



Research in Queuing Theory



This past summer Dr. R.B. Lenin, Assistant Professor of Mathematics, received a \$16,379 contract from the Center for Distance

Health (CDH) at the University of Arkansas for Medical Sciences (UAMS) to identify an optimal scheduling policy for patients reducing waiting time while optimizing healthcare resources. He plans to develop computer simulation models based on the data collected by CDH at UAMS, which will help test new ideas for system design or improvement before committing the time and necessary resources to redesign the procedures used to schedule patients. The schematics diagram shown is the actual floor plan *(continued)*

Congressman Tim Griffin Visits UCA

Arkansas' 2nd District Representative Tim Griffin paid a visit to the CNSM on Monday August 8, 2011. He stopped by to learn about the opportunities for STEM students in the College. Congressman Griffin was given a tour of some of the facilities led by Dr. Carl Frederickson the Associate Dean of the College and Jeff Pitchford, Vice President for University and Government Relations. The tour started in the new STEM Residential College. Here the Congressman met Leah Horton the Resident Master of the STEM Residential College. Ms. Horton discussed the UCA Residential College program in general and the STEM Residential College in particular. A video presentation of the various academic, outreach and social activities from the residential college's first year was shown to give the Congressman an overview of the College. A special note was made of the outreach activities that are an important part of the programming in the residential college. Congressman Griffin asked a *(continued)*



Save the Date!

Labor Day Holiday

Monday, Sept. 5

Chalk Talks

Tuesday, Sept. 20
6:00 p.m.
Arkansas Hall

Advisor Alert

Final Date to Make
Degree Application
for December
Graduation
Friday, Sept. 23

(Tim Griffin visit continued) number of questions about the program including how students apply for admittance.



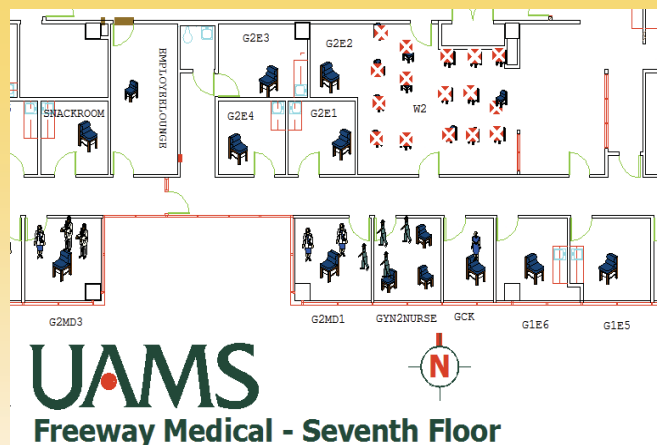
The next stop on the tour was the UCA Institute for STEM Professional Development and Education Research in Old

Main. Dr. Uma Garimella, the Institute’s Director, gave the Congressman an overview of the services provided by and the classroom materials available in the Institute. Science Instructional Facilitator Specialist Minnietta Ready helped to explain the equipment that was available in the Institute for teachers to checkout.

The Congressman’s final stop was in Lewis Science Center where he visited the research labs of Dr. Jeff Padberg in Biology and Dr. William Slaton in Physics and Astronomy. Dr. Padberg put the Congressman to work sectioning the brain of an armadillo. The Congressman was very interested in Dr. Padberg’s work. The fact that both Dr. Padberg

and Congressman Griffin received their graduate degrees from Tulane University didn’t hurt. From here, the Congressman moved to the lab of Dr. Slaton. Here he learned of acoustic research with possible applications monitoring the flow of natural gas in a well. He also got to talk with Ashley Hicks an undergraduate student who has been studying the flow of a fluid from a larger container through a small opening in the bottom. Congressman Griffin seemed impressed that this is how Ashley had chosen to spend her summer.

