

## Board approves update to Campus Master Plan, addition to Foy Hall, new Aviation Education and Recycling facilities

Auburn University's Board of Trustees on Nov. 15 approved an update to the Campus Master Plan and expansion of Foy Hall for an additional dining option, as well as three other construction projects.

The latest update to the Campus Master Plan incorporates changes since a previous update in 2008.

"The Campus Master Plan defines the capacity of the campus to accommodate growth and change, and establishes an effective framework in which future campus operations and growth can occur," stated Dan King, assistant vice president for Facilities Management. "The Campus Master Plan Update is the result of an extensive, transparent and open planning process that has involved senior administration, colleges and schools, the entire campus community and other key stakeholders."

During development of the Campus Master Plan, a space planning model was developed, facility requirements and priorities for all colleges and schools were identified, a long-term facility development capacity plan was established, future land-use requirements and reserved land for its use were established, and Auburn's first Landscape Master Plan was developed.

Among individual projects, the board approved the expansion of Foy Hall to include a new 2,600-square-foot dining venue. In addition, outdoor seating and an overhead cover for patrons will be constructed in the Foy Hall courtyard.

The addition will be at the southwest corner of Foy Hall and the existing Foy Hall courtyard. The estimated total project cost is \$1.6 million. Chicken Salad Chick, an Auburn-based restaurant chain with two local sites and 15 other stores in the Southeast, is scheduled to occupy the new Foy addition.

The board also approved phase one of an Equestrian Center construction project. This phase will feature a 48,600-square-foot pavilion roof structure to cover one of the College of Agriculture's existing riding arenas. The arena is located in the equestrian and horse farm area on the south side of Wire Road across from the College of Veterinary Medicine. The \$1.4 million project is being funded by donors. The Board of Trustees has named Infinity Architecture as the project architect.



### Foy addition

An addition to the south and west sides of Foy Hall, as seen in this artist's rendering from behind Tichenor Hall, will provide an additional dining option in the center of campus. The addition will take in an old loading dock, which predates the large loading dock on the building's north side.

Also, trustees approved project initiation and authorization to select an architect for the design of a new Aviation Education Facility to support Auburn's Aviation Management program. Currently, the flight education operation is in temporary facilities at the Auburn University Regional Airport.

In addition, the board approved project initiation and authorization to select an architect for the design of a new Recycling and Service Support Facility. The  
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## Auburn senior named Marshall Scholar for study in United Kingdom

Auburn University senior Patrick Donnan has been named a recipient of the prestigious Marshall Scholarship, becoming one of only 40 U.S. students selected for the scholarship to attend their choice of university in the United Kingdom.

"We are very proud of Patrick, both for his accomplishments at Auburn and for his being named a Marshall Scholar," said Melissa Bauman, Auburn University assistant provost and director of the Honors College. "He has displayed great leadership in the classroom and the laboratory and in advancing science in the community."

Auburn native Donnan, who has a 3.98 grade-point average, is a student in the Honors College double-majoring in physics and music, concentrating on the bassoon, and minoring in mathematics. He is also a 2013 Barry M. Goldwater Scholar.

"I am truly humbled," Donnan said. "Receiving the Marshall Scholarship is the culmination of all the work that my professors and Honors College staff have invested in me these past three years at Auburn."

Donnan added, "Even if I did not receive the award, going through the application process was beneficial in

itself as it helped me grow as a person.

"I am looking forward to continuing my research in theoretical physics at Oxford and becoming a good ambassador for the United States and Auburn while abroad."

Donnan conducts research in Auburn's College of Sciences and Mathematics as a member of the theoretical and computational atomic physics group.

In addition, he is an editor of the Auburn University Journal of Undergraduate Studies and has co-authored four peer-reviewed publications, one of which was

published in Nature: The International Weekly Journal of Science.

"Patrick embodies a near ideal example of balance. He is an accomplished musician and an accomplished young scientist," said one of Donnan's research professors, Ed Thomas, the Lawrence C. Wit Professor in the College of Sciences and Mathematics. "He has found a way to blend both of his passions into a seamless whole. Patrick not only has talent, but he has the dedication and self-awareness to put forth the effort and hard work to allow those talents to mature."

