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A publication of Armstrong Atlantic State University

AASU leads state in increasing teacher preparation

A November progress report on the University System of Georgia's production of new teachers revealed Armstrong Atlantic is leading the state. Overall, the system's production of new teachers increased 44 percent over the past five years.

The report, using data from 2004-2007, said that AASU went from 181 new teachers prepared in 2004 to 318 in 2007, an increase of 76 percent. Increases at the other leading colleges of education ranged from 27 to 36 percent.

Overall, the university system has improved the diversity of the new teachers it prepares by 17 percent since 2004. AASU once again outpaced the front-runners by increasing the number of its minority initial-certification graduates by 193 percent. The other leading state education programs increased minority participation from 88 percent to 144 percent.

Savoring Tuscany

Alumni and friends of AASU traveled to beautiful Siena, Italy in November 2007. The trip was a continuation of a longstanding relationship between AASU and the Dante Alighieri Institute of Siena, which provided charming, knowledgeable guides and presenters. The group enjoyed cooking and savoring two gourmet feasts with the help of Italian chefs. The travelers spent two beautiful autumn days in the Tuscan countryside exploring hill towns.

AASU is planning a second trip to Siena for November 8-16, 2008. For more information contact Carol Anderson (Carol.Anderson@armstrong.edu) or Gail Rountree (Gail.Rountree@armstrong.edu).

Pictured above:

Pausing at a well in San Gimignano, a hill town near Siena, are front row from the left: Ron Fagin, Gail Rountree, Carol Anderson, A.J. Cohen, and Kelly Cohen. Back row from the left: Catherine Fagin, Andi Carter, Pam Parker, Paige Samples, and Linda Farrer.



Anna Mamalakis accepts an honorary Doctor of Letters on behalf of her late husband, Nick, from President Thomas Z. Jones. Her son, John, looks on.

Nick Mamalakis receives posthumous degree

The late Nicholas John Mamalakis was honored during the fall 2007 commencement with a posthumous honorary Doctor of Letters. His wife, Anna, accepted the degree.

Nick Mamalakis was a leader in the Savannah business community. He joined Mercer General Insurance & Realty Company as a clerk in 1932 prior to his graduation from Savannah High School. He retired 50 years later as the company's president and chairman of the board.

He considered AASU's mission fundamental to Savannah's prosperity. He often referred to AASU as "Savannah's brain trust,

charged with equipping the area's future workforce with the knowledge to foster responsible economic growth."

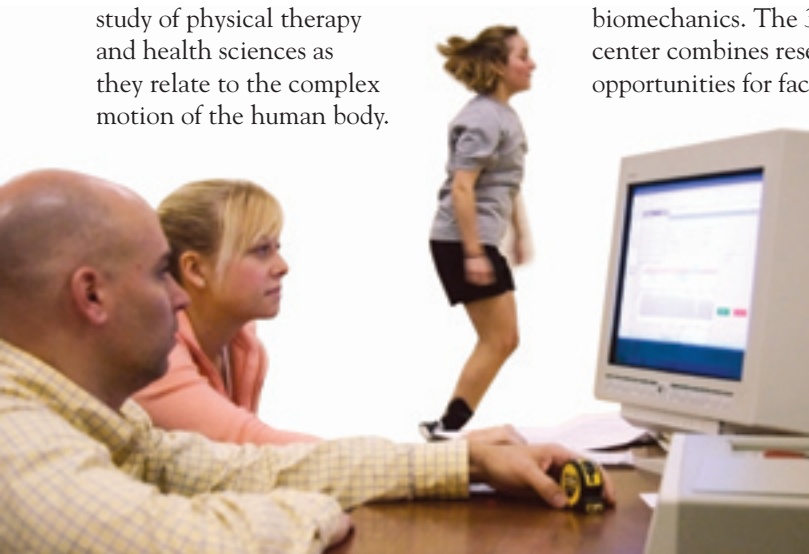
His long history with Armstrong began in the 1960s, as a founding member of the Big "A" Club in athletics. He extended his support to the alumni association and the university foundation. In 1985, the AASU Alumni Association named Mamalakis Armstrong Citizen of the Year for his service to the university and the community. Mamalakis served as a trustee of the foundation board from 1993 to 1996. In 1997, he and Anna established the Nick and Anna Mamalakis Scholarship. Two years later Mamalakis was inducted into the AASU Athletic Hall of Fame.

In 2003, longtime friend and protégé J. Cliff McCurry and his wife, Kathy, made a generous contribution to the Emerging Leader Program at Armstrong Atlantic in honor of Mamalakis. The 15-week leadership development program for first year students and students new to AASU, was renamed The Nick Mamalakis Emerging Leader Program.

Biodynamics Center *flexes* its muscles

The appearance of the room is deceptive. At first, it resembles the cardio section of a large gym. Almost two dozen pieces of equipment line the walls. Large, colorful poster presentations from academic conferences cover one wall. A full-size skeleton stands in one corner, a quiet observer.

This is AASU's new research and teaching laboratory to advance the study of physical therapy and health sciences as they relate to the complex motion of the human body.



It moved to a permanent home in Ashmore Hall this past January. The Biodynamics Center is the only regional facility providing quantitative assessment of human performance and movement. It fills the space vacated by the dental hygiene program.

On this day, Leah Ferster, recovering from a foot injury, is leaping up and down on a force plate built into a wooden riser. Sarah McGrath watches Leah's progress on a computer monitor as undulating red lines spike up and down. Sarah is conducting research on the effects of prophylactic ankle bracing and taping on lower leg stiffness. Both are graduate

sports medicine students.

The center formed in spring 2007, temporarily housed in an Ashmore classroom, under the direction of Bryan Riemann (health sciences) with assistance from George Davies (physical therapy).

The Biodynamics Center brings to the university a facility that is dedicated to the study and research of human biomechanics. The 3,050-square-foot center combines research and teaching opportunities for faculty and students in the areas of physical therapy and health sciences.

Graduate students, particularly those in the doctoral program in physical therapy and in the master's program in sports medicine, use the center to conduct hands-on research. Since

last spring, some two dozen papers, book chapters, conference presentations, and research projects have come from the program.