You can hear Congressman Griffin’s comments about his visit as well as some comments from Dr. Frederickson on UCA’s YouTube page. The photos that accompany this article are courtesy of Mike Kemp.



(Research in Queuing Theory continued) of the Department of OB/GYN, Freeway Medical Clinic at UAMS. Data on the flow of patients and resources is acquired from Medmodel, a software package, which takes this floor plan as an input over which flows of patients and resources (such as physicians, nurses and lab techs) are programmed. It represents different paths through which patients and resources

move between different locations (such as waiting rooms, exam rooms, physician offices, ultrasound rooms, and break rooms). During a simulation run, one can see the movements of patients and resources along these paths. Dr. R.B Lenin joined the Department of Mathematics at UCA as a tenure track Assistant Professor in August 2009.

REU: Hit@UCA



The Research Experience for Undergraduates (REU) project "HIT@UCA: Applied Research in Health Information Technology" is a three-year National Science Foundation (NSF) funded research program hosted by the Computer Science Department at UCA. This is the first ever Computer Science REU in Arkansas selected by the Computer and Information Science and Engineering (CISE) Directory of NSF. It is one of the seven newly selected NSF-CISE RUE sites across the nation this year. There were also seven sites renewed this year. The primary objective of the UCA REU program is to encourage motivated undergraduate students to pursue graduate study and research careers in computer science by providing them a competitive research experience.

This project integrates fundamental research in computer science with applications to health information technology (HIT), aimed at improving the overall quality, safety and efficiency of the

health delivery system. The interdisciplinary nature of this REU program offers opportunities for the participants to perceive the importance and applications of computer science and encourages them to continue their education in this field. A series of training seminars and field trips equip students with knowledge specific to the various research projects as well as general skills required in graduate school. The students participate in a full range of research activities including designing and conducting experiments, analyzing data, documenting research results, writing papers for publication, and presenting at a symposium.

For summer 2011, ten undergraduates from across the country were selected from a strong pool of forty applicants to conduct research on four HIT projects, along with four CS graduate students. The REU mentor team for 2011 included Dr. Vamsi Paruchuri (PI), Dr. Yu Sun (Co-PI), Dr. Sinan Kockara, Micheal Nooner, Dr. Paul Young, Dr. Umit Topaloglu (UAMS) and Dr. Shengli Sheng. Further details about the award and the program can be found at:
www.nsf.gov/awardsearch/showAward.do?AwardNumber=1062838 and
<http://sun0.cs.uca.edu/reu/program.html>



Professional Development Workshop for 2011-12 Concurrent Teachers in Mathematics

Ten mathematics teachers from Oak Grove, Central Arkansas Christian, Vilonia, Parkview, Guy, Catholic and Academic Plus Charter High Schools, who were approved to teach concurrent courses for UCA for the coming academic year 2011-12, attended professional development (PD) workshops held in the Department of Mathematics on August 3, 2011. The teachers took part in Calculus, Algebra, Statistics, and Trigonometry workshops. Drs. Clarence Burg and Ramesh Garimella worked with the calculus teachers, Drs. Patrick Carmack and R.B. Lenin worked with statistics teachers, and Dr. Charles Watson worked with algebra and trigonometry teachers. A joint luncheon for all concurrent teachers and faculty mentors was arranged by UCA's Office of Outreach and Community Engagement. At the luncheon, Drs. Garimella and Watson briefed the teachers about the National Alliance of Concurrent Enrollment



Partnerships (NACEP) guidelines and standards. The Department of Mathematics at UCA continues to have the largest concurrent enrollment program in the College of the Natural Sciences and Mathematics. Last year, the Department offered 26 sections for concurrent credit in College Algebra (Math 1390), Plane Trigonometry (Math 1392), Algebra and Trigonometry (Math 1580), Calculus I (Math 1591), and Statistics I (Math 2311) with an enrollment 368 students.



