

COLLEGE OF NATURAL SCIENCE and MATHEMATICS

Minutes of Council of Chairs Meeting - June 12, 2017

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, June 12, 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 April 17, 2017 meeting approved with minor revisions.
- Dean Addison asked chairs to send him topics to cover in first of year faculty meeting and led a discussion on planning for the future and goals for the CNSM:
 - Need to plan and be aware of usage cycles on equipment and look at setting up escrow or rollover accounts to support large equipment purchases.
 - Prepare for students coming in with concurrent or A/P credit and support teachers who teach these courses so students are better prepared.
 - Develop ways to get students engaged earlier.
 - Develop atmosphere of giving.
 - Develop mentorship teams to help minority retention rates.
 - Highlight hands on experience in degree programs – interview students and alumni to create videos.
 - Create map of where CNSM alumni are teaching.
 - Develop online programs.
 - Create academic convocation for CNSM to recognize students and faculty achievements.

Other Items:

- Dean Addison informed chairs that the new graduate dean would start on July 1st.

Chair Reports:

Biology

Dr. Hill reported:

- Reviewers for Biology's 10 Year Review will be on campus June 14-16, 2017. The Department Chair meeting will be on Thursday at 3:30 in the blue chair room.
- Drs. Rahul Mehta and Brent Hill took 5 biology, physics, and biochemistry students to NASA Ames Research Center in California.
- Mindy Farris was awarded a summer faculty research grant via AR INBRE program.

Chemistry

Dr. Pat Desrochers reported:

- 6 honor graduates were recognized at the ACS Central Section Banquet at UALR, April 2017.
- Marsha Massey was invited to teach a University College – Institutional Diversity Partnership Course for Fall 2017.
- Marsha Massey attended two conferences: Louis Stokes Alliance in Little Rock, April 14-15th, and a Pearson publishing focus group with N. Tro, author of our general chemistry text, March 2017.
- Two students were honored by the AURS foundation program: Haley Heacox (thesis award for Chemistry), and Rachel Senn (summer research stipend for work with Dr. Greg Naumiec.)
- Faith Yarberry won professor of the year from ACS local section, April 2017.
- Melissa Kelley had a paper published in PLOS One including 4 UCA undergraduate co-authors.
 - Kelley MD, Phomakay R, Lee M, Niedzwiedz V, Mayo R, (2017) Retinoic acid receptor gamma impacts cellular adhesion, Alpha5Beta1 integrin expression and proliferation in K562 cells. PLoS ONE 12(5): e0178116.
- Melissa Kelley won 2017 Teaching Excellence award.
- Bill Taylor was a finalist for the Scholarly and Creative activity award.
- Tori Dunlap submitted an AR INBRE grant, May 2017.
- Department hired Mason Hart (PhD Inorganic, U of KS) as the stockroom manager/chemical hygiene officer and Jamie Freeman (BS UCA Chemistry) as lab coordinator.

Computer Science

Dr. Emre Celebi reported:

- Tansel Halic and Sinan Kockara jointly submitted two grant proposals (\$294K and \$292K) to the Arkansas INBRE program.
- Mahmut Karakaya submitted a \$292K grant proposal to the Arkansas INBRE program.

Geography

Dr. Jeff Allender reported:

- Steve O'Connell, Ellen Hostetter, and Jeff Allender attended the eight-day AP Human Geography Reading in Cincinnati.
- Steve O'Connell organized the Arkansas competition for the Esri ARC/GIS National Student Mapping competition. Six middle school and four high school winners from Arkansas received \$100 each and their projects sent to Esri headquarters for the national competition. Chloe Crain from George Junior High School in Springdale won the ArcGIS competition. This is the second time in four years that an Arkansas middle school student has won the ArcGIS competition, she along with parent and teacher will fly out to present at the International Esri Conference in Redlands, California in August.
- The MGIS program had five students receive their Masters in May along with two graduate certificates. Looking at expected graduations this August and December 2017 should more than double the number of graduates the program has ever had in a single year.