The facility includes many pieces of equipment that are used to measure body strength, function, and gait. The equipment has been assembled through various channels, including pieces from the departments of Health Science and Physical Therapy that, separately, have not been used to their fullest capacity.

In addition, almost \$100,000 worth of equipment was donated to the Department of Physical Therapy during the last few years by Christine diLorenzo,

director of West Side Physical Therapy in New York City. Included in the donation are computerized isokinetic dynamometers used for measuring dynamic muscle performance, as well as various cardiovascular and musculo-skeletal training equipment.

Several manufacturers and companies have expressed interest in using AASU and the expertise of Riemann and Davies as a beta testing site for newly evolving instrumentation. These arrangements will provide a means for AASU to have access to the latest developments in human performance and movement instrumentation without the financial burdens of ownership.

According to David Lake, head of physical therapy at AASU, the laboratory is of interest not only to faculty and students, but to the larger medical community in the area. Its presence fills one of the current voids in the region's health-related resources.

"We want area practitioners and health providers to be familiar with what we have here and invite them to become involved in the research being conducted at the center and take advantage of the expertise of our faculty," said Lake.

For example, an interdisciplinary study of muscle dynamics and tissue compliance—the ability to stretch—was recently done involving faculty from three academic areas in the university: engineering, physical therapy, and health sciences.

"The laboratory presents an opportunity for a collaborative interaction between the campus and the community in the area of biomechanical assessment of human performance," Lake said. ☼

—Bryan Riemann, Francisco Duque, and Barry Ostrow contributed to this article.

Pictured above: Bryan Riemann and Sarah McGrath monitor computer data generated by Leah Ferster jumping on a force plate.

APEELING RESEARCH

Richard Wallace has gone bananas. The professor of organic chemistry in the Department of Chemistry and Physics at AASU took a detour from synthetic methodology research seven years ago and has never looked back.

These days he splits his time teaching, doing research in a Science Center laboratory, and toiling in the backyard of his Richmond Hill home, where he grows bananas and citrus trees. He conducts additional research at the Bamboo Farm and Coastal Gardens in Savannah.

Wallace's work over the last years has been driven by a curiosity to identify a banana variety that can grow and produce edible fruit in Southeast Georgia's cooler than tropical climate. Recently, Wallace and two collaborators at the University of Georgia-Tifton have identified a variety that holds great promise.

The findings by Wallace, Gerard Krewer, and Esendugue Greg Fonsah, were published in the 2007 winter issue of *Southeastern Palms*, the quarterly journal of the Southeastern Palm Society.

In the last three years, Wallace has experimented with a variety known as *Veinte Cohol* and observed the same results every time: a two-foot stem gets planted in early May and quickly grows to produce mature fruit in October.

"Scientifically this is pretty exciting," Wallace said. "Over the last three years we've grown 50 plants of this variety and each one does the same thing. This is real."

That a relatively obscure variety of banana can produce fruit in South Georgia has long-term implications for gardeners and commercial growers in the region.

"Maybe one day we will be thinking about Georgia bananas in addition to Vidalia onions," Wallace quipped.

In the paper published in *Southeastern Palms*, Wallace and his colleagues write: "The discovery of this short cycle banana... holds great promise for expanding the regions of the world where bananas can be grown and fruited – both by the homeowner and possibly even commercially."

GROWING THINGS THAT DIDN'T BELONG HERE

The path to finding *Veinte Cohol* started in Wallace's backyard more than seven years ago and has been forged by scientific inquiry as much as a passion and curiosity about "growing things that didn't belong here."

Sporting wire-rimmed eyeglasses, a goatee, and a Hawaiian shirt, Wallace speaks with charitable patience to a layman about the years of research, breeding and pollination that has gone into the project.

Consider that there are between 900 and 1,200 banana varieties known around the world. Cavendish is the common variety produced by commercial growers and found in grocery stores worldwide. Growers prefer Cavendish because it has, so far, resisted disease and because its fruit yield is abundant.

Most bananas are grown in the tropics where temperatures fluctuate between 75 and 85 degrees Fahrenheit year round. The plants, and more specifically, their large green leaves, do not fare well in cooler temperatures. In general, trees take anywhere from 100 to 150 days to mature the fruit after it emerges from the stem.

In the search to find the elusive Georgia-friendly banana, Wallace had to pinpoint a variety that had some degree of cold-resistance and be able to produce mature fruit fast, ahead of the first fall frost in early or mid-November.

A *Veinte Cohol* plant that Wallace picked up by chance from a nursery in South Florida some years ago opened up the likelihood of Georgia-grown bananas.



“When I first got the plant from Homestead, FL, I grew it to about two feet in a container and put it in the ground in the spring,” he said. “I harvested fruit from it around the first of November. I didn’t believe it. I had so many other varieties going on at the same time that I thought for sure I’d made a mistake.”

All doubts have now been dispelled.

The baby plants emerge naturally as “suckers” in the field. They are harvested late in the fall and put into a greenhouse over the winter. They are planted in late April or early May and produce mature fruit beginning as early as October.

The fruit it produces is considerably smaller than the Cavendish variety, about four inches in length. The flavor is tangier and has a hint of citrus. That is the consensus reached by volunteer tasters Wallace has summoned from around the campus and his neighborhood.

Working in the laboratory he has been able to achieve rapid multiplication of *Veinte Cohol* plants. Having an adequate supply of plant material is necessary to conduct further research, breeding, pollination, and DNA manipulation.

“Everything has fit together so nicely,” he said. “We have this plant that we can breed and rapidly reproduce in the lab and see how we can make it better.”

In addition to increasing its fruit yield, which now stands at about 15 pounds per plant, Wallace is working to make the variety even more cold resistant.

He asks, “How will it behave once we move it into North Carolina, North Georgia, or Tennessee?”

STUDENT INVOLVEMENT

Starting in fall 2007, senior Crystina Bronk has worked alongside Wallace in the laboratory. Majoring in biology with a minor in chemistry, Bronk has assisted with the delicate work of high rate reproduction under sterile conditions.

