Capital GAINS
Alumni Stake Claims in Washington, D.C.
UAB’s International Studies program has been redesigned to be more student-friendly, with course selections ranging from Asian culture to foreign literature in translation.

“Citizens of the World”—page 16

Bright ideas define the work of graphic designer Erin Wright, associate chair of the Department of Art and Art History.

“Design on a Dime”—page 24

“It’s important that the next generation of scientists and engineers have role models who are teachers, research advisors, and mentors.”

Jeanette Doeller, Ph.D., associate dean of the graduate school—page 14

“I’m intrigued by the tendency of authors, especially in Spanish America, to either idolize or demonize Sáenz—to portray her as a heroine or a bad girl.”

Pamela Murray, associate professor of history—page 16

On the cover: UAB School of Social and Behavioral Sciences alumnus Mason Beale, Ph.D. Photograph by Steve Wood
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Erin Wright, Associate Professor of Graphic Design

THE PROFESSOR’S PUZZLER
Broadcasting Major Named ‘Noxema Girl’

MIA RUTLEDGE was riding in the back seat of her dad’s car on a routine Monday morning when her cell phone rang. It was a call that would change her life.

“The call was from a Cosmopolitan magazine representative who told me I had been chosen as the new Noxema Girl. I just started screaming,” recalls the 22-year-old UAB broadcasting major. “I can’t say what took place after that, other than sheer pandemonium. I still can’t believe it. I was thrilled just to be one of three finalists, because I was able to visit New York for the first time. To actually be chosen as the new Noxema Girl is truly amazing.”

As the new face of the famous skin cream, Rutledge wins a one-year, $25,000 Ford Modeling contract, a walk-on role on a CBS soap opera, and an appearance in a “Noxema Girl Search” magazine ad. Rutledge’s senior year at UAB has been put on hold; however, she believes her broadcasting and theater classes have already paid off.

Philosophy Student Wins Fellowship

PRANATHI LINGAM, an Honors student, 2004 outstanding philosophy student, and a student in UAB’s Early Medical School Admissions Program, has been named a 2005-06 Mabelle Arole International Fellow. The John Snow International Research and Training and American Medical School Association founded the Mabelle Arole Fellowship in 2001 to honor Dr. Mabelle Arole, who died in 1999. Arole was noted for her dedication to the health of women and children. Lingam will study in Jamkhed, India, for a year.

Psychologist Wins Outstanding Achievement Award

UAB professor of psychology Timothy R. Elliott, Ph.D., has received the Dorothy Booz Black Award for Outstanding Achievement in Counseling Health Psychology. The Society of Counseling Psychology at the American Psychological Association (APA) presented the award to Elliott at its recent annual convention in Honolulu. The award is given to encourage and reward outstanding research and practice in counseling health psychology. It includes a cash prize.

At the convention, Elliott also was named to a five-year term, beginning in 2005, as the incoming editor of the journal Rehabilitation Psychology, published by the APA.

Elliott’s research focuses on factors that influence personal and family adjustments following chronic illness, disability, and stress. He also studies the efficacy of home-based problem-solving interventions for family caregivers of individuals with spinal cord injuries, cerebral palsy, and brain injuries.

UAB Receives NSF Nanoscale Grant

PHYSICS PROFESSOR and University Scholar Yogesh K. Vohra, Ph.D., and his research team have received a four-year, $1.35-million grant from the National Science Foundation (NSF) to fund the UAB Nanoscale Interdisciplinary Research Team to develop the next generation of hip- and knee- replacement joints.

“Right now, most implants are made of conventional metals and polymers,” Vohra says. “The new nanostructured, metalloceramic implants will be more wear-resistant and cell-friendly than the biomedical implants currently offered. Life expectancy of the new materials is expected to be 30 to 40 years, versus about 10 years in current implants.”

The interdisciplinary team brings together researchers from the schools of Natural Science and Mathematics, Engineering, and Dentistry and the Department of Joint Health Sciences. The team, under Vohra’s direction, also includes Alan W. Eberhardt, Ph.D., biomedical engineering; Jack E. Lemons, Ph.D., professor of dentistry; Shane A. Catledge, Ph.D., physics research assistant professor; and Susan L. Bellis, Ph.D., assistant professor of physiology and biophysics.
ASSOCIATE PROFESSOR Steven H. Haeberle, Ph.D., who teaches American government, empirical methodology, and public-policy analysis, has been named chair of the Department of Government.

Haeberle’s appointment became effective June 1. He replaces James D. Slack, Ph.D., who has returned to teaching.

Haeberle has been a member of the UAB faculty since 1982. He was interim chairman for the department from 1991 to 1993.

He is a 1975 graduate of Marshall University and earned two master’s degrees in political science and public policy from Duke University in 1978 and 1979, respectively, Haeberle earned his doctorate in political science from Duke University in 1981.

Robots R Us

HIGH-SCHOOL INTERNS LEARN PROGRAMMING BASICS

IF YOU’RE A high-school student fascinated by robots and computers, then you might want to check out this Web site to find out more about the UAB Department of Computer and Information Sciences’ (CIS) “robot camps.” [www.cis.uab.edu/heritage/]

The program was initiated this summer in conjunction with the Heritage Center, with plans to conduct future camps on a monthly basis at the Bessemer Civic Center.

Students participating in the inaugural program were Matthew Ferguson, a senior at the Alabama School of Fine Arts, and Erik Scott, a senior at Jess Lanier High School. Both students were mentored by Jeffrey G. Gray, Ph.D., CIS assistant professor.

“The projects we worked on this summer focused on robotic control systems,” Gray says. “The students were taught the Java programming language and used Java to create robotic solutions to six problems. Examples of the projects were Kick The Can, Balloon Buster, Sumo Wrestler, Maze Exploration, Homing Pigeon, and Simon Says.”

The Heritage Center has a successful history of matching high-school students with UAB mentors, says Gray, who recently was awarded a UAB Faculty Development grant to expand the effort next year.

Powell Named Interim Chair

LARRY POWELL, Ph.D., has been named interim chair of the Department of Communication Studies. Powell, who joined the UAB faculty in 1998, steps in for Mark L. Hickson III, Ph.D., who has returned to teaching and research. Powell’s research has focused on polling and political communication. He has published more than 60 journal articles and has authored and co-authored several books. Powell has been ranked as one of the top 100 communication researchers by the Association of Communication Administrators.
AFTER MEETING OVER A LONG AND SUMPTUOUS DINNER, Thomas Jefferson and Alexander Hamilton shook hands, and the deal was done: America would have its first permanent capital city. The year was 1790, and plans called for the new city to be built on the Potomac River between Maryland and Virginia. It would be named after the country’s first president.

Today, Washington, D.C., is home to world-class museums and libraries, resplendent gardens and parks, acres of historic monuments that lure tourists from around the globe, and a thriving arts-and-culture scene. That’s the upside.

The downside of living at the center of government, according to the increasing number of UAB alumni of the School of Social and Behavioral Sciences who are making their homes and careers in the District of Columbia, includes nightmarish traffic, a high cost of living, a frantic pace of life, the recent cicada invasion, and—most disturbing of all—an egregious lack of decent barbecue. But it’s a tradeoff they’re willing to live with.

OPEN SPACES, CLEAR VIEWS

“There’s no place like D.C. in the springtime,” says Amos C. Townsend (B.S., political science, 1975, M.A., urban affairs, 1978), a Birmingham native who now works as a project manager for the Internal Revenue Service. “The city has no skyscrapers because of the height...
limitations on buildings, so the sunshine is never blocked. There’s just an open, uncluttered feeling that you don’t get in other big cities.”

For Townsend, the road to the capital began in UAB’s Ullman Building. He vividly remembers the afternoon he was waiting in a hallway to meet with professor Ed Lamonte when he noticed a poster promoting the Presidential Management Intern Program, a creation of former president Jimmy Carter. “A career in government wasn’t something I had envisioned, but it seemed like a great opportunity,” Townsend recalls.

With Lamonte’s encouragement, Townsend became one of about a thousand applicants for the 250 positions. After several rounds of interviews and assessments he was offered two jobs, one at the Kennedy Space Flight Center in Florida and the other at the IRS. “That was 1978,” he says. “I did some research on both jobs, decided to go with the IRS, and I’ve been here ever since.”

Townsend now works at the center of Washington’s information-technology boom, serving as an IRS liaison with IT vendors, developers, and testers. That the IRS computerization project is broad in scope is an understatement, he says. “As far as we know, there’s no other automation effort that compares to this one, in terms of size and complexity.” When things go perfectly, Townsend leaves his office at 5 p.m., but he’s no stranger to long conference calls on nights and weekends to ensure that problems don’t knock the project off schedule.

9/11 CHANGED EVERYTHING

Unlike Townsend, Tammi Reilly (B.A., political science, 1988, M.S., justice sciences), a senior special agent with the U.S. Customs Service, says she “knew from day one” that she wanted to work in Washington, even though she left her heart in Birmingham. During her second year of graduate school, Reilly took a co-op job with Customs. After graduation, she was hired by the Nashville office, where she worked as an investigator for seven years before receiving a promotion that took her to the D.C. headquarters.

Reilly’s job responsibilities have changed dramatically in the past three years. “Before 9/11, the primary role of the Customs Service was to keep the borders safe, but now we’re involved in domestic security on a much broader scale,” she says. As a manager at the Service’s headquarters, her office has oversight of some 800 field locations and writes policy on emergency preparedness and continuity of federal operations. “My sole function is to help make sure that our 40,000 employees are prepared if there’s another 9/11,” she says.