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Jeff Etheridge, Photographic Services

### Autumn colors

Auburn took on the colors of a painter's palette last week as a perfectly timed autumn chill left the university and town with vibrant seasonal colors seldom seen this far south. As shown in this aerial, Samford Park was among the best spots for viewing the fall colors.

## Liu named associate vice president for research

Professor Zhanjiang (John) Liu has been named associate vice president for research and associate provost at Auburn University, effective Dec. 1.

The offices of the Vice President for Research and the Provost announced the appointment last week, following an internal search.

"Dr. Liu has the experience, background and strong desire to assist faculty in seeking external sponsorship for their scholarly work across our campus," said John Mason, vice president for research and economic development. "His scholarly achievements and administrative leadership are an excellent fit for the position as we continue to strengthen the quality and visibility of our research programs."

As associate vice president for research and associate provost, Liu will serve as a liaison between the university's administration, the colleges and schools, the Alabama Agricultural Experiment Station and the Alabama Cooperative Extension System, in addition to representing Auburn among key stakeholders in government, industry and foundations.

"As a recognized researcher, scholar and administrator, Dr. Liu understands the importance of our faculty in advancing Auburn's mission as an economic leader," said Provost Timothy Boosinger. "His ability to align our research activities with the university's strategic plan is crucial to Auburn's role in developing practical solutions for the citizens of Alabama and beyond."

A professor in the School of Fisheries, Aquaculture and Aquatic Sciences, Liu has served as the associate dean for research and assistant director of the Alabama Agricultural Experiment Station since 2007.

Liu is recognized in his field as leader in the field of genome research of catfish, and his previous appointments include service as director of the Program of Cell and Molecular Biosciences in the Aquatic Genomics Unit, coordinator of the college's China Programs, Alumni Professor and director of the Department of Fisheries and Allied Aquacultures.

He will be responsible for supporting academic units in identifying, facilitating, promoting and developing sponsorship for cross-disciplinary research initiatives, in addition to working closely with the associate deans for research and various university committees and governance groups to implement Auburn's strategic research goals.

"I am honored to serve Auburn University at this level of leadership and look forward to working with our faculty as we address current and future challenges," said Liu. "Research is a core value of our land grant mission as it enhances students' competitiveness in the global job market, generates technologies for economic development in the state and provides a basis for excellence in outreach and extension."

Liu received a Bachelor of Science degree in 1981 from Northwestern Agricultural University in Shaanxi Province, China, followed by a master's degree in 1986 and a Ph.D. in 1989 from the University of Minnesota.

He is a member of the College of Agriculture's Academy of Fellows and the American Association for the Advancement of Science. In 2012 Liu was named honorary dean at Qingdao Agricultural University's College of Marine Science and Engineering and has been recognized by the USDA for his outstanding work in the aquaculture field.

## Campus Calendar

### WEDNESDAY, NOVEMBER 27

**THANKSGIVING HOLIDAYS** No classes this week; offices closed Wednesday-Friday in observance of Thanksgiving

### TUESDAY, DECEMBER 3

**CONCERT** Auburn Community Orchestra, 7:30 p.m., Telfair Peet Theatre; admission at door, \$5 students, \$10 others

### WEDNESDAY, DECEMBER 4

**LAST DAY** of classes for fall semester

### THURSDAY, DECEMBER 5

**CONCERT** Auburn University Percussion Ensemble, 7:30 p.m., Telfair Peet Theatre; admission at door, \$5 students, \$10 others

### SATURDAY, DECEMBER 7

**CONCERT** Auburn University Singers, 2:30 p.m., Telfair Peet Theatre; also Sunday 2:30 p.m. and 7:30 p.m., same location; tickets, \$5 students, \$10 others; **FINAL EXAMS** through Friday, Dec. 13