“The nice thing about this type of research is that it is so attractive to students,” Wallace said. “For our biology and chemistry students this is something they find interesting and exciting.”

ORNAMENTAL BANANAS TOO

Along the way, Wallace has also been breeding ornamental bananas. Over the last seven years he has produced hundreds of new hybrid seedlings.

“These are brightly colored, attractive plants with blooms lasting five to six weeks,” said Wallace. “They have tremendous potential in landscape applications.”

Smaller than the edible varieties, ornamentals are quick to grow and mature. In southeast coastal Georgia, stems will emerge from the ground around mid-April and the plant will reach blooming stage by mid-June.

“Ornamental Bananas: New Hybrids from a Group of Underutilized Landscape Plants,” was published by Wallace, Krewer and Fonsah in the fall 2007 issue of *Southeastern Palms*.

His research has also appeared in *The Journal of Food Distribution Research*. “Banana Production: An Alternative Crop for Niche and Ethnic Market in Georgia” was published in 2007 by Wallace, Fonsah, Krewer, and Ben Mullinix, a statistician at the University of Georgia-Tifton.

More recently “Why Are There Seeds in My Banana: A Look at Ornamental Bananas,” has been accepted for publication in the *Journal of Food Distribution Research*. Fonsah, Wallace and Krewer authored the article.

“Obviously, I am very thankful to be a faculty member at Armstrong where I can explore my love of teaching and research,” he said. ☀

—Francisco Duque

THE WALLACE FILE

Richard Wallace

1984

B.S. in chemistry,
AASU

1988

Ph.D. in organic chemistry,
Clemson University

1988-1990

Post-doctoral work at
Colorado University

1990-1995

University of Alabama
faculty

1995

Joined AASU faculty

Opposite page: Richard Wallace examines an edible banana flower from a Honduras-bred hybrid banana known as Sweetheart.

On the cover: Richard Wallace and his experimental banana plants

CLEARING THE WAY

Their challenges seem designed for them to fail, but some AASU students shine—thanks to their own determination and, in no small part to the offices of Disability Services and Plant Operations.



Navigating the campus

One of the first things a visitor wanted to ask Jonathan Kennard was, “How do unsighted students navigate the campus?”

For Jonathan, his challenge was to map the campus in his mind. An orientation and mobility specialist from the Savannah Association for the Blind initially helped him learn the landmarks of the campus using the Lane Library as a home base. He has memorized where ramps, crosswalks and structural landmarks “that don’t move” are located. He avoids large open spaces like the quadrangle that don’t offer any tactile or audible clues.

“It’s a matter of matching up the map that’s in my mind with the map (sidewalks) that’s actually there.” While he has learned to compensate for diagonal crosswalks—designed for wheelchair traffic—he says, “When I get to the other side, I know I’ll be a little bit off.” But not by much.

Jonathan Kennard ’08 is often seen with his white cane making his way around the campus, carefully following the grass at the edge of the sidewalk and traversing the mental maps he has stored in his head.

He is one of about 100 disabled students served by the Office of Disability Services each semester. The range of challenges that must be accommodated is varied: learning disabilities; attention deficit disorder; psychological disorders of many kinds; acquired brain injuries; visual, hearing, and mobility disorders; and even problems caused by necessary medication. Disabilities are not always obvious. Many of these students pass under the radar of their professors and classmates.

Jonathan is a psychology major who maintains a 3.0 grade point average. While some classes have been particularly difficult, he says, “The greatest challenge I face is that most professors don’t know how to work with a student with disabilities.”

The job of Amelia Castilian-Moore, director of disability services, is to bridge that communication gap. She is tasked with seeing that both the students and

their professors play their respective roles in assuring that each student receives reasonable and appropriate accommodations supported by documentation. She works to train both students and professors on the techniques and technology to get the job done.

Assisting Castilian-Moore is Kelly Woodruff ’01, coordinator of disability services. Woodruff, who was an AASU psychology major, handles all of the test accommodations and coordinates books on tape and some of the software programs.

Sometimes a solution comes in the form of computer-assisted aids (see box, next page). Sometimes it is relatively low tech, such as hiring a sign language interpreter. And sometimes solutions must spring from the imagination. For instance, when Jonathan needed to visualize what star constellations look like, Castilian-Moore used “puffy paint” and painted an astronomical map so that he could experience them tactilely. “You can plan a lot,” Castilian-Moore said, “but still things come up that are not expected and you have to be creative.”

Students are often hired to assist a challenged fellow student to perform



At right: Amelia Castilian-Moore (front) and Kelly Woodruff at one of the many wheelchair ramps on campus.

Opposite page: His mental map helps Jonathan Kennard navigate the AASU campus.



very visual or physical activities such as dissecting a frog or mixing chemicals. It may require assistance, but disabled students are still required to undergo the same experiences—with appropriate accommodation—as regular students.

Sometimes an appropriate class may be substituted. Jonathan, for instance, was allowed to use Braille to fulfill his foreign language requirements. This is a rare occurrence that required approval of the Regents Center for Learning Disorders at Georgia Southern University.

The Regents Center for Learning Disorders—one of three centers in the state created by the Georgia Board of Regents—is a valuable resource in assisting Castilian-Moore to evaluate

students and make decisions for appropriate accommodations.

Students with disabilities may come to Castilian-Moore's attention during the university application process, or by contact with Navigate freshman orientation, or from a student's high school counselor. Once identified and approved to receive accommodations, the student is issued an "advocacy letter" to present to the professor who will work with Castilian-Moore. 🌟

—Barry J. Ostrow

Taking down barriers

Armstrong Atlantic has been at the forefront of state universities in removing barriers to access by the disabled. According to the Department of Education Civil Rights Division, AASU is in the top third of audited universities and colleges for compliance with the Americans with Disabilities Act (ADA).

David Faircloth, director of plant operations, said the university has spent some \$2.9 million since 1993 on removing barriers on the campus. "We do not create any new barriers and anytime we can remove a barrier, we do," Faircloth said.

