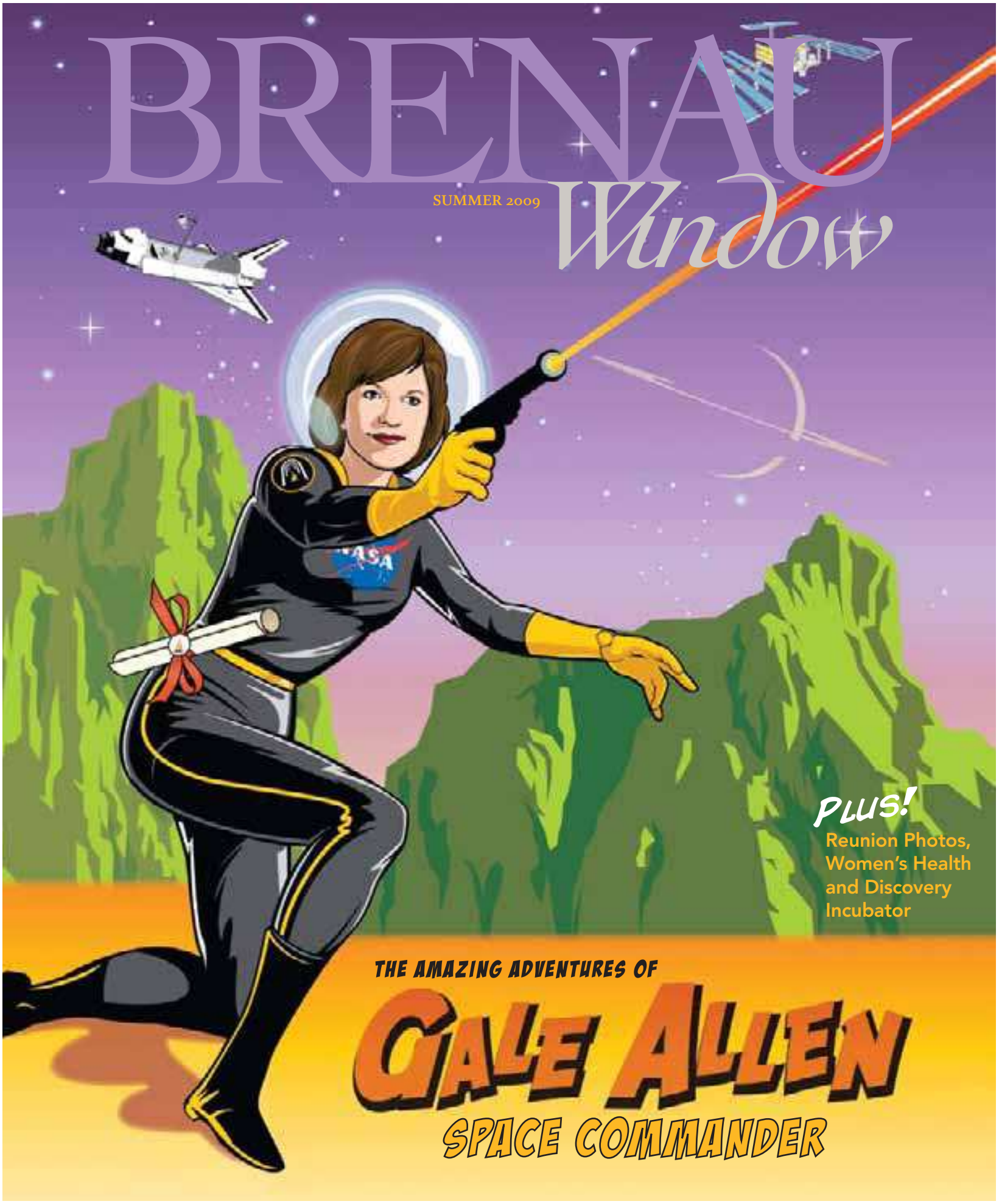
BRENAU Window

SUMMER 2009



PLUS!
Reunion Photos,
Women's Health
and Discovery
Incubator

THE AMAZING ADVENTURES OF

GALE ALLEN

SPACE COMMANDER

Star Power

Recently I hosted a small gathering in Los Angeles to salute the costume designer Katherine Jane Bryant. Janie graduated from Brenau Academy and briefly attended the Women's College before setting off on a remarkable career in motion pictures and television. She already has an Emmy Award for her work on the HBO series, *Deadwood*, and other awards and acclaim for her current project, the television drama *Mad Men* – a level of accomplishment usually reserved for much older people in the entertainment world. I joked that there is no telling how high the arc of her stardom would have reached if we'd had her at the college for the full four years.

Windows in the hotel reception room opened to a view of the 20th Century Fox studios. The sides of these iconic buff-colored buildings displayed huge, colorful images depicting memorable moments in movies and portraits of super luminaries from Hollywood history. It was a pretty heady experience because Janie and her colleagues who attended our reception are stars, too. These designers, actors, make-up artists, tailors, production assistants and wardrobe supervisors all draw from unique talents and experiences to contribute creatively and seamlessly to final products that mesmerize people around the world as they sit in movie houses or before TV screens.

What they do in Hollywood is a perfect metaphor for what we do at Brenau University. We bring together talented, creative people on our faculty, in the administration and in the student body. Their myriad expertise in a wide variety of disciplines and their life experience in different parts of the world contribute to the rich palette of liberal arts education. Students bring with them their native talents and abilities; it is our job to let those students find ways to express those talents, to nurture them for the parts they play out in life. That is what happened with Janie Bryant and with a star in another galaxy, Dr. Gale Allen, who you will also read about in this issue.

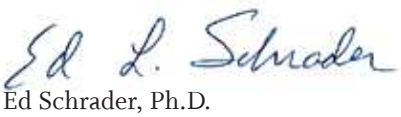
As we move forward to the next level of Brenau as a doctoral degree-granting institution, we will also see emerge something of our own star system as we recruit and nurture faculty gifted in their abilities to communicate in the classrooms, their skill in leading and conducting break-through research, and their inventiveness in transferring their knowledge to the rest of the world in both commercial and non-commercial vehicles.

We will create from that cast a council of scholars – about 10 true faculty superstars in their respective disciplines. They will hold endowed "named" chairs in those disciplines, each for a specific term. These will not be so-called "ivory tower" scholars, shielded from the world, self-absorbed in esoteric topics. On the contrary, our faculty stars will design and implement unique programs feeding into a "Discovery Incubator," which then will determine the best methods for sharing knowledge and the fruits of faculty and student research with the rest of the world. It is our plan to find stars in interior, fashion or graphic design; business and economics; language and communications; music, fine arts and performing arts; the humanities, education and other disciplines.

