

## Lightning Session Descriptions

9:00-10:00 Lightning Sessions	10:30-11:30 Lightning Sessions
<p><b>Military*-related research:</b> Research that pertains to military-related functions, military personnel, families, veterans, and any other research that involves a military focus.</p> <p>*Details of classified research will not be shared at this session.</p>	<p><b>Cyber research:</b> Research addressing computers, computer networks, and other forms of digitized information.</p>
<p><b>Climate-Earth Systems research:</b> Research that addresses climate-earth systems from diverse disciplines that includes (but is not limited to) a focus on climate change and the climate-food-energy-water nexus.</p>	<p><b>Health Disparities research:</b> Research aimed at identifying, characterizing, remediating, and/or preventing health disparities, where health disparities refer to differences in health status of different groups of people (by ethnicity, age, sex, socio-economic status, region...).</p>
<p><b>Energy research:</b> Research addressing diverse approaches to harvesting and transforming energy.</p>	<p><b>Nano-Bio research:</b> Research that addresses the intersection of nanotechnology and biology.</p>
<p><b>SENCER*:</b> Science Education for New Civic Engagements and Responsibilities aims to strengthen student learning and interest in STEM by connecting course topics to issues of critical local, national, and global importance.</p> <p><b>*Group will meet during the Networking Lunch</b></p>	<p><b>Science, Technology, Engineering and Math (STEM) Education research:</b> Research that presents innovations in education and informs teaching and learning in STEM.</p>
<p><b>Functional Magnetic Resonance Imaging (fMRI) research:</b> Multi-disciplinary research, in areas such as cognitive neuroscience, using MRI technology that measures brain activity by detecting associated changes in blood flow.</p>	<p><b>Omics and Informatics research:</b> Research addressing an array of molecules in an organism-wide manner (e.g., genomics, proteomics, transcriptomics, metabolomics and phenomics) and the analysis, using powerful algorithms, of vast amounts of data (“big data”) produced by omics approaches.</p>
<p><b>Research Data Management*:</b> This session will facilitate a conversation about the current state of research data management at Auburn.</p>	<p><b>Creative Scholarship</b></p> <p>(A) <b>Visual, Performing, Media and Literary Arts:</b> The creation, performance, production and dissemination of artistically driven visual art, media arts (film, video, new media and audio), theatre, dance, music and literary art.</p> <p>(B) <b>Digital Applications:</b> Practical applications of digital technology related to the direct application of digital technologies to the solution of issues including but not limited to production, fabrication, communication, infrastructure assessment, imaging, etc.</p> <p>(C) <b>Applied Design:</b> Research and creative work from diverse disciplines related to design systems and solutions with practical applications for building, production and fabrication.</p>
<p><b>*Panel format</b></p>	

Faculty Interests/Expertise in Lightning Session Topic Areas: This is Research Faculty Symposium 2015

