959, recognizes outstanding career achievement within ten years of graduation.

Dr. Jessica Brian was the 2002 recipient of this award.

Dr. Brian received her PhD in electrical engineering at Tulane in 1992. She joined Westinghouse Electric Corporation in 1993 and was the recipient of many awards, including the 1996 George Westinghouse Signature Award of Excellence for Significant Achievements. In 1997, Jessica became senior engineer at Electric Reliability Council of Texas.

She is a registered engineer in Texas and Florida, has published 14 technical papers, and holds a U.S. patent for inventing a simplified magnetic filter.
Tulane Engineering Forum 2002

“Energy and the Environment” was the theme of the 2002 Forum held on September 13 at the New Orleans Hilton.

The forum featured a panel presentation, “National Energy Policy and the Future of Energy Production,” that included the following panelists: Donald A. Juckett, Director of U. S. Energy Department’s Natural Gas and Oil Import and Export Activities; Frank Gallagher, President of Entergy Fossil Operations and Transmission; John R. McGaha, President of Entergy Nuclear South; Charles W. Pryor, former President and CEO of Westinghouse Electric Company and currently President of the company’s Nuclear Utilities Business Group; and Jerry J. Saacks, President of Georgia System Operations Corporation.

Forum attendees were able to hear lectures in the areas of construction/maintenance, information technology, manufacturing, petro-chemical, and power and transportation.

Participants who attended the forum earned six professional development hours.

Keynote Speaker Paul Bishop, Associate Dean of Engineering and Research at the University of Cincinnati, spoke on pollution prevention, biological waste treatment and hazardous waste management.

ExxonMobil Provides Grants to the School of Engineering

At a luncheon held on October 10, 2002, Tulane received $14,000 from ExxonMobil as part of its special grants program to assist academic institutions.

Selected academic departments can use the grants for educational purposes such as scholarships, field trips, visiting speakers, equipment purchases, student and faculty travel to professional meetings, and other academic projects.

ExxonMobil awards these grants to schools that offer degrees in fields from which the company recruits employees.

“ExxonMobil has a long history of supporting higher education, especially in the areas where our company recruits future employees,” said Sharyl Hackett, ExxonMobil Campus Relations and Diversity Manager.

“With these departmental grants, our support is specifically directed to those university departments that are educating the highly-qualified graduates that ExxonMobil needs.” The amount of the grant is based on many factors, including the number of ExxonMobil employees from a particular school and ExxonMobil’s recruiting success at the school over the past five years.

The Departmental Grants Program represents only a part of ExxonMobil’s overall support of education. In 2001, ExxonMobil Foundation, ExxonMobil Corp., and its divisions and affiliates provided $126 million in contributions worldwide, with $38 million dedicated to education.

The recipients of the $14,000 Tulane grant were the departments of chemical, mechanical, and civil and environmental engineering ($12,000) and the law school ($2,000).

Left to right: Stacy Bennett with ExxonMobil; Monte Mehrabadi, chair, mechanical engineering; Gary Roberts, law school; Dean Nicholas Altiero; Shawn Kuntz with ExxonMobil; ViJay John, chair, chemical engineering.
In Memoriam

Memorial donations are welcome.

John C. Van Hees (nongrad ’47)
Harold R. Sisk (ME ’74; EE ’58)
Daniel M. Oliver
Robert J. L’Hoste, Sr.
Rene B. Kronlage (EE ’52)
Robert D. Hinson (CE ’47; EE/ME ’36)
Ben J. Haney, Jr. (EE/ME ’35)
Arthur G. Grant (ME ’42)
Farrar R. Dodge (Che ’37)
James B. Eaton, Jr. (EE/ME ’35)
Francis J. Favaloro (EE ’50)
Harold L. Flettrich, Sr. (ME ’55)
Angelo V. Graci, Jr. (Che ’49)
Byron Levy (ME ’41)
Dr. Robert J. Fritz (EE ’44)
Dr. Robert A. DeFraites, Jr. (CE ’86; MS ’85)
Dr. Donald J. Bagert, Jr. (BS Engr. ’77)
Dr. Sherri A. Longo (BME ’86, MD ’90)