Later in this issue, you will learn that we did not have to search widely for our first named scholar for this initiative. Thanks to the generosity of one of our trustees and his spouse, Dr. Randy May is now the Richard and Phyllis Leet Professor of Biological Sciences. This multifaceted individual is at once genetics counselor, biologist, scholar, teacher, entrepreneur – a perfect alignment of individual credentials and a job description.

Throughout its history Brenau has boasted considerable star power among its faculty – Jeannette Rankin, the first woman elected to Congress; historian H.J. Pearce Jr.; sculptor Jean Westmacott; pianist Eliza Feldmann; CBS newsman Zeke Segal; author Paul Hemphill. Each left a lasting legacy, sharing their luminescence with hundreds of Brenau students.

Star faculty attract star students. The more superstars we have, the more stars like Janie Bryant and Gale Allen we will turn out. It may sound a bit "Hollywood," but it is really just common sense.



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THE AMAZING ADVENTURES OF

GALE ALLEN

SPACE COMMANDER

Growing up in coastal Virginia, Gale Allen, EWC '91, as a 10- or 11-year-old girl harbored dreams of one day becoming an astronaut. She remained blissfully unaware that another Gale Allen already had staked a claim in outer space. In 1940 Planet Comics launched the saga of Gale Allen, leader of the "All-Girl Squadron." Clad in high heels and "space suits" vaguely resembling items you might find in a Victoria's Secret catalog, the blonde heroine participated in what this adult comic book series proclaimed "Weird adventures of the other world – the universe of the future," doing battle with a creepy alien villain named Nors, whose mutant looks and costume probably would have been more at home in a professional wrestling ring than in intergalactic combat.

No, says the real Gale Allen in her Washington D.C. office in the headquarters building of the National Aeronautics and Space Administration, that fictional earlier-day Gale Allen was not what she had in mind in her youthful dreams. "I have always been adventurous," the brunette Allen says with a broad, engaging smile. "Just not that adventurous."

The presence of such a fictional character in our lore underscores the fact that, dating back at least to Jules Verne and probably beyond even Galileo, humankind's fascination with space travel has known no gender barrier. Before even the Gale Allen of the pulp comics universe world came Dale Arden, Flash Gordon's female companion. The allure for women is no different from that for men. As the real Gale Allen describes it, the prospect of space travel and exploration is arguably the ultimate high for humankind with its innate curiosity, its absolute requirement for precision and excellence, the demands it puts on the race and the potential rewards for learning more about ourselves and our universe.

In her current role, Allen is very much in the middle of the realities of space exploration, not the fantasy. This "space commander" does not fly missions. She is director of strategic integration and management in the Exploration Systems Mission Directorate – the No. 2 person in one of four divisions of the nation's space program.

HOUSTON, WE HAVE ANOTHER KIND OF PROBLEM

NASA, which employs about 18,000 workers distributed among 10 field centers throughout the country and its Washington, D.C., headquarters, has always been a male-dominated society. Not too long ago, more than 70 percent of those employed at the Johnson Spaceflight Center in Houston were white males. In 1992, according to an article in *Public Administration Review*, the agency had one of the worst records in government for women – only six percent of those in managerial ranks. By 2003 that had improved to about 20.3 percent. And were Allen among the current crop of 114 active and management NASA astronauts, she would be one of only 23 women.

Following the black eyes it received after the 1992 report and in the aftermath of some celebrated blunders like cancelling or refusing to do research and development in programs specific to women and women's health, NASA has embarked on a quest to improve its diversity. Indeed, some of its most visible officials are women. Georgia-born Shana L. Dale stepped down in 2009 as NASA's second in command after almost four years as the highest-ranking woman in NASA history.

Also, it has specifically directed some of its research dollars into gender-specific areas, like the results Ball State University recently announced from a NASA-funded study focusing on more effective countermeasures to mitigate strength and muscle loss in female astronauts on long-duration missions.

BY DAVID MORRISON

ILLUSTRATIONS BY BRAD HAMANN

Why is such gender focus important? For one thing, unless NASA and its partners come up with some solutions to female-specific problems related to long-term exposure to radiation in space and long-term subjection to effects of zero gravity, there will not be any female astronauts on the missions to the moon and Mars. If you extrapolate for the historical record of everything that space exploration in the past has contributed to society, it is easy to see that the Ball State study that pertained to zero gravity conditions in space flight has significant implications for women on earth who are confined to long-term bed rest during pregnancy and illness.

More of that type thing is coming, says Allen. "We cannot afford to be so male dominated."

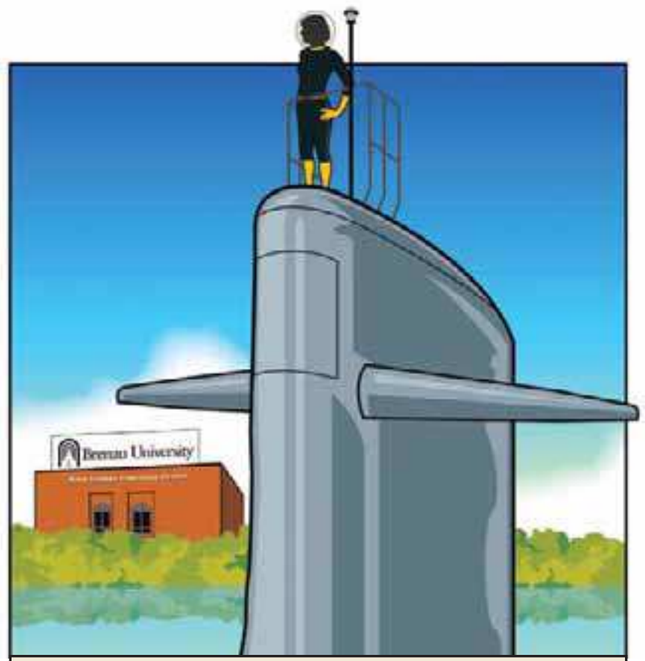
WANNA-BE SPACE CADET

NASA's four divisions, or directorates, are Space Operations, which oversees the shuttle and space station programs; Science, which covers all earth and space science work; Aeronautics Research, which is the aviation branch; and Allen's division, Exploration Systems. The Exploration Systems directorate is responsible for, among other things, developing and deploying critical technologies to support future human space flight on the planned missions to Mars and the moon. It is also responsible for keeping the White House, Congress and other stakeholders informed about NASA programs as they craft budgets and make decisions that will shape the future of American space exploration. It has responsibility for education media relations and education programs, like the program for high school science teachers that puts them aboard the "Vomit Comet," the NASA aircraft that simulates a zero-gravity environment, so they can conduct experiments concocted by their students. It also runs research programs and collaborations with universities, like the one at the University of Texas designed to create a new emphasis on the systems engineering discipline which will be much needed in development around future space exploration. And, if NASA develops, for example, astronaut clothing that specifically protects female organs that are affected by extended doses of radiation, the directorate would be responsible for licensing that technology for some practical use on earth. Although Allen never realized her dream of flying in space herself, all of those who do will, in some measure, depend on her. And so will all of us at home who could reap untold benefits from future space exploration.