Military –Related Research	Climate and Earth Systems Research	Energy Research	Research Using fMRI Technology
<p><b>JoEllen Sefton</b>  <a href="mailto:jmsefton@auburn.edu">jmsefton@auburn.edu</a>  <i>Auburn University Warrior Research Center: Serving those that serve us</i></p>	<p><b>Puneet Srivastava</b>  <a href="mailto:srivapu@auburn.edu">srivapu@auburn.edu</a>  <i>Reducing Climate Risks to Water Resources</i></p>	<p><b>Jeff Fergus</b>  <a href="mailto:ferguje@auburn.edu">ferguje@auburn.edu</a>  <i>Materials for Energy Conversion and Storage</i></p>	<p><b>Tom Denney</b>  <a href="mailto:dennets@auburn.edu">dennets@auburn.edu</a>  <i>Brain Imaging Resources at the AU MRI Research Center</i></p>
<p><b>Scott Renner</b>  <a href="mailto:rennesr@auburn.edu">rennesr@auburn.edu</a>  <i>Veterans with Disabilities and Assistive Technology</i></p>	<p><b>Lisa Samuelson</b>  <a href="mailto:samuelj@auburn.edu">samuelj@auburn.edu</a>  <i>Developing decision support tools for ecological forestry and carbon management</i></p>	<p><b>Yasser Gowayed</b>  <a href="mailto:gowayya@auburn.edu">gowayya@auburn.edu</a>  <i>High temperature materials for energy generation</i></p>	<p><b>Mona El Sheikh</b>  <a href="mailto:elshemm@auburn.edu">elshemm@auburn.edu</a>  <i>The Effects of Sleep Restriction on Adolescents' CNS activity</i></p>
<p><b>Vishnu Supiramaniam</b>  <a href="mailto:suppivd@auburn.edu">suppivd@auburn.edu</a>  <i>Post-Traumatic Stress Disorder: Erasing Fear Memories</i></p>	<p><b>Chandana Mitra</b>  <a href="mailto:chandana@auburn.edu">chandana@auburn.edu</a>  <i>Cities and influence on microclimate</i></p>	<p><b>Z. Y. Cheng</b>  <a href="mailto:chengzh@auburn.edu">chengzh@auburn.edu</a>  <i>Materials for Energy Storage</i></p>	<p><b>Veena Chattaraman</b>  <a href="mailto:vzc0001@auburn.edu">vzc0001@auburn.edu</a>  <i>Neural connectivity between aesthetic perception and purchase decisions</i></p>
	<p><b>Wanyun Shao</b>  <a href="mailto:wshao@aum.edu">wshao@aum.edu</a> <i>Human Dimension of Climate Change</i></p>	<p><b>Curtis Shannon</b>  <a href="mailto:shanncg@auburn.edu">shanncg@auburn.edu</a>  <i>Heterogeneous Catalysis for Energy</i></p>	<p><b>Ben Hinnant</b>  <a href="mailto:jbhinnant@auburn.edu">jbhinnant@auburn.edu</a>  <i>Peer Effects on Adolescent Risky Decision Making</i></p>
	<p><b>Anthony Moss</b>  <a href="mailto:mossant@auburn.edu">mossant@auburn.edu</a>  <i>The hard thing about ctenophores</i></p>	<p><b>Steve Taylor</b>  <a href="mailto:taylost@auburn.edu">taylost@auburn.edu</a>  <i>Collaborative Programs in Bioenergy and Bioproducts</i></p>	<p><b>Gopikrishna Deshpandi</b>  <a href="mailto:gopi@auburn.edu">gopi@auburn.edu</a>  <i>MRI Center</i></p>
	<p><b>Susan Pan</b>  <a href="mailto:panshuf@auburn.edu">panshuf@auburn.edu</a>  <i>Climate Change, Water Resources and Ecosystem Production in the 21st Century</i></p>	<p><b>Marcelo Kuroda</b>  <a href="mailto:mkuroda@auburn.edu">mkuroda@auburn.edu</a>  <i>Atomistic modeling of materials</i></p>	<p><b>Jeff Katz</b>  <a href="mailto:katzjef@auburn.edu">katzjef@auburn.edu</a>  <i>Understanding MTBI in Soldiers via fMRI</i></p>
	<p><b>Bill Hames</b>  <a href="mailto:hameswe@auburn.edu">hameswe@auburn.edu</a>  <i>Noble Gases as Tracers in Climate and Earth Systems Research</i></p>	<p><b>David King</b>  <a href="mailto:kingdat@auburn.edu">kingdat@auburn.edu</a>  <i>Petroleum geology and exploration</i></p>	<p><b>Jen Robinson</b>  <a href="mailto:jlr0029@auburn.edu">jlr0029@auburn.edu</a>  <i>High resolution fMRI</i></p>
		<p><b>Anne Gorden</b>  <a href="mailto:anne.gorden@auburn.edu">anne.gorden@auburn.edu</a>  <i>Selective Systems for Rapid in-the-Field Detection of Uranium</i></p>	

Faculty Interests/Expertise in Lightning Session Topic Areas: This is Research Faculty Symposium 2015