As for the attack’s effect on daily life in D.C., Reilly says it turned up the pressure several notches in a city that was high-pressure to begin with. “Most of the people here are very determined, Type-A personalities. They’re focused, intense, and constantly juggling multiple issues. Sometimes it makes me wish I was back on the Warrior River, watching butterflies and lightning bugs.

“Incidentally,” she adds with a laugh, “there have to be more badges here, per capita, than in any other city in the world.”

FROM THE MUNDANE TO THE SUBLIME

“It was culture shock, absolutely,” agrees Ann Bridges Steely (M.P.A., 1980), who grew up in Homewood, Alabama, and who was working happily in San Antonio, Texas, four years ago when she was offered a major career advancement in D.C. ‘Today, her job title alone fills up most of an identification badge: Steely is Associate Director, Division of Administrative Administration, Services Acquisition Services Branch, Federal Deposit Insurance Corporation. Translated into plain English, Steely says she does “high-falutin’ financial-contracting type stuff, ranging from the mundane to the sublime.” Her office is responsible for negotiating federal contracts with companies and individuals, for services ranging from economic advice and janitorial work to constructing an FDIC office building.

“People tend to think of Virginia as a place of Southern hospitality and graciousness, but in reality it’s much more fast-paced,” Steely says. “It’s not widely known, but the government is no longer the area’s largest employer. These days, it’s information technology that drives the economic engine. The Dulles Corridor, here, is becoming known as the ‘Silicon Valley of the East.’

“The government certainly drives much of that growth, but many of the people working in information technology are private contractors or work for non-profit organization or professional groups. It all adds up to an abundance of professional opportunities. The job market is wonderful. And if you’re willing to change your commute, it’s relatively easy to move between agencies and gain a lot of diverse experiences.”
harm’s way on September 11. He was working at his Pentagon desk when

Beale says. But such plenitude can also be frustrating for an avid historian. As senior budget analyst in the Office of the Secretary of Defense, worked for six years in the Pentagon before moving to his current position as assistant director at the Federal Deposit Insurance Corporation, ranks Washington, D.C., the Nation’s Capital, among his six academic degrees. Like Townsend, Beale got his first government job through the Presidential Management Intern Program. He

When I first moved here,” he adds, “somebody pointed out to me that if you spent 40 hours each week at the Smithsonian, and looked at each display for two minutes, it would take you a couple of years to see it all.”

But Beale’s proximity to the seat of government also put him in harm’s way on September 11. He was working at his Pentagon desk when hijacked jetliner Flight 77 crashed into a section of the building 200 yards away. “We were well prepared for evacuation,” he recalls, “for fire alarms and so forth. So I didn’t realize what was happening until I left the building, and walked through the area where they were doing triage for the injured.” In addition to the loss of his Defense Department colleagues, one of Beale’s acquaintances was a passenger on the ill-fated plane. As for returning to work in the aftermath of the tragedy, Beale says, “You just don’t think about it. You’ve got to trust in the systems we have to prevent that happening again, and get on with what you’re doing.”

MANAGING THE METROPOLIS

As a city, Washington, D.C., is best classified as an official anomaly. Its population (about 580,000—not including surrounding communities) is greater than that of the entire state of Wyoming, but D.C. is the only city in the U.S. that’s not a part of any state. Technically, it’s a federally managed district with limited self-rule.

Beale adds. But such plenitude can also be frustrating for an avid historian. In every direction you look, there are historic landmarks that most people only get to see on the news or in travel books. The variety of entertainment, parks, shopping, and restaurants is amazing. And just by walking around, you get to see and meet lots of famous people.”

Among its other attractions, Washington is a mecca for history buffs—such as UAB alumnus Mason Beale, Ph.D. (M.P.A., 1982), who includes history among his six academic degrees. Like Townsend, Beale got his first government job through the Presidential Management Intern Program. He worked for six years in the Pentagon before moving to his current position as senior budget analyst in the Office of the Secretary of Defense.

“The monuments and the National Mall make for really striking scenery,” Beale says. But such plenitude can also be frustrating for an avid historian. “When I first moved here,” he adds, “somebody pointed out to me that if you spent 40 hours each week at the Smithsonian, and looked at each display for two minutes, it would take you a couple of years to see it all.”

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ART, MUSIC, FOOD, HISTORY

Like some other UAB alumni, Steely ranks D.C.’s cultural offerings as one of the area’s biggest draws: “Within easy access, you have the Smithsonian, the National Gallery, the Kennedy Center, the symphony, and the opera,” she says. “Then there’s the theatre, where you can see anything you could want—from Shakespeare to the most avant-garde plays. Not to mention great restaurants. The diversity of cultural offerings is very satisfying. And many of them are either free or very low-cost.”

“Boredom is not an option here,” Townsend agrees. “In every direction you look, there are historic landmarks that most people only get to see on the news or in travel books. The variety of entertainment, parks, shopping, and restaurants is amazing. And just by walking around, you get to see and meet lots of famous people.”

Along the way, the English major worked on the Birmingham mayoral campaign of David Vann, and “to my great shock, he actually won.” At the tender age of 21, Carlee was appointed an assistant to the mayor and found that working in the inner-sanctum of city government was a life-changing experience.

“David Vann had a profound effect on my life,” Carlee says. “He was one of those rare people who did what he thought was right without regard to the political consequences. Morally and ethically, he just could not be swayed. To this day, I try to follow the example of his integrity.”

Just a few classes away from earning his master’s degree, Carlee began learning about city management. After graduation, he was offered a job as aide to a member of Congress, and eagerly moved to Washington in his 1975 Mercury Bobcat. “The job lasted a month,” Carlee recalls, “which was at least 30 days too long.”

Through a process he calls “circumstance and desperation,” he found work in Arlington’s budget office and, over the next two decades, gradually worked his way through nearly every county agency. Little did he know when he took the top job in 2001 that his baptism under fire was just ahead.

“I had nearly six months experience under my belt when the Pentagon was attacked on 9/11,” says Carlee. “Arlington had initial responsibility for the Pentagon, and our fire department commanded the response team for
the next 10 days. It was an incredible time.” Since then, his duties have included testifying as part of the 9/11 Commission’s staff report, conducting a detailed debriefing on the Pentagon events, and hosting a conference for 1,000 local governments from around the U.S. to share lessons Arlington learned from responding to the terrorist attack.

After 9/11 came an unprecedented string of crises for the D.C. area: an anthrax attack on government offices, Hurricane Isabel, and the sniper shootings. “We’ve had more emergencies here during the last three years than in the past 50 years combined,” Carlee reflects now. “Being new in the job, of course I was thinking about valuable professional experience it all was. But at another level I had to wonder, ‘Gosh, have I jinxed this place?’”

**THE BEST OF BOTH WORLDS**

Donna Morere (Ph.D., psychology, 1989, M.A., psychology, 1987), on the other hand, is one of the few UAB expatriates in Washington who doesn’t work for the government. A native of Texas, she eventually moved to Alabama, where her grandparents lived, and studied psychology at UAB. She became fascinated with the psychological aspects of deafness and today teaches in the doctoral program in clinical psychology at renowned Gallaudet University.

“Growing up, I never pictured myself living in Washington, D.C.,” Morere says now. “But since Gallaudet is the world’s only four-year liberal arts college for the deaf, it was natural that I would gravitate here.”

Morere’s specialty is the field of psychological assessment, which she says offers “the best of both worlds” for a scholar: “People are endlessly fascinating. Not only do I interact with interesting people, but I also get to play detective and try to figure out what’s going on in their heads.”

The current boom in audiovisual technology has been a godsend for teachers of the sensory-impaired, Morere says. She makes particular use of the PowerPoint format, as well as an “electronic blackboard,” in her class presentations. “We use sign language as we teach, and we obviously try to convey as much information visually as we can. But the standards and content of the courses are exactly the same as for hearing students.” The graduate classes Morere teaches include both deaf and hearing students.

**HANKERIN’ FOR BARBECUE**

Despite the challenges and excitement of their current jobs, most of the alumni admit to occasional bouts of homesickness, and some might retire to Alabama once their working years are over.

For Carlee, homesickness for Alabama has the scent of barbecue and hot dogs. “There’s nothing up here remotely like Golden Rule Barbecue,” he says. “And there are no hotdog stands like Pete’s Famous; their sauce is second to none.” Carlee’s mother, brother, and aunt and uncle still live in Birmingham, but he’s not able to visit them as much as he’d like. More frequently, he says, they travel to see him in D.C.

“My wife is from Baltimore,” Townsend says, “and I’ll be retiring long before she does, so there’s no telling where we’ll end up.”

Beale, though, already has his sights on either Alabama or the Florida Panhandle—particularly since he gained another Birmingham connection this summer, when he married a fellow student from his high-school alma mater of West End.

For Morere and Reilly, the future is more complicated. While teaching at Gallaudet, Morere had her first child, a son, who was born deaf. “He’s 12 now and doing great,” she says. “I’ll want to be in a place that offers him the best opportunities.”

Tammi Reilly’s life took another turn as well, when she adopted a daughter who’s now seven. “I came here for a career, and then decided to have a family,” Reilly says. “That happens a lot in D.C., because the average age of parents is somewhat older than most places. Adopting has been a real blessing for me. I used to be so focused on my job that I forgot to stop and smell the roses. Now that I have my daughter, I don’t forget.”
By Dale Short

The new offering will be tailor-made for what scholars are describing as today’s “visual culture,” and Communication Studies professor Jean Bodon says it will help build on existing momentum at the school. “The students in our department make about 25 short films a year,” according to Bodon. “But what we’ve lacked, up until now, is some kind of academic profile to bring our folks together with students in anthropology, sociology, theatre, and so on. This will be a wonderful opportunity for people with very different backgrounds to get together and brainstorm creatively about making films.”