2011 Summer Mathematics Graduates



At the 2011 Summer Graduation, eight students received graduate degrees in Mathematics Education (MA) or Applied Mathematics (MS) and three received undergraduate degrees in Applied Mathematics (BS). In the picture, on the back row (left to right) are Eli Lowery (MA), Blake Tinsley (MA), and Jennifer Tracey (MA). On the front row (left to right) are Jon Summers (MA), Pamela Cook (MA), Yuee Chen (MS), Kim Kullander (MA) and Beata Opuku (MA). Overall, during the 2010-11, including summer 2011, the Department of Mathematics awarded 14 graduate degrees and 18 undergraduate degrees. Since the inception of the MS Program in Applied Mathematics in fall 2006, 19 graduate degrees have been awarded.

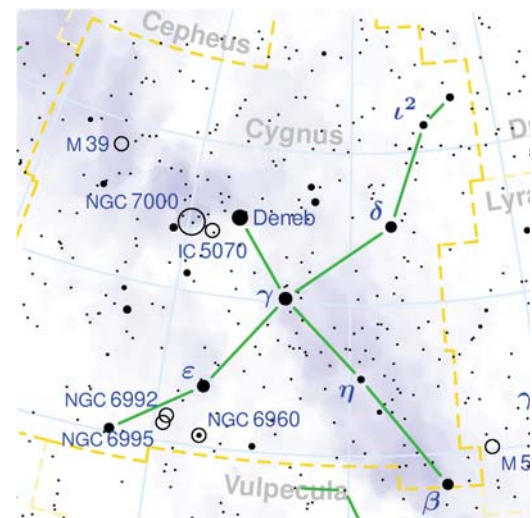


Dr. Clancy Goes Back to Washington!

The National Science Foundation (NSF) recently appointed Barbara Clancy (Associate Professor in Biology) to a three-month term on the scientific review panel for the Advances in Biological Informatics (ABI) program. The panel, which will meet in Arlington VA in September, advises NSF on the merit of proposals requesting financial support of research for the development of informatics tools and resources that have the potential to advance, or transform, research in biology. Dr. Clancy's own research is currently funded through this division of NSF. Working with a number of students at several universities, including Travis Kersh, Rachel Smith, Alan Lim and Erick Clark here at UCA, Dr. Clancy's lab is studying the relationships of lifespan milestones across various species (<http://www.translatingtime.net/>). This summer they are investigating if the time at which the first brain cells are organized in a particular species is known, can accurate predictions be made for dates when walking will occur, when puberty should happen, or when death is likely?

Stories of the Stars

Debra Burris presented "Stories of the Stars" as a program on July 30th at Lake Dardanelle State Park. In addition to the stories of the constellations observed in various cultures, the 30 or so participants learned some simple naked-eye observation tricks, how to use a star wheel, a circumpolar constellation star clock and about the life cycles of stars. The observing session was followed by a question and answer session. This helped fulfill her hours to become a Certified Arkansas Master Naturalist as well. Dr. Burris has been invited to return this fall to give a tour of the fall/winter sky.



2011 Upward Bound Algebra II

During the summer of 2011, Dr. Clarence Burg, Assistant Professor of Mathematics, taught the Algebra II preparation class for the Upward Bound Summer Academy for the fourth time in as many years. The Upward Bound program focuses on high school students who have the potential to be successful in college but, due to a variety of factors, probably would not attend college without this program. Upward Bound provides tutoring and mentoring throughout the school year, which culminates in the five-week summer program and the annual trip. Approximately 35 students participate in the residential summer program each year. This year, Dr. Burg taught 17 students from Bigelow, Mayflower, Morrilton, Nemo Vista and Perryville High Schools, in the Algebra II class, using the HP Tablet PCs and DyKnow software. Dr. Burg initially participated in this program as part of a Hewlett-Packard Technology for Teaching grant, which included 21 Tablet PCs.

