

COLLEGE OF NATURAL SCIENCE and MATHEMATICS

Minutes of Council of Chairs Meeting – December 7, 2015

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, December 7, 2015. Stephen Addison presided, members present: Ginny Adams, Jeff Allender, Pat Desrochers, Ramesh Garimella, Brent Hill, and Carl Frederickson. Absent: Uma Garimella. Guests: Dr. Mehmet Ulupinar and Ashley Pettingill from International Engagement.

Agenda Items:

- Dr. Mehmet Ulupinar and Ashley Pettingill from International Engagement introduced the Friends of Fulbright Program to the council. A press release was handed out and discussion followed on ways the CNSM could contribute to the Argentinian student's experience while they are on campus.
- Minutes from the November 16, 2015 meeting were approved.
- Dean Addison gave the council an update on the Cyber Discovery 2.0 workshop held last weekend. The Cyber Discovery program is changing to a new game-based program that is designed to increase student involvement with educational material and UCA has been selected to be a part of the initial roll out of the new program.
- Dean Addison led a discussion on UCA Online and the need for the CNSM to continue to develop online courses. Currently there are online courses in computer science, mathematics, and physics. Dr. Hill reported that biology is working on an online BIOL 1400 course. Discussion followed on the effectiveness of online labs and liability issues with the use of lab kits.
- Dean Addison updated the council on the Apple Initiative. President Courtway has authorized pilot programs that would require laptops in the classroom. The College of Education will have a large push to incorporate laptops in the classroom and the CNSM could launch a similar program through STEMteach. Dean Addison asked chairs to look at their programs and let him know if there are other areas that would be interested in launching a pilot program.

Other Items

- Dean Addison announced that due to scheduling conflicts, there would not be a winter Council of Chairs retreat. We will work on scheduling a retreat for the summer starting in January.
- Dean Addison announced that there were four SURF applications submitted and that one was awarded to Dr. Arijit Mukherjee. He asked that the chairs encourage more of their faculty and students to apply for grants. Discussion followed regarding the possibility of reassigning awards to travel or supplies so students who are at the financial aid cap can still benefit from receiving grant funds.
- Dean Addison encouraged chairs to set up active shooter training for their respective departments. The training has two parts, a basic training course and a live scenario. Dean Addison recommended that the chairs review their BEP's in the first class.

Chair Reports

Biology

Dr. Hill reported:

- Drs. Hill and Mehta along with their UALR collaborator received an Arkansas Space Grant Consortium collaborative grant of \$45K over 3 years for their research, “The effect of estrogen depletion on the skeletal system in female mice under space-like conditions.”
- Drs. Hill and Mehta received an Arkansas Space Grant Consortium campus research infrastructure grant of \$10K for their research, “The effect of estrogen depletion on the skeletal system in female mice.”
- The Biology department is currently conducting two faculty searches, the one for a tenure track genetics faculty has over 50 applicants and the one for an A&P lecturer has about 17 applicants.

Chemistry

Dr. Desrochers reported:

- 39 high school students from Clarendon High School visited chemistry and biology classes and sat in the class of Dr. T. Dunlap on November 18, 2015. All received a tour of biology and chemistry facilities and labs. Their teachers were Ashley Cremer (BS from UCA) and Phillip Blake.
- Faith Yarberrry attended the 20th Annual National Learning Communities Conference on November 12-14, 2015, in Kansas City, MO. She presented an oral presentation in conjunction with Danielle Archie (HPaW), and Kondwani Phwandaphwanda (STARS) titled “Using a Student Behaviors Inventory to Help Freshman Succeed Academically.”
- Faith Yarberrry (with Lisa Christman), Kristin Dooley, and Tori Dunlap collectively earned \$18K from URC funding of their proposals.

Computer Science

Dr. Ramesh Garimella reported:

- A paper “Multi-Class Ground Truth Inference in Crowdsourcing with Clustering” co-authored by Victor Sheng has been accepted by IEEE Transactions on Knowledge and Data Engineering, a top-one journal in data mining.
- Yu Sun will present a research paper co-authored with her students at the IEEE Global Conference on Signal & Information Processing 2015 during December 14-16, 2015. Also, at the same conference, she will chair two sessions: one is a Keynote session of Symposium on Mobile Multimedia Communication Systems, and the other is a technical session on Multimedia Signal Processing.
- A paper “A Fast Mode Decision Algorithm Applied in Medium-Grain Quality Scalable Video Coding,” co-authored by Yu Sun has been accepted for publication in the *International Journal of Visual Communication and Image Representation (Elsevier)*.

Geography

Dr. Allender reported:

- At the Arkansas Curriculum Conference last month, the Arkansas Geographic Alliance (which is housed in our Department and directed by Dr. Allender) organized and presented seven different workshops. Dr. Allender gave two content workshops for teachers and co-ran a third.
- Matt Connolly has been accepted to attend the week long Esri T3G workshop at their headquarters in Redlands, California this summer. Steve O'Connell attended last year and it was a great workshop showing how to get middle school and high school teachers to learn and use ArcGIS technologies in their classes and to teach their students how to use it for research projects.
- Mary Sue Passe-Smith had her chapter on the Climatological Hazards of the Delta published in *Defining the Delta* last month.

Mathematics

Dr. Ramesh Garimella reported:

- As of today, the department has received 26 applications for the open tenure-track position in applied statistics.
- The new data science track proposal in the B.S. Mathematics Program will be considered by the Undergraduate Council at its December meeting.
- On November 19th, the department hosted the second annual calculus tournament. It was organized by Dr. Jeff Beyerl, Dr. Long Le, Rebecca State, and James Palmer, assisted by various other mathematics faculty members and graduate teaching assistants. Seven teams of three students each competed against each other to solve problems as quickly as possible. The winning team, calling itself CAL, consisted of three students from Dr. Long Le's Calculus I course: Lindsey Hazeslip, Connor Wilson, and Azaryah Wilson.
- Four new GTAs, three MS students, and one MA, will join the department in January 2016. This will bring the total number of math GTAs to 12 for Spring 2016.
- Presentations:
 - Carolyn Pinchback presented a paper on November 5th at the Mid South Education Research Association-Lafayette.
 - A paper co-authored by Carolyn Pinchback has been accepted for presentation at the Research Council in Mathematics Learning in Orlando, Florida, in February 2016.
 - Linda Griffith gave a presentation at the Arkansas Curriculum Conference in Little Rock in November.
 - James Fetterly gave five presentations at the Arkansas Curriculum Conference in Little Rock in November.
 - Math majors, Diana Morales and Alma Malibekova, mentored by Long Le, have been accepted to present a poster titled "Mathematical Modeling of Epidemic with Exposed Group" at the Joint Mathematical meetings to be held in Seattle, Washington in January 2016.

STEM Institute

Dr. Uma Garimella reported:

- No report

Physics

Dr. Frederickson reported:

- The Computer Science Chair search applications have been narrowed down to the short list and interviews will begin soon.