Cyber Research	Health Disparities Research	Nano-Bio Research	STEM Education Research
<p><b>Peter Chen</b>  <a href="mailto:peter.chen@auburn.edu">peter.chen@auburn.edu</a>  <i>Security behaviors and outcomes</i></p>	<p><b>Brian Vaughn</b>  <a href="mailto:vaughbe@auburn.edu">vaughbe@auburn.edu</a>  <i>Introduction to the Health Disparities Cluster/Cluster Hire Initiative at Auburn</i></p>	<p><b>Allan David</b>  <a href="mailto:aedavid@auburn.edu">aedavid@auburn.edu</a>  <i>"Smart" nanomaterials for targeted drug delivery</i></p>	<p><b>Megan Burton</b>  <a href="mailto:megan.burton@auburn.edu">megan.burton@auburn.edu</a>  <i>Supporting Young Learners with Special Needs in Mathematics</i></p>
<p><b>Jin Wang</b>  <a href="mailto:wang@auburn.edu">wang@auburn.edu</a>  <i>Cyber manufacturing</i></p>	<p><b>Tom Fuller-Rowell</b>  <a href="mailto:tef0005@auburn.edu">tef0005@auburn.edu</a>  <i>Racial disparities in the health benefits of educational attainment</i></p>	<p><b>Tatiana Samoylova</b>  <a href="mailto:samoiti@auburn.edu">samoiti@auburn.edu</a>  <i>Phage nanoparticles as platform for vaccine development</i></p>	<p><b>Joni Lakin</b>  <a href="mailto:jml0035@auburn.edu">jml0035@auburn.edu</a>  <i>Predictors of STEM engagement and retention</i></p>
<p><b>Tony Skjellum</b>  <a href="mailto:skjellum@auburn.edu">skjellum@auburn.edu</a>  <i>Internet of Things in 3 Minutes or Less</i></p>	<p><b>Danielle Wadsworth</b>  <a href="mailto:wadswdd@auburn.edu">wadswdd@auburn.edu</a>  <i>Physical Activity Promotion in Rural Environments</i></p>	<p><b>Bradley Merner</b>  <a href="mailto:blm0022@auburn.edu">blm0022@auburn.edu</a>  <i>Chemical Synthesis of Biological and Nanoscale Materials</i></p>	<p><b>Marilyn Strutchens</b>  <a href="mailto:strutme@auburn.edu">strutme@auburn.edu</a>  <i>Increasing Student Engagement and Achievement in Mathematics Via Professional Mathematics Learning Communities</i></p>
	<p><b>Sarah Zohdy</b>  <a href="mailto:smz0003@auburn.edu">smz0003@auburn.edu</a>  <i>Living with Lemurs: One Health in Madagascar</i></p>	<p><b>Curtis Shannon</b>  <a href="mailto:shanncg@auburn.edu">shanncg@auburn.edu</a>  <i>Electrochemical Proximity Assay for Femtomolar Protein Detection</i></p>	<p><b>Christine Schnittka</b>  <a href="mailto:schnittka@auburn.edu">schnittka@auburn.edu</a>  <i>Save the Animals: STEM Teaching Kits</i></p>
	<p><b>Nancy Merner</b>  <a href="mailto:ndm0011@auburn.edu">ndm0011@auburn.edu</a>  <i>Gaining insight towards breast cancer disparities through gene discovery efforts</i></p>	<p><b>Robert Arnold</b>  <a href="mailto:rda0007@auburn.edu">rda0007@auburn.edu</a>  <i>Composite Nanomedicines for Treatment of Cancer</i></p>	<p><b>David Cline</b>  <a href="mailto:clinedj@auburn.edu">clinedj@auburn.edu</a>  <i>Aquaculture as a teaching platform</i></p>
			<p><b>Raj Chaudhury</b>  <a href="mailto:schaudhury@auburn.edu">schaudhury@auburn.edu</a>  <i>The role of multiple representations in STEM teaching and learning</i></p>
			<p><b>David King</b>  <a href="mailto:kingdat@auburn.edu">kingdat@auburn.edu</a>  <i>When cosmic impact strikes the Earth</i></p>
			<p><b>Jen Robinson</b>  <a href="mailto:jlr0029@auburn.edu">jlr0029@auburn.edu</a>  <i>Brain Camp</i></p>

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Creative Scholarship	Omics and Informatics
<p><b>Robin Jaffe</b>  <a href="mailto:theatretechguy@auburn.edu">theatretechguy@auburn.edu</a>  <i>Using Computer and/or Video Games to Teach and Demonstrate Time Management, Critical Thinking and Problem Solving Techniques</i></p>	<p><b>Jeff Coleman</b>  <a href="mailto:jjcoleman@auburn.edu">jjcoleman@auburn.edu</a>  <i>Supernumerary chromosomes in fungal pathogens</i></p>
<p><b>Pamela Long</b>  <a href="mailto:plong@aum.edu">plong@aum.edu</a>  <i>Literature and Ceramics in Colonial Mexico</i></p>	<p><b>Tonia Schwartz</b>  <a href="mailto:tschwartz@auburn.edu">tschwartz@auburn.edu</a>  <i>Evolution of genetic networks</i></p>
<p><b>Fereshteh Rostampour</b>  <a href="mailto:fzr0006@auburn.edu">fzr0006@auburn.edu</a>  <i>Matrix II (the Robotic Culture)</i></p>	<p><b>Ken Halanych</b>  <a href="mailto:ken@auburn.edu">ken@auburn.edu</a>  <i>Using genomic tools to understand marine invertebrate evolution</i></p>
<p><b>Mark Dougherty</b>  <a href="mailto:doughmp@auburn.edu">doughmp@auburn.edu</a>  <i>Auburn Arboretum pervious parking design</i></p>	<p><b>Laurie Stevison</b>  <a href="mailto:lstevison@auburn.edu">lstevison@auburn.edu</a>  <i>Using bioinformatics to understand speciation genomics</i></p>
<p><b>Courtney Windham</b>  <a href="mailto:courtney.windham@auburn.edu">courtney.windham@auburn.edu</a>  <i>Kinetic Typography &amp; Graphic Design: Utilizing Augmented Reality to Connect Print to Motion</i></p>	<p><b>Fernando Biase</b>  <a href="mailto:fbias@auburn.edu">fbias@auburn.edu</a>  <i>Mapping gene regulatory networks in early stages of development in cattle</i></p>