In the class, Dr. Burg focused on skill maintenance and improvement going *(continued)*



Clarence Burg

(Upward bound continued) all the way back to fractions. Using daily warm-ups and speed drills, along with short explanations or reviews of Pre-Algebra and Algebra I material, a wide variety of Algebra skills were reviewed, including factoring, calculating the equation of line, solving linear equations and inequalities, graphing lines and linear inequalities and solving absolute value equations. Dr. Burg gave a pre-test on the first day of class and a post-test on the last day of class. This year, the same test was administered as the pre- and post-test. On the pre-test, the average student score was 4.5 out of 32, with a range of 0 to 13. On the post-test, the average student score was 21 out of 32, with a range of 8 to 30.5. Clearly, the students' skills on these Algebra topics improved dramatically, preparing them for success in Algebra II this fall.



UCA Math Faculty Provide Professional Development for Algebra II Teachers

Since 2009, Dr. Linda Griffith and Dr. Ramesh Garimella have worked with Ms. Aimee Evans of the Arch Ford Educational Cooperative on a 3-year MSP grant project titled: Algebra II – A Gateway to a Smart Future. The primary objective of the project was to support Algebra II teachers as they dealt with content and the American Diploma Project (ADP) exam. While the ADP has been dissolved and became a part of the Partnership for Assessment of Readiness for College and Career (PARCC), this summer's workshop, held from July 11-15, 2011 in the Department of Mathematics at UCA, helped teachers understand the new Common Core State Standards curriculum for Algebra II and continued providing rigorous study of advanced algebra and trigonometry contents. This summer's special feature was a daylong workshop by Dr. Carl Lee of the University of Kentucky. He introduced Geogebra (a math software) and its capabilities in enhancing high school students' understanding of various concepts of Algebra II and Trigonometry. Along with Dr. Griffith and Dr. Garimella, mathematics faculty members Dr. Clarence Berg, Dr. Fred Hickling, Dr. Long Le, and Dr. Jean McGehee have also been visiting participating teachers during the school year and will continue their site visits through this coming school year.



UCA Stem Institute Receives Grants Total \$233,483 to Support Common Core State Standards in Mathematics



Uma Garimella

A paradigm shift has occurred in the realm of K–12 academic standards in Arkansas. The new Common Core State Standards (CCSS) will completely replace Arkansas' existing academic standards for Mathematics, English, and Language Arts by the 2014-2015 School Year. The UCA STEM Institute has received two grants, one from the Arkansas Department of Education (ADE) and the other from the Arkansas Department of Higher Education (ADHE), totaling \$233,483 to provide training and support to mathematics teachers in the state of Arkansas in implementing the CCSS. To compliment the adoption of the CCSS,



Belinda Robertson

Arkansas is one of the twenty-four states that have joined the Partnership for Assessment of Readiness for College and Career (PARCC). The goal of PARCC is to create an assessment system and supporting tools that will help states dramatically increase the number of high school graduates ready for college and careers. The CCSS will be implemented in Arkansas for grades K-2 this school year, Grades 3-8 in 2012-13 school year, and 9-12 in 2013-14. The first year for PARCC assessments is 2014-15.

The first grant is for \$128,171, titled “Math Core Team,” from the ADE. This is a two-year Mathematics and Science Partnership (MSP) grant.

Dr. Umadevi Garimella, the Project Director, and Ms. Belinda Robertson, Program Coordinator, will work closely with the Arch Ford Educational Cooperative to create an ongoing partnership between three high-need school districts (South Conway, Little Rock and North Little Rock) and the STEM Faculty of the University of Central Arkansas. The program will develop mathematics initiatives that target grades 3-5 focusing on enhancing learning progressions that support the coordination of the CCSS, curriculum, instructional practices and multiple forms of assessment. The project goal is to improve the academic achievement of Arkansas' students in the areas of mathematics by improving the mathematics content knowledge of teachers. The Math Core Team project will create professional development opportunities pertaining to 30 of the mathematics CCSS with a minimum of 100 contact hours during the year of the project. To evaluate the success of the project, a quasi-experimental design with carefully matched comparison conditions will be used. An experienced external evaluation specialist will conduct a comprehensive evaluation that includes both qualitative and quantitative measures for each program goal.