In the Spotlight

Erwin R. Johnson (ME ’52) is retired and lives with his wife, Margaret, in Lacombe, LA. During World War II, Mr. Johnson enlisted in the Army Air Corps and was sent to the Philippine Islands. He is a survivor of the Bataan Death March and spent 3 years as a prisoner of war in Mukden, Manchuria.

After the war he returned to New Orleans and enrolled in Tulane Engineering under the GI Bill, living in the barracks on campus next to the Navy ROTC Building.

After graduating, he worked for North American Aircraft in Los Angeles, CA in the hydraulics department. He later obtained his professional engineer license for Louisiana and Texas. Mr. Johnson’s last employment was with the Port of New Orleans in charge of operations of four bridges over the Industrial Canal, working there for 11 years before retirement in January 1992.

Mr. Johnson is the author of By The Grace of God, a book about his experiences in the Philippine Islands and as a prisoner of war.

His hobbies include golf and travel.

Mr. and Mrs. Johnson are the parents of five sons, four grandsons and one granddaughter.

Joseph B. Bethancourt (ME ’50)
Ronald L. Black (nongrad ’49)
Farrar R. Dodge (Che ’37)
James B. Eaton, Jr. (EE/ME ’35)
Francis J. Favaloro (EE ’50)
Harold L. Flettrich, Sr. (ME ’55)
Angelo V. Graci, Jr. (Che ’49)
Arthur G. Grant (ME ’42)
Ben J. Haney, Jr. (EE/ME ’36)
Robert D. Hinson (CE ’47)
Rene B. Kronlage (EE ’52)
Robert J. L’Hoste, Sr. (CE ’51)
Joseph McCarron, Jr. (Che ’41)
Daniel M. Oliver (EE ’58)
Thomas Portwood, Jr. (EE ’46)
Harold R. Sisk (ME ’74)
John C. Van Hees (nongrad ’47)

Loving Cup Award
Anders Nelson
Waldemar Nelson

1930’s

Donald E. Wilson (nongrad ’39, graduate U.S. Naval Academy) of Henrietta, TX sends congratulations to Waldemar Nelson on receiving the Times-Picayune Loving Cup Award and the SE LA Council Boy Scouts’ 2001 Distinguished Citizen Award. He also sends congrats to his USNA friend, Doc Laborde, on his induction into the Tulane School of Engineering Hall of Fame.

1940’s

Byron Levy (ME ’41) was the artist for the Spring ’02 Fundraiser Showboat Auction for WYES-TV in New Orleans. The silk-screened prints auctioned were images of his original watercolor painting, “Four New Orleans Sketches.”

Dr. Robert J. Fritz (EE ’44) is retired and lives in Schenectady, NY, where he spends his time enjoying his family and grandchildren. During his distinguished career Dr. Fritz developed naval nuclear systems; specialized in thermal, shock and vibration, structural, design reviews and materials.

Dr. Fritz gave lectures in Washington, DC at shipyards and to prime contractors in noise prevention, as well as troubleshooting submarine noise and developed new technology.

Warren E. Ibele (ME ’44) recently retired from the faculty of mechanical engineering at the University of Minnesota after 52 years of service. His research resulted in the publication of 75 papers involving both experiments and theoretical analysis.

He was coauthor of a textbook and in 1975 became dean of the University of Minnesota graduate school. He was recognized for his outstanding teaching by an appointment to the university’s academy of distinguished teachers.

August H. “Doug” Douglas (ME ’49) is currently serving as Chairman of the Board of the Tulane Emeritus Club.

1950’s

Donald P. Maynard (ME ’51) works for American Airlines as a simulator pilot instructor. He says he’s “too old to fly as an airline pilot so [he’s] doing the next best thing.”

