

# COLLEGE OF NATURAL SCIENCE and MATHEMATICS

## Minutes of Council of Chairs Meeting – April 4, 2016

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, April 4, 2016. Stephen Addison presided, members present: Ginny Adams, Jeff Allender, Pat Desrochers, Ramesh Garimella, Uma Garimella, Brent Hill, and Carl Frederickson.

### Agenda Items:

- Minutes from the March 7, 2016 meeting were approved with minor corrections.
- Dean Addison led a discussion on the use of social media by faculty in our college. He asked chairs to remind faculty to be professional when posting and to keep in mind that students read these posts and that they are a reflection on UCA.
- Dean Addison attended the Arkansas Academy of Science (AAS) meeting this past weekend and announced that UCA would be hosting the meeting next year on April 7-8, 2017. He noticed that UCA's participation in the AAS has dwindled and would like to see UCA become more involved. The Dean also announced that we would hold our annual poster symposium in conjunction with the AAS meeting next year and the need to begin planning early, as it will be a great way to promote UCA and the research program that we have developed. Discussion followed.
- Dean Addison informed chairs that the Provost was still working on determining Programs of Distinction for UCA. Discussion followed.
- Dean Addison reminded chairs that the 22<sup>nd</sup> Annual Student Research Poster Symposium is on April 15<sup>th</sup>. Discussion followed on who to invite and the possibility of creating a virtual poster display.
- Dean Addison announced that he is planning to have a one day retreat this summer or early fall and would send out an email to see when everyone would be available.

### Other Items

- Pat Desrochers reported that he helped Dr. Mebi with the Arkansas Junior Academy and there is a need for better instructions on how to make presentations and write abstracts. He suggested that we find examples and create an online resource for these students to better prepare them for this event.
- Dean Addison reminded chairs that commencement will be at 10:00 am on April 30<sup>th</sup>. Chairs need to determine who will be serving as marshals.
- Carl Frederickson announced that there is summer support for 6 STEMteach Grants and that the program will be run similar to the Noyce program. He asked for help in developing jobs for these students such as supplemental instruction or working in tutoring labs.
- Ramesh Garimella announced that he will be participating in a meeting regarding statistic courses being offered in other disciplines and whether or not students could get math credit for taking those courses.
- Dean Addison announced that the ASU Jonesboro articulation agreement was being finalized and that work on a second program in Fort Smith has started.

- Ginny Adams announced that Girl Power in STEM will be held on April 22. The Keynote Speaker is Physics Girl and she is still in need of 15 team leaders.

## Chair Reports

### Biology

Dr. Hill reported:

- Tammy Haselkorn accepted our offer to be a new tenure-track Assistant Professor; she replaces Dr. Don Shepard who left for another position. Her teaching emphasis will be Genetics.
- Dr. Kari Naylor and Dr. Rick Noyes attended the Arkansas Academy of Science conference with students. Dr. Noyes gave an invited talk at the meeting.
- Ginny Adams -- Finalist for the Research, Scholarship, and Creative Activity Award.  
Kristie Hicks -- Winner of the Teaching Excellence Award.

### Chemistry

Dr. Desrochers reported:

- 15 students and five faculty gave presentations at the 251st American Chemical Society National Meeting & Exposition in San Diego, California on March 13-17, 2016.
- Karen Steelman attended the Annual Meeting - Society for American Archaeology in Orlando, Florida on Apr 6-10, 2016.
- Desrochers invited paper accepted for publication in the *European Journal of Inorganic Chemistry*, special issue on scorpionate ligands.
- Enock Rwamuza (BS May 2016) recognized as the outstanding CNSM student.
- 95% completed plans for Prince 201 renovation received from architect/engineer, comments due April 7, 2016.
- Laney-Manion stockroom tiles removed to expose smooth base concrete floor. Addresses an acute safety need, reducing likelihood of tripping in stockroom.

### Computer Science

Dr. Ramesh Garimella reported:

- Three computer engineering tenure-track candidates have been scheduled for campus interviews this week and early next week.
- Two research papers by Bernard Chen and four graduate students (Hai Le, Christopher Rhodes, Valentin Velchev, and Alexander Yu) on Wineinformatics have been accepted as regular papers and oral presentations in the Industrial Conference on Data Mining ICDM 2016 in New York.
- A paper co-authored by Tansel Halic and his collaborators from the Yale School of Medicine, "On the Face and content validation of a Virtual Transluminal Endoscopic Surgery Trainer (VTEST)" has been accepted for publication in *Surgical Endoscopy*.