And the Winner Is...

A growing number of UAB’s student films fall into the category of award-winners. A team effort by Bo Hughins and Neil Kirkpatrick, both seniors...
in fine arts, was selected as Best Short Documentary in Birmingham’s 2004 Sidewalk Moving Picture Festival. Hughins and Kirkpatrick took an arcane topic—the subculture of people who study the graffiti painted on passing railroad cars—and turned it into a six-minute feature titled “Benching: The Art of Watching Trains,” which took the top prize against competing films from as far away as New York City and The Netherlands.

Marc Powers, chair of the Department of Theatre, says the new program is a boon for his students as well: “A huge number of students who study theatre are equally interested, sometimes more interested, in film,” he says. “The two industries used to be very separate, but that’s no longer the case. People working in the field tend to go back and forth between the two mediums—whether as actors, directors, designers, writers, technicians, or what-have-you—so there’s a lot of crossover.

“One thing we’re doing with the new minor is to provide students the kinds of experiences that can broaden their career possibilities. We’re also taking advantage of the wealth of opportunities that exist, both at UAB and in the Birmingham area, where film is concerned. There’s a lot going on right now, and this will give us a better umbrella for it, stronger coordination, and better advocacy for our students.”

Building on what’s already in place is a key aspect of the new effort, faculty members say. Courses for the minor are drawn from existing offerings, and students’ coursework covers three primary areas: critical and theoretical awareness, technical application, and creative concepts.

“In a way,” says Powers, “students were already doing the equivalent of a minor in film through courses they took, and work they did, on their own. Yet their transcripts wouldn’t show that concentrated focus among their experiences unless somebody was reading the transcript very carefully. Now, if we want to put together a film festival of student work, or help students get resources to make a film, we can do that with greater ease because the processes are becoming formalized.”

**All-Star Cast**

Janice Kluge, associate professor of art, has volunteered to teach film-related classes in the past, but this is the first year she’ll have one in her official course load. “It’s a very exciting project,” says Kluge, “because of its interdisciplinary nature and the team-teaching involved. Our art students are learning a lot from working with anthropology and students in the Honors Program.

“Having the new studio facility available makes the production process a lot more efficient. It’s a challenging and stimulating course, not only for the students but for the instructors who teach it.”

**Cinema Verite**

Eight short films by students in the course “Ethnographic Filmmaking,” offered jointly by the anthropology and art departments, the UAB Center for Urban Affairs, and the UAB Honors Program, were screened as part of the McWane Center’s 2004 Digital City Films Series. The subjects (including Hughins’s and Kirkpatrick’s “Benching”) give some idea of the wide range of interests and ideas that are being incubated by the new mix of academic disciplines.

In “Meet Me at the Alabama,” by Alan Franks and Ginny Humber, volunteers recount how they saved the historic Alabama Theatre from destruction, and comment on the importance of preserving old buildings. Education and family are the themes of both “Growing Up at Home,” by Leslie Lambert and Jacqueline Homm, which chronicles the ups and downs of a Hoover little league baseball team, and Alan Barton’s and Christina Cooley’s effort, “A Separate Place,” about a local family’s choice to homeschool their children.

Three very different aspects of arts and entertainment served as subjects for other student documentarians: clowning, belly dancing, and hip-hop. “The Magic City’s Clowns,” by Lindsay Mouyal and Jen Poyayadou, profiles a group that uses its talents to minister to the sick; “A Tribal Fusion,” by Stephanie Kahalley and Lesley Wheatley, examines the popularity in Birmingham of the ancient art of belly dancing; “The Big Six,” by Rachel Corona and Miles Keith, is about a local hip-hop group trying to get their music noticed. Ghosts and religion share top billing in Marcia DeFiore’s and Charles Kelley’s documentary “Abraham’s Bosom,” about the activities of a faith-based ghost-hunting group.

**HD Resolution**

Film students at UAB may also get a chance to be on the cutting edge of video technology, if a current initiative by Bodon and Arts and Humanities dean Bert Brouwer pans out. High-definition video, or HD, is just now becoming widely available for television consumers, and UAB is talking with Sony and other industry sources about the possibility of the university becoming a showcase for the new technology, whose enhanced visual resolution further closes the gap between video and traditional film.

In the meantime, the school’s traditional video facilities will get an increasing workout as the new interdisciplinary program gains momentum. “In the larger picture,” says Bodon, “our courses are a very good thing for the State of Alabama, because of the high demand from young people wanting to study film. It’s wonderful that we can bring those people, and their ideas, together here at UAB.”
THE TINY WORLD of nano-sized particles has been the primary focus of research by Lowell Wenger, Ph.D., but that doesn't prevent him from being able to see the big picture.

Now completing his first year as dean of UAB’s School of Natural Sciences and Mathematics, Wenger envisions a growing role for the contributions his departments and their students can make to other disciplines at UAB and beyond.

“I see overlapping circles of opportunity,” Wenger says. “The natural sciences, mathematics, engineering, and medicine all fit together. In chemistry and physics we’re developing biomaterials, while mathematics and the computational sciences create material simulations. These efforts then allow engineering and medical teams to use these materials for providing the technology for better health care, which improves the quality of life for everyone.

“But there are research and real-world opportunities in addition to medicine,” Wenger says, “and UAB science and mathematics graduates are involved in scientific endeavors that impact the lives of people everywhere in many different ways.”

Creating Environments of Excellence

Wenger says his top priority as dean is to strengthen educational and research opportunities for science and mathematics students. “We want to create an environment of excellence and build on the school’s past successes,” Wenger says. “To achieve that, we’re focusing our resources where we can accomplish the greatest results, with an eye toward how we can support our departments and make the school a good fit with UAB as a whole. There are so many new and developing needs in our nation and throughout the world that we want to make sure our students are ready to meet evolving real-world challenges.”

Big Results on a Small Scale

One example of meeting growing world needs can be found in Wenger’s own research. After earning his bachelor’s and master’s degrees in physics and a doctorate in solid-state physics at Purdue University, Wenger taught at Wayne State University in Michigan, where he was chair of the Department of Physics and Astronomy.

His research speciality is in experimental condensed-matter and low-temperature physics, in particular magnetic and superconducting materials. During the past decade, the demand for increased data storage capacity has grown, pushing the limits of the size of a magnetic bit to smaller and smaller sizes. However, scientists such as Wenger were working at the ultra-small level of nanoparticles to see if data could be stored in these nanostructures and remain stable.

Specifically, Wenger investigated the unusual magnetic properties of nanowire structures. Data-storage technology eventually went in a different direction, but what he learned about the magnetic behavior of nanostructures revealed new possibilities for other applications.

“Research is delving into ever-smaller dimensions, approaching the molecular level, so now we’re working on the same scale as biologists,” Wenger says. “Understanding nanostructures and harnessing their potential to meet a wide range of engineering, medical, and energy needs is now a major thrust of scientific investigation at UAB and throughout the world.”

Wenger’s present work involves the synthesis and understanding of the underlying physics of ferromagnetic nanoparticles, which have possible biomedical applications.

“If we could attach a magnetic nanoparticle to a biomolecule, we might one day be able to improve magnetic resonance imaging and drug delivery, as well as manipulate the biomolecules,” Wenger says. “This technology could also be used to build sensors to monitor and quantify biological activity within the human body. The materials end of this approach is still challenging. We need uniformity, biocompatibility, and the largest magnetic response. That’s where we have work to do.”

On Par with Birmingham

Wenger says he is very pleased with the caliber of the university and its faculty. He and his wife also are enjoying life in Birmingham. “It’s great working in a stimulating, cosmopolitan university environment. Although I miss the Red Wings hockey games, I like being able to play golf year-round.”

In the big picture, it is a little thing, perhaps. But if there’s anyone who can appreciate how much little things can mean, it’s Lowell Wenger.

Laura Freeman

SYNTHESIS AND CONSENSUS

Dean Fuses Science and Leadership Skills
WHEN LEX OVERSTEEGEN, PH.D., talks about the UAB Department of Mathematics he displays the enthusiasm and exuberance of a proud and excited father. And in some ways, that's exactly what he is. Oversteegen has been a faculty member in the department since 1980 and was chair of the department from 1987 to 1997. “In the early 1980s, there was a small, core group of mathematics faculty who were intent on building up the department,” he says. “Since then, we’ve exclusively hired people who are not only very good mathematicians and professors, but who also have enthusiasm and energy.”

Oversteegen says the department’s goal is to establish one of the top mathematics programs in the country and to attract exceptional students with a strong desire to learn. “During the past five or six years, we have ranked consistently in the top five in the Southeast in terms of percentage of faculty supported by research grants. Even nationwide we did pretty well. We were ranked 40th last year, and we just moved up to 27th this year—which is not the only measure of a department, but it is a very significant one. We’re very proud of this improved ranking.” No other university in Alabama even made the list.

**Formula for Success**

The secret of the department’s success, Oversteegen says, is a winning combination of outstanding faculty members, excellent students, top-notch mathematics research, and a unique and highly competitive curriculum—all infused with an atmosphere of fun and excitement. “We have large research groups in specific areas—mathematical physics, differential equations, and dynamical systems—that have enabled us to attract very good people. It’s fun to be around people with whom you can communicate about your field, who conduct research similar to yours, and who let you join their team. The department is such a fun, exciting environment that it attracts quality professionals to a larger degree than anyone would have guessed.”