Gale Johnson Allen, the self-described "wanna-be space cadet," applied to the U.S. astronaut program the first time shortly after she graduated from college. Most of her competitors had graduate degrees in some sort of engineering discipline, and she did not make the cut. She applied again after she got a master's degree, and still did not make it. On the third try, she was called in for an interview, but learned that she simply did not have the credentials that matched NASA's needs. She moved on after that, but says "I never lost the spark. I am just as enthusiastic about what we do and my role in it as I was when I first dreamed about becoming an astronaut."


...GALE'S BACKGROUND JUST WASN'T THE RIGHT CHEMISTRY FOR ASTRONAUT TRAINING...

She grew up in a family of modest means in rural coastal area on Virginia's eastern shore. Her father, who died when she was 12, drove a produce truck to support his wife and four children. She made no secret of her ambitions to explore space, but her experience in no way paralleled that of former NASA engineer Homer Hickam, whose space travel-dreaming character in the movie *October Sky* was constantly at odds with his coal miner father. "My parents occasionally looked at me strangely, and they didn't always understand why I had this obsession," Allen recalls, "but they were always supportive and never discouraged me." She was first in her family to graduate from high school, but by the time she enrolled as an undergraduate at Norfolk State University, she was in her 20s, and married with a child. She completed a degree in chemistry, graduating *summa cum laude*, and went to work for a paint company.



...IRONICALLY, WORKING WITH SUBMARINES SHOWED HER THE LAUNCHING PAD FOR HER SPACE PROGRAM CAREER.

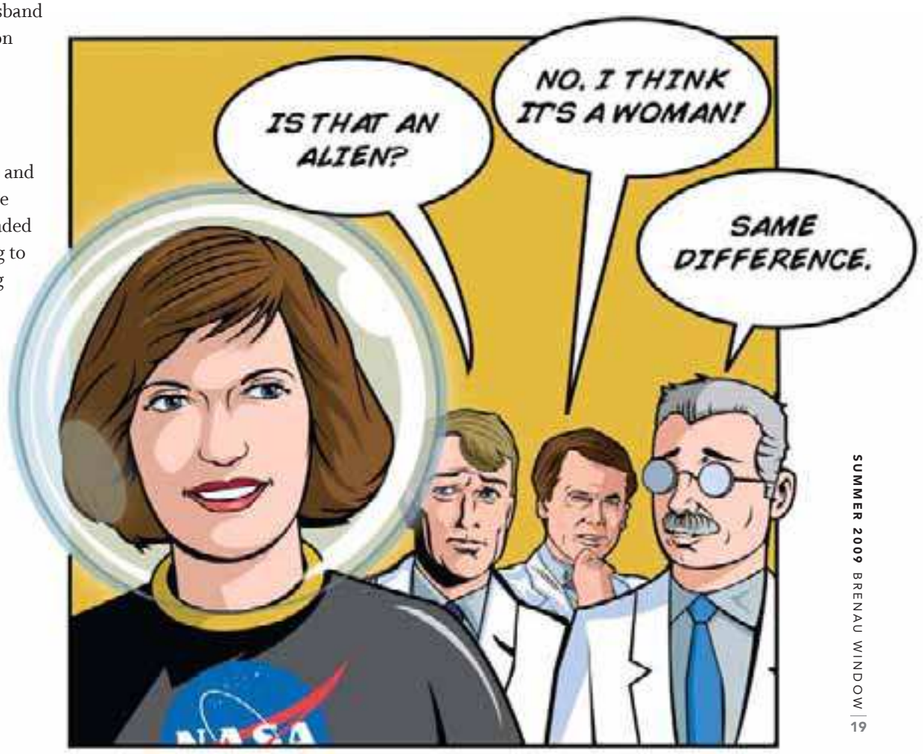
Knowing she needed more education and breadth to further her ambition, Allen received pilot certification and became an avid scuba diver (There are many parallels, she would tell Brenau graduates in her commencement address this spring, between the undersea and outer space environments.). She also took additional training as a medical technician and began working in that field while she moved on into a graduate program in chemistry and materials at Old Dominion University. She completed a master's degree with a 3.75 grade point average and graduated *magna cum laude*. Her thesis work at NASA's nearby Langley Research Center helped her land a job with the Department of Defense, working with the U.S. Navy in Yorktown, Va.

"I know that her main mission, though, was providing for me," says her daughter, Nicole Mapp Hardee, who is a lawyer in Birmingham, Ala. "But she never stops learning. She constantly challenges herself." Hardee, who is herself a bit of an over-achiever type with a law degree, an M.B.A and two children at the ripe old age of 31, adds, "My husband says I am the hardest-working person he knows – next to my mother."

TURNING POINT

Allen's combination of adventurism and ambition came into play after Nicole graduated from high school and headed to college. The Navy was attempting to staff a new facility it was developing on the rural Georgia coast at Kings Bay between Brunswick and Jacksonville, Fla., that would be the east coast base for its fleet of Ohio-class Trident ballistic missile submarines. Unlike the astronaut program that seemed unenthusiastic about Allen's science credentials, the Navy needed someone to run a chemistry lab on the base.

"It was a chemist's dream," she says. "I went to Kings Bay before the facility was completed, and I was able to outfit the entire lab and hire the folks to work there before the first submarine, the *U.S.S. Tennessee*, came in. It was quite an experience."



Kings Bay, located on Cumberland Sound between the St. Marys and Crooked rivers, is touted in publicity material as the top destination for military retirees. Shortly after her arrival, however, Allen discovered why the Navy was having some difficulty staffing it. There simply was not a lot to do there. "When the movie theater opened, we celebrated for a whole month," she quips.