Some of the projects completed on the campus have included:

- installation of elevators and ramps
- making restrooms wheelchair accessible
- posting ADA-compliant signage
- creating curb cuts
- lowering drinking fountains
- providing wheel chair-accessible seating in theaters
- making labs ADA compliant
- installing power door openers
- adding an ADA-compliant lift in the swimming pool

The Castilian-Moore file

Bachelor's degree in psychology from Georgia Southern University

Master's in social work from University of Georgia

Began her career as director of the Senior Center at the Athens Community Council on Aging

Worked in the admissions unit of Georgia Regional Hospital in Savannah

Worked at the Westside Urban Health Center (now the Curtis Cooper Health Center)

Came to Armstrong Atlantic in 1999

OUT OF THE BOX

Many solutions for supporting disabled students on campus come out of a sometimes gee-whiz collection of high-tech boxes.

- **Jaws** is a program that gives voice to e-mail, desktop icons, and the Internet that is equally effective for both visually impaired and dyslexic students.
- **Kurzweil** allows students to both see and hear their textbook as it is being read aloud. The books are laboriously scanned into the computer. The books may be played at their own speed, slowed down, or sped up. For students with short attention spans, the voice of the narrator can be changed to retain interest longer.
- **Dragon Dictate** is similar to programs that are seen widely advertised on television. It allows a student to speak into a word processor that types out what they dictate.
- **I Communicator** is high on Castilian-Moore's wish list. At the beginning of the spring semester, she and a graduate student were attempting to add this program to their arsenal. Ideal for the hearing impaired, I Communicator translates a professor's lecture into writing on a student's laptop. Simultaneously, it generates the image of a sign language interpreter delivering the lecture and prints out the text of the lesson. The lecturer, who has been trained to use the program, repeats questions from other students so that the hearing impaired student can be kept current with classroom discussion.



ALUMINARI

Saving Veronika

Ray Woodberry '85 sits in a fifth floor office at the U.S. Secret Service in downtown Savannah looking out over a cityscape muted by a rainy winter mist. But his mind is elsewhere as he reaches back to the still vivid memory of the great challenge he and his wife, Marie, met in rescuing a child from a dingy orphanage half a world away.

Woodberry graduated from the criminal justice program at Armstrong State and went to work for the Savannah Police Department. He moved from a patrolman to a crime prevention officer. Eventually, he took a detour to work as an investigator in Recorder's Court and in the district attorney's office. When he returned to the police department, he was assigned to investigate financial crimes such as bank fraud, counterfeiting, high-end embezzlement, and identity fraud.

Through his work with major, big ticket fraud cases, his investigations often led to joint operations with the Secret Service. In partnership, they've tracked down criminals from bookkeepers, to physicians, to a serial identity thief who had stolen more than \$400,000. This last case kept Woodberry busy for two years with few leads until the thief had a falling out with his girlfriend who turned on him.

The Woodberrys were married in 1988 and have two sons, Christian, 15 and Matthew, 12. But they longed for a daughter. As their professional lives progressed, they realized that a normal pregnancy would not fit in with the family's lifestyle. "We wanted a girl past diaper age," Woodberry said, "but we never really thought about adopting."

Following a chance meeting with an attorney who was handling a foreign adoption case, the Woodberrys began reconsidering their position. "We thought about it and decided to give a child without a family a home," he recalls. "At first we thought a foreign child would be out of our reach."

What the Woodberrys found was that many American-born children available for adoption were suffering from health and abuse problems. Private agencies with healthy children were expensive.

Finally looking into foreign adoption, they found it was cheaper although the process was filled with a great deal of daunting paperwork. Little did they know all the hurdles they would eventually face.

Many children from Eastern Europe were readily available and the Woodberrys began to look at an adoption in Ukraine. A private Russian agency working out of California came into the picture, but Ray Woodberry viewed it with skepticism.

Drawing on his background in fraud investigation, he was concerned that the Russians might be operating a scam, and he proceeded to check them out through every resource available to him. He admits now that his caution extended the amount of time necessary to affect an adoption, but feels that the peace of mind it brought to him and Marie was worth it.

The agency proved to be very professional and thorough. They sent the Woodberrys profiles of available children including one named Veronika, a little blonde ten-year-old, who peaked their interest. “She looked a lot like our sons,” he said. “We were interested in this girl and our boys were all for it.”

Agency medical records—provided contrary to Ukrainian law—were written in Russian. Using his connections, Woodberry located a Secret Service agent in Atlanta who could translate the file and a local physician pronounced her an apparently healthy girl.

The Immigration and Naturalization Service (INS) paperwork was extensive, and the family had to pass scrutinizing by a U.S. family service agency, but Ray and Marie were finally approved to travel to Ukraine to pick up their new daughter. They thought.

In May 2003, the Woodberrys arrived in the Ukrainian capital of Kiev. They were met by Angelina who would be their facilitator and interpreter.

For 11 hours on the following day, their driver pushed his vintage car at 100 mph across deeply rutted roads toward Gorlivika, a city the size of Savannah. The countryside was bleak, largely deforested by the Soviets. They sped past run-down collective farms, workers sitting by the roadside selling eggs and milk. Horses pulled antiquated plows in the fields. “I only saw two tractors on that entire trip,” Woodberry recalls.

Gorlivika proved to be a gray, run-down city—a throwback to the 1930s—where the electricity was turned off during the day. Their hotel was equally shabby and sinister and the Woodberrys spent their first night with a dresser pushed securely against the door.

Their first encounter with the orphanage—“the best in Gorlivika”—was no less dreary. It lacked running water and electricity. The cheerless place housed 150 children ages five to 15. At 16, they are turned out on the mean streets of Gorlivika to survive as best they can.

The Woodberrys had expected to meet Veronika, spend the next two weeks getting to know her, and then decide if they wanted to go through with the adoption. Instead, the orphanage director introduced her to them saying, “These are the parents who are going to adopt you.” The underweight, ten-year-old child ran to them shoeless, calling the shocked Americans “momma” and “poppa.”