Oversteegen is the lead investigator of a new grant from the National Science Foundation (NSF) that will support and expand the mathematics department’s unique Mathematics Fast-Track program. “The Fast-Track program targets incoming freshmen,” he says, “and the goal is to take them though a master’s degree program in mathematics within five years—four years if they take summer courses. These students work with faculty members from the first semester they come to UAB, and we try to engage them in research much earlier than normal. That really advances their mathematical maturity and makes it possible for them to take higher-level courses. They’re also allotted office space and participate in weekly socials. The whole program is very student oriented.”

A series of seminars allows Fast-Track students to participate as members of a team, learn writing and communication skills, and talk with guest speakers who have been successful in careers outside of academia. “It’s not written in stone that students have to become mathematicians,” Oversteegen says. “Many of our students enter medical school or law or engineering.” A quick scan of the department’s alumni list shows graduates of the Fast-Track program presently attending medical, law, and graduate schools at such prestigious institutions as Princeton, Duke, and Cornell.

**Money for Math**

The new NSF grant, called Mentoring through Critical Transition Points, will enable the Fast-Track program to provide fellowships for approximately 30 undergraduate students and will pay stipends of $6,500 to $9,000 per year. A number of graduate students will also be supported at a level of $22,500 per year, and these students will have reduced teaching responsibilities. The fellowships are awarded based on achievement, rather than financial need.

“We want good students,” says Oversteegen. “That’s something nice for students to know—if you are good, we’ll try to work with you, and we want you to learn as much math as you can. We have the money, we have the faculty, and we have a program that is already working.”

Oversteegen smiles, again reflecting the fun and enthusiasm that he believes defines the mathematics department: “We hope that everybody who goes through the Fast-Track program will look back and say, ‘That was a great time. I really enjoyed learning a bunch of math, and there were a lot of fantastic people around me.’ If we achieve that, I think we will have won something. That’s what we’re shooting for.”

For more information, call (205) 934-2154.

Michael L. Miller, Ph.D.
The Art of Engineering

Art student Dustan Creech and engineering student Andrea Rossillon collaborated on a three-dimensional design that would serve as a "gateway" sculpture to the UAB campus.

"Gateway" Sculpture Forges Unlikely Alliance

IT COULD BE CALLED "Meeting of the Minds" or "Pathways to Knowledge." Whatever its eventual title—the final design hasn’t been nailed down—a new gateway sculpture project at UAB has students forging bronze along with an unlikely partnership between the arts and engineering.

The collaboration began when students in the Department of Art and Art History met with students in the engineering school to brainstorm ideas for creating a gateway sculpture on the west end of campus. "This collaboration was an experimental approach," says art professor Janice Kluge, M.F.A. "Art students contributed artistic vision and engineering students provided expertise in the analysis of materials and construction methods.

"Fifteen of my students submitted proposals for the project, with two students in my sculpture class receiving $100 prizes for their designs. One configuration entails axons—fibers in nerve cells that transmit electrical impulses—while the other involves Birmingham’s steel mills."

COMMON GROUND

Bert Brouwer, M.F.A., dean of UAB’s School of Arts and Humanities, says the collaboration provided a wonderful opportunity for the two schools to work together. "Dr. Linda Lucas, who is dean of the School of Engineering, and I had been talking about a collaboration between the two schools," he says. "And I thought, what better way to do this than to have our students put their heads together to find ways to share their experiences and expertise? Since the new parking deck and office complex on University Boulevard and 12th Street is configured to accommodate a work of art in front, I thought we should consider the possibility of a site-specific sculpture to serve as a gateway piece to the campus. I anticipate the competition will take two or three semesters before we have sufficient proposals and produce desired results."

As the consulting student engineer for the project, Andrea Rossillon, whose effort serves as her final thesis, has played a key role in developing the first two models. "My responsibilities deal with materials selection based on corrosion traits, sheer strength of the material, and cost. I’ve also looked into regulations concerning visual distractions along a motorway, issues of maintenance, and how much cement to sink into the ground to support the sculpture," Rossillon explains.

"The 15-inch axon model designed by Jackie Homm is composed of 12 cast bronze pieces stacked on top of each other and fastened together. The project involves clay modelling, plaster mold forming, wax casting, sand mold forming, and finally hollow bronze casting. It’s a wild piece, with arms and legs sticking out everywhere. The mathematics of Dustan Creech’s steel mills model is much easier—right cylinders are easy to analyze, because all their weight is centered on the axis, and there aren’t any corners to stress the piece. It involves hollow towers of cast iron. Because his shapes are conical/cylindrical, they could be spin cast. Of course, we would have to weight the bottom so that they wouldn’t tip over, and we would have to create some sort of drainage system."

Regardless of which model is selected, Homm says she’s thrilled to have played a role in the competition. "This project has really been exciting for me. I originally studied biology and planned to become a genetics researcher, but art classes changed all that by taking me in a very different direction," she says. "The piece I’ve worked on combines both interests. To have the chance to express my ideas in this way has been extremely rewarding."

FUTURE PROJECTS

Douglas Rigney, Ph.D., associate dean of UAB’s School of Engineering, says this interdisciplinary project will encourage more collaborations. "The accreditation process in engineering requires that our students work on multidisciplinary teams," he says. "Normally we achieve that by assembling teams of engineering students with different expertise to design solutions to problems. With this project, Andrea has had the opportunity for a wonderful 'real-world' experience. It’s allowed her to work with clients who may be approaching the project from a completely different perspective than hers, but who, ultimately, want to achieve a common result."

Brett Levine, curator of UAB’s Visual Arts Gallery, who has provided advice concerning conceptual and aesthetic relationships with the site and how the project addresses the school’s commitment to outdoor sculpture, says "the biggest challenge is ensuring that the work is driven by artistic concerns. The university’s vision should be embodied in the work far more than in a logo or mascot. And I anticipate the work will be perceived and interpreted on a variety of levels. Artworks evoke individual responses, and I do hope that this one shows UAB to be committed to the arts by supporting a major work on campus."

For more information, call (205) 934-8566.

Cindy Riley
NEURORADIOLOGIST TRACY CARVER withstands the withering cross-examination of defense counsel in a murder case, her demeanor belaying the considerable emotional baggage she brings to the witness chair. Try as he might, counsel can’t crack her testimony. What a performance! She should win an award—and she did. For her assignment as “Tracy Carver” in the American Mock Trial Association (AMTA) regional competition in February, UAB Mock Trial Team member Kim Black won Best Witness. The ex-nursing student was so convincing that judges thought she was a real doctor.

The UAB Department of Justice Sciences Pre-Law Program, which administers the Mock Trial Team, scored success in the regional competition, with one UAB team beating Emory, Vanderbilt, and the University of Tennessee—all with organized pre-law programs on campus—to win first place. UAB students Allison Monk and Lucy Jones won Best Attorney on their respective teams, with both teams advancing to national competition.

TRIAL PREPARATION

Teams prepare for such high-level competitions throughout the semester as part of UAB’s Mock Trial Team course and during numerous extracurricular practice sessions, each lasting several hours. Using a designated scenario and prepared witness affidavits from the AMTA, team members construct questions and answers based on the roles of attorneys and witnesses for both the prosecution and defense. Some team members work exclusively on case research. Real-life attorneys and judges who are members of a professional advisory board of the Birmingham Bar Association volunteer to coach UAB’s teams. The judges advise on practice rounds that replicate full trials, including opening and closing arguments and examinations.

Monk says she gained valuable knowledge about trying a case from practice sessions on courtroom comportment, mannerisms, formality, and etiquette. “I learned never to show any emotion—worry, happiness, surprise—and to keep a poker face, even if an objection was sustained or the judge ruled against you. The closing argument was the only time to show passion or conviction.”

Mock trial teams aren’t told if they will be prosecuting or defending a case until just before each trial. Regardless, they will only be allowed to call three of the eight possible witnesses they prepare. Competition trials are judged by a point system.

During one marathon weekend practice session, Monk played the roles of both prosecuting attorney and defense counsel.

Black says that when you prepare for the role of witness, “you have to know the witness’s background thoroughly so that you won’t be tricked by attorneys for the competing team when they cross-examine you on the stand. It’s imperative that you stick to the affidavit as far as the facts are concerned. If you’re caught in a lie, you lose points, but you can also gain points for creativity by inventing a fact on cross-examination as long as it doesn’t contradict the affidavit.”

SWEAR TESTIMONY

John Grimes, J.D., director of the pre-law program, along with Jim Phillips, assistant United States attorney, coach UAB’s teams. Grimes believes that students who participate on mock trial teams are able to self-inventory their interests and capabilities in an experiential setting—though law school may not prove to be the next logical step. “At the end of each semester, students write an essay addressing future teams,” Grimes says. “They either say, ‘Coach, I’ve never worked so hard in my life and I love law,’ or ‘Coach, I never worked so hard in my life—I wouldn’t take anything for the experience—but I’m going to medical school.’ About 70 percent write the former.”

Monk, who says she was terrified at the outset of her participation on the Mock Trial Team, says, “I didn’t know what being on the team involved when I signed up, but my coach persuaded me to accept the role of attorney because he believed I would succeed.”

The School of Social and Behavioral Sciences has an ongoing campaign to fund Mock Trial Team scholarships and competitive travel and to create a mock-trial courtroom at UAB in its new building on University Boulevard.

For more information, call (205) 934-2069.