Arthur A. DeFraites, Jr. (CE ’86; MS ’85) is the recipient of the 2002 A.E. Wilder, Jr. Award.

1970’s

Dr. Donald J. Bagert, Jr. (BS Engr. ’77) was recently named director of software engineering and professor of computer science and software engineering at Rose-Hulman Institute of Technology, after 14 years at Texas Tech University.

Richard K. “Rick” Blum (CE ’78) of New Orleans is the Regional Chamber of Commerce’s 2002 Ambassador of the Year.

Dr. Joseph E. Bavaria (Che ’79; MD ’83) is a professor of cardiovascular and thoracic surgery at the University of Pennsylvania and director of lung transplantation and thoracic aortic surgery.

1980’s

Robert W. “Robin” Hensley (CS ’84) has been promoted to Vice President, Engineering Support, with Hewlett Packard in Houston, TX.

Karen Sikorski Bridges (BME ’86) has been promoted to Lieutenant Colonel, USAF, and is currently serving as Chief of Targets at Joint Analysis Center, RAF Molesworth.

Dr. Sherri A. Longo (BME ’86, MD ’90), was ranked among the area’s best in “Top Female Doctors” by New Orleans Magazine. She was featured in the November issue. Dr. Longo also serves on the Biomedical Department Advisory Board.

...continued on back page
Grateful Graduate Repays Tulane with Charitable Gift

When Joseph Boston looks back at his 43-year career, he sees a direct relationship between his success and the doctorate he earned in Chemical Engineering at Tulane University.

In the early 1960s, computers were just beginning to be used in the field of Chemical Engineering, and in 1959 Dr. Boston was one of the few recent college graduates with computer training. After eight years of experience in the technical application of computers at Union Carbide Corporation and Monsanto Chemical Company, he decided to expand his career options by earning his doctorate at Tulane University. It was one of the few graduate programs that placed strong emphasis on the application of computers at that time.

After finishing his doctorate in 1970, he had the unique opportunity to become an Assistant Professor of Chemical Engineering at the University of Petroleum and Minerals in Dhahran, Saudi Arabia. He spent four years at the university, learning the culture and traveling extensively. A highlight of his experience, he said, was a six-week tour he and his family took through the Middle East in a Volkswagen camper bus.

“We traveled on some of the very roads that the troops in Iraq are traveling on right now,” said Dr. Boston. “We broke down in Baghdad and had to get the camper fixed, and then went on to Turkey, Greece, Syria, and Jordan. It was a once-in-a-lifetime experience.”

Upon returning to the U.S. in 1974, Dr. Boston was invited to become an Associate Professor of Chemical Engineering at the University of Toledo. Three years later, he became the Associate Project Manager for the ASPEN Project at Massachusetts Institute of Technology. Funded jointly by the U.S. Department of Energy and more than 65 companies from the process industries worldwide, the ASPEN Project’s charter was to develop the “next generation” software system for computer-aided process engineering.

When the ASPEN Project was completed in 1981, Dr. Boston joined other key members of the project team in founding Aspen Technology, Inc. (AspenTech) to commercialize the ASPEN software developed at MIT. The company has grown from an eight-person start-up company to a successful public company with more than 2,000 employees.

Since its Initial Public Offering in 1994, the company has been transformed from a supplier of off-line modeling tools for computer-aided chemical engineering to the leading supplier of integrated systems for design, automation and management of process manufacturing plants.

Dr. Boston served as president of AspenTech from 1984 to 2001 and continues to serve the company in the role of Senior Corporate Advisor.

Dr. Boston attributes the opportunities he has had over the years in large measure to his educational experience and doctoral degree at Tulane University. “Having a PhD opened doors throughout my career that otherwise would have been closed to me,” he said. “Without the graduate education and the PhD, I never would have had the teaching opportunities in Saudi Arabia and the University of Toledo, and I probably would not have been considered to become a member of the ASPEN Project at MIT.”