One thing it did have, however, was a regional campus of Brenau University that offered, among other things, a program leading to a Master of Business Administration degree. "It was a godsend," says Allen. "I had always been into science, and it was a totally new direction for me, but I am always looking for a challenge. I am just not the type of person who likes the routine."

For a technical person, much of the business curriculum "was like Greek. There was a time when I was ready to quit because I thought I'd die if I didn't get away from credits and debits and back to oxygen and nitrogen." She got nothing but encouragement from the Brenau faculty, however. Professors urged her to stick with it and advised her to "quit trying to over-analyze it; it's simply another way of looking at things."

For her it was the turning point.

After four years, she was ready for another move. A fortuitous call to an old boss in Virginia revealed that this time NASA was looking for someone with exactly her credentials. She took a job as

Tyrone Turner

chief of the materials and chemistry branch at the Kennedy Space Center in Florida. In addition to her award-winning research into environmentally friendly cleaning materials and processes, in that role she also had heavy budget and strategic planning responsibilities and discovered that the M.B.A. served her well. Thus, when she decided to seek a Ph.D., instead of a science track she enrolled in and completed the doctoral program in business at Nova Southeastern University in nearby Ft. Lauderdale.

In 2002 she landed a temporary assignment at NASA headquarters in Washington, working on the long-term strategy for NASA's space exploration program. And, after three years working in an executive position in human research programs, she assumed her current position.

It is a role that virtually was tailor-made for a person of her background – plenty of science, to be sure, but also a wide range of business activities, including overseeing programs for licensing to private enterprise technology that NASA develops in its various programs.

"I'm not over-stating it when I say that I simply would not be where I was today if it were not for Brenau," she says. "The Brenau experience gave me a head start on gaining some unique attributes for the NASA world."

SHEER THRILL

When Allen first started working for NASA at Kennedy Space Center in Florida in 1991, she managed the materials and chemistry labs in the Operations & Checkout Building, which also houses the crew quarters for shuttle astronauts. She became friends with many of them, including some of the women on the various shuttle crews that have lifted off since the first mission in April 1981. During the 70 missions that occurred while she worked at the center, she concedes to some minor pangs of envy when she saw the women and their crewmates begin the much-photographed seven-mile journey to the launch pad. That, however, is quickly erased by "the sheer thrill of watching the launch," she says, "and knowing that you contributed to the health and safety of the astronauts on board and to the success of their mission is one of the most rewarding experiences in life."

In early May the shuttle *Atlantis*, with seven astronauts aboard, set off again for a 13-day trip into space. After close to 30 years of operations and in spite of two major disasters in 1986 and 2003, the lift-off occurred with little more than routine notice. What Allen knew, and what she conveyed to Brenau Women's College graduates in a commencement address three days before the launch, was that this mission was particularly dangerous: it would fly out to repair the Hubble Space Telescope, about a hundred miles farther than normal shuttle orbits with higher risks of hitting space debris. Allen told the graduates that she had been to the shuttle launch site a few days before. She said she had driven to launch pads 39A and 39B and saw an extraordinary and poignant sight – not one, but two shuttles, one on each pad, pointing skyward, a sight not seen outside disaster movies. The shuttle *Discovery* was to remain on Pad B ready for launch in case it was needed for a rescue mission for the *Atlantis* crew.

The shuttle program is scheduled to end in 2010 and at that point there will be no more Americans going to space until the Constellation program gets fully underway with the anticipation of landing people on the lunar surface in the early 2020s. Unlike Apollo, which put the last men on the moon in 1972 for a couple of days, this project is designed to keep them there for up to six months. Meanwhile, any Americans who need to travel to the International Space Station, the principal destination of the shuttle over the last three decades, will have to bum a ride on Russian rockets. And, it is likely that the next human voices that will be heard from the moon will be speaking Chinese.

U.S. astronauts' returning to the moon is important in its own right, says Allen, "but you really have to look at the moon with Mars in sight." Those long stays on the moon merely are limbering-up exercises to determine whether astronauts can fare well in such conditions. It takes three days to get to the moon; it will take six months to get to Mars.

With the country spending unfathomable amounts on economic recovery and the Obama administration's pressing other high-cost priorities, the future for the NASA moon and Mars programs are at best uncertain. The good news is that the president's pick to head NASA, former astronaut Charles F. Bolden Jr., is highly regarded. One of the first African-American astronauts, Bolden flew on four shuttle missions and was the pilot of the mission that put the Hubble telescope into orbit.

In Washington, however, the loudest voice of program advocacy comes from the appropriations process. President Obama requested about $18.7 billion for NASA for 2010, including a five percent increase for the NASA division responsible for building the early elements of the moon-bound Constellation program. But in subsequent years the president is asking for less than what was originally allocated for the program as the administration conducts a review of NASA's overall plans.

Allen generally works an 11-hour day, "not counting what I do when I get home," she says. And like all good managers, she plans priorities for the day. But such is the nature of the NASA beast that, by the time she gets her computer fired up at around 7 a.m., priorities are already moving down the list. She gets about 250 e-mails a day, many from the media, congressional staffers, the White House science offices or NASA liaisons at the Office of Management and the Budget, or the Congressional Budget Office that require immediate attention. It's usually about 4 p.m. before she gets back to her priority list. "But I would not have it any other way," she says. "One day is never the same as another."

Allen in October will officially assume a new role: having been unanimously elected in March, she will begin her term as a trustee at Brenau University.

"I believe Gale Allen will be an excellent trustee for the university," say President Ed Schrader. "Usually you want your trustees to have a broad view of the world. This one has a broad view of the universe."

Allen says she is extremely comfortable that serving as a trustee for a liberal arts institution will jibe nicely with her role at NASA.

"We will not just need scientists and engineers," she said. "We will need business people and people from many other disciplines. Part of my job is to encourage higher education to help keep the pipeline filled with all the skills that we are going to need as we return to the moon and go to Mars. That's a vital part of our program."

Brenau buys into the region's biotech boom to launch Discovery Incubator program

incubating innovation

By Mary Welch

With a new bioscience laboratory center and plans for a master's degree in biotechnology, Brenau University is set to graduate with honors in the growing – and increasingly important – world of biotechnology.

The university, as part of its strategic plan for 2025, is creating a "discovery incubator," with interdisciplinary teams of faculty, students and staff in about 10 areas. Along with that the university will create a number of "named" professorships in a council of scholars, positions that will entice top scholars and researchers capable of inspiring students in the classroom, conducting important research and helping leverage fruits of that research for non-academic purposes. Not only would these teams help create exciting and world-class educational experiences, but also in some cases, such as biotechnology, it may create products that could be patented and become commercial successes or benefit mankind. An example of such an endeavor at a neighboring university led to creation of a company that is marketing an Insulin patch that helps people with diabetes maintain their health without injections.