Marlene Ricker
One of the three types of awards granted through the program is the Institutional Transformation Award, which helps colleges and universities implement changes to facilitate the advancement of women in academic leadership. “I thought UAB could benefit from the grant,” says Doeller, associate dean of the graduate school.

In 2003, with Doeller as lead investigator, UAB was awarded one of 10 five-year, $3.5-million ADVANCE grants to develop innovative methods to retain and increase the number of female faculty in science and engineering at the university.

“We have three areas of emphasis—creating awareness of the issue, improving recruitment of women into faculty positions, and improving retention and advancement of women faculty at UAB,” Doeller says.

**Percentages Skewed**

Though women earn about 40 percent of all doctoral degrees in science and engineering in the United States, they make up only 22 percent of the science and engineering workforce and less than 20 percent of the science and engineering faculty in four-year colleges and universities. Doeller had long been concerned about what has been called a “female filtration system.”

“Something happens within the academic pipeline,” she says. “At higher levels, there are very few women.”

Because of stringent demands placed on full professors, Doeller believes women with family responsibilities have traditionally opted not to pursue higher-level careers. As a result, younger women may be reluctant to pursue leadership positions, because they don’t see it as a real opportunity.

“It’s important that the next generation of scientists and engineers have role models who are teachers, research advisors, and mentors,” Doeller says. “Women benefit so much from role models when they’re making career choices.”

**Paving the Way**

Doeller believes the ADVANCE program can help remove many obstacles for women. The first step has been the establishment of the Office for the Advancement of Women in Science and Engineering (OAWSE), located in the Hill University Center.

“OAWSE acts as a conduit of information for faculty, students, and staff about the best ways to attract and retain women in academia at UAB,” says Wendy Gunther-Canada, Ph.D., associate professor in the Department of Government and co-investigator on the grant. “The efforts of OAWSE highlight the accomplishments of women faculty already at UAB, while working to enhance the research opportunities for women scholars new to the institution through ADVANCE professorships and research awards.”

Doeller notes that since the office was established, several openings in the life sciences, government, and computer and information sciences have been filled by women. In addition, workshops are being offered on mentoring and leadership and UAB is working with other ADVANCE institutions across the country to share ideas and practices.

“The key to a diverse and able workforce in the future is to train, hire, and retain qualified women faculty members as they successfully pursue their individual research agendas,” says Gunther-Canada. “Everyone benefits from faculty women’s successes.”

Frances Pace Putman
WHY WOULD A BRILLIANT OTOLARYNGOLOGIST endow an “experimental” theatre in the UAB Alys Stephens Center (ASC)? The answer is simple—it would benefit students—but the patron is more complex. The theatre in question is the Odess Theatre and the patron in question is John S. (Jack) Odess, who along with his wife, Carol, provided the funds to complete the theatre that students call “the black box.”

In addition to being a UAB otolaryngologist, Jack Odess helped organize the first cleft-palate clinic in the United States and pioneered the operating microscope. In 1989, he endowed the John S. Odess Professor and Division Director-Otolaryngology/Head and Neck Surgery Chair in the School of Medicine at UAB. Jack died in November 2003 at the age of 80.

CLASH OF THE PATRONS

The Odesses’ involvement with the theatre department began when then UAB president W. Ann Reynolds, Ph.D., approached them about completing the recital hall in the ASC. “But Jack wasn’t interested in the hall, he wanted to contribute to a project that would specifically benefit students,” Carol says. “So when Ann mentioned that the ‘black-box’ theatre would be a venue for students to conduct ‘experimental’ theatre, Jack enthusiastically agreed to finish it.”

Since Jack’s death, Carol has continued her involvement with the UAB theatre department and with “her kids,” as she fondly calls them. “When I began attending plays at the Odess, students came up to me and said, ‘This is our home. We love it here.’ From that, the love affair began, and they really have become ‘all my children.’”

Like most mothers, Carol dotes on her kids and wants them to succeed. “On opening night, I take cookies to the green room [the area backstage where actors stay when they’re not on stage] and I always try to include a note of encouragement—just to let them know that I’m here and that I care.”

Although she’s proud of all theatre students’ efforts, it’s those working behind the scenes—stage managers, costume makers, set builders—who hold a special place in her heart. “It’s easy to praise the performers, and to see them progress and get better makes me very happy,” she explains. “But it’s the ones who are in the background, whom no one sees, who have taught me to appreciate their talents and skills. I now look at the sets, the lighting, sound, and the costumes in a completely different way.”

FITTING TRIBUTE

In February, the theatre department dedicated the play *Home* to Jack’s memory and performed a special performance in his honor. Carol says she was particularly moved by comments theatre department chair Marc Powers made during the dedication. “Marc hit Jack on the head,” she says. “I think what moved me most were these words: ‘For his [Jack’s] young thespians, he was more than a benefactor, he was a steadfast mentor who never ran out of time to spend with students. He loved to make them think and aspire. He was their greatest fan and their toughest critic, and they loved him for it. Dr. Odess loved to laugh, and he did so often and with carefree abandon. During a performance of *Flaming Guns of the Purple Sage*, his booming laugh nearly brought the house down, delighting performers and audience alike. And he loved to tell stories. He was a natural-born storyteller, who could enthral an audience as surely as any Barrymore. As his wife, Carol, said: ‘Life was his theatre, and he loved to take center stage.’”

To honor Jack’s memory and legacy, a new marquee has been erected at the Odess Theatre to announce upcoming student performances—a fitting tribute for a person who held students in such high esteem.

Jo Lynn Orr
Catching Crooks in the Information Age

Computer Forensics Emerges as a Hot New Field

Alabamians visiting New York City might take in the Statue of Liberty, Chinatown, and Rockefeller Center; but when UAB students majoring in International Studies (ITS) recently toured the Big Apple, they were ushered into the United Nations for exposure to UN activities and briefings with UN officials.

“As new director of the ITS, I want to introduce courses with applied components,” says ITS program director Nikolaos Zahariadis, Ph.D., who accompanied the students to New York. “At the UN, students met with Foreign Service officials and were introduced to nongovernmental organizations such as Human Rights Watch and Doctors Without Borders, with whom they left resumes applying for internships and job opportunities. I felt it was important to do this because these organizations don’t come to Birmingham. We have to go to them.”

UAB’s interdisciplinary ITS program has been redesigned to be more student-friendly, including a list of approved courses delineating major requirements in core courses, area of concentration, and elective courses. Course selections range from Asian culture in the Department of Anthropology to Foreign Literature in Translation in the Department of Foreign Languages and Literatures. Proficiency in a second language is also required for graduation with a concentration in international studies.

A new ITS requirement involves gaining international experience through traditional study-abroad programs or via internships with international companies such as Honda or Alabama Power—in their offices here or abroad. Other internship opportunities in Birmingham include working for the Red Cross in the Hispanic community or for Rotary International. “Students need to learn about opportunities and experiences beyond the classroom, so that after graduation they can take the next step,” Zahariadis says.

ITS also now sponsors student delegations to conferences and meetings such as the Model Arab League Conference, the Model UN Conference, or the International Studies Association (ISA). Two students, Mila Heersink and Mary Hawkins, recently presented papers at the ISA-South annual meeting in Columbia, South Carolina.

“This is the first time we’ve had undergraduates present their work at this prestigious professional conference,” Zahariadis says. “This is not a conference designed for undergraduate students, but for professors, which makes our students’ accomplishments even more exciting.”

For more information, call (205) 934-9680.

Michael L. Miller, Ph.D.

Citizens of the World

Students Embrace International Studies

From identity theft to embezzlement, Internet fraud to corporate misrepresentation, the role of computers and technology in committing crimes seems to be escalating at an alarming pace. Since computer hardware, software, and networking methods undergo drastic changes every few years, gathering evidence about high-tech crimes can be very difficult.

That’s why two UAB departments have teamed up to stay one step ahead of computer-savvy criminals. John Sloan, Ph.D., chair of the Department of Justice Sciences, and Anthony Skjellum, Ph.D., chair of the Department of Computer and Information Sciences, have established a collaboration that will result in a certification program in the field of computer forensics.

“Computer forensics studies criminal activities related to computers, communications, or technology,” says Skjellum. “It’s about using computers to detect crimes committed with computers, and traditional crimes for which the evidence happens to be in the computer—where the evidence is in the computerized system and you need to extract it.”

The computer forensics certification program will benefit UAB students, as well as local and state law enforcement officers, the FBI, and the Secret Service, all of which have local offices in Birmingham. “The Secret Service is specifically encouraging us to pursue the computer forensic certificates. We’ll be their collaborators as well,” says Skjellum.

If all goes well, the certification program will be only the beginning. “Ultimately we want to offer an interdisciplinary master’s program and a research program. In this time of homeland security issues, we’ll definitely be producing a graduate much in demand,” Skjellum says. “We see opportunities for service that extend beyond the walls of academia.”

For more information, call (205) 934-2213.

Marlene Ricker
Growing Seafood on Land

Sea Urchins Potential Cash Crop

Seafood lovers in Kansas should be delighted: Thanks to research by UAB biology professor Stephen Watts, Ph.D., fresh sushi for landlocked areas may be just around the corner. Watts recently received a grant from the National Oceanic and Atmospheric Administration to research land-based culturing of sea urchins. These include a popular sushi item called “uni,” which is actually the roe of the sea urchin Tripneustes ventricosus and should soon be readily available across the country.

“During the past 15 years, sea urchin fisheries have been depleted to such an extent that most populations of edible urchins are on the decline,” says Watts. “For instance, Japan’s waters are fished out, so the Japanese import about a quarter of a billion dollars worth of sea urchins each year.”