As a gesture of his appreciation, Dr. Boston has recently established a charitable remainder unitrust that will fund the Joseph F. and Phyllis J. Boston Endowed Fund, which will be used to create a chair or a professorship in the Department of Chemical Engineering.

“Without the graduate education and the PhD, I never would have had the teaching opportunities in Saudi Arabia and the University of Toledo, and I probably would not have been considered to become a member of the ASPEN Project at MIT.”

Dr. Boston has recently established a charitable remainder unitrust that will fund the Joseph F. and Phyllis J. Boston Endowed Fund, which will be used to create a chair or a professorship in the Department of Chemical Engineering.

“This is a way I can give back to the institution that gave so much to me,” said Dr. Boston, who was the recipient of the Outstanding Alumnus Award from the Tulane School of Engineering in 1998. He now serves as Chair of the Chemical Engineering Department’s Advisory Board.

“I have come to know the department very well over the past three years and it is an excellent department,” he said. “It is constantly striving to be the best it can be, and that is what is most important to me. I hope my donation can help them with that goal.”
Graduate students of Dr. Glen Boyd gave presentations at local and international conferences last year. Hua Wang spoke about Intrusion behavior of a simulated water distribution system at rapid change in operating conditions at the AWWA National Conference in June.

In September, Johana Husserl, Ana Maria Ocampo and Jennifer Holland presented at the ASCE/ACI Louisiana Civil Engineering Conference and Show. Johana and Ana’s presentation covered Tools for predicting DNAPL removal from groundwater using naturally buoyant co-solvent flooding. Jennifer’s presented the Potential of advanced oxidation process (AOP) for simultaneous disinfection and polishing of drinking water.

The Society for Biomaterials Ophthalmology Special Interest Group awarded its first Student Recognition Award to Chris Wallace during the society’s annual meeting in Tampa, FL. A three member panel judged all ophthalmic student presentations – paper and poster – on scientific content, completeness of presentation and ability of the student to discuss his/her work. Chris was chosen the winner for his poster entitled Determination of Corneal Epithelial Cell Adhesion Strength to Novel Polymer Surfaces using a Jet Impingement Technique. Coauthors included Jingjing Bi, Kirk J. Bundy and Jean T. Jacob. A $250 cash prize is given to the winner of this award.

The Southeast Affiliate Research Committee of the American Heart Association awarded Russell Auger a two-year grant for his proposal, Mesenchymal Stem Cells as Angiogenic Cellular Vectors for Revascularizing the Heart. The award was funded for $36,000 in total costs.

Valmiki Sooklal, a mechanical engineering graduate student working with Dr. Michael Larson, presented the paper High Cycle Vibration Testing of BGA Packages at the IMECE 2002, held in New Orleans. Dr. Larson and another graduate student, Xia Liu, are coauthors of this paper.


Louise B. Lawson, a chemical engineering graduate student, is the latest recipient of the Louisiana Engineering Foundation’s Vincent A. Forte Graduate School Fellowship.

Her selection was based on her outstanding accomplishments and her desire to enter the teaching profession in the field of engineering.

Louise entered Tulane Engineering graduate studies in the fall of 2000 as a 4-year Board of Regents fellow. Her research, under the direction of Dr. Kyriakos Papadopoulos, includes water-in-oil-in-water double-emulsions for targeted drug delivery. A recent article authored by Louise along with C.H. Villa, Y. Li and Dr. Papadopoulos entitled Internal Coalescence as a Mechanism of Instability in Water-in-Oil-in-Water Double-Emulsion Globules can be found in Langmuir, Volume 19(2), pp.244-249.
Supporting the Minority Faculty of Tomorrow

No one understands the subtle consequences of ethnic and racial homogeneity better than those who must function outside its parameters. In academia, minority faculty members have long known that the time they spend as teachers and scholars is regularly taxed by a workload not officially listed in the job description—being “available.”