The second grant, “Algebra 1 and Implementation of Common Core State Standards,” is a No Child Left Behind: Improving Teacher Quality: P-16 Education Partnerships grant for \$105,312, from ADHE. The project is a collaboration between the UCA STEM Institute and the Department of Mathematics and will assist 9th grade Algebra 1 teachers to enhance their mathematics content knowledge and to integrate and implement CCSS. Dr. Umadevi Garimella is the Project Director and Dr. Ramesh Garimella is the Project Co-Director. UCA Mathematics faculty members Drs. Linda Griffith and Jean McGehee are taking the lead (*continued*)



Algebra I Teachers at UCA Workshop

(UCA Stem Institute continued) roles in providing professional development for the teachers participating in the project. Ms. Belinda Roberts of the UCA STEM Institute is a facilitator for the project.

Before PARCC, Arkansas participated in the American Diploma Project (ADP) with the End of Course Exam in Algebra II. ADP was one of the first efforts to develop a more rigorous national curriculum. PARCC expands ADP to create a challenging national curriculum across all grades. The new standards narrow the content taught at each grade but call for greater depth. Mathematics educators in Arkansas immediately noted that one of the challenges would be centered on Algebra I. While the Arkansas Frameworks included a strong introduction to linear functions in the 7th and 8th grades, the CCSS calls for basic mastery of linear functions in these grades. In Algebra I, CCSS requires the value-added topic of comparing and contrasting linear and exponential functions and in-depth exploration of quadratic functions. Some of this material had been in Algebra II. With these changes in mind, Dr. Suzanne Mitchell of ADHE organized multiple grants under one professional development project for the state. After the grants were awarded, Dr. Ramesh Garimella, Dr. Linda Griffith and Dr.

Jean McGehee met last spring with other grant recipients in the state to plan the organization and writing of modules for the professional development. Drs. R. Garimella, Griffith and McGehee wrote five of the twenty modules and presented their work with other educators at a 3-day meeting in Little Rock in May, 2011.

As a part of the Algebra I – Implementation of CCSS Project, UCA offered two sets of workshops. One workshop was conducted on the UCA campus and the other one in the Nashville, AR School District. Thirty-six Algebra I teachers in central Arkansas attended the workshop on the UCA campus, which was held from July 25-29. Nineteen teachers attended the workshop in the Nashville School District, which was held from August 1-5. Feedback data indicated that the participants were very positive about the material, and they had many “aha” moments. Teachers especially saw the advantage of enhancing understanding of linear functions by comparing them to exponential functions and using arithmetic and geometric sequences as a starting comparison. Dr. George Bratton, a mathematics faculty member at UCA, is leading the team that will evaluate the different sites for the project and will assess participants’ progress as they go through the workshops. The Department of Mathematics at UCA will continue to play a very important role as Arkansas makes the transition from the State Frameworks to the CCSS. Dr. Linda Griffith will be on loan to the Arkansas Department of Education to spearhead the implementation of the CCSS across the state. This puts UCA at the leading edge of the CCSS implementation in Arkansas.



Teachers at the Nashville Workshop



2011 MSIT Academy @ UCA

into two groups and each group sent several encrypted e-mail messages to the other group to decipher using the techniques that they have learned in the previous days.

