COLLEGE OF NATURAL SCIENCE and MATHEMATICS Minutes of Council of Chairs Meeting – November 10, 2014

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, November 10, 2014. Stephen Addison presided, members present: Jeff Allender, Ben Cash, Pat Desrochers, Ramesh Garimella, and Carl Frederickson. Members absent: Ginny Adams and Uma Garimella. Guests: Brian Corbin, Director of Transfer Services, Hunter Goodman and Carolyn Ishee, UCA Foundation.

Agenda Items:

- Brian Corbin led a discussion on the 2+2 Articulation Agreements with Arkansas State
 University Beebe. He asked that each department complete their checklists by Thanksgiving
 so we could meet the December 1st ADHE deadline. He would like to have a workshop for ASU
 Beebe with breakout sessions to go over the agreements and to emphasize the importance of
 getting involved in events at UCA so the transfer students are familiar with our faculty and
 students when they get here.
- Hunter Goodman and Carolyn Ishee led a discussion on what the UCA Foundation does and how the money is allocated. They are looking for ways for the Foundation and the CNSM to work together in raising money for our college. One way to do that is to rebuild relationships with alumni so she asks that when we travel to please call her and get a list of alumni that are in the area so you can reach out to them while you are in town; she will even pay for lunch. Other options that were discussed include blogging and social media that includes a giving link to the Foundation, sending out thank you notes to donors, creating videos for Bear Tales, etc.
- Minutes from October 27th meeting were approved with minor revisions.

Other Items:

• Dean Addison announced that he attended the INBRE steering committee meeting and that there is a good chance we could get funded. The deadline to apply is at the end of January.

Chair Reports:

Biology

Dr. Cash reported:

- A faculty member accompanied the Provost Contingent to Argentina and Ecuador looking at possible environmental science impact.
- Several biology students attended the INBRE Conference in Fayetteville on November 8th.

Chemistry

Dr. Desrochers reported:

 Lei Yang submitted a grant to the National Science Foundation "RUI: Development of New MOF Materials for CO2 Capture of Post-Combustion Flue Gases", total request \$150,852 over three years.

- Karen Steelman attended the "Federal Columbia River Power System" Cultural Resource Program annual conference. She was a panelist in a round-table discussion on "Technical Advances in Rock Image Recording and Preservation". The discussion provided advice to local area tribes and federal land agencies (Core of Engineers, BLM, National Forest, etc) in Washington and Oregon State along the Columbia River as to how to document and study rock art sites.
- Ryan Rogers earned 1st place for his oral presentation in the Chemistry/Biochemistry category at the INBRE Conference in Fayetteville, November 8th.

Computer Science

Dr. Ramesh Garimella reported:

- Drs. Tansel Halic and Sinan Kockara's proposal, "Parrallel Processing Techniques and Applications in Medicine", to organize a mini-symposium at the 13th U.S. National Congress on Computational Mechanics (USNCCM13) has been accepted. The soliciting of papers for the symposium will be announced in upcoming weeks. The congress will be held between July 26-30th in San Diego, California.
- The Computer Science Advisory Board meeting will be held on December 5, 2014.

Geography

Dr. Allender reported:

- Drs. Matt Connolly and Steve O'Connell had papers accepted for presentation at the American Association of Geographers annual conference in Chicago next March.
 - Connolly's paper: <u>Decadal County-scale Trajectory Changes in the Drivers of</u> <u>Municipal Water Consumption</u>;
 - Steve O'Connell's paper: "Data Accuracy, Accessibility, and Recreation Assessments in GIS"
- GEOG 1320: Human Geography is now a Lower-Division Core General Education course that will cover two or three required categories for all UCA students.
 - It is a Social Science;
 - o It covers Diversity in World Cultures:
 - Some sections will be offered as a First Year Seminar.

I've been working with Jenny Welter and Geoff Thiers to make sure that incoming freshman declaring any of the majors in our College are aware that this one class covers two or three requirements, that it is being taught by professors within our College, that it has more of a "physical emphasis" than any other Diversity in World Cultures course option, and is the second most "physical" of the Social Science options.

Mathematics

Dr. Ramesh Garimella reported:

- A poster by math major, William Kyle Barker, has been accepted for presentation at the Joint American Mathematical Society-Mathematical Association of America meetings in San Antonio, Texas, on January 10-13, 2015.
- Drs. Linda Griffith, Jean McGehee, Carolyn Pinchback and several math education students attended the Arkansas Curriculum Conference in Little Rock on November 6-7, 2014. All three faculty presented at the conference.

STEM Institute

Dr. Uma Garimella reported (via email):

- This weekend, November 8, we hosted two events:
 - AP Science (biology, physics, and chemistry) review session in College of Business building. We had 145 high school students. The event went very well and Leigh Ann did a presentation at 10:00am.
 - Science and Engineering Institute in Lewis Science Center. We had 40 students from grades 6-10. They did spectroscopy and synthesis of esters. Leigh Ann did a presentation at 8:30 am and gave UCA sunglasses to students.

Physics

Dr. Frederickson reported:

- Drs. Carl Frederickson and William Slaton along with five students attended the 168th Meeting of the Acoustical Society of America in Indianapolis, Indiana October 27-30. The students presented five posters and Dr. Slaton made two oral presentations.
 - Poster Presentations:
 - Nicholas L. Frederickson and Carl Frederickson, "The diffraction pattern associated with the transverse cusp caustic."
 - Forrest McDougal and Carl Frederickson, "Impedance tube measurements of printed porous materials."
 - Scotty McKay and William Slaton, "Stick bombs: A study of the speed at which a woven stick construction self-destructs."
 - John Ferrier and William Slaton, "Three-dimensional printed acoustic mufflers and aeroacoustic resonators."
 - Gerard Munyazikwiye and William Slaton, "Determining elastic moduli of concrete using resonance."
 - Oral Presentations:
 - William Slaton, "Using Twitter for teaching."
 - William Slaton, "Aeroacoustic response of coaxial Helmholtz resonators in a lowspeed wind tunnel."
- Drs. Azida Walker and Rahul Mehta and three students attended the Arkansas INBRE meeting in Fayetteville, Arkansas November 7 and 8.
 - Oral Presentations:
 - T. Ryan Rogers, "Computational Investigation of the Surface Tension of Supercooled Water"
 - Otis Perkins, "Effects of Microgravity and Radiation on Elastic Modulus of Rat Femurs Using 3-Point Bending."
 - Poster Presentations:
 - Jacob Linna, "Effects of Microgravity and Radiation on Elastic Modulus of Rat Femurs Using 3-Point Bending."