The depleted fisheries sparked Watts’s idea of bringing the urchins inland to see if they could be harvested away from the ocean. “The purpose of this study was to use a fast-growing species of sea urchin to develop the knowledge and ability required to ‘ranch’ them on land,” Watts says. Very little information is currently available about culturing urchins, according to Watts. “Someone is going to have to create a ‘Purina Fish Chow’ of some type,” he says, “but Purina doesn’t know what they eat and neither do we, yet. But we’re getting there.”

The commercial potential of the grant is only half the story, however. Urchins undergo development similar to that of humans, and their embryos are virtually transparent. “We can spawn them, generate eggs and sperm, mix them at will—and generate millions of embryos with no problem whatsoever,” Watts says. That will enable scientists to expose urchins to environmental conditions or toxins such as mercury, alcohol, or pesticides to learn what effects these substances have on embryonic development.

“Previously, researchers had to depend on wild collections of sea urchins—you had to be at a lab that was right on the water, and once per year you could collect gametes. Now we can rear animals and get gametes year-round,” Watts says. “We’ve developed systems where we can use 100 percent artificial seawater, which is a big deal. If you can concoct artificial seawater, you could do this research in Kansas, if you’d like.”

For more information, call (205) 934-2045.

Michael L. Miller, Ph.D.

Who Was Manuela Sáenz?

Spanish America’s Eccentric Heroine

She dressed in military garb, rode horseback like a man, drank, smoked, and told dirty jokes. For a woman in the 19th century, that was odd enough. But Manuela Sáenz had an even stranger trait: She displayed an uncommon political prowess. Pamela Murray, Ph.D., an associate professor and historian of modern Latin America, has researched archives and libraries in the United States, England, Peru, Ecuador, and Colombia in order to write a book and separate the real woman from the legend. “I’m intrigued by the tendency of authors, especially in Spanish America, to either idolize or demonize Sáenz—to portray her as a heroine or a bad girl,” says Murray. “I wanted to dig beyond that to find the heart of a real and complex person.”

Sáenz was born in 1797 in Quito, Ecuador, and died in 1856. She’s mainly remembered for her love affair with Simon Bolivar, the legendary hero of the Spanish-American wars for independence from Spain. Sáenz was Bolivar’s mistress, personal archivist, informant, and advisor. It was her quick thinking that allowed Bolivar to escape assassination in 1828.

Murray says that historical interpretations of Sáenz have been clouded by chauvinistic views of women in the 1800s. That motivated her to explore Sáenz’s historical significance and make sense of her life during the period in which she lived.

The book, Murray hopes, will shed light on the informal political roles South American women played from the start of the independence movement in 1810 through the consolidation of the young republics around 1850. “Above all, I want to show that Sáenz’s life constitutes a central piece of a larger history puzzle about the contributions of Spanish American women,” says Murray.

Murray’s book, Libertadora: The Odyssey of Manuela Sáenz is the first full-scale critical biography of Sáenz. The manuscript, which is under advance contract with the University of Texas Press, received support from two UAB faculty development grants, a UAB graduate school faculty research award, and a grant from the Andrew W. Mellon Foundation.

Murray also is the author of Dreams of Development: Colombia’s National School of Mines and its Engineers, 1887-1970 (The University of Alabama Press, 1997).

For more information, call (205) 934-8695.

Ella Robinson
A Seat at the Round Table

Reclaiming African Scholarship

It was a serendipitous letter. The envelope was addressed to UAB English professor Virginia Whatley Smith, Ph.D., and inside was an invitation to attend a summer session of the Oxford Round Table at St. Antony’s College, University of Oxford. Smith says she doesn’t have any idea who nominated her to attend.

“Candidates are nominated by former attenders or affiliates of the institute,” she explains, “but I don’t know who submitted my name. I attend European conferences, and I’m in touch with colleagues worldwide, so it could have been someone from this European academic group.”

Smith says such round table seminars are held at different times year-round, featuring different topics. “The tables are composed of 35 people,” she says. “Moreover, you have colleagues, corporate executives, and members of parliament attending. Participants come from as far away as New Zealand and Australia, as well as from the United States. Topics vary, but they do include women’s concerns.”

African-American literature is Smith’s area of expertise. She’s a Richard Wright scholar, but she also works on many women’s issues and teaches a course on black women writers and another course on African women writers.

The current trend in African scholarship, Smith notes, is to recover Africa as the site of knowledge in order to counter the West’s historical representation of Africans as subhuman chattel. “For instance, I’m researching the work of Nella Larsen, a novelist of the 1920s Harlem Renaissance period. I’m especially interested in the way her mulatto heroine Helga Crane in ‘Quicksand’ had difficulty situating her identity in American culture. She is bicultural (African-Danish) like the author, and has what W. E. B. DuBois describes as the ‘double-consciousness’ of a conflicted people who are neither African nor American. In addition, I’m researching a slave narrative by Hannah Crafts titled The Bondwoman’s Narrative. I question the authorship and authenticity of the text.”

Smith’s previous works include a collection of essays on Richard Wright, titled Richard Wright’s Travel Writings (University Press of Mississippi, 2002), and articles on John Edgar Wideman, John A. Williams, and Charles Johnson.

At the round table, Smith spoke on Saartjie Baartman, a 20-year-old indentured servant who went to Europe in 1810 and ended up publicly displayed, like the ‘elephant man,’ as a freak. Baartman, during a five-year period, was displayed in the nude at exhibits in England and France. “This kind of treatment shouldn’t come as a surprise,” Smith says, “considering the prevalence of race theories being postulated by such notables as David Hume of England, Georges Leopold Cuvier of France, Immanuel Kant of Germany, and Thomas Jefferson of America that blacks were inferior.”

But what happened to Baartman after her premature death in 1816 was even more outrageous than the degradation she endured while alive, Smith points out. “Georges Cuvier of France cut off Sara’s buttocks and genitalia, which were scored with the tribal markings of South-African women,” she says. “Her black female body type of large breasts and buttocks were used to justify the representation of

Miami’s Civil Rights Movement

Jews Played Historic Role

Tourists flock to Miami for its sunny beaches, palm trees, and neon nightlife, reveling in the city’s many charms. But it’s doubtful that these transient visitors will learn while there that, like Birmingham and Montgomery, post-World War II Miami was involved in the struggle for civil rights.

UAB urban historian and professor of history Raymond Mohl, Ph.D., chronicles this period in Miami’s history in his new book South of the South: Jewish Activists and the Civil Rights Movement in Miami, 1945-1960. Mohl’s research of Miami’s postwar history of race relations, ethnicity, and immigration uncovered information about the migration of northern Jews and their role in the city’s civil-rights movement. Prominent among transplanted Jewish activists were Matilda Graff and Shirley Zoloth, who were responsible for organizing grassroots action for civil rights in Miami.

As Mohl explains, “The history of the civil-rights movement traditionally has been studied from the top down, examining the roles played by national organizations such as the NAACP and the Urban League. But the past decade has seen the emergence of research into the significance of grassroots civil-rights movements that were locally organized to address local issues.”

Graff was one such organizer. She was a leader in the Miami Civil Rights Congress and was active against the Ku Klux Klan from 1948 to 1954, when she fled the city to escape political harassment. A year later Zoloth arrived in Miami, joining Miami’s Congress of Racial Equality (CORE) and working for school desegregation. She continued her civil rights work throughout the Sixties.

Prior to the migration of northern Jews, Southern blacks, Haitians, and Cubans, mid-century Miami was primarily inhabited by Southern
black women as Jezebel/whore figures contrasted to the petite image of white women. So, Saartjie’s body was used as ‘proof’ that Negroes were beasts.”

Round table participants were given the choice to make presentations from any point of view, and Smith said in her presentation that it was essential that systems of power be understood, especially in the way that they foster racism. “White power radiates from top to bottom,” she says. “The political is tied to economics and a wealthy ruling class, which controls power with money. And systems of laws and government—while starting at the social level—leap up to the political and the highest forms of government. So a circle of power has been established that keeps blacks ensconced in an invisible ‘imprisonment metaphor.’ Jim Crow segregation became America’s version of the apartheid that existed in Sarah’s South Africa.”

Smith’s talk at the round table, which publishes presentations, was titled “Saartjie Baartman and Black Women’s Rights: The Hottentot Venus’s Violated Body as Site of Public Policy and Change.”

For more information, call (205) 934-5634.

Marlene Ricker

Just What the Doctor Ordered

Early Admissions Further Medical Ambitions

EMSAP—what on Earth could that stand for? If you guessed “Early Medical School Acceptance Program,” then Greg Pence, Ph.D., wants to talk with you. EMSAP is UAB’s nationally-acclaimed B.S./M.D. program for very bright students seeking a head start on the competition for admittance to medical school. Pence directs the program and teaches medical ethics. He also holds appointments in both the medical school and philosophy department, and he recruits students to UAB from throughout the Southeast.

In the past, EMSAP has enrolled student-standouts such as Neel Varshney and Victor Chin, both of whom have achieved extraordinary academic success. “Neel is now in the M.D./Ph.D. program at Harvard Medical School and the Massachusetts Institute of Technology (MIT) in neurosciences, and Victor is in residency training at Harvard Medical School after graduating in 2004 from Johns Hopkins Medical School,” Pence says.

NOT A BACK-DOOR PROGRAM

EMSAP should not be viewed as an easy, back-door entrance into medical school, Pence says. “Our ideal students come here not for early admission to medical school but to maximize their learning through the EMSAP program and faculty,” he says. For example, EMSAP students Jason Lott and Joyce Hsu worked not only with Pence, but also with UAB neuroscientist Michael Friedlander, Ph.D., and professor of pediatrics and immunologist Max Cooper, M.D. Pence says EMSAP faculty are committed to providing students with every opportunity to “be all they can be” when it comes to medical research. In addition, most EMSAP students are paid stipends for the research they conduct.