“It’s not something everyone else is doing, but everyone is thankful you’re doing it,” says Calvin Mackie, associate professor of mechanical engineering. With so few African Americans on faculty, Mackie must make himself available to African-American and other minority students who need counseling or just want to talk. When a diversity-related program or committee is being planned, Mackie is invariably recruited.

“As minority faculty members this is what we do,” he says, “because it must be done.”

And it will always be so until a “critical mass” of members from underrepresented minority groups are on university faculties. Which is why Mackie is optimistic about Tulane’s participation in a new program to increase diversity in graduate education and, ultimately, the professoriat in Louisiana.

Mackie, along with Hank Bart, associate professor of ecology and evolutionary biology, and Lester Lefton, provost and chief academic officer, are recipients of a $2.5 million National Science Foundation grant that will be used to coordinate a team of Louisiana universities to further the education of minority science students.

The Graduate Alliance for Education in Louisiana comprises three historically black Louisiana universities and two Carnegie Research I universities. Mackie and Bart refer to the first group, which includes Dillard, Xavier and Southern universities, as “feeder” schools and the latter group, composed of Tulane and Louisiana State University, as “finishing” schools.

“We want to tap into those feeder schools and recruit the best students into our graduate programs,” says Bart, who notes that, with the exception of Xavier’s pharmacology program and Southern’s environmental science program, graduate programs are in short supply at Louisiana’s historically black universities.

In many respects, the funding will help extend efforts already being made on campus through the Louisiana Alliance for Minority Participation, a program created in 1995 with funding from the NSF and the Louisiana Board of Regents to increase the number of minority students receiving undergraduate degrees in science, technology, engineering and math. Bart and Mackie are the co-coordinators of that program on campus (see the September 1996 issue of Inside Tulane for a story on LAMP).

Mackie sees the two programs coexisting to “pipeline” qualified students from high school graduation to their first faculty positions.

In keeping with that, the NSF grant will be used to set up and staff an office on campus to coordinate a panoply of initiatives. Beginning in January, the work will begin to recruit minority students into Tulane’s science, engineering and math graduate programs. The next step will be to offer academic mentoring and social support to those students who are already here. Stipends and other financial incentives also will be made available.

By next semester, Mackie and Bart expect to see “peer survival sessions” fostering dialogue among minority graduate students who often feel isolated. At the same time, they hope to create a dialogue with non-minority faculty members on the needs of minority students coming to a predominantly white university.

“We realize that for this to be a success we need to have the involvement of all the faculty,” says Mackie.

Of that number, minority groups are represented by only one African-American student.

“She does feel isolated,” says Bart. “I think if we had three or four minority students she would feel more comfortable.”

And finding a comfort zone is important, says Mackie, who suggests that because graduate school has not historically been an option for minorities, “these students may not like the culture of graduate schools and shy away from them.”

Or, says Mackie, many qualified students with an interest in science will opt out of a career in academics, choosing lucrative professions in engineering and medicine instead.

“Part of the rationale for this funding is that minority populations are not being served because we are not recruiting them into our faculties,” says Bart. “The needs of minority populations would be better served if we were. We need to have the perspective of minority scholars and researchers in terms of developing science policy and agenda.”

Article and photo used courtesy of Inside Tulane.
Article by Nick Marinello.
Second Annual Outstanding Researcher Awards

On November 22, Frederick Petry, Professor of Computer Science, and Natalia Trayanova, Professor of Biomedical Engineering, were presented with the 2002 Outstanding Researcher Award.

Recognizing the need to honor deserving scholars and to increase the visibility of the school’s research activity, the Outstanding Researcher Award was established in 2001 by the faculty of the School of Engineering.