### WEDNESDAY, DECEMBER 11

**FINAL** Auburn Report of fall semester

### SATURDAY, DECEMBER 14

**GRADUATION** Ceremonies at 10 a.m. and 2 p.m., Auburn Arena

### MONDAY, DECEMBER 23

**SEMESTER BREAK** Offices closed until Jan. 6; spring semester classes begin Jan. 8

## Marshall Scholar

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"I thoroughly enjoyed working with Patrick throughout the application process," said Paul Harris, associate director for national prestigious scholarships in the Honors College. "He represents the very best of Auburn University and his generation. As a double major in physics and music, he is not only bright and intellectually engaging, but he also gives generously of his time and talents whether promoting research among his fellow physics majors or sharing his love for music as a member of the Auburn symphonic band."

The Marshall Scholarship program was established in 1953 by the British Parliament in honor of U.S. Secretary of State George C. Marshall as an expression of gratitude for economic assistance received through the Marshall Plan after World War II. The program is overseen by the Marshall Aid Commemoration Commission. Approximately 900 students are endorsed annually for the scholarship by their respective universities, for which 40 scholarships are awarded nationwide.

— Charles Martin

## Profiles in Excellence

# Professor helps students in classroom and beyond

As the business sector struggles to keep up with rapidly changing technology, Casey Cegielski, a faculty member in Auburn University's Raymond J. Harbert College of Business, says professors and students in his field have to run ever faster to stay ahead of those changes.



**Casey Cegielski**

"I've got to be current," said Cegielski, an associate professor of management and information systems. "If I'm not, I'm not delivering the value that students are paying for." Maintaining relevant connections through active engagement and fieldwork is vital in presenting current technology to students, he explained.

Recognizing his success in that endeavor, Auburn University recently presented Cegielski with its top teaching award, the Gerald and Emily Leischuck Endowed Presidential Award for Excellence in Teaching.

To Cegielski, receiving the 2013 award validates that he is indeed "doing the right things for the right people in the right way."

The Leischuck Awards each year honor two faculty members who have demonstrated effective and innovative teaching methods and a continuing commitment to student success through advising and mentoring in and outside the classroom. His fellow recipient is David Umphress of the Samuel Ginn College of Engineering.

Cegielski, who began his Auburn career in 2000 after an extensive business career, says he takes pride in aiding in the success of his current and former students.

"I am most proud of the number of professional careers that I've helped start for our graduates," said Cegielski. "When parents send their sons and daughters to Auburn University, they do so with the aspiration that their respective children will gain the requisite knowledge and skills to prosper in some career."

Cegielski is co-author of the popular information systems textbook, "Introduction to Management Information Systems: Supporting and Transforming Business."

"Casey is one of the most competent, rigorous, energetic and enthusiastic teachers that I have ever known, and at the same time, one of the most well-liked, and he is respected by his students at every level – undergraduate, masters and doctoral," said F. Nelson Ford, coordinator of management information programs in Auburn's Department of Aviation and Supply Chain Management. "I cannot see how anyone could be more deserving of this honor than Casey."

In 2006, Cegielski, with the aid of the national leadership of the professional services firm of KPMG, designed the first interdisciplinary, undergraduate business information assurance program in the nation. To date, nearly 50 students have completed the information assurance minor with 95 percent of those students finding employment with the Big Four advisory firms.

"Many of the top information security and assurance firms now recognize Auburn University and the Raymond J. Harbert College of Business as a provider of choice for information security and assurance professionals," said Cegielski, a former KPMG Faculty Fellow.

As author of more than 30 peer-reviewed articles in areas including innovation diffusion, emerging information technology, information security and the strategic use of information technology, his research has been featured in numerous international information systems journals.

Specializing in "security visioning," technology strategy development and technology policy articulation, Cegielski has more than 15 years of executive-level professional experience in the healthcare, financial services and manufacturing industries. Professionally, he maintains strong ties to industry and practice as a highly skilled provider in the development, management and implementation of comprehensive information security and assurance services.