STUDENTS BENEFIT

Many people might assume that bright kids with good grades can get into medical school without benefit of an EMSAP-type program, but that may not be the case, Pence says. “For pre-med students seeking admission to medical school, there is many a slip between the cup and the lip,” he notes. “I work to make sure EMSAP students take the courses that will get them into medical school. I try to help the best students get scholarships to attend medical school, which are available for less than 1 percent of students. From day one, I’m always in the students’ corner.”

“Parents should also consider the alternative to EMSAP,” Pence says. “Students accepted into Harvard or Virginia take large introductory courses during the first two years that are taught by part-time faculty or graduate students, so what kind of help can they expect from the tenured faculty? In all likelihood, not much.” By contrast, Pence says: “I’m like Jenny Garp in John Irving’s The World According to Garp—I pre-inspect all courses that EMSAP students take and monitor their progress. If they slip between the cup and the lip, we meet to fix the problem.”

In 2000, Pence testified before congress about human cloning, and his book Classic Cases in Medical Ethics is a standard textbook used in medical ethics courses nationwide. Designer Food, Pence’s book defending genetically modified food, was named a Choice Outstanding Academic Title for 2003. “Naturally enough,” Pence says, “EMSAP student Joyce Hsu and three other assistants helped me write that book while they were working as summer research assistants.”

Pence says that all in all as many as 10 EMSAP students have helped him write and research books dealing with bioethics.

For more information, call (205) 934-4805.

Marlene Ricker
Heading Up the Red Cross in the Southeast

Like many who work with the American Red Cross, Joseph J. (Joe) Packa, M.P.A., marks the past not so much by calendar years as by disasters. There was Hurricane Frederick in 1979, Hurricane Andrew in 1992, and the terrorist attacks that destroyed the World Trade Center in New York City on September 11, 2001. This year marked another disaster milestone for Packa and the Red Cross when Hurricane Ivan struck Alabama.

In between have been floods, tornadoes, hurricanes, and ice storms. At each disaster during the past 27 years—especially in the Southeast—Joe Packa has been involved in relief efforts.

“Joe reflects the very best of the public servant in the 21st century,” says James D. Slack, Ph.D., professor and former chair of UAB’s Department of Government. “He has certainly helped improve the condition of people in Alabama.”

Last year, Packa was tapped to head the Southeast Service Area of the American Red Cross, a vice-president-level position in the international organization. The newly created office and position oversees operations in five states: Alabama, Florida, Mississippi, Georgia, and Tennessee.

“The idea was to move resources closer to the field, where disasters happen,” says Packa, who received his master’s of public administration degree from UAB in 1983. “It’s also a way to offer greater support to local chapters.”

In 1977, after interning with the American Red Cross for several summers, Packa, an Ohio native and graduate of Ohio State University, came to Alabama to assume the assistant directorship of safety services for the Birmingham Area Chapter.

After holding several Red Cross positions in Alabama, Packa assumed the reins of Mississippi’s State Coordinating Chapter in 1989. In 1997, as a result of

Science on “the Ice”

Exploring Marine Life in Antarctica

When Kevin Peters first entered UAB as a biology major, his plan was to go to medical school and prepare for a career as a physician. But along the way, his love of biology overshadowed his career plans and led him, literally, to the ends of the earth.

Earlier this year, Peters (B.S., biology, 2001) made his third trip with UAB explorers to Antarctica, where he studied the biochemical defenses of plants and animals living in the Great Southern Ocean. While there, Peters lived with other researchers at Palmer Station on Anvers Island, one of three permanent U.S. stations in Antarctica.

Much of his work involved diving into the southernmost continent’s icy waters and collecting sea stars and sponge samples, then conducting preliminary research on them.

“Diving was the most incredible experience,” says Peters, 25, who is now working on a Ph.D. at UAB. “I love the fact that I worked in Antarctica, and that diving was considered part of my work.”

In addition to the Antarctica expedition, Peters also has participated in UAB study-abroad trips to Costa Rica and the Bahamas. It was in the Bahamas that he got to know James McClintock, Ph.D., UAB Endowed Professor of Polar and Marine Biology. McClintock has traveled to Antarctica many times and was a mission co-investigator on Peters’ most recent trip.

Peters and other UAB researchers arrived at their base on the Antarctic Peninsula in February, when there was about 18 hours of sunlight each day. By June, there was very little available sunlight each day, and diving was difficult, so most of
his efforts to help Mississippians during times of disaster, Mississippi Governor Kirk Fordyce declared a “Joe Packa Day” in the state. Later that year, Packa returned to Birmingham as chief executive officer and state coordinating manager for Alabama. He held that position at the time of the September 11 attacks, and under his leadership the Alabama Red Cross deployed 150 staff members to Ground Zero and raised more than $2.5 million to help in disaster response. Packa himself made two trips to New York City and appeared on CNN to talk about Red Cross relief efforts there.

The recent onslaught of Hurricane Ivan hugely increased Red Cross disaster-relief operations for 2004. At press time, 32,998 Red Cross workers had helped provide shelter for 425,408 people, given out 11,014,837 meals and snacks, and made 76,617 mental-health contacts for people who were experiencing traumatic stress from the event.

Frances Pace Putman

Peters’s work at that time involved lab experiments. Chemists at the University of South Florida are now conducting most of the follow-up work on his research.

After earning his Ph.D., Peters plans to pursue a postdoctoral position with another marine biology group, possibly one doing research in Antarctica. Eventually he wants to teach at the university level—preferably at a university close to the coast, though he says he won’t be picky.

“I want a Ph.D.,” Peters says, “so that I can teach college students in the same knowledgeable and exciting way that many of the UAB faculty have taught me.”

Frances Pace Putman

Tinker, Sailor, Pump Maker

A Master of Many Trades

You couldn’t plan a career path like the one taken by Larry Bachus. Once an apprentice mechanic in a Birmingham steel mill, Bachus went on to serve in the Navy during the Vietnam War, earn a bachelor’s degree in Spanish from UAB, become a broadcast announcer and a foreign correspondent, sell parts for industrial pumps in Venezuela, and then become an inventor, writer, lecturer, and magazine columnist.

“Deep inside, I am a messenger,” says Bachus, B.A., 1974, one of UAB’s first foreign-languages graduates. “I’m a deliverer of information. It’s the basis of everything I do.”

While in the Navy, Bachus became fascinated with the “secret language” spoken by so many of his counterparts. He was determined to learn to speak Spanish, even though he had never studied the language before.

After graduating from UAB and working as a bilingual broadcast announcer in El Paso, Texas, and other broadcast positions in Orlando, Birmingham, Knoxville, and Memphis, Bachus landed a job at ABC Radio in New York and eventually traveled throughout Latin America, covering stories such as the signing of the Panama Canal Treaty, the Jonestown massacre in Guyana, and the U.S. invasion of Grenada.

While doing a commercial for a company that produced parts for industrial pumps, Bachus’s passion for mechanical operations—first awakened during his steel-mill days—resurfaced. He ended up taking a sales and development position at the company’s Venezuela offices.

Working with pumps every day, Bachus discovered ways to improve them, and in the mid-1980s began developing his own pump-related products. Today, the ORIDO O-Ring Identifier and the Turbo Tank double-seal support system are sold all over the world.

“Larry is very down to earth for an individual who has enjoyed such a remarkable career in business and communications,” says Sheri Spaine Long, Ph.D., associate professor of Spanish and chair of the Department of Foreign Languages and Literatures at UAB.

In fact, Bachus has become known affectionately as “The Pump Guy”—traveling from his home in Nashville, Tennessee, to all parts of the world, lecturing about pump operations. His columns appear in the magazines Energy Tech and World Pumps, and he has recently written a book about pumps that’s available—¡naturalmente!—in both English and Spanish.

Frances Pace Putman

Foreign Languages graduate Larry Bachus, also known as “The Pump Guy,” has charted a rich and varied career path.
Developed from the ground up with seamless integration of the National Standards for Foreign Language Learning, *Nexos* prepares introductory Spanish students to communicate meaningfully in interpersonal, interpretive, and presentational modes. Through realistic pacing of material, easy-to-use grammar, practical vocabulary, and a modern video storyline that contextualizes grammar and vocabulary, *Nexos* provides rich linguistic and cultural content that promotes language learning. Throughout the text, situations, vocabulary, and activities reflect a technologically up-to-date, Internet-proficient Spanish-speaking world that appeals to contemporary students. Other practical, day-to-day themes that command student attention include fashion, sports, journalism, medical professions, volunteer organizations, and a focus on U.S. Latinos and their contributions to society.

**The Eve/Hagar Paradigm in the Fiction of Quince Duncan**, Dellita Martin-Ogunsola, Ph.D., Department of Foreign Languages and Literatures, University of Missouri Press, 2004

Costa Rican writer Quince Duncan has penned an impressive body of work, including novels, short stories, essays, and literary and cultural criticism. Despite his reputation as Costa Rica’s leading novelist, Duncan remains one of its least-studied writers. Dellita Martin-Ogunsola seeks to remedy this inequity with *The Eve/Hagar Paradigm*. In this first book-length study in English devoted to Duncan’s work, Martin-Ogunsola explores the issues of race, class, and gender in five of Duncan’s major works published during the 1970s. Focusing primarily on the roles of women, Martin-Ogunsola uses the figures of Eve and the Egyptian slave Hagar to provide, through metaphor, an in-depth analysis of the female characters portrayed in Duncan’s prose. Specifically, the Eve/Hagar paradigm is employed to examine how the essential characteristics of femininity play out in the context of ethnicity and caste.