### Geography

Dr. Allender reported:

- Three geography faculty attended and presented at the American Association of Geographers annual meeting in San Francisco last week:
  - Dr. Steve O’Connell presented a Poster Session: “Examining Second-Home Ownership Using Local Tax Records: A Case Study of New Jersey Shore Communities.”
  - Dr. Matt Connolly presented an invited paper: *Navigating the Academic Job Search Gauntlet: Recent Perspectives from Both Sides of the Table*.
    - He was an invited panelist in the session: *The Academic Job Market for Geographers: Strategies for Improving Career Preparation*.
    - He was an invited discussant in the: *A discussion on navigating and making the most of the conference*.
    - He received a \$500 Faculty Development Grant to attend a week long ArcGIS workshop in California.
    - He co-advised with Chemistry an undergraduate research project resulting in a poster presentation at the South Central Region of the Geological Society of America Project. Title: *Differences in Water Types in Wells and Springs of the Ozark Plateaus in Northern Arkansas*. Students: Samantha Wacaster (Chemistry) and Kristen Barre (Geography).
  - Dr. Ellen Hostetter presented a paper: “Judges, Legal Opinions, and the Emerging Automotive Business Landscape: Case Studies from New Jersey and Pennsylvania.” She also organized a paper session titled: “Landscape Backstories”, which received so many paper submissions it turned into two sessions.
- On Friday, April 1<sup>st</sup>, UCA hosted the Arkansas State Finals for the National Geographic Bee. 95 local winners from around the state along with parents and teachers attended. Sanjas, a 7<sup>th</sup> grade boy that won last year, finished 3<sup>rd</sup> at the national competition in Washington D.C. The boy that won this year never missed a question in the final round, and could do very well in D.C. next month.
- On April 2-3, Jeff Allender organized and co-led a group of 15 Russellville High School students along with 4 teachers on a two-day trip along the Buffalo National River, conducting water testing at several tributaries. All expenses were covered by the Arkansas Geographic Alliance.
- On March 31<sup>st</sup>, April 7, 14, and 21<sup>st</sup>, Jeff Allender and Chuck Campbell (Environmental Science teacher at Russellville HS) working with the Arkansas Lepidoptera Society and Dr. Lovely from Arkansas Tech are also running four Lepidoptera surveys, one each Thursday night from 8:00-11:00 at the Russellville High School wetlands lab. Thirty one students attended the first one and they captured and identified dozens of moths, and they may have captured a species that has not been officially recorded in Arkansas previously, but they are waiting for conformation on the species ID. The next three are April 7, 14, and 21<sup>st</sup>, and any of our students are welcome to attend. Allender will be going this Thursday, the 7<sup>th</sup>, and probably one other night, if they want to ride with me. All expenses are covered by the Arkansas Geographic Alliance.

## Mathematics

Dr. Ramesh Garimella reported:

- The Department of Mathematics hosted the 78<sup>th</sup> Annual Meeting of the OK-AR Section of Mathematical Association of America from March 31 to April 2, 2016. Approximately 200 faculty, students, and guests attended the meetings. There were 23 undergraduate talks, and 34 faculty presentations, a faculty workshop, a student workshop, and three hour-long invited

lectures. On the evening of March 31, there was a Student Team Jeopardy Competition attended by 12 teams of three from various colleges in Oklahoma and Arkansas. On April 2, approximately 40 students participated in Individual Student Integration Bee competition. Overall, the conference was a huge success.

- Five undergraduate students (Math – Alma Malibekoa, Diana Morales, and James Palmer; Physics – Douglas Roisen; Business – Macoe Austin Davis), seven graduate students (Math – Brandon Ashley, Seth Bloomberg, Thomas Deathrage, Robert Habimana, Haly Lafoon, and Rebecca Moody; Leadership – Charlie Wood) and three faculty members (Larry Huff, Jimmy Fetterly, and Jason Martin) from UCA presented research talks at the 78<sup>th</sup> Annual Meeting of the OK-AR Section of Mathematical Association of America.
- Two mathematics education tenure-track candidates have been scheduled for campus interviews this week and early next week.