Cegielski received his bachelor's and master of accountancy degrees from the University of Alabama and his Ph.D. from the University of Mississippi. He also holds several professional licenses, including Certified Information Systems Security Professional, Certified Information Systems Auditor and Certified in Risk and Information Systems Control.

– Lindsay Miles

## Burgess appointed advisor for Intelligence and National Security Alliance

Retired Army Lt. Gen. Ronald Burgess Jr., Auburn University's senior counsel for national security programs, cyber programs and military affairs, has been named to the Board of Advisors for the Intelligence and National Security Alliance.

He began the one-year term in October.

The Intelligence and National Security Alliance is described by security experts as the premier intelligence and national security organization providing a unique venue for collaboration, networking and examination of policy issues and solutions.

National security officials say the INSA membership represents an unprecedented alliance among senior leaders from the public, private and academic sectors. The officials state that the INSA members form a community of experts who collaborate to develop cre-

ative, innovative and timely solutions to the intelligence and national security issues facing the United States.

"The INSA is fortunate to have Ron Burgess join its leadership team," said INSA President Ambassador Joseph DeTrani. "Ron was an outstanding intelligence officer for the Army and our

nation for 38 years, is an outstanding representative of Auburn University and will be a tremendous asset to the INSA and its membership in forging meaningful public, private and academic partnerships which will greatly benefit our nation's intelligence and national security communities."

The Board of Advisors is a selective body from the INSA community charged with enhancing the functions of the Alliance. The breadth of experience among current board members includes service with the Central Intelligence Agency, Department of State, National

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## Board of Trustees

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recycling support functions currently operate in the existing Food Service warehouse near Lowder Hall.

The Campus Master Plan update calls for the demolition of the warehouse to create future expansion space for the Harbert College of Business.

Planners indicate that the most likely location for the new Recycling

and Service Support Facility would be at the Facilities Management complex on West Samford Avenue.

In other matters, the board approved a five-year lease for the Aviation Accreditation Board International. The leased office space is within an Auburn-owned building located at 3410 Skyway Drive in Auburn.

Also, the board approved a centennial

marker commemorating the 100th anniversary of the Auburn University Honor Society of Phi Kappa Phi. The proposed location for the marker is Ross Square.

Founded in 1897, Phi Kappa Phi is an honor society representing all academic disciplines. Auburn's chapter was chartered in 1914 and is the 13th oldest chapter of the society.

– Gail Riese

# Professor discovers new lifeform in Antarctica

Auburn University professor Kenneth Halanych and his colleagues have made a new scientific discovery: Acorn worms found in deep waters surrounding Antarctica secrete a tube around their bodies.

The discovery of an acorn worm with the ability to make tubes is significant, as the only other worms of this type known to make tubes lived more than 500 million years ago, near the dawn of animal life on earth.

The group's discovery comes on the heels of the first of two Antarctic research cruises. Last January, a team of scientists from the College of Sciences and Mathematics' William P. and Ruth W. Molette Environmental and Climate Change Studies Laboratory spent six weeks on a research cruise exploring the genetic diversity of marine organisms found in the waters surrounding Earth's southernmost continent.

The team set sail on a second cruise Nov. 21, set for return on Dec. 20. They will again explore the biodiversity of the Antarctic seas, searching for evolutionary relationships between species. A daily blog is available to follow on the Antarctica Cruises website

at [www.auburn.edu/antarctica](http://www.auburn.edu/antarctica). Follow them on twitter: @Icy\_Inverts\_AU.

The discovery that acorn worms in the waters of Antarctica actually make tubes has captured the attention of the scientific community, and a paper on the research titled, "Modern Antarctic acorn worms form tubes," was published in the prestigious scientific online journal, *Nature Communications*.

"Our observations suggest the acorn worms with tubes have the same behaviors as fossil worms, and some of the behaviors we observed have been conserved for more than 500 million years. Arguably, some behaviors of these animals appear to be among the earliest known animal behaviors that are still around today," Halanych said. "The discovery of these relatively common animals in polar seas emphasizes our lack of biodiversity knowledge in these regions and suggests close ties between polar continent shelf animals and the deep sea from more northern regions."