In fact, biotechnology is the first of these interdisciplinary scholastic programs to be developed and it will be chaired by Professor S. Randolph May, who is the Richard and Phyllis Leet Distinguished Chair of Biological Science and the director of the new Anne Thomas Bioscience Center on the Gainesville campus. With both impressive academic credentials and business experience, May will also lead the university's first foray into applied genetics and cancer research.

"What we are doing is exciting and very challenging," May says. "We believe we can do it – create a credible graduate program in biotechnology where our students will get the scholastic work as well as the hands-on research work that is so necessary in today's scientific world. Our program, along with the liberal arts curriculum, is an excellent way to train students in the biosciences."

HIGHER-LEVEL GRADUATES

During the last five years, the number of students majoring in science at the university has increased 500 percent with 87 students majoring in hard sciences. Although biotechnology is the fastest growing industry segment in Georgia, there are few education programs supporting this industry, particularly at the bachelor's and master's degree level for training technical laboratory personnel. As May puts it, Georgia universities are churning out lots of people who can work in laboratories but few higher-level people capable of managing them. Brenau intends to change that quickly. The university expects to enroll its first students in its master's program in biotechnology in 2011.

Gale Starich, dean of the School of Health and Science and a biochemistry professor, believes the program will offer just what the market desperately needs. "By increasing our graduate program and our graduate research program, along with a tandem feasibility study for a medical school, we are developing students who will be able to go out in the workforce and work for major companies. Our students will have the hands-on experience of working in a lab, along with a liberal arts background, that corporate America so desperately wants."

Cinda Herndon-King, director of educational programs for Georgia Bio, agrees. "The program is very exciting," she says. "They are looking at it from a unique perspective. In the biosciences, talent is the key to growth and companies in the state, and those looking to relocate here, want to know that there will be enough trained talent – trained at the master's level – to carry out the work. Brenau will offer that and have students very familiar with working in a state-of-the-art laboratory and in an interdisciplinary way. It's very exciting not only for the students and the university but for the state and biotechnology in general."

Georgia is trying to make a name for itself in the increasingly growing biotechnology sector. Atlanta is the seventh leading city in biotechnology in the United States with 250 companies and growth of 38 percent in the sector over the last five years.

JOINING A $17 BILLION INDUSTRY

According to Georgia Bio, the economic impact of the life sciences industry is larger in the state than that of the entire university system. The life sciences industry has an economic impact of $17.3 billion versus $11 billion for state-run higher education.

"The life sciences sector accounts for 62,000 direct jobs in the state, and one job out of every 68 owes its existence to the life science industry or research," Herndon-King says. "In order to grow that industry, we need the talent as well as universities devoted to the life science sectors. We've had that with Georgia Tech, Emory, the University of Georgia, and a few others. Now, it'll be great that we can add Brenau to the list."

Starich says the interdisciplinary approach melding math and science will help attract students. "It's very important," she says. "With this kind of research you have to almost 'hook' students in. It's very much a matter of you don't know or think you will like research until you actually go into a lab. Once there, many students will find, as I did, that the research work is very fulfilling."

So exactly how will this Discovery Incubator program in biotechnology work?

ANYONE CAN PLAY

According to Dr. Bill Lightfoot, dean of The School of Business and Mass Communications and director of the Discovery Incubator, the program will empower students, faculty and other participants to generate research that will be supported across multiple disciplines throughout the university. "Anyone can come up with a concept and be able to go through a logical process – a series of checks and balances – to get the funding and a team to see it through," he says.

The Discovery Incubator for biotechnology will have to be "market-based," he says. "Coming up with a big idea and making it a business is not a simple process. It does not involve one single discipline. It's not just pure research. It's not just a pure business issue. We will be linking the laboratory work with commercial applications, and that will involve a very interdisciplinary approach."

An essential part of the success of this program is having a world-class laboratory, and thanks to a grant from Gainesville philanthropist Anne Thomas, the new bioscience facility provides students and faculty capability to release their scientific creativity and innovation. "With our new equipment, we are creating new learning materials and strategies to help our students learn modern biology. To this end, we are submitting grant applications to the National Science Foundation to fund the development of new courses and a new curriculum for our biology majors. We are also applying for scholarship grants for our students," May says.

THE LEET PROFESSORSHIP

May's new professorship was endowed by Brenau trustee Richard Leet and his wife, Phyllis. Dick Leet, a Ph.D. in chemistry, rose through both scientific and business ranks to become vice chair of Amoco before his retirement. Similarly, May, in addition to his academic work, has helped found two biotechnology companies: LifeCell, a publicly traded company in Branchburg, N.J., and LXR, a private stem cell research company in New York City. It is this duo background that will help propel Brenau research into the market.

"We certainly expect to be able to spin out companies from the research that we intend to do here at the university," May says. "There is no reason why we should not be applying for and getting major research grants and taking our ideas to market. For instance, we have a pilot program right now with three students that have isolated a gene. It is a first for Brenau. We intend to do things like that. It is not only a good exercise for developing students and their laboratory skills but it will help the university attract more students and research dollars."

In fact, May and his colleague, Dr. Thom Gaddy, an experienced cancer researcher, are working on what may be the university's first biotechnology spin-off company. The two scientists hope to unravel the basis of low-temperature cell injury and produce mitigating compounds. If those can be discovered, then the two hope to form a new biotechnology company in Gainesville to produce protective media for freezing cells.

"Very few liberal arts colleges are undertaking such an ambitious program for their students," May says. "We need more women in science, and we are growing our science program very aggressively. Five years from now I hope we will have 100 science majors, all of whom will be able to go on to get their master's and doctoral degrees and work in the industry."

Mary Welch, a freelance writer in Atlanta, was most recently editor of Atlanta Woman *magazine.*

Rudi Kiefer

Billy Howard

Dr. Randy May, left, is the university's first 'named professor' in the proposed Council of Scholars and spearhead of an applied research project with an entrepreneurial bent. For Dr. Bill Lightfoot, right, Brenau business dean and head of Brenau's new 'knowledge transfer' initiative, May's unique blend of scientific, academic and research credentials aligns perfectly with the interdisciplinary foundation for the program. Discovery Incubator, however, is open to non-science scholarship activities as well.