The Computation Revolution, the second activity, was presented by Dr. Clarence Burg, and assisted by the undergraduate students Brandon McVay and Vinh Lu. They showed the participants how to build 2D and 3D geometries, generate computational grids around these geometries and calculate airflow around these geometries using UCA's Callisto Cluster. The students built simple geometries such as spheres and cubes as well as realistic geometries such as wings, rockets, downtown city buildings and homes. Using the 64-processor cluster, they calculated the airflow around these structures at various wind speeds, noticing how the wind accelerates in certain areas and decelerates in other areas. Finally, on the subsonic and supersonic wings, they ran the simulations at different angles of attack, in order to determine the relationship between the lift and drag coefficients at different angles of attack, just as an aerospace engineer would analyze these geometries for their flight characteristics.

Each day of MSIT started at 9:30 AM and ended at 4:30 PM. The lunchtime activities included a visit to the UCA Planetarium, a physics lab, and a presentation by Ms. Leigh Ann DenHartog the College Program Coordinator on the mathematics and science programs in the College of Natural Sciences and Mathematics. For more information on the future MSIT Academy @ UCA, contact rameshg@uca.edu or call 501-450-3147.

Thirteen high school students from Conway, North Little Rock, Little Rock, and Perryville participated in the 2011 MSIT Academy@UCA during the week of July 18-22. Dr. Ramesh Garimella, Chair, Department of Mathematics and Dr. Umadevi Garimella, Director of the UCA STEM Institute received a \$10,000 grant from the Arkansas Science and Technology Authority to organize and run the Academy. The weeklong summer program was designed to enhance high schools students' interests in STEM areas. This year, MSIT had two activities – Cryptology and Computation Revolution. Seven students took part in Cryptology and the other six in Computation Revolutions.



The Cryptology activity was presented by Drs. Ramesh Garimella and R.B. Lenin. Math graduate students Ryan Stoval and Martha Watkins provided support to the activity. A great deal of modern cryptography depends upon basic number theory, especially clever manipulations of large integers, modular arithmetic, and the use of software such as Excel and Maple. In this program, students were introduced to the essentials of number theory and cryptography. Participants learned several types of encryption and decryption methods such as Caesar cipher, affine cipher, multiplicative cipher and RSA Encryption. On the last day students were divided





UCA Stem Institute Hosts Camp Invention Program for Students Grades 3 - 6



The UCA STEM Institute held its first Camp Invention Program (CIP) during the week of July 25 - 29, 2011 for children entering grades three through six. Ms. Minnietta Ready, Science Specialist at the UCA STEM Institute, was the Director of the CIP. The primary objective of the camp was to

instill vital 21st century life skills such as problem solving and teamwork through hands-on fun! Twenty kids participated in several sessions that involved hands-on activities, brainstorming, and experimentation. The kids were challenged to survive harsh living conditions on an alien planet in the "Planet Zak" session, green up the infrastructure of a polluted city in a "Sludge City" session, design model roller coasters by exploring Newton's Laws of Motion in "Ride Physics" and recycle parts from discarded household appliances and electronics to create new machines in "Edison's Work Shop." On the final day, students had a wonderful experience with the Game On Challenge activities and a walking field trip to the UCA Planetarium. Dr. Rahul

As a Parent it was priceless...



Mehta of the Department of Physics and Astronomy, Dr. Zaida Gomez-Kramer of the Department of Biology and Ms. Kathy Peery of Vilonia High School conducted the sessions.

The CIP challenged children to think creatively about real-world



I can do anything...

problems and allowed them to work as a team to collectively identify solutions. When asked what they liked about the Camp Invention experience, students wrote, "My favorite thing was making a Rube Goldberg Machine," "Camp Invention made me know that if I never give up, I can do anything." A Camp Invention Parent commented "As a parent it was priceless when my child came home and announced, 'Learning is AWESOME!'" A camp invention teacher's comment was "This exciting camp is everything a good science instruction should be. I am proud to be a part of Camp Invention."

Learning is Awesome!



New Faculty in CNSM



Dr. Ben Cash, the new chair of the Department of Biology, comes to UCA from Maryville College in Tennessee. Dr. Cash earned his Ph.D. in biology from the University of Mississippi in 2000. His expertise centers on the behavior and physiology of reptiles and amphibians. For the last decade he has worked in the tundra wetland systems of northern Manitoba, Canada.



