Worley’s work in chemistry leads to breakthroughs

Hansen’s book listed as one of best of 2006

AU professor gets grant for study of homelessness

Auburn Abroad options expand to Vienna, Paris

Building site
This parking area bounded by Wallace Center, CDV Extension and the coliseum has been identified by campus planners as the most likely site for new student housing and a new basketball arena. The AU Board of Trustees on Thursday and Friday continued discussion of plans for both projects, which in each case would be the largest construction project of its type since the 1960s.

Search committee members say panel’s work will be finished soon

The chairman of the presidential search advisory committee said Friday that the search is entering its home stretch.

Trustee Charles McCrary of Birmingham told the Board of Trustees that the committee is trying to have recommendations of finalists ready in the next few weeks. “Our goal,” McCrary said, “is that by spring break, we will have a vote and invitations issued for candidates to come to campus.”

McCrary and two other committee members — Trustee Sarah Newton and faculty adviser Conner Bailey — said they have been impressed with the quality of the candidates. Bailey, speaking at the start of the meeting in Montgomery, said search consultant John Kuhnle has helped bring in a strong pool of candidates.

Bailey, who commended McCrary’s leadership of the search committee, said the Fisher Report on the state of the university seemed to reassure presidential candidates and may have encouraged some to apply.

The next president will come in with a salary of $500,000. The board approved the $100,000 increase, and, in a nod to outgoing President Ed Richardson, they made the new salary retroactive to Jan. 1.

Looking toward the selection of his successor, Richardson promised to give a progress report on April 27, at the next scheduled Board of Trustees meeting. At that meeting, Richardson said, he will update the board on academic program review, post-tenure review, the Natural Resources Institute, alternate fuels initiative, the new scholarship program, strategic planning and other major goals.

In other activities, the board approved incremental increases, ranging from 4 percent to 4.5 percent, in student housing fees for the Auburn and Montgomery campuses. In committee discussion on Thursday, officials said the increase would offset rising costs. Executive Vice President Don Large said campus housing would still cost less than most off-campus housing and will remain much lower than at Auburn’s peer institutions.

The board also voted to honor a former AU first lady, Carolyn Draughon, by naming the AU Center for the Arts and Humanities for her. She was the wife of President Ralph Brown Draughon, who led Auburn from the late 1940s until 1965.
Profiles in Excellence

Safer drinking water, mold-resistant paint result from Auburn research

From safer drinking water to mildew-resistant wall paint, research by Dave Worley of the AU Department of Chemistry has had an international impact on development of a wide range of new products.

Worley, who has been conducting research and teaching at Auburn for almost 33 years, has spent the last 15 years developing and refining a technology that can lead to a new generation of longer-lasting water filters and treatments, paints with better mildew resistance and safer water-quality treatments for home aquariums.

"This technology has many potential applications that could improve health around the world, especially in less-developed areas," said Worley, a College of Sciences and Mathematics professor who has been awarded 30 patents. "When bacteria, mold or virus cells collide with the treated object, the cells pick up the chlorine or bromine atoms which sink into the cell walls and kill them."

A Seattle-based company, HaloSource Inc., is introducing advanced, in-home water filters in India based on Worley's research with compounds classified as N-halamines. The company, established in 1998 on the potential of the Auburn professor's discoveries, bought the rights to the technology and pays royalties to the university.

Worley's research led to development of a process that allows water filters and other treatment facilities or devices to make more efficient and longer-lasting use of chlorine or bromine so less of the chemical is necessary. "To activate the filters, we just run chlorinated or brominated water through them to anchor the chlorine or bromine atoms to polymeric beads," he said. "After that, when contaminated water is run through the filter, the chlorine or bromine will kill the bacteria."

The filters can be refurbished periodically simply by running chlorinated or brominated water through them again.

"The use of chlorine in city treatment plants will kill bacteria only for a short time period," he said. "This may be several hours inside dark pipes, from the water treatment plant to the faucet. Sunlight reduces effectiveness even more, which is why chlorine tablets must be continuously added to your swimming pools."

In many developing countries, he noted, a common way to disinfect water involves putting tablets in a pail of water and stirring, which results in only a small quantity of treated water, which will also have a bad taste. "Some filters just remove dirt and make the water look clean, but it still contains harmful bacteria," said Worley.

Worley's research also has led to development of an antimicrobial paint, which, when wiped with bleach, will hold chlorine atoms on its surface.

Top researcher

Dave Worley won AU's Creative Research Award in 2006 in recognition of his discovery of new chemistry technologies that have led to improvements in water treatments for water, plastics, paints and consumer products.