HEALTH FOR THE WHOLE WOMAN

"This is where I should be," says alum Joy Hostetler, EWC '02, who for six years has worked in an Atlanta clinic that sees about 12,000 patients a year, many of them indigent women who can't get help anywhere else.

Past the sprawling park that houses Zoo Atlanta and the Cyclorama and down Boulevard almost to the federal penitentiary, the Grant Park Family Center blends inconspicuously into the neighborhood. Visitors fidget in the waiting room where signs are printed in English and Spanish and free brochures warn about the dangers of diabetes. A montage of baby pictures hangs on the wall just inside the door to the exam rooms, where Joy Hostetler has devoted her working life for six years.

by Karen Rosen

Matter-of-fact, yet quick to laugh, Hostetler worked as a registered nurse in a Buford, Ga., family practice before earning a Master of Science degree at Brenau University in 2002. She bolted for Guatemala to immerse herself in Spanish for five weeks before settling in as the Grant Park Family Center's nurse practitioner.

No day – or patient – is the same. One woman came in with a misshapen breast that contained a mass half its size. Hostetler sent her for an ultrasound. Another tested positive for Chagas, an infectious disease from Central America. Neither ailment is the kind of thing she would encounter in a family practice in the suburbs. By necessity, however, Hostetler has become a women's health specialist, providing prenatal care, Pap smears, breast exams, birth control and even some fertility treatment for women with no insurance or little money.

On another street named Boulevard – this one on the Brenau campus in Gainesville – another clinic is making itself known as a women's health destination.

The red brick building with black shutters and golden columns is the wellness center and houses counseling services, health services and the women's center. The campus chaplain also is located there, part of an initiative undertaken by the university to create a sort of one-stop shopping center on the Women's College campus for taking care of the whole person physically, spiritually, emotionally and attitudinally.

"I think it's finally getting out in the school, 'Hey, we have a health services here,'" says Janie McCoy, the women's health nurse practitioner who came on board three days a week last November.

McCoy has increased the care provided to students at the Women's College and Brenau Academy and sees as many as 80 young women a week. McCoy does complete physical and gynecological exams and provides treatment for ailments such as allergies, bronchitis and strep throat. She also also conducts a variety of other tests, and she plans to administer a wide range of immunizations beginning in the 2009-10 academic year.

Specialization Required

Both establishments are part of one of the fastest-growing segments in human U.S health care today – women's health. It is a branch of health care that requires some specialization because things affect women that do not affect men at all. For example, young college-age men don't have to deal with pregnancy, planned or unplanned, or some sexually-transmitted diseases which have much more long-term deleterious effects for females than for males. There's simply a broader range of ailments and issues affecting women's health: breast and cervical cancer, osteoporosis, occupational injury, maternal mortality, digestive disorders, oral health, eye health, and urologic disorders are only a few. Every year we learn more about women's health topics and how to deal with them.

Still, in the Southeast, which is Brenau's principal "market," there remains a significant gap in health care that is specifically addressed to the needs of women. According to the U.S. Health Resources and Services Administration, about 89.1 percent of women of all ages, races and social situations have a usual source of health care, a professional they see when they are sick and where they are more likely to receive preventive care and specialized treatment for their problems. In the Southeast that number drops precipitously to about 77.3 percent.

Although Brenau offers no specific women's health program as some other institutions do, the level of commitment to the issue is changing rapidly. From the students who want to learn how to treat women's health needs to the ones simply learning about their own bodies, they can find courses of study across multiple disciplines at Brenau. The 131-year-old university offers graduate and undergraduate programs in nursing, occupational therapy and

Photos by Billy Howard

clinical psychology and a pre-physician's assistant accelerated program in conjunction with the Philadelphia College of Osteopathic Medicine. One of the first three students who entered the postgraduate phase of that program this summer says she plans to specialize in women's health because of her exposure to the field at Brenau.

Brenau continually adds more women's health-related studies, including a recent graduate program in gerontology. Starting as soon as 2011, Brenau will also begin offering a doctor of nursing practice degree, which will become the new standard for licensing nurse practitioners in the United States. And, if Brenau pursues the idea to launch a medical school, one of its emphases will likely be women's health, says Gale Starich, dean of the School of Health and Science and the point person on the medical school exploratory initiative.

Joy Hostetler at her clinic in Atlanta serves about 650 prenatal patients a year. "The big gap in women's health care in the state of Georgia is with prenatal care," she says. "If you don't have money in Georgia, there's no place to go."

Natural Fit

Since Brenau historically is a women's college, an expanded emphasis on women's health will be a natural fit, says Starich. However, a more compelling reason in her view is society still sees a classic woman's role as sacrificing her own health to take care of her family's. For single mothers, economic challenges take an additional toll on their health.

"With a women's health focus, you have such a broad reach," she says. "If you improve the health care of women, you also improve the health of their children and their families. And you improve the educational outcomes for the children and the family."

> "A lot more women are becoming health conscious. They're learning what they do now affects them later."
>
> *– Janie McCoy, women's health nurse practitioner at Brenau*

When Starich arrived on campus seven years ago, there were 125 students in the School of Health and Science in both the Women's College and the Brenau coeducational programs. By last spring, the enrollment had jumped to 727, most of them women, a majority of them involved in health care programs. Some of those who are not in specific health care programs as undergraduates plan to go on to medical school or postgraduate health care studies.

Starich predicts that by 2015 about 13 percent of all available jobs will be in health-related fields, which are already dominated by women."Even medical schools are 50-50 now," she says. The growth is a convergence of factors, including the economic downturn in which health care jobs, like nursing, are regarded as recession-proof with good earning power. According to professional associations data, a physician assistant or family nurse practitioner, the principal primary caregiver for many families, can earn between $75,000 and $90,000 per year after a short time in clinical practice.

There is also just a plain old shortage of qualified health practitioners across the board, a problem that is particularly acute in north Georgia, says Keeta Wilborn, chair of the Brenau Department of Nursing. With that there is also a significant shortage of people to train the professionals who will be replacing those approaching retirement age.

"The average age of nursing faculty is 55-56," Wilborn says. "So in the next five or six years, probably more than half of our faculty are going to retire, and there's no one really coming up to replace us."