The award is given according to the following criteria:

• The quality and quantity of publications, with particular emphasis given to archival publications, research treatises and citations of published work.
• The total amount of research funding.
• The contributions to the mission of the university in graduate education, training and mentoring, including graduate students and post-doctoral scholars.
• National and international recognition as evidenced by honors and awards, journal editorships and participation in editorial boards, national and international scientific committees and boards, and professional patents.

Presentations were given by both award recipients, Dr. Petry, “Designing Information Systems for Real World Uncertainty” and Dr. Trayanova, “Cardiac Defibrillation: Virtually Shocking.”

They were honored at a reception immediately following the award ceremony.

President’s Corner

The Society of Tulane Engineers has made significant strides in the past year. We are expanding the activities of STE, and are looking forward to interacting with as many Tulane engineering alumni as possible. STE is continuing the success of the Engineering Forum in 2002 with the Tulane Engineering Forum 2003. We are currently in the planning stages of the 2003 Forum. Anyone interested in participating or sponsoring the Tulane Engineering Forum, please contact me or the Tulane Engineering Dean’s office.

STE, with the help and support of Dean Altiero, has organized the STE Board of Past Presidents. The board’s goal is to support the work of STE. I am pleased with the support and enthusiasm this board has brought to STE and I am looking forward to becoming a member at the end of my tenure as STE President.

STE currently has three major events each year. These are the Engineers Awards Banquet, this year set for April 15, the Tulane Engineering Forum, set for September 26, and the homecoming meeting in the Fall.

We are embarking on a new project within STE. This project titled “Student Mentoring” will bring alumni and students together to strengthen first year engineering students’ perspective and experience regarding engineering as a profession. The cornerstone of this project is the facility visit.

Engineering freshmen will receive a first hand view of an engineering environment and experience the “day in the life” of an engineer. Companies or individuals interested in participating in this program may contact me or the Tulane Engineering Dean’s office.

I have met many of the alumni, plus faculty and staff of the Engineering School and I would like to thank all of you for your support through this year.

Please visit www.eng.tulane.edu to explore additional information regarding the Tulane School of Engineering.

Best Regards,

David Gereighty
2002-2003 STE Officers

PRESIDENT
David Gereighty
(ME ’83)
davidg@emi-marine.com

VICE PRESIDENT
Bob Kahl
(CE ’79)
Robert.Kahl@spr.doe.gov

TREASURER
Dave Kanger
(CE ’95, MsE ’96)
DAKanger@modjeski.com

SECRETARY
Celia Blum
(CE ’84)
celia.blum@maf.nasa.gov

Alumni News continued...

1980’s

Dr. Ken Ford (PhD Computer Science ’87) has been nominated by President Bush to serve as a member of the National Science Board, which is the governing board of the National Science Foundation. Dr. Ford is currently the director of the University of West Florida Institute for Human and Machine Cognition.

Debra Lombard (CE ’87) lives in Connecticut with her 10-year old daughter. She is a sustainable design consultant with the RETEC Group in New Haven, and works with several universities and large corporations, assisting them with making their new and existing buildings more environmentally sustainable.

She is also on the education committee of CT Green Building Council and serves on the Board of Directors for the ADPSR-ny.

1990’s

Dr. Shawn P. Gross (CE ’93) is an assistant professor in the department of civil and environmental engineering at Villanova University in PA.

Dennis G. Lambert, P.E.
(BS Engr. ’96, MS Engr. ’00
[Environmental] serves on the National Council of Examiners for Engineering and Surveying, Environmental Engineering P.E. Exam Committee. He also writes articles for the Licensure Exchange, an official NCEES publication for the exchange of information, opinions, and ideas regarding the licensure of professional engineers and land surveyors.

Ian C. Barras (EE ’99, MS ’02) began Loyola University of New Orleans Law School in the fall of 2002. He and his wife are expecting a child in early April 2003.

Let us know!
If you have alumni information you’d like to share, please submit it in the attached envelope, or email Barbara Hogue in the Dean’s office: bhogue@tulane.edu.