"This will provide disinfection for months on painted surfaces, such as hospital walls," he said. "Bacteria that lands on the surface will die. To add chlorinated protection back to the wall, you just wipe it with bleach."

His work has also led to improved water-treatment tablets for aquariums. "You can add 50 parts per million of the N-halamine in these tablets and not kill the fish, but kill the harmful organisms," he said. "Regular chlorine tablets can only be added at a ratio of 0.2 parts per million without killing the fish."

Worley won Auburn's 2006 Creative Research and Scholarship Award for his development of the N-halamine technology. He plans to retire Sept. 1, but says he hopes to continue doing research and teaching some classes at Auburn.

"It is very rewarding to know that my research is helping others," he said. "I have also really enjoyed teaching organic chemistry to undergraduates and working closely with more than 40 Ph.D. students."

Worley earned his bachelor's degree from Auburn in 1964 and his Ph.D. from the University of Texas in 1969, followed by post-doctoral work at the Johnson Spacecraft Center. He joined the Auburn faculty in 1974 and served as interim chair for the Department of Chemistry and Biochemistry in 2005-06.

At Auburn, Worley served as an Alumni Professor from 1981-86 and as Sarnagel Professor of Physical Sciences from 2001-04. In 2004, he received the College of Sciences and Mathematics Dean's Research Award.
Hansen book on Neil Armstrong honored as one of best of 2006

History Professor James R. Hansen's book, First Man: The Life of Neil A. Armstrong, has been named by Choice magazine as one of the Outstanding Academic Books of 2006.

Choice, the publication of the Association of College and Research Libraries, listed Hansen's book in its January issue among the top 10 percent of more than 7,000 works reviewed last year.

"My challenge in writing the Armstrong biography was composing a book that would serve the dual purpose of attracting and satisfying readers from the general public while still living up to the highest standards of academic scholarship," said Hansen, a professor of history in the College of Liberal Arts. "It is extraordinarily fulfilling to receive this confirmation that I have somehow managed to do both."

Hansen's book, published by Simon and Schuster in 2005, is the first authorized biography of astronaut Armstrong, the first man to walk on the moon. It spent two weeks on The New York Times bestseller list and has also won the Gardner-Lasser Aerospace Literature Award, presented by the American Institute of Aeronautics and Astronautics, and the Eugene M. Emme Prize in Astronautical Literature, awarded by the American Astronautical Society.

Reviewer John Carver Edwards of Library Journal called the book "a Herculean effort" and said Hansen "succeeds in penetrating his subject's seemingly enigmatic personality. This impressively documented and engagingly written biography will stand the test of time."

Editors at Choice selected titles for the Outstanding Academic Books category on such criteria as overall excellence in presentation and scholarship, value to undergraduate students, and importance in building undergraduate library collections.

New grant supports researcher's study of homeless women and their children

Carmie Zugaza of the AU College of Liberal Arts has been awarded a fellowship and grant by a national organization that promotes social science research.

The fellowship from the Fahs-Beck Fund for Research and Experimentation includes $15,000 to support Zugaza's study of the social stresses of homeless mothers.

The goal of her research, Zugaza said, is to better understand the antecedents of homelessness or characteristics of women who become homeless. In this project, Zugaza will examine the impact on motherhood of such formative factors as a childhood in foster care or physical abuse as a child, and she will compare social support systems of homeless women with those of low-income housed women.

"This grant provides me with the opportunity to learn more about the growing number of homeless women and children," Zugaza said. "This will also allow me to involve social work students in the research project, which will provide them with a significant opportunity to learn more about this vulnerable population."

Zugaza, an assistant professor in the Department of Sociology, Anthropology and Social Work, holds a Ph.D. from Florida State University and has been an AU faculty member since 2002.

Founded in 1986 and based in New York, the Fahs-Beck Fund supports research that contributes to a greater understanding of social problems affecting individuals, families and local communities. The fund is named for Dorothy Fahs-Beck and Hubert Park Beck, who were pioneers in research on family issues and education.

Caleb Clark named CGS Senior Fellow

The Center for Governmental Services in AU Outreach has named Caleb M. Clark as its 2006-07 Senior Fellow.

Clark, an alumni professor of political science and director of the Master of Public Administration program in the College of Liberal Arts, has been an AU faculty member since 1992.

As a Senior Fellow, Clark will serve as primary co-author of a book examining selected prominent governing and public policy issues that affect the citizens of Alabama.