Steve Karafit joined the Biology Department as a Lecturer I in June 2011. He is also the new Biology I/II Course Coordinator. Steve received his M.S. degree in Systematics and Evolution from the University of Alberta in British Columbia, Canada in 2008. He was a visiting instructor at Hendrix College before coming to UCA. Steve and fiancée Chrissy Shackle will be getting married on September 3rd in Tulsa, Oklahoma. Chrissy is the Serials Librarian here at UCA.



Xianping Li joins the Department of Mathematics as a Visiting Assistant Professor for the AY 2011-12. Dr. Li recently defended his doctoral dissertation and will be awarded his Ph.D. in Applied

Mathematics from the University of Kansas soon. Dr. Li obtained his BA and MS in Petroleum Engineering from China University of Petroleum-Beijing. His research interests include numerical analysis, scientific computing, image processing, mathematical modeling and simulation. In his spare time, Dr. Li likes swimming, biking, hiking, fishing, and listening to music. He also enjoys computer related activities such as programming and gaming.



Dr. Jason Martin was hired to fill one of our mathematics education positions in the Department of Mathematics. Dr. Martin received his Ph.D. from the University of Oklahoma at Norman in August 2009. For the 2009-2011 academic years, he held a postdoctoral position in the Center for Research and

Innovation in Mathematics and Science Education at Arizona State University. Dr. Martin also holds an M.A. in Mathematics from the University of Oklahoma and a B.S. in Mathematics and Computer Science from the Southeastern Oklahoma State University. Dr. Martin's research interests are in how students come to understand formal limit definitions within and across contexts, expert and novice understandings of the concept of convergence of Taylor series, metaphorical reasoning in reducing cognitive load when reasoning about complicated mathematical topics, and the effects of dynamic images on student understanding.

New Faculty in CNSM (continued)



Dr. Jungeun Park was selected for one of two mathematics education positions in the Department of Mathematics. She received her Ph. D. in Mathematics Education from Michigan State University in May 2011. She also holds an M.S. in Mathematics

from Michigan State, and an M.A. in Mathematics Education and a B.S. in Mathematics from Korean University in Seoul, South Korea. Dr. Park's primary research focuses on improving undergraduate student learning opportunities in mathematics in the classroom. She also interested in teacher education of prospective mathematics teachers.



Dr. Andrew Mason is joining the Department of Physics and Astronomy as an Assistant Professor. Andrew specializes in physics education research and will perform research

into effective pedagogies for teaching introductory college courses as well as contributing to our secondary science education program. Andrew earned his BS in physics at the State University of New York, Buffalo, where he was Phi Beta Kappa. He went on to earn MS (2005) and PhD (2009) degrees at the University of Pittsburgh. Before joining UCA Dr. Mason was a postdoctoral fellow at the University of Minnesota, Twin Cities.

Dr. Lei Yang received the Ph.D. degree in Chemistry from the University of Oklahoma in May of 2008. Prior to that, Dr. Yang earned the B.E.

degree in Material and Chemical Engineering from the Guilin Institute of Technology in Guilin, China and the M.S. in Chemistry from Nankai University in Tianjin, China. Since completion of his Ph.D. at

Oklahoma, Dr. Yang has been a postdoctoral associate in the laboratory of Dr. William Tolman at the University of Minnesota-Twin Cities. Of particular note is Dr. Yang's involvement in the Mentorship Program for Aspiring Chemistry Teachers while serving as a postdoctoral associate in Minnesota.

Nathan Jones is returning this Fall to our Biology Department as a Visiting Instructor. Nathan

received his M.S. degree in our department in 2009. Since then, he served as a Clinical Research Coordinator in the Neurology Department at the University of Tennessee and most recently, a Laboratory



Technician in the Department of Pathology/Laboratory Research at the Nevada Cancer Institute in Las Vegas, Nevada.