The plan for this trip is to sample in the Belling-

hausen Sea at the southwestern end of the peninsula, an area where, until January, no one had sampled the deep dwelling animals of the ocean floor.

"The mission of this voyage complements our January-February cruise," Halanych said. "We will continue to examine biodiversity and collect samples to assess if bottom-dwelling marine invertebrates have localized distributions or are found all the way around the Antarctic. By doing this, we can see if the animals' ranges have shifted in the future due to climate change."

The research cruises are sponsored by a National Science Foundation grant titled, "Genetic Connectivity and Biogeographic Patterns of Antarctic Benthic Invertebrates." Halanych is the principal investigator on the project and Scott Santos, associate professor of biological sciences at Auburn, and Andrew Mahon, assistant professor of biological sciences at Central Michigan University and former postdoctoral fellow at Auburn, are co-principal investigators.

— Candis Birchfield

# New residence hall cited for outstanding interior design

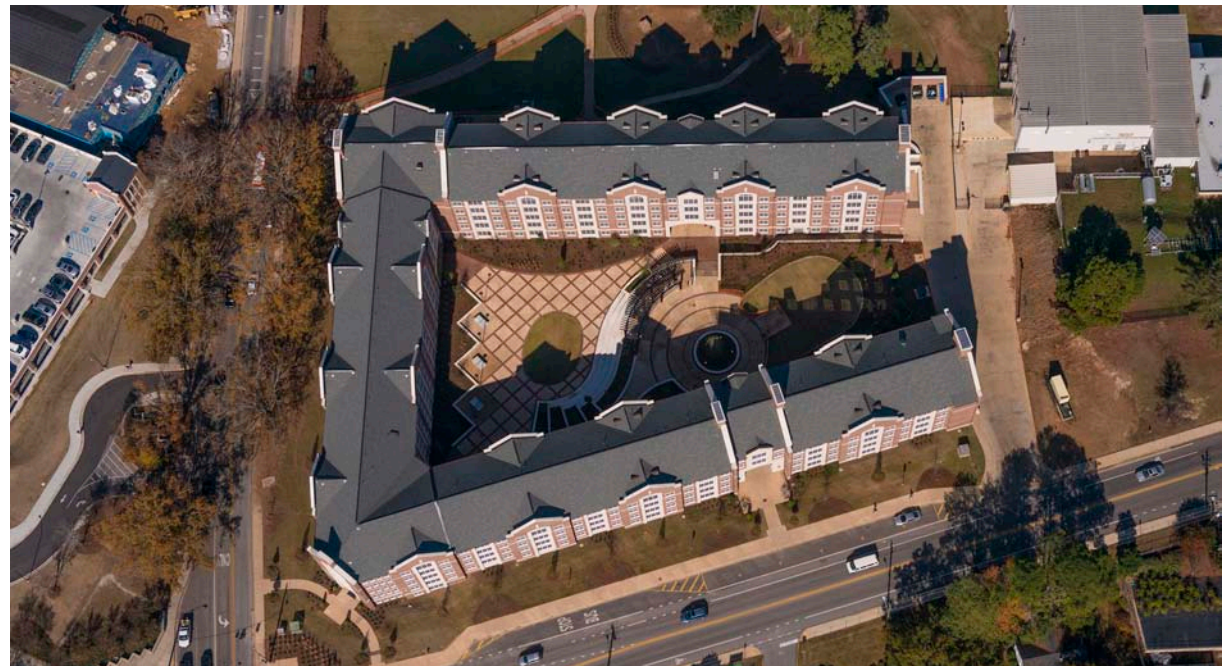
Auburn University's newest residence hall, South Donahue, won second place recognition by the Association of University Interior Designers at its 2013 annual conference held at the University of Texas at Austin.

Auburn interior designer Anna Ruth Gatlin and her team submitted the award-winning entry for New Construction. South Donahue was selected from among 36 entries for setting a new precedent for high-end, luxury on-campus living.