Veronika’s story

Veronika’s father committed suicide when she was seven. She and an older sister, Viktoria, were what the Ukrainians called, “living on the tramp.” They barely subsisted with their alcoholic mother moving from one abandoned hovel to another. Sometimes they went to school, but more often their mother would send them out to beg for food and money.

If the two girls snagged three eggs, they would eat two of them raw and bring the third home rather than risk their



Ray Woodberry (front row center) and his wife, Marie (back row center), get to know Veronika (center) and some of the other children in the Ukraine orphanage.

mother taking them all for herself. Veronika would walk cows in return for their milk which she drank raw.

Nick, the orphanage manager, often rode around Gorlivika looking for street children. He spotted the sisters one day and, with a judge’s order, took Veronika, now eight, into his own facility and had Viktoria sent to another. For a while her mother would come to the orphanage to visit her, but eventually stopped coming. Veronika never saw her mother or sister again.

The Woodberrys weren’t aware of all of this as they got to know their prospective child. She was pleasant and outgoing and the Americans were beginning to believe they made the right choice. In the meantime, the other children in the orphanage also touched their hearts. Little girls would try to ingratiate themselves and asked to be adopted. Moved by the boys playing soccer with nothing more than the bladder of a ball, Ray bought them three new soccer balls. For the girls, the Woodberrys purchased jump ropes.

A mandatory visit to the Gorlivika “education office” yielded a new twist. Here, the Woodberrys heard of Viktoria for the first time. They would have liked to have kept the two sisters together, but were unable to adopt Viktoria.

At a final court appearance, the Woodberrys were hit with an unexpected roadblock. They would have to wait 30 days before they could take Veronika out of Ukraine. They returned to the

continued on page 10

Grant Supports Cancer Treatment and Education Research at AASU

A \$30,000 grant from the Radiological Society of North America Research and Education Foundation is supporting an Armstrong Atlantic professor's development of a comprehensive web-based software system for radiation therapy treatment and training.

Felix Hamza-Lup, an assistant professor of computer science, undergraduate student assistant Ivan Sopin, and Omar Zeidan, a radiation therapy physicist at M.D. Anderson Cancer Center in Orlando, conducted the research. Memorial Health University Medical Center with Curtis and Elizabeth Anderson Cancer Institute is a collaborator.

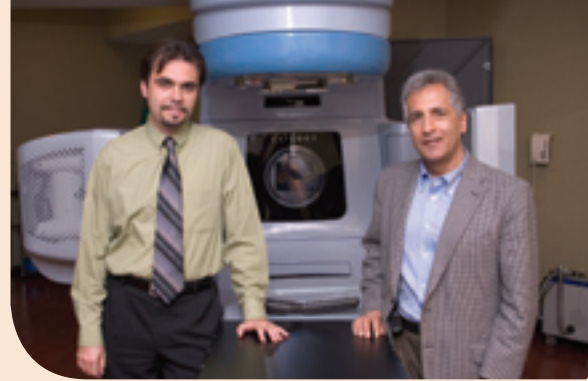
The three-dimensional radiation therapy treatment (3DRTT) [www.3drtt.org] is a real-time, web-based, graphical simulator for the external beam radiation therapy procedure. While radiation therapy is highly effective in the treatment of cancer, its ultimate benefit depends on the skills of the medical personnel who deliver the treatment.

One of the key features of the 3DRTT system is automatic collision detection. The risks of having the

machine collide with a patient or other equipment during treatment has vexed doctors and technicians over the years. While a number of analytical methods for linac-based radiation therapy have been proposed in the past as a means to improve the planning process, the 3DRTT system combines new algorithms and state-of-the-art technologies to facilitate planning and a novel approach for simulation and training of medical procedures. The simulator may assist healthcare personnel in developing optimal collision-free treatment plans that are patient-specific.

"Our collaboration with hospitals, cancer treatment centers, and several departments at AASU has spawned important multidisciplinary research directions, laying out the foundation for the innovations of the future," said Hamza-Lup. "Involving undergraduate and graduate students as a team in the research process has increased their interest and expertise in computer science, engineering, and health sciences."

The simulator can be used as a learning tool in existing radiation



Felix Hamza-Lup (left) and Dr. Nasser Maleki, director of medical physics at the Curtis and Elizabeth Anderson Cancer Institute at Memorial Health University Medical Center, stand before a Varian 23iX Trilogy linear accelerator at the center.

therapy courses by offering three-dimensional content, simulation of concepts, and treatment scenarios for novice therapy staff, physicians, and students. Faculty and students from the Department of Radiologic Sciences at AASU are very helpful in providing feedback to improve the simulator.

Current users of the 3DRTT web-based simulator are doctors from different parts of the world, including National Taiwan University Hospital, Swedish Cancer Institute, Johns Hopkins University, Mount Sinai Hospital, and University of Rochester. Medical personnel at the M.D. Anderson Cancer Center Orlando are evaluating the systems in a clinical setup. ☸

—Francisco Duque



All American. Today, Veronika plays basketball for Savannah Christian Preparatory School.

Saving Veronika *continued from page 9*

States and Ray flew back a month later with all of the paperwork from the INS.

Only an American embassy can issue an immigration visa and the nearest embassy was in Warsaw. Ray and his new daughter flew to the Polish capital, only to be delayed, once again—this time by his own embassy. Although the INS had assured him that he could obtain the visa using Marie's power of attorney, the law—this time American law—had changed. The power of attorney was no longer acceptable. Thanks to the twin miracles of faxes and FedEx, the two were only delayed a few days before Marie's signature arrived and Veronika's visa was approved. The long journey was over.

"Today," Ray says beaming, "she is doing absolutely wonderfully. She speaks perfect English with barely an accent. She didn't eat our food when she first arrived and now she eats everything." Indeed, she has gone from tomatoes and boiled potatoes to everything from pizza to lobster.

Veronica—an American "c" has replaced the Slavic "k"—is now 14 and a natural born athlete. She is a junior champion tennis player and excels at volleyball, soccer, softball, and basketball. And the boys are starting to come around now. Dad smiles wistfully at this new phase in the Americanization of Veronika. "I'm not too concerned," he said as the mist intensifies outside his office window. "She knows how to take care of herself." ☸

—Barry J. Ostrow

Profile in Leadership |

LADY WITH A PASSION

Talking to Jane Barnard is like being run over by a freight train—in a nice way. She comes at life full throttle and with gusto! Her passion for mathematics is palpable.