Growing Enrollment

Brenau's nursing school has 15 full-time faculty and about 300 students, with more than 70 graduates the last two years. Since 2001 the undergraduate enrollment has more than doubled and the graduate program enrollment has more than tripled. For about 70 undergraduate spots in the fall semester, Brenau had 200-300 applications and there were about 30 applicants vying for the 20 graduate slots. Brenau was able to admit more students after moving into the Featherbone Communiversity building, called the Brenau East campus, and gaining more classroom and laboratory space. In the year since Brenau has had its human patient simulator, (remember Mr. Ogletree from the Spring issue of *Brenau Window*?), there have been 510 student visits with him. Nursing and other health care programs are growing at regional campuses, too. At the new South Atlanta campus in Fairburn, Brenau's fellow tenant, Georgia Military College, offers a two-year nursing program. A natural offshoot would be for Brenau to add its four-year degree and graduate programs there as well.

"We're seeing people who were nurses who have gone on to other things coming back to the profession because there are jobs," Wilborn says. "We're seeing a huge increase in family nurse practitioners, and I think we'll see more than that."

Brenau emphasizes preventive medicine and health promotion in its nursing training, Wilborn says. Although it is extremely important in women's health, a common philosophy for nurses of every specialty is "risk reduction, health promotion and disease prevention." However, one of the most sensitive, and occasionally controversial, areas of women's health is in diagnostics. Not all health insurance programs, for example, cover mammography, ultrasound and other diagnostics that have been extremely effective in detecting breast cancer in early stages.

A recent freshman seminar at Brenau dealt with the genital human papilloma virus (HPV), which according to the Centers for Disease Control is the most common sexually transmitted infection, and it can lead to cervical cancer. "Many young women are unaware that cervical cancer is a sexually transmitted disease," said nursing professor Dianne Preissler, who taught the seminar. According to the American Cancer Society, about 7,000 women die of cervical cancer each year. HPV-related cervical cancer, however, "is totally preventable," Preissler says, by avoiding unprotected sexual activity. And, there is a vaccine, which is extremely effective in reducing HPV risk.

Women's health, however, encompasses much more than childbirth and common illnesses. As a result, the university has consolidated a number of services into one location on the Women's College campus to address "mind, body, spirit" issues for young women. In addition to the health clinic, the location also houses the Counseling Center, the Women's Center and the university chaplain's office. "It will focus on all aspects of women's health: emotional health, physical health, spiritual health," says Heather Casey, director of the Women's Center.

Global Issue

Casey says the focus ranges from very local (stress relief and eating disorders are big concerns with university-age women) to the very global. Her "Intro to Gender Studies" has a section that includes violence against women. It also explores the different ways male and female bodies react to health issues such as heart attacks, prescription medications and athletic injuries. "There's a different ligament that gets torn in women generally than it does in men," Casey says, "and the way that we land is different than men." Casey teaches a section on international women's health issues such as female genital mutilation in Africa, malnutrition, AIDS and access to water. In addition, the university has consolidated a variety of services into one location on the Gainesville campus. In some instances the local and the global converge.

Stress relief and weight management are the keys, which also begin early in a woman's life. Casey says a series of holistic "body, mind, spirit" seminars will be conducted jointly this year by the women's center, the counseling center, the chaplain's office and student health services. McCoy says some frequent visitors to the health center are internationals. They are often not sick, but merely so far from home that they just need an authority figure to listen to them.

"One of our big roles as nurses is all about risk reduction, health promotion and disease prevention," says nursing department chair Keeta Wilborn.

"Letting them hear themselves talk it out, resolves a whole lot of issues," she says. "Once they get to know us, they know we're not judgmental. We're here to help them in whatever we can do."

Starich has a cushion in her office with the anonymous quote: "Strong women – May we know them – May we raise them – May we be them." She says Brenau provides a "much more coaching, mentoring approach than many schools do, where they throw you in with the sharks and you sink or swim." She thinks that's a good motto for Brenau's "whole person" approach to women's health.

"Part of our role here is to help women find their passion and the place where abilities and passion intersect," she explains. It's one thing to say, 'I've always wanted to be a nurse.' But you have to be able to do very high-level scientific work that nurses are expected to do now. It's not just bedpans and bed sheets anymore."

Freelance writer Karen Rosen, a long-time reporter for the Atlanta-Journal Constitution, *lives in Decatur, Ga.*

A YEAR FOR HONORS


Kelly Moore

Golden Tigers softball coach Devon Thomas shows some late-inning angst as the nationally ranked Brenau team makes its first national title run and delivers Thomas coach of the year.

A basketball player who wasn't recruited by Brenau and a softball senior transfer became the first All-Americans in their sports for the Golden Tigers.

Ashley Hagans put the three-year-old Brenau basketball program on the national map by leading the NAIA in scoring and earning honorable mention All-America accolades. The 5-foot-7½-inch junior forward, who scored 21.17 points per game and ranked fifth nationally in steals (3.6), graduated from high school before Brenau had a hoops program. After junior college, Hagans showed up for a tryout at Brenau and immediately became "a difference maker," says coach Gary Bays.

Cassie Lassiter, a pitcher who transferred from Troy University for her senior year, became Brenau's first softball All-American as an honorable mention selection. The right-hander, who was Southern States Athletic Conference (SSAC) Player of the Year, ranked third in the conference in wins (18) and ERA (1.28), fourth in strikeouts (195) and eighth in batting average (.350).

In other honors, softball coach Devon Thomas was named SSAC Coach of the Year. His 11th-ranked team finished the regular season as conference co-champs with Lee University. Softball player Morgan Smith, a catcher, was SSAC Freshman of the Year.

In tennis, senior Paula Ghilardotti was named to the NAIA All-America first team, while freshman Lyn See Choo was an honorable mention. They led the Golden Tigers to an NAIA quarterfinals appearance and two playoff wins.

From the soccer team which placed third in the SSAC, sophomore Lisa Lesnick, junior Lily Futrell and senior Kelly Young were first-team All-Conference selections, while junior Mari Anderson was second-team.

'Trifecta' as spring sports win national recognition

The individual performances helped Brenau's intercollegiate sports teams enjoy their first three-pronged presence in national sports rankings this year. The tennis, softball and swimming teams each notched Top 20 rankings and competed in national championship events, an unprecedented feat for Golden Tigers athletes.

Coach Gordon Leslie's tennis team finished the season ranked 10th nationally with a 19-6 overall record and 5-2 in conference for third place. The Tigers returned to the national championships after a one-year absence by receiving an at-large bid to the NAIA tournament in Mobile, Ala. Brenau defeated Bethel (Kan.), then knocked off Azuza-Pacific (Ca.) before losing to Fresno Pacific (Ca.) in the quarterfinals.