New Faculty in CNSM (continued)

Dr. Katherine A. Marvin will join the department of Chemistry as a Visiting Assistant



Professor. She obtained a Ph.D. degree in Inorganic Chemistry from the University of Wisconsin-Madison in February of 2008. From 2008 – 2010, Dr. Marvin worked at University of Texas at Austin. She has also been an Adjunct Instructor at Hendrix College from 2010 – 2011 in Conway, Arkansas.



Jon Sumners joins the Department of Mathematics as a Visiting Lecturer for the AY 2011-12. Jon received his undergraduate degree in mathematics education from UCA in spring 2010 and a M.A. degree in Mathematics Education from UCA in August 2011. One of Jon's future goals is to pursue a doctoral degree in Mathematics Education. In his spare time, Jon enjoys listening to classics such as the Beatles, Journey, Eric Clapton, and Johnny Cash. A few of his current favorites are Keith Urban, O.A.R., and Taking Back Sunday. Also, he enjoys running, playing basketball, reading, hunting, and fishing.



Emily Malcolm is returning to the Chemistry Department as a Visiting Lecturer. Emily earned her B.S. degree in Chemistry and Biology from UCA in 2007. She received a Master of Science Degree in Chemistry from Georgia Tech in May of 2010 where she served as a Graduate Teacher and Research Assistant. She also works as a science tutor for students at all levels.

UCA Astronomical Facilities Fall 2011 Schedule

Observatory

The primary telescope of the UCA Observatory is a Meade 14-inch aperture LX200R GPS telescope. The observatory is used for faculty and student research projects and public observing nights.

The UCA observatory is located on the UCA campus, in the Lewis Science Center (stairs located in front lobby). Longitude = 92 degrees 27 minutes West, Latitude = 35 degrees 5 minutes North

The observatory is open to the public the third Wednesday night of the month (if the sky is clear) for approximately two hours after dark.

Fall 2011 Observatory Schedule:

Wednesday, September 21 from 8:00 – 10:00 p.m.

Wednesday, October 19 from 7:00 – 9:00 p.m.

Wednesday, November 16 from 6:00 – 8:00 p.m.

Planetarium

The UCA Planetarium simulates the sky visible to the naked-eye onto a 30-foot diameter dome using a Spitz 512 projector. The seating capacity is 60. The facility is used for astronomy classes and

laboratories, field-trip shows, and monthly public shows.

The UCA planetarium is located on the UCA campus, in the Lewis Science Center, 010 (downstairs).

Field trip shows are available free to public school groups on Fridays at 9:00 a.m., 10:00 a.m. or 11:00 a.m. Reservations are required and can be requested by calling 501-450-5900.

Monthly public shows are usually the first Wednesday of the month at 7:00 p.m. Shows include a tour of the evening sky for the given month, updates on astronomical events, and flights through the universe. Admission is free. Seating is limited to 60 people on a first come first serve basis. Shows are not recommended for children under 5 years. No admittance once the show has begun.

Fall 2011 Planetarium Public Shows:

Wednesday, September 7 at 7 p.m.

Wednesday, October 5 at 7 p.m.

Wednesday, November 2 at 7 p.m.

Wednesday, December at 7 p.m.

Find Your Inner Superhero at the Jewel Moore Nature Reserve

AETN Family Day - Saturday, Sept. 17



Planet Earth needs your special eco-hero powers to help keep the natural world safe from harm. Learn more by coming to AETN Family Day for guided nature tours through the Jewel Moore Nature Reserve on the campus of the University of Central Arkansas. Walk with Chuck Dovish, host of AETN's "Exploring Arkansas," and a representative from UCA's Natural Sciences Department Saturday, Sept. 17, at 12:30 p.m. and 2:30 p.m. For more information, visit www.aetn.org/familyday.