The Middle Georgia native—and daughter of a middle school mathematics teacher—began her teaching career at Calvary Day School where she developed the school's mathematics program. After a brief sojourn in Albany, GA, she returned to Savannah and the inner city Beach High School. For a lesser person, her career might have ended there.

The late, much admired principal Richard "Chief" Mole greeted her at Beach. "Barnard," he said, "I don't know if you can last here. This is going to be a shock for you." But Barnard successfully took the challenge and went on to develop math courses for at-risk students.

A temporary position in the mathematics department at Armstrong State College opened new doors for Barnard, although she recalls her interview got off to a rocky start. The first question she was asked was, "Do you make coffee?" She didn't, but she learned.

As her daughter, Mandy, turned five, Barnard became curious about how children learn mathematics. It was that curiosity that would drive her career. She took a course in elementary mathematics from Dale Kilhefner at the college. "A world opened up to me that I never knew existed." In exploring this new world, Barnard involved herself in teaching mathematics beginning with kindergarten and working her way through a special project funded by the Georgia Board of Regents in which she taught the same students in grades six through eight.

Kilhefner, a professor of mathematics *emeritus* and now semi-retired, said, "She learned a little from me and then took it a whole lot farther. She has an enthusiasm for getting others to do the things they should with equal enthusiasm."

He became a mentor and advised her that, since she was on a tenure track without a doctorate, she would have to carve out a niche for herself if she wanted to advance. Kilhefner encouraged her to conduct classes for K-12 schoolteachers.

Barnard followed his advice, but she

said, with a laugh, "I would often say to Dale, 'If I am underpaid and overworked in the field of mathematics, I will either bless you or curse you for pushing me into this.'"

Kilhefner got Barnard involved with the Georgia Council of Mathematics in which she took her first professional leadership role. She would eventually become president of the council. There would be many more state, regional, and national leadership positions to fill.

With Ed Wheeler, former mathematics department head and now dean of the College of Arts and Sciences, she created the curriculum for and taught in the MathStart program. In 10 years, MathStart served 300 rising eighth graders who were at risk for not developing their full potential in mathematics and science. She enthusiastically recalls that many of those students are now working in medicine, engineering, and other areas of science and mathematics.

Working on a committee of the Georgia Board of Regents, she helped develop "early mathematics and placement" testing that alerted high school students to the math courses they needed to take to get into Georgia public colleges and universities. She also contributed to the state of Georgia's Quality Core Curriculum (QCC) in the 1980s and to the Georgia Performance Standards that replaced the QCC in 2007.

Kilhefner said, "She revolutionized Chatham County mathematics education." He adds that her work has had an impact on schools throughout the state.

Barnard says, "Mathematics is my passion. If you are not passionate about something, you can never be as successful as you would be otherwise."

In 2002, Barnard took a leave of absence to pursue her doctorate at Saint Louis University in Missouri. Her academic quest was slowed when she learned she had cancer and got sidetracked by chemotherapy and radiation treatments. While earning a doctorate and battling cancer might have stopped others,

Barnard was able to carry on and carry out one of her most satisfying projects.

After writing a professional development grant for the PRISM (Partnership for Reform in Science and Mathematics) program, she flew a group of middle school teachers from Savannah to St. Louis where they stayed in her home for several three- or four-day mathematics workshops. "I had some of the best times in my life, sitting in my PJs and bald from my chemo, working collaboratively with these teachers," Barnard said. "It was like a great big pajama party."

Back in Savannah, Barnard enthuses, "Right now my greatest passion is to help middle school teachers to learn mathematics in exciting ways, using technology appropriately, and communicating what they've learned to their students."

Such commitment to providing opportunities for teachers to learn and grow is evidenced by her being awarded more than 40 grants in the past two decades.

Barnard assesses the impact of teachers on the future saying, "A good leader has to be a good role model. You need to take (your students) into your life and encourage them to do the same for others." She understands the power of one teacher teaching another and the changes they can affect on the generations of children to come. "It's the continuum of life," she said. ☼

—Barry J. Ostrow

The Barnard File

1971 B.S. in mathematics, Georgia Southern University
1972 M.S. in mathematics, Georgia Southern University
1990 Ed.S. in middle grades/mathematics, Georgia Southern University
2008 Ph.D. from Saint Louis University
Star Teacher, 1976, 1977, 1978, 1980
1996 Outstanding Faculty Award, AASU Alumni Association
1998 H. Dean Probst Award, Armstrong Atlantic
2001 Georgia Regents Teacher of the Year



Keeping it together

*S*herri Fincham has it all together.

Fincham is a sophomore pre-nursing student at Armstrong Atlantic's Liberty Center in Hinesville. Like many military wives, she wears multiple hats and plays many roles.

Her husband, Sergeant First Class Joseph Fincham has been in the U.S. Army for 19 years. The couple has been married 16 of those years. They have two children, Savannah, 14 and Grayson, 12. For most of their married lives, the Finchams have been able to remain together in postings from Hunter Liggett, CA to Dexheim, Germany. Until Iraq.

Joseph is now serving his second tour in Iraq as a truck driver.

Sherri says her initial reaction to his first deployment in the desert was "shock and fear." "The second time," she says, "you are more aware of what you have to go through and you already know you have to deal with the loneliness and sadness.

"It's sad when he deploys, so we just get out of the house and into a new routine. Sometimes, you just cry."

Much of her strength has rubbed off on the younger Finchams. "They know their dad is very strong and smart," Fincham says of her children. "They know he can take care of himself. Very often we will pray together."

Last Christmas, Sherri bought the children dog tags with Joseph's name on them. "It's something they can hold on to that gets them through the day," she says.

Theirs is a very strong family, each supportive of one another. Joseph calls every morning around 7 a.m. so that he can talk to the kids before they go to school. He tells them to have a good day and not to worry. If he is going out on a mission, he'll tell Sherri so that she won't worry. "I still do," she admits.