"We here in Facilities were ecstatic that AUID honored us with this award," Gatlin said. "The Departments of Housing and Residence Life, Ellen Johnson and her team at Goodwyn Mills & Cawood, and everyone involved wanted to set a new precedent for high-end luxury on-campus living. The building has received overwhelmingly positive feedback from students and staff alike."

From the carpet and accent colors to the War Eagle wall covering in the lobby, Auburn themes fill the common areas. Auburn's newest residence hall has a residential feel with its neutral colors, stone-look tile in the walk-in showers, quartz countertops, and dark wood cabinets and furnishings. Each suite includes a washer and dryer, 42-inch flat screen television mounted in the living room, queen sized beds, along with wood and stone look accents.

"Our Facilities Management in-house interior designers, in partnership with Goodwyn Mills & Cawood Architects, have created an amazing living space, with well-appointed amenities," said Gail Riese, communications and marketing specialist for Facilities Management.



## Award winner

The new South Donahue Residence Hall, seen here from above, features an award-winning interior, as recognized by the Association of University Interior Designers.

Jeff Etheridge, Photographic Services

"The new South Donahue Residence Hall is close to athletic venues, the student center and a new healthy-dining facility, now in construction," she said. "The hall is truly an inviting home away from home where our students can enjoy both social and academic liv-

ing. We really appreciate the recognition for designing a space that incorporates a spirit of community living."

— Jourdan Cooper

# Auburn, military researchers look to brain studies of vets to better understand post-concussion syndrome, PTSD

Auburn University and military researchers are studying the structures and activity of the brains of soldiers returning from Iraq and Afghanistan in an effort to better understand post-traumatic stress disorder and post-concussion syndrome.

The project brings together the Auburn University MRI Research Center, the Department of Psychology in Auburn's College of Liberal Arts and the U.S. Army Aeromedical Research Laboratory at Ft. Rucker.

Faculty and graduate students in the departments of Electrical and Computer Engineering and Psychology are testing 160 soldiers – those diagnosed with PTSD, those diagnosed with PCS and healthy control soldiers. A percentage of the healthy control soldiers have been deployed to Iraq or Afghanistan but do not have PTSD or PCS.

"We hope to use our results to test the efficacy of different treatments for people with PCS and PTSD," said Tom Denney, director of the Auburn University MRI Research Center.

Capt. Michael Dretsch, chief of neuroscience applications with the Comprehensive Soldier and Family Fitness Program at the Pentagon, said he met Denney and Jeffrey Katz, director of the Cognitive and Behavioral Science program in the Department of Psychology, while he was stationed at the U.S. Army Aeromedical Research Laboratory at Ft. Rucker and the two were presenting research there. Because of their shared research interests, he said he thought combining their work would be a great collaboration. They began working on grant proposals, and Dretsch was able to secure funding from the Military Operational Medical Research Program through the United States Army Medical Research and Materiel Command.

Marlin Wolf, a clinical neuropsychologist at Fort Benning, Ga., helped recruit service members for the study, and his efforts have resulted in one of the largest-ever studies involving brain imaging for PTSD and PCS.

"As a neuropsychologist I am concerned with the applied science of brain-behavior relationships," Wolf said. "My role at Fort Benning has been to diagnosis and treat active duty service members returning from war who have sustained mild to moderate traumatic brain injuries. They also have co-morbid disorders including PTSD, insomnia, depression and chronic pain which we treat. I am hopeful that our research will provide data to help with earlier intervention and more successful treatments for neurocognitive and emotional problems for soldiers and all people afflicted with these life-changing problems."

Participants in the study undergo a series of MRI brain scans to analyze the structures of the brain as well as the fiber tracts that connect the structures. In addition, each group participates in functional MRI scans, which measure brain activity while participants are engaged in a specific task.