"It was the best season they've had in the last three or four years," says athletic director Mike Lochstampfor. "They did well. They just didn't have quite the depth."

While the tennis team has national championship experience – and even a couple of national titles in 1999 and 2002 – the six-year-old softball team made its first visit to the postseason. The Golden Tigers opened the season with an 11-game winning streak and finished 42-12 overall. With a 26-6 record in SSAC play, they shared the title with Lee University. Although top-seeded going into the conference tournament, they lost to Lee and eventual champion Shorter. Nevertheless, the Golden Tigers received an at-large bid to the national tournament in Decatur Ala., where they lost to Notre Dame (Ohio) in the first game of pool play, defeated Waldorf, then lost to No. 5 William Carey.

Coach Thomas' team ended the season ranked 11th after cracking the NAIA Top 25 poll for the first time in school history in March at No. 16. "They had some injuries that caught up with them because of the length of the season," Lochstampfor says.

The swimming team ended its season in early March in a tie for 19th place at the national championships. The accomplishment by Coach Gabby Matthews' team was all the more remarkable because only five swimmers competed. "They're young," Lochstampfor says. "They're improving all the time."

Soccer loss is cross-country gain, but volleyball just needs experience

The bad news is that Brenau Golden Tigers All-Conference defender Kelly Young used up her eligibility and will not be on the soccer field this fall. The good news is that she still has a year of eligibility for cross-country. That, plus the combination of returning experienced athletes and some aggressive recruiting, put the Golden Tigers fall sports teams – soccer, cross-country and volleyball – in pretty good shape for successful seasons.

Soccer coach Lochstampfor's Golden Tigers team received votes for national rankings for the first time in school history but finished third in the tough SSAC and a shade out of the national Top 25. The Tigers still have to deal in conference play with defending national champion Lee University and Berry College, ranked 10th when it played the Tigers. Lochstampfor also is hedging bets with some ambitious scheduling that pits his team against some of the top teams in the nation, including Savannah College of Art and Design, University of Mobile and Lindenwood University in Missouri.

"Even if you don't win the conference tournament, you have a chance to get an at-large bid to the national tournament" he says. "We've set up our regular-season schedule to hopefully facilitate that."

Brenau returns the majority of its team, including All-SSAC players Lisa Lenik, Lily Futrell and Mari Anderson. The soccer squad added recruits Shawnna Manchette and Ryann Clelland of Florida and Taylor Bates of McDonough, Ga. It is also working on solidifying defense.

Cross-country veterans Diana Cardenas, Hillary Corey and Shkurte Ejupi celebrate a victory.

On the turf, cross-country coach Susan McIntyre's runners placed fourth in the conference last year. Along with Young, however, she will have some talented newcomers from close to home in Georgia who will add depth to the squad: Ashley McCoy of Banks County, Fatima Talavera of Gainesville, and Laura Simmons, who transferred from the University of Georgia.

The Golden Tigers' young volleyball team returns most of its players, but coach Meredith Matthews has added Mekenna Cipres of Murrieta, Calif., and Melissa Thornton of Canton, Ga.

"Even though they were close in many matches last year, they couldn't close the door," Lochstampfor says. "They're a little bit of experience away from winning."

– Karen Rosen

Tom Askew

Flying High

Eloise Gilmer in a recent telephone conversation seemed anxious to leave for her job at the city of Gainesville, Ga., public utilities department. It was her first day back to work after four months recuperating from an illness, and she did not want to be late. To her missing work or being late is anathema. During her 33 years with the department, nobody remembers any other time she missed a day. That's even more remarkable when you consider that she will be 84 on her next birthday.

Gilmer is an inventory and operations control clerk with the City of Gainesville Public Utilities Department. In 2005 the Georgia Department of Human Resources Division of Aging Services, the Department of Labor, and other organizations named Eloise Gilmer the Older Worker of the Year – a testament to her enviable work ethic.

In December Brenau presented her the Mary Mildred Sullivan Award, the university's highest non-academic award, for service to the university, including her financial support. "For as long as I can remember," says Jim Barco, senior vice president for institutional development, "we have been virtually able to set our watches and calendars by the punctuality of her annual gifts." In 1996 she established the Lee and Eloise Gilmer Memorial Trust, a scholarship fund that will provide full tuition and room and board for nursing students.

"The thing about it is I wouldn't have been able to do it if I hadn't been able to work," she says. "But I felt it was something I had to do for Lee."

Eloise grew up in Austell, Ga., and at the end of World War II, worked at the aircraft plant in nearby Marietta. There she met Lee Gilmer, who trained U.S. Army Air Corps pilots. As this legend goes, he made an off-handed remark that someone could not be "in his family" unless they could fly an airplane. By the time Eloise and Lee as newlyweds moved to Gainesville in 1949, she had owned her pilot's license for a year.

The Gilmer name is eponymous with aviation in Gainesville and Hall County. When Eloise and Lee arrived 60 years ago, the city had inherited as its airport two 4,000-foot former military dirt airstrips. Lee first taught flying there; then, until his death at age 59 in 1971, he ran the airport that now bears his name. He and Eloise also had another business. Lee convinced Georgia Power Co. that 1,600 miles of power lines strung across the mountainous north Georgia region could be more easily inspected from a slow-flying aircraft than on foot. So for more than three decades the Gilmer family business had responsibility of flying the route in a small plane at about 65 miles per hour, counting and surveying numbered power poles. They zigzagged through the skies from Tallulah Gorge to Lake Jackson and from Cumming to Madison, looking for problems and encroachments on the right of way. After Lee died, Eloise for the next six years continued flying airplanes and inspecting power lines.

On her desk she keeps a model of a Piper Super Cub – one of the two tiny planes that she and Lee used to inspect power lines. In the 1990s, following the Atlanta Olympics, coworkers arranged for her to fly aboard the Goodyear Blimp – as co-pilot.

Both Lee and Eloise believed that hard work and determination are keys to success. But they also recognized that people of means have a responsibility to help those who are willing to invest their efforts, but who may not have the means. Eloise captured that spirit when she created the scholarship fund and began contributing.

Significantly, she created the fund in times similar to now: dire economic forecasts for America's future, people lined up at service stations for high-priced gasoline because of imported oil shortages; a troubled housing industry and a credit crunch with mortgage interest rates in double figures.

We joked with Eloise about the possibility of getting Brenau's newest trustee, a NASA executive, to arrange a space shuttle flight, but she wasn't biting. "No, I don't fly anymore," she says. "I could, though. I've still got my license."

– David Morrison