

COLLEGE OF NATURAL SCIENCE and MATHEMATICS

Minutes of Council of Chairs Meeting - February 6, 2017

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, February 6, 2017. Stephen Addison presided, members present: Ginny Adams, Jeff Allender, Emre Celebi, Pat Desrochers, Carl Frederickson, Ramesh Garimella, Uma Garimella, and Brent Hill. Guest: Aimee Poynter - CNSM Development Officer.

Agenda Items:

- Minutes from January 9, 2017 approved with minor adjustments.
- Aimee Poynter updated council on recent development projects:
 - Traveled to Huntsville, Alabama and met with Ralph Carruth, director of the Materials and Processes Laboratory in the Engineering Directorate at the Marshall Space Flight Center.
 - Received \$2500 from Axiom in support of Girl Power in STEM.
 - Working on developing giving program through sponsorship of bones in a bear skeleton that will go in the lobby of CCCS.
- Dean Addison reminded chairs that he has a meeting with President Davis on February 14th at 3:30pm. Discussion followed on possible key topics for the meeting: enrollment growth and the need for more facilities, completion of the Lewis Science Center renovation, need for more faculty (18 full time positions), moving STEM Institute into college buildings, continued support of Jewel Moore Nature Reserve, undergraduate research funds, and a campus talk focused on our college.
- Dean Addison reminded chairs that new permanent position requests are due to him on February 25th and the Provost on March 1st. He asked that chairs include requests for 3-year visiting positions and conversion of visiting positions to full time position in their requests.
- Dean Addison led a discussion on the need to review our lab and course fees. The current course fee is \$7.50/credit hour and the lab fee is \$20/course with a maximum of \$40/semester.
- Ginny Adams asked chairs to help find ways to minimize student travel costs and to provide justification for expenditures when requesting travel funds. Discussion followed.
- Ginny Adams gave an update on the new field station at Steel Creek. Rules and regulations are being worked out as well as plans for both collaborations and outreach opportunities with North Arkansas Community College. Would like to schedule a time for the council to go out and see the site.
- Dean Addison reported that the Arkansas Academy of Science planning committee begins their work this week.
- Dean Addison announced that University of Arkansas Pine Bluff is having a poster symposium on March 28th and is in need of judges.

Other Items:

- Dean Addison would like to form a committee to help develop plans for the renovation of the classrooms in Lewis Science Center. He asked that chairs submit names of faculty they would like to serve on this committee.

Chair Reports:

Biology

Dr. Hill reported:

- No report.

Chemistry

Dr. Pat Desrochers reported:

- Marsha Massey attended a workshop on chairing Gordon Conferences, January 20-22, 2017 in Orlando, Florida.
- Karen Steelman sent a call inviting students to work on an internship at the Shumla Archeological Research and Education Center. Lodging will be provided; other expenses must be borne by students. Honors College students could use TAG/URGE funds to support this experience.

Computer Science

Dr. Emre Celebi reported:

- Drs. Kockara and Halic had a paper accepted for publication in the proceedings of the International Conference on Computational and Mathematical Biomedical Engineering. There are student co-authors involved in this study.
- Dr. Celebi's paper has been accepted for publication in the proceedings of the IEEE International Symposium on Biomedical Imaging (ISBI 2017). The lead author of this paper is a PhD student from Portugal.
- Dr. Mahmut Karakaya submitted a grant proposal to Oak Ridge National Lab (the program is funded by the Department of Energy).
- Dr. Chen and his graduate student's paper has been accepted for publication in the Transactions on Machine Learning and Data Mining.

Geography

Dr. Jeff Allender reported:

- Publication: Wood, Scott L. and **Brooks C. Pearson**, 2016. "Data Collections in Field-Based Environments with Alternative Mobile Devices Using Mobile Geographic Information Systems and Services for Quality Flexible Platforms." International Journal of Services and Standards 11 (4): 301-17.
- Steve O'Connell organized Arkansas as one of only two states in Spring 2016 to have an online mapping contest for middle and high school students using the ArcGIS Online platform. After the success of those efforts, Esri, the company that produces ArcGIS, has provided incentives to states

to make the Spring 2017 competition a national effort; currently, over half the states have enrolled in the project. The Arkansas Geographic Alliance is the primary coordinator of the project within Arkansas, with support provided from the EAST Initiative and GIS professionals throughout the state. Dr. O'Connell is again leading the Arkansas competition.

Mathematics

Dr. Ramesh Garimella reported:

- No report.

Physics

Dr. Carl Frederickson reported:

- Ashley Hicks led a contingent of three UCA students, Catie Mason, Haley Heacox, and Kimberly Manriquez, to Houston, Texas for the Women in Physics conference on January 12-16, 2017. While in Houston, they met with Holly Smith, a UCA Physics graduate employed at the Johnson Space Center.
- Dr. Burris' collaboration with the Atkins School District has won the AGATE curriculum award for districts of 1000 students or less for their GT project, *A Walk Through History*. This is the 7th year in a row they have received this award.
- The UCA Society of Physics Students was recently awarded a March W. White award from the National Society of Physics Students. Marsh W. White Awards are made to SPS chapters to support projects designed to promote interest in physics among students and the general public. UCA SPS's proposal award of \$500 will fund the creation of five self-contained physics demonstration shows that are aligned with the Next Generation Science Standards (NGSS). Demo shows will be available to local educators for outreach visits and be presented as part of the physics demonstrations that have been scheduled by the Department of Physics and Astronomy for schools in Conway and the surrounding area. These shows also seek to present content specific to the NGSS in a method that engages students and makes science seem less like "class work" and more like entertainment. It is our hope that presenting physics as entertainment will inspire students to take an interest in the topic and carry that interest into their later life. The project is expected to be completed by May 31, 2017. For more information, please contact the SPS Advisor, Dr. Will Slaton – wvslaton@uca.edu.
- On February 21-23, Drs. Burris and Frederickson will travel with 22 students in the Meteorology (PHYS 4350) course to the NOAA National Severe Storms Laboratory in Norman, Oklahoma. The students will conduct measurements there as part of the laboratory component of this course. All are hoping for bad (but not too bad) weather.

STEM Institute

Dr. Uma Garimella reported:

- STEM Leadership for Girls on February 10, 2017. Close to 100 students from Conway are coming this Friday. Collaborating with AETN – Karen Walker.
- Statewide STEM Leadership for Girls – March 8th. UCA President and Tim Griffin will be speaking. We need female faculty to attend if possible.

- ADE – TechStart - Oculus VR Training – STEM Center has one unit and COOP has several. Teachers register for training through COOP and STEM Center provide support. We want to invite UCA faculty to look at it.
- ADE – Attend grant funding meeting with Traci Boyd. Making all grants process more uniform with good accountability piece. No change in funding.
- Arkansas STEM Coalition Board of Directors member – representing STEM centers. First meeting, February 3rd.