"There is a series of networks in the brain that are active and there's a natural rhythm to the network

in our brains," said Katz. "Different structures have more blood flow going to them at different times, and the brain oscillates in these different networks. What happens with people who have different psychological problems is that those networks don't oscillate the same way. Nobody really knows what that means at this point in time. This is a hot topic of research."

Participants in the PCS and PCS healthy groups perform what is called an emotional regulation task. During the scan, the participant is presented with a series of military related pictures projected on a screen mounted inside the scanner. Some pictures are of disturbing events, animals and people, while some are ordinary, everyday objects. After the participant is presented with an image, he is asked to do one of three things: enhance, suppress or maintain his emotional response to the images.

Katz said initial analyses are showing differences in brain activity during emotional regulation that may be related to the disease.

Participants in the PTSD and PTSD healthy groups perform what is called a fear-conditioning task. During the scan, the participant is presented with a tone that is then followed by a burst of aversive white noise or a tone that is not followed by the noise. Using a track ball, participants continually report their expectancy of the noise's occurrence on a scale of 0-100. While each participant is being scanned, skin conductance response – a method of measuring the electrical conductance of the skin, which is related to emotional response – also is collected to assess learning.

"Our initial analyses are showing differences in brain activity in PTSD patients during threat-related responses and learning-related differences in the predictability of the threat," Katz said.

In addition, all participants undergo a resting state functional brain scan to reveal the connectivity of brain regions which are consistently found while the subject is at rest. Participants are instructed to clear their minds and lie still while not performing a specific task.

"Analyses will be conducted that compare the resting states of PCS, PTSD and healthy participants to test whether differences exist across groups in the connectivity of the brain regions," Katz said.

The scans create a large data set that will be analyzed by Gopikrishna Deshpande, an assistant professor in the Department of Electrical and Computer Engineering, who works at the MRI Center.

"You're doing a 3-D scan of the brain every two seconds for 10 minutes," Denney said. "You've got gigabytes worth of data for each little bit of the brain – you've got thousands of time series from each part of the brain that you're correlating with each other to see which ones work in a network or in concert with each other. Dr. Deshpande's expertise is taking these sets of data and reducing the information down to something that tells us what parts of the brain are working in concert together in a network and how strongly related they

are. We can measure the different types of networks."

Study participants also have their blood drawn so researchers can look for particular biomarkers that are related to PCS and PTSD. Researchers will conduct biochemical assays to better understand the relationships between the peripheral (blood plasma) protein molecules and lipid species and the outcomes of the brain scans and neuropsychological assessments. In addition, specific genes implicated in neurobiological processes and their role in neural functioning associated with PTSD and PCS will be explored.

"Ideally, we'd really like to understand what's taking place when a soldier is concussed – when you get a concussion, what changes take place?" Dretsch said. "And are there specific biomarkers – imaging biomarkers or blood-based biomarkers – which will maybe better assess and diagnose what's happening with the soldier? This is a very unique study in which the sample size of soldiers we have is enormous compared to other studies which have previously been published. We have a lot of opportunities here to contribute to the body of research out there in psychological resilience, as well as the clinical psychopathology."

"Once you've established all of this with the military population, then you can start asking about treatment," Katz said. "You establish these tasks, scan the participants, then they go through treatment, which may be meditation, cognitive behavioral therapy or other forms of treatment. Then, you scan them at a later time and ask, 'Are they better able to perform these tasks?' to validate whether or not those therapies are working."

– Carol Nelson

## National Security

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Security Council, Department of Defense, Department of Homeland Security, the National Security Agency, the National Geospatial-Intelligence Agency and Defense Intelligence Agency, as well as with leading private sector firms in intelligence national security-related areas.

"Auburn University joined the INSA as an academic partner in February of 2013," Burgess said. "I am pleased to now have the opportunity to join the INSA's Board of Advisors. Service on this board will help connect Auburn to the people who really make a difference and who have links to areas where Auburn would like to operate. They represent leading-edge technologies and serve as an invaluable thought engine for the nation."

Burgess added that engagement of college and university academic leadership with public and private members provides the intelligence and national security communities with a nonpartisan catalyst for creative solutions.