In addition to the daily calls, they text message and exchange photographs over the Internet.

"I am blessed with great kids who really support me," Sherri Fincham says with pride. "They're both good in school—Savannah is the president of the school's chapter of the National Honor Society—and we do homework and cook supper together."

Sherri says, "Joseph is pretty honest about what he sees over there, but I would think he shields me from a lot because he doesn't want me to worry."

Fincham keeps busy with her kids, her job as a legal assistant, and her studies at the Liberty Center. Both Savannah and Grayson are active with baseball and basketball. "Sometimes there are two games in one night; sometimes a game every night of the week," Sherry explains.

Asked how she keeps it all straight, she says everything is written out on a calendar.

"I really like school," Fincham says, sitting among the body part models, microscopes, and skeletons of the Liberty Center's biology lab. "I like the other students and what they bring to class. I'm not the only military spouse in the room. As our spouses are deployed, there will often be days when several students are missing from class. The professors are very good about understanding what we are going through. Not a lot of schools are that caring."

Upon completion of her nursing degree, Sherri hopes to continue her education and become a physician assistant.

Joseph will return from Iraq in January 2009 and plans to retire from the military shortly thereafter. That's when this strong, all-American family can begin the next phase of their lives together. ☸

—Barry J. Ostrow



Joseph Fincham enjoys leave time with his children, Savannah and Grayson.

The Heritage Society



The Armstrong Atlantic State University Heritage Society supports not only the present needs of the university, but also seeks to make provisions for future generations of Armstrong Atlantic students and faculty. Members of the society have chosen to name AASU as a beneficiary in their wills. Heritage Society members may choose to provide the university with a designated amount, or may simply choose to notify the Office of Advancement that a planned gift has been made with their designated attorneys.

These donations may include planned gifts and/or bequests with restrictions. It is often meaningful for individuals who wish to provide a named legacy to work with the Office of Advancement to offer suggestions.

For information on options to provide a Heritage Society gift of any amount, contact Gail Rountree at 912.927.5208 or Gail.Rountree@armstrong.edu. All gifts, regardless of amount, are meaningful to Armstrong Atlantic.

Savannah loses two community leaders



HERB S. TRAUB, JR. '37 died March 20, 2008. A lifelong booster of Armstrong, Traub was president of the alumni association in 1941-42 and 1943-44.

Traub is, perhaps, best known as a restaurateur for his creation of the world-famous Pirates' House Restaurant. Both the restaurant and its owner have been lauded by the

restaurant industry.

He will also be remembered for his community leadership in bringing illumination to the statues in the city squares, adding fountains to Daffin Park, and restoring the Lucas Theater among other civic projects.

Traub was pleased that Armstrong Atlantic offered courses in historic preservation and hospitality.

Readers may contribute to the Herbert S. Traub, Jr. Award at the university.



FRANK S. CHEATHAM, JR. '44, a community leader and retired chief judge of Chatham County Superior Court, died on March 26, 2008. As an Armstrong student, he served as class president for two years.

Cheatham was elected to the state legislature in 1953 and played a key role in passing a charter that established a council-manager form of government

in Savannah. He also chaired a study committee that resulted in Armstrong, and other junior colleges, being admitted to the University System of Georgia.

Following his legislative career, he became involved in the Savannah YMCA. As president during the 1960s, he led the effort to build a new integrated family Y.

In 1972, Cheatham was appointed by Governor Jimmy Carter to the Chatham County Superior Court where he served until his retirement in 1993.

Photo courtesy of Steve Bisson/Savannah Morning News. Copyright 2000

class notes

'50s



Earnest Murphy '51 returned to AASU for a performance in the Fine Arts Theatre. He received a framed drawing depicting the college prior to

its move to Southside Savannah.

'60s



Otis S. Johnson '64 was reelected to a second term as mayor of Savannah.



J. Cliff McCurry '68, chairman of Hilb, Rogal & Hobbs Company, has been appointed by Governor Sonny Purdue to a three-year term on

Georgia's Consumer Advisory Board, representing the First Congressional District.

'70s

Charles "Chip" Humphrey '74 is the director of planning for Haggard Clothing Company in Dallas.

Dewey DeLettre '79 was featured recently in a *Savannah Morning News* article about his 25 years as a basketball official. DeLettre is currently president of the Savannah Basketball Officials Association. He said he will keep officiating as long as he can still run up and down the courts with the players.

'80s

Ernest H. DeLong '88 is a civilian contractor in Baghdad and has served on the U.S. ambassador's protective security detail.

'90s

Elizabeth Rodgers Clarke '90 recently graduated with an education specialist degree in instructional leadership from Nova Southeastern University in Florida. She and her family moved back to Savannah this past summer.

Renee Hutson Connolly '93 was awarded her Doctor of Philosophy in Educational Administration from the University of South Carolina in December 2007. She is an administrator at the University of South Carolina in the College of Education. She and her husband, Sean, were expecting their first child in February 2008.

Pamela D. Florence '95 is working as the clinical director of Triangle Medical Services. After graduating from AASU, she attended Pfeiffer College, and expects to graduate in June 2008 from Webster University with a master's in clinical psychology.

Michael J. Walker '95 graduated from Georgia State University's College of Law in 1999. He is assistant general counsel for Atlanta Public Schools. He is married to Erin McKenna, and they have two daughters Fiona, 6 and Abigail, 4.

Shannon George Richards '98 obtained her National Board Certification in early adolescence mathematics in November 2005. She was chosen as her school's Teacher of the Year. Shannon and her husband, Brian, live in Charleston, SC.

Jennifer Wu '98 was elected vice president for collegiate operations for Phi Mu Fraternity.

Angela Lewis Healy '99 lives near Daytona Beach with her husband, Brendan, and two sons, Patrick, 16 and Connor, 14. She manages two radiation oncology facilities and is finishing her master's in healthcare administration.