Don-Terry Veal, director of the Center for Governmental Services, said the Senior Fellows program recognizes the positive impact that experienced practitioners, academic experts and researchers can have on government. "Our Fellows utilize their expertise to engage in research or funding opportunities that enhance the quality of public policy for the State of Alabama," said Veal.

Clark holds a Ph.D. in political science from the University of Illinois and has authored or edited 17 books and more than 300 publications. His primary areas of teaching and research interests are in public policy, comparative politics and methodology.
Department adding Paris, Vienna to options for summer programs

The Department of Foreign Languages and Literatures in AU's College of Liberal Arts is adding Paris and Vienna to its roster of study abroad programs for AU students this summer.

The Paris and Vienna programs, along with similar programs in Italy, Spain and Mexico, are popular with students who want to experience another culture first-hand and practice or build on foreign language classes they took as part of the CLA core curriculum or an elective at Auburn, said Department Head Robert Weigel.

Students from any college or school at AU may participate, and they do not need prior classes in the language of the host country to study there. AU's academic partner in each host country places students, according to their knowledge of the language, in classes at the elementary, intermediate or advanced level.

Students at all levels of language proficiency, even beginners, usually learn more of the language in a country where they can use it on a daily basis, Weigel said. "Instead of simulated situations in the classroom, such as buying food in a restaurant or asking for directions in another language, they are actually doing these things in real life."

Taught by native instructors over four weeks, many of the classes in the host country examine the history and culture of that country and its neighbors. The language component serves to ease the students' introduction into the new culture, Weigel said. "History and culture become much more relevant when students actually experience what they have read about in books or discussed in class," he said.

Besides viewing masterpieces of art and listening to symphonies where they were composed, Weigel noted that students in the summer programs are immersed in neighborhoods or communities, where they experience the day-to-day life of people in their host country. "Even if they have been abroad before, the experience broadens their perspective and gives them an edge in a competitive global world," he said. "And for students who have spent their entire lives in Alabama, it can be a life-changing experience to be part of a culture other than their own and see things from a different perspective."

Directed by Tracy S. O'Brien, the Vienna program is the department's newest offering. The capital of Austria was the center of one of Europe's largest empires for nearly 600 years until World War I. The city is also world-famous for its Baroque architecture, philosophers and classical music. The Vienna program also includes an excursion to nearby Prague in the Czech Republic and either Budapest, Hungary, to the east or Munich and Salzburg to the west.

The French program, directed by Pamela Paine, moves this year from the provincial culture of the Loire Valley to the cosmopolitan culture of Paris, where students have ready access to the world's largest collection of art masterpieces in the Louvre, as well as numerous historical sites and neighborhoods that are prominent in literature and cinema.

The Italy program, entering its second year, is headquartered in the coastal village of Taormina in Sicily. The program, led by Giovanna Summerfield, places Italian history and culture in a Mediterranean context, examining the influences of Greek, Roman, Norman and other cultures on Italy and Western Europe. Capped by an ancient Greek theatre, the beautiful hillside resort and nearby coastal mountains have literary ties to Homer, Goethe, Oscar Wilde, D.H. Lawrence and others.

Those programs join the department's oldest and highly popular summer program in the historic university town of Salamanca, Spain, led by Tony Madrigal and Lourdes Betanzos, and the newer program in another university town, Cuernavaca, Mexico, led by David Zuwiiya. Already in session is another program in Spain, the spring semester program led by Jana Gutierrez.

The sign-up period for most summer programs is nearing an end. Information is available from the instructor, the department or the Office of International Education. Although last-minute changes are rare, scheduling of all programs is subject to student demand and circumstances in a host country.

Haley event to showcase international opportunities

Approximately 400 Auburn students will be in class in other countries this summer.

Several colleges and schools at AU are in the final stage for signing up students for classes this summer in a variety of settings around Europe, Asia and the Americas. In addition, the interdisciplinary Human Odyssey program has an international option. Also, many AU students and faculty participate in exchange programs with universities in other nations.

Information on international program opportunities will be available Wednesday, Feb. 14, at the Auburn Abroad Fair in the lobby of Haley Center. From 9 a.m.-2 p.m., more than 30 program directors will present information on up to 200 international programs in approximately 90 countries around the world.

"There are multiple options for students — and for faculty — to spend time abroad as part of their academic experience," said James Ellis, executive director of AU's Office of International Education.

Assistant Director Deborah Weiss said the office can often help students find scholarships for international study, especially if they apply well in advance of travel.