- Friday, June 30th, from 5:00-9:00, my wife and daughter are hosting a retirement party for me at UA Downtown. Beer, wine, and food provided. You and spouse are all invited.
- Michael Yoder's article was accepted in the *International Trade Journal*.
 - The title of the article, "Cargo Transport and Economic Development in the Chihuahua-Albuquerque Corridor: An Emerging Binational "Megapolitan" Area?"

Mathematics

Dr. Ramesh Garimella reported:

- After 30 years of exceptional service to the Department of Mathematics, Ms. Brenda Graham retired on May 31, 2017. A UCA Foundation fund in the name of Brenda Graham has been created to give annual service award to the individuals who provide exceptional service to the Math Department. So far a total of \$1,500 has been contributed by mathematics faculty to the fund.
- During this T&P cycle, Dr. Jason Martin was tenured and promoted to the rank of Associate Professor.
- Dr. Jason Martin and his collaborators received a funding of \$289,247 to "Investigating Student Learning and Sense-Making from Instructional Calculus Videos" from NSF through their Improving Undergraduate STEM Education program. UCA's part of the grant is \$53,531.
- Nine graduate students in MA and MS programs and six undergraduates were awarded summer stipends from the department to conduct research.
- Sixteen undergraduate students and one graduate student received various degrees in mathematics at the 2017 spring commencement.
- Twenty-seven middle and high school students have signed up for 2017 Summer Math & Science Programs @ UCA, which started on June 12. The activities in the program include:
 - Algebra I (Instructor: Ms. Cara Cates, UCA STEM Institute)
 - Algebra II (Instructor: Ms. Katie Burden, Math Graduate Student)
 - Physics (Instructor: Dr. Debra Burris, Physics and Astronomy Department)
 - Biology (Instructor: Dr. Krista Peppers, Biology Department)
 - Robotics (Instructor: Ms. Nancy Getson, Physics and Astronomy Department)
 - Computer Coding (Instructor: Dr. Mark Doderer, Computer Science Department)
 - The program was organized by the Department of Mathematics and the UCA STEM Institute.

Physics

Dr. Carl Frederickson reported:

- Two students working with Dr. Debra Burris' University Physics 3 course received Service-Learning awards during the fourth annual Service-Learning Awards ceremony on Monday, April 24. Dr. Burris's students work on a Super Science Saturday project during the semester as part of the public scholarship component of her class. Her class, in collaboration with Community Connections, prepares and presents science lessons in a round robin fashion for special needs children. This year they worked with 30 children, 15 of whom had attended the event last year.
 - The Exceptional Achievement in Service-Learning Award went to Audry Schucker for her sustained commitment to excellence in service-learning through her work with Glenhaven's Sparks Out of School Program and Super Science Saturday.

- Garrett McKamie's love of people and his heart to serve individuals with special needs landed him this year's Spirit of Humanity Award.

STEM Institute

Dr. Uma Garimella reported:

- STEM Leadership for Girls: hosted on April 28. We collaborated with GPS.
- Trainings
 - Hosted national NCSM/AAML Coaching collaboration: We had 86 participants! The UCA STEM Institute was proud to sponsor the National Council of Supervisors of Mathematics (NCSM) and Arkansas Association of Mathematics Leaders (AAML) Arkansas Coaching Collaboration on May 14 & 15. Over the two days, we examined best practices for effective coaching, planning a 3-day coaching academy, and preparing articles and recordings of coaching success stories.
 - NICERIC – hosted TOT for 24 statewide math and science specialists and one at ArchFord for 22 teachers.
 - PASCO – we had technical training on the efficient use of wireless probes.
 - Took 28 teachers to Mt. Nebo for geological study. Staff from Arkansas Geological Survey led the team.
- Collaboration with College of Education:
 - Working with Donna Wake regarding mentorship for new teachers. This is a 3 year program developed by ADE and is being implemented by ArchFord Coop.
- Grants:
 - Submitted specialist grants. The grant process is easy and is uniform through out the ADE.
 - STEM Institute through grants paid \$15,000 faculty summer salary
- Conducted:
 - We are conducting several math and science PD through out the summer.
 - Involved with math department with Math and Science Summer program.

Development Officer

Aimee Poynter reported:

- Working on College panels.
- Working on CNSM Advisory Board.
- Working on mentorship program.