'00s

Catherine Jordan Compton '02 is a health and wellness coach at Palmetto Health in Columbia, SC. She is also the co-host on one of Columbia's first holistic health radio shows airing Sundays on WOIC-AM from 4-5 p.m. In fall 2008, she plans to enroll at Winthrop College to pursue a master's in human nutrition.

Isaac Joseph Davis, Jr. '04 received his MBA from Kaplan University in August 2007.

Rev. Richard L. Hall II '04 and his father, Rev. Dr. Richard L. Hall, Sr., celebrated their church's 88th anniversary. The AASU alumnus gave the honorary sermon for the event.

Annette Lee '04 was named Beaufort County School District Teacher of the Year 2007-2008.

Quentin L. Martin '04 graduated from the Mercer School of Law in May 2007 and will return to Savannah to practice law in the area of civil litigation.



Sasha McBryer '04 is the Ft. Stewart Museum historian and exhibit designer. She also runs her own company, Ladyhawk Graphic Design

(www.ladyhawkgraphicdesign.com). Additionally, McBryer writes weekly articles for the military paper *Frontline* focusing on "this day in history" and a column on arts and entertainment.

Melissa L. Wilson '03, '04 is director of recruiting for Torres Advanced Enterprise Solutions, an international consulting firm in Arlington, VA.

Crystal Snipe '03 is in the 11th edition of *Who's Who Among American Teachers*. She teaches kindergarten and was nominated Teacher of the Year.

pairings

Natausha Ilami '03 to wed Scot Wallace May in spring 2008

Former educator, administrator honored

Grace Burkett Martin, Ph.D., professor of psychology *emerita*, is listed in the 2007 *Who's Who of American Women*. Her biographical sketch will also be included in the 2008 *Who's Who in America*. Martin retired in 2002 after 22 years at the university, serving as professor, head of the department of psychology, head of the division of social and behavioral sciences, and interim dean of the College of Arts and Sciences. She currently serves on the advisory board of the Gender and Women's Studies Program.



weddings

Elizabeth M. Hilderbrand '05 married William F. VonWaldner, Jr. on October 20, 2007.

Meaghan Hayes '05 married Robert Daniel Davis '05 on June 9, 2007.

Megan E. Moore '05 married Christopher Holland on December 1, 2007.

Raven All '06 married Mason Clark in December 2007.

Sarah Lee '06 married Nicholas Solomon on October 20, 2007.

Amanda Robinson '06 married Preston Futrell III '07 on October 20, 2007.

Ashley Lorraine Buie '07 married Corey Madison Hendrix on November 17, 2007.

Leslie Seckinger '07 married Billy Shea in October 2007.

additions

Charles "Chip" Humphrey '74 and his wife adopted twin girls from China who are now two years old.

Eric Grider '98 and Janet Ellis Grider '00: twin boys, Jack and Charlie, May 14, 2007

passings

Carl Kleeman '40, November 1, 2007

Joaquin Lamas '40, October 28, 2007

Alice Jane Scott Waters '40, September 17, 2007



Alvie L. Smith '43, former director of corporate communications at General Motors and author, March 19, 2008.



Ruffles and flourishes

Twenty-three of the AASU Alumni Association past presidents and the current president met in December for their annual holiday luncheon.

Standing, back row, left to right: Young Allen Beall (1969-1972), Richard Edwards (1984-1986), H. Mark Worsham (1977), Tom Hux (1979-1980), Herb S. Traub, Jr. (1941-1942, 1943-1944), Fran Arnsdorff (1991-1993), Kenny Sellers (1997-1998, 1999-2001), Judge Michael Barker (1993-1994), and Spence Hoynes (current president).

Middle row, left to right: Crystal Taylor Cooper (2004-2005), Joan Schwartz (1994-1996), Harriet Konter (1997-1998), Patty Parker (retired alumni director), Judge Leesa Bohler Hunter (1989-1990), Dodie Gay (2006-2007), Herbie Griffin (1948, 1998-1999), and O. Steve Eady (1972-1973).

Front row, left to right: Judge David Elmore (1952-1953), Bette Jo Krapf (1996-1997), Amy Tuttle Massey (2001-2002), Louise Mayhew (1988-1989), Amanda McLaughlin Cannon (1975-1976), Patrick Burk (2002-2003), and Eugene McCracken (1983-1984).

Attending, but not pictured: Craig Harney (1990-1991) and Lee Meyer (1965-1967).

Natalie Hymes DeLette '47, July 31, 2007



William L. Bell '49, instructor in physical education and Pirates basketball coach from 1952 to 1955, August 9, 2007

Margaret Crawford Bernhardt Livingston '70, September 15, 2007

Ethel Rhett '72, October 27, 2007

Roger A Rancourt '73, August 26, 2007

Russell Rawlings II '73, February 15, 2007

George A. Zettler '76, July 28, 2007

Donald N. Dickerson '78, October 13, 2007



Patricia Singleton Reese '78, executive director of university relations and marketing, October 25, 2007

Anita Roane '02, October 14, 2007



Lt. Col. Charles Larry Collins '50, March 25, 2008



Sharyn D. Gibson, professor and department head, radiologic sciences, March 28, 2008.

TOP TEN

Based on weekly rankings, the AASU Elderhostel Program is frequently named one of the nation's Top 10 Elderhostel sites each year. It was featured on the cover of the national organization's October 2007 guide.

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LET US HEAR FROM YOU

If you would like to comment on anything you read in *Compass*, or if you have ideas for future stories, please e-mail the editor at Barry.Ostrow@armstrong.edu.

To see past issues of *Compass*, please go to: www.urelations.armstrong.edu/compassmenu.html.

Three DAYS FOR AASU

3 Days for AASU sets a record

In April, Janice Woods, senior vice president, First Chatham Bank, and Michael Kemp, senior vice president, Sea Island Bank, led the university's community campaign, 3 Days for AASU '08. This year, \$341,378 was raised, a 36.1 percent increase over last year.

This is the fifth year of the 3 Days for AASU campaign, which raises funds to provide assistance throughout the university. The focus is to meet immediate needs for students, faculty, and programs including scholarships.

Pictured below: Janice Woods presents a check for \$341,378 to President Thomas Z. Jones.



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