**Choice, Behavioural Economics and Addiction**, Edited by Rudy E. Vuchinich, Ph.D., Department of Psychology, and Nick Heather, University of Northumbria at Newcastle, Pergamon, 2003

Essays in *Choice* examine the theory, data, and applied implications of choice-based models of substance use and addiction—an important distinction since many people use substances but aren’t addicted to them. The book’s major focus is on theories of addiction, but it’s also necessary to consider the behavioral economic account of substance use in order to place the theories presented in their proper context and provide full coverage of the contribution of behavioral economics to this field of study.

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During the decade that followed the end of World War II, American and English dockworkers undertook a series of militant revolts against their employers, their governments, and even their union leadership. In this in-depth comparative study, Colin J. Davis draws on a wide range of sources to explore the upheavals on both sides of the Atlantic. Davis examines the dynamics of work and work stoppage along the two pivotal waterfronts, showing how issues of race, organized crime, union affiliation, working conditions, and Cold War politics shaped waterfront uprisings and the state’s response to them. Addressing questions of why dockworkers were such influential forces in the postwar industrial arena, *Waterfront Revolt* reveals how workers and trade unions directly influenced Cold War politics, the economy, and culture—even across national borders.

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**Cloning after Dolly, Who’s Still Afraid?**, by Gregory E. Pence, Ph.D., Department of Philosophy, Rowman and Littlefield, 2004

As the number-one topic in bioethics, cloning has made big news since Dolly’s announced birth in 1998. In a completely new book building on his classic *Who's Afraid of Human Cloning?* (1998), pioneering UAB bioethicist Gregory Pence continues to advocate a reasoned view of cloning. Beginning with his surreal experiences as an expert witness before congressional and California legislative committees, Pence analyzes the astounding recent progress in animal cloning, the coming surprises about human cloning, why the political left wrongly opposes cloning, the many links between animal, stem-cell, and human cloning, the hoaxes and hucksters of cloning, embryo politics, and issues about artificial wombs and transgenic animals. Pence rebuts the growing chorus of naysayers who increasingly attack biomedical sciences. Along the way, he explains why cloning will save endangered species and help people with degenerative diseases.


Intrigued by a slide showing a woman breast-feeding a monkey, anthropologist Loretta A. Cormier spent fifteen months living among the Guajá, a foraging people in a remote area of Brazil. The result is this ethnographic study of the extraordinary relationship between the Guajá Indians and monkeys. While monkeys are a key food source for the Guajá, certain pet monkeys have a quasi-human status. Some infant monkeys are adopted and nurtured as human children while others are consumed in accordance with the “symbolic cannibalism” of their belief system. The apparent contradiction of this predator/protector relationship became the central theme of Cormier’s research: How can monkeys be both eaten as food and nurtured as children?
Budding Wordsmiths  
Workshop Targets High-School Students

Seasoned writers know to avoid literary cliches such as “It was a dark and stormy night. . . .” But what about budding young wordsmiths? Are they susceptible to the pitfalls of hackneyed writing? If so, UAB has developed a potential cure—the Ada Long Creative Writing Workshop, which is a three-week workshop for high-school students sponsored by the English Department in collaboration with the Honors Program. The workshop offers high-school students interested in creative writing an unprecedented opportunity to hone their skills in a dynamic learning environment with other young writers.

This summer the workshop was offered for the first time with the goal of helping participants prepare for creative-writing programs at the university level and to introduce them to the possibilities of careers in creative writing.

The workshop was established by the English Department Advisory Board and was named in honor of Ada Long, Ph.D., English professor and founder of the Honors Program, who retired in July. But it was workshop director Tony Crunk, M.F.A., assistant professor in UAB’s Creative Writing Program, who was responsible for launching the project—and based on students’ evaluations of the workshop, it was a success.

Crunk says that most of the students found it a “rare experience” to work with peers who shared their own academic and artistic interests. “They established a learning environment that was extraordinarily cooperative,” he says, “and they were as enthusiastic about each other’s accomplishments as their own.”

Long, who for many years wanted UAB to have a creative-writing workshop, says that “the workshop will provide an invaluable service to Alabama students; help to identify early some of the great talents in this state; and allow these young writers to meet others who have great talent from a wide variety of schools and backgrounds.”

In addition to Crunk, workshop faculty included Daryl Brown, M.F.A.; Tina Harris, M.A.; Maria Morrison, M.F.A.; and Rusty Rushton, Ph.D.

“I hope this workshop will flourish for many years to come and be one of the finest opportunities that UAB has to offer,” Long says.

For more information, call (205) 934-4250.

Nancy Mann Jackson

An Astronaut’s Legacy  
Helping Students Advance

Despite growing up poor in segregated South Carolina, Ronald E. McNair, Ph.D., earned a bachelor’s degree in physics in 1971 and, five years later, a Ph.D. in physics from the Massachusetts Institute of Technology. He went on to gain national recognition for his research in laser physics and eventually became a NASA mission specialist astronaut. McNair and his fellow astronauts died January 28, 1986, when the Space Shuttle Challenger exploded as it rocketed toward space. But McNair’s legacy of achievement has been honored through the McNair Scholars Program, an academic support and enrichment program established by Congress in 1986.

First funded at UAB in 1999, the McNair Scholars Program helps prepare undergraduate students for study in advanced-degree programs. “The objective of the Ronald E. McNair Post-Baccalaureate Achievement Program is to encourage students to earn doctorates and pursue careers in college teaching,” says Susan Sell, Ph.D., associate dean of the UAB Graduate School and director of the program. “In addition to working on research projects, students attend professional development workshops and sessions to help them prepare for the graduate-record exam.”

This summer, 22 undergraduate students participated as McNair Scholars in the research program. Students worked on research projects from a wide range of topics, including breast cancer and spirituality, cultivating kindness in children, and the neurochemistry of stress-induced binge eating.

Two-thirds of students involved in the program must be low-income, first-generation college students, and all remaining students must be from groups typically underrepresented in doctoral programs. McNair scholars benefit from faculty members who are committed to helping them succeed in advanced degree programs and who are experienced in mentoring undergraduates. The program also offers scholars outstanding research programs and facilities, a full range of support programs and educational enhancement opportunities, graduate students who serve as role models and peer mentors, and administrative commitment at all levels.

Currently, UAB has a McNair alumna, Akilah J. Dulin, enrolled in a medical sociology graduate program. Undergraduate students who participated in the summer internship program were Annie Artiga, psychology; Angela Jones, sociology; Victor Martin, psychology; Kliph Woodfin, biology; and April Wright, psychology. Applications are available online at [http://main.uab.edu/show.asp?durki=24162].

Nancy Mann Jackson

Akilah Dulin is an alumna of the McNair Scholars Program at UAB.
GRAPHIC DESIGNER ERIN WRIGHT earned his M.F.A. with a concentration in graphic design and illustration at the University of Arizona and his B.F.A. in graphic design at Colorado State University. He has 20 years’ experience as an award-winning designer and teacher. Wright’s work has appeared in nationally and internationally competitive design annuals and compendiums; such as American Corporate Identity 19 (published in New York) and New Logo World (published in Tokyo).

In addition to print design, Wright, who is associate chair of the Department of Art and Art History, has also produced graphics for exhibits at McWane Center, an interactive science museum in downtown Birmingham, and for the “We the People” interactive exhibit at the Old State Capitol in Baton Rouge, Louisiana, which recently won the Curators’ Committee Exhibition Award for exhibitions from the Southeastern Museum Conference. Currently Wright is working in multimedia and Web design, including a project for Footsoldiers, Inc., a group dedicated to educating the public about African Americans’ struggle for civil rights. Recently, he was awarded a $5,000 grant from the Alabama State Council on the Arts in recognition of artistic excellence.

Solution to the Previous Puzzler:

The problem is to show that, given any positive integer \( N \), there is a circle enclosing exactly \( N \) lattice points (points in the plane with integer coordinates).

The strategy is to produce a point \( P \) such that the distance between \( P \) and any lattice point is different from the distance between \( P \) and any other lattice point. This will mean that every lattice point is at a unique distance from \( P \). In this way, we can order the lattice points according to increasing distance from \( P \). Let \( L_1 \) be the closest lattice point to \( P \), \( L_2 \) the second closest, and so on. If we want a circle enclosing exactly \( N \) lattice points, draw the circle with center \( P \) and radius equal to the distance between \( P \) and \( L_{N+1} \). This circle will enclose the \( N \) lattice points \( L_1, L_2, ..., L_N \) which are closer to \( P \) than \( L_{N+1} \), but no others.

Producing such a point \( P \) is easy, as there are infinitely many possible choices. For example, it is easy to check that \( (\sqrt{2}, 1/3) \) has a different distance to each lattice point. For other choices, pick points having an irrational coordinate.

Essentially, this solution was submitted by Mr. Archie Cobbs. Congratulations on not only solving the problem, but doing so with a touch of elegance.

Postscript: To those who found this lattice point problem unchallenging, try these variations on the theme. For any positive integer \( N \),

1. There is a circle having exactly \( N \) lattice points on its circumference.
2. There is a circle of area \( N \) enclosing exactly \( N \) lattice points.
3. There is a square enclosing exactly \( N \) lattice points.

Submit your Puzzler answer to:
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