## STEM Institute

Dr. Uma Garimella reported:

- Submitted the two Specialist grants to ADE for renewal of the positions.
- Sharon Mckinney – working with greenbrier, Mayflower, Vilonia – help implement K-4 Science standards; one-on-one; developing 5-8 professional development training for the state.
- Cara Cates – working with Clinton, Morrilton, Mayflower, Conway; Doing ACT Aspire trainings, developing math and science units using probability, geometry.
- Cara Cates going to National Council of Supervisors of Mathematics in Oakland CA, April 14.
- Dr. Hu and Dr. Garimella: Presentation of research paper at SITE (Society for Informational technology and teacher Education). “Code K-5: Teachers’ Learning about Computer Programming from a Professional Development.” March, 2016, Savannah, GA.
- Dr. Hu and Dr. Garimella: “Code K-5: Teachers’ Learning about Computer Programming from a Professional Development.” Will be published in SITE 2016 Proceedings.
- Dr. Garimella – Invited presentation at STEMCON: “Formative Assessment Using Manipulatives.” Cleveland OH, April 8, 2016.
- Working with Amber Wilson (Library) and Debra Burris (physics) to submit a \$300K proposal to Library of Congress.
- Renovation: We are planning to expand 213resource room to a lecture hall. Getting an estimate from physical plant.
- We will be developing outreach lesson for the EPSCORE research – working with UAMS and UALR.

## Physics

Dr. Frederickson reported:

- Dr. Frederickson and Dr. Mehta took three students to the 100<sup>th</sup> Annual Meeting of the Arkansas Academy of Sciences at the University of Arkansas on April 1-2.
- *Hayley Heacox, Lawrence M. Benzmilller*, and Rahul Mehta presented a poster titled, “Changes in Elasticity of Rat Bones Exposed to Simulated Microgravity and Radiation.” This poster received the first place award in the undergraduate physics poster category.
- *Clinton Costello* and Carl Frederickson presented a poster titled, “Scanning System for Measuring Acoustic Wavefields.”
- Noyce Summer Interns have been selected. These students will receive \$2,000 for 10 weeks to work with a faculty member on research over the summer, room and board for 10 weeks on

campus, a scholarship to cover the cost of a 1-hour course on how we learn, and funds (\$3,000) to serve as a learning assistant in the fall and spring semesters in their departments.

The eight students selected for summer internships are:

<b>Name - First</b>	<b>• Name - Last</b>	<b>• 1st Major</b>
Andrea	Weaver	Mathematics
Azaryah	Wilson	Mathematics
Kristen	Jones	Biology
Sidney	Freyaldenhoven	Biochmeistry
Kaitlyn	Walden	Biochemistry
Jaishlynn	Braxton	Biology
Jake	Bass	Physics
Allen	Nguyen	Chemistry

- There are also six positions available through funding from the STEMteach grant. These six students should be part of STEMteach now. At this point there is one applicant for these positions.
- There are five more slots available. These students will receive \$2,000 for 10 weeks to work with a faculty member on research over the summer, room and board for 10 weeks on campus, a scholarship to cover the cost of a 1-hour course on how we learn, and funds to serve as a learning assistant in the fall semester in their departments.
- There are six students who have applied for the Noyce Scholarships. These scholarships cover 15 credit hours and the equivalent of room and board in Bear Hall with the all-you-can-eat meal plan (~\$7,400/semester). Students are required to teach 2 years in a high needs school district for every year of scholarship support.
- Grade Delph and Morgan Sweere were two of the summer interns from 2015.
- Debra Burris, Azida Walker, and Ashley Hicks hosted 20 high school juniors on campus Wednesday March 30th. This is the first Women in Physics Day. It was funded by a \$1,000 grant from the Women’s Giving Circle. The students attended a PHYS 3361 Electromagnetism 2 class, enjoyed a demo show from Ashley Hicks, heard from UCA alumnus Stephanie Shelton, and talked with current female physics majors. Five students from each of four high schools; Conway High School, Mount Vernon/Enola High School, Parkview High School, and Atkins High School attended. The total cost for the program was just over \$500 and the department plans to conduct a second WPD in the fall semester.
- Doug Roisen presented a paper titled “Experimental Exploration of Solutions to Third-Order, Chaotic Differential Equations,” at the 78th Annual Meeting of the Oklahoma-Arkansas Section of the Mathematical Association of America. The conference was hosted by the UCA Department of Mathematics on April 1 and 2.