

COLLEGE OF NATURAL SCIENCE and MATHEMATICS

Minutes of Council of Chairs Meeting - January 9, 2017

A meeting of the Council of Chairs of the College of Natural Sciences and Mathematics was held on Monday, January 9, 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 November 21, 2016 approved with minor adjustments.
- Aimee Poynter updated council on recent development projects:
 - Mary Anna Dalske added \$10,000 towards the Fred Dalske Endowment.
 - The Wilbur Owen Leadership Endowment (\$25,000) has been established with \$5000 pledged to start being awarded. There will be a reception on April 12th from 2-3pm; calendar invites will be sent out later.
 - Need to establish a Homecoming Planning Committee to meet the 1st Wednesday of every month from 2-3pm. Would like to have a representative from each department on the committee.
 - New office located in the Dean's Suite in Lewis Science Center 145F. Office hours will be Monday 3-4:30pm and Friday 8:30-11am.
 - Will be traveling to Huntsville next week and touring NASA with Ralph Carruth and going North Carolina in February – are there any alumni in the area that she could visit.
- Dean Addison updated council on budget and expenditures issues and emphasized that we are working to keep expenditures down. Ginny asked that chairs provide justification when sending purchases forward. She also advised that start-up money will be available on July 1st and that she will send out letters to the faculty.
- Dean Addison announced that the new building is open and classes will start this week. There are still issues with the sliding doors but we are working to get the issues resolved.
- Dean Addison led a discussion on recruiting and retention efforts in our college. Recruiting events have been poorly attended but the number of applications are up so it is important that we continue to develop and improve our efforts.
- Dean Addison reminded chairs that we are hosting the Arkansas Academy of Science on April 8-9, 2017 and he would like to get a planning committee assembled and working.
- Dean Addison announced that President Davis will be on campus for the last Council of Deans in January and he will be meeting with President Davis in February to introduce him to the College of Natural Sciences and Mathematics. Please send in items that you would like highlighted from your department.

Other Items:

- Ginny Adams reported that the Steel Creek MOU has been signed and that there is a lot of flexibility on the use of the space. This is a partnership with North Arkansas Community College.
- Dean Addison announced that we are trying to establish a Cyber Security Range at UCA that is designed to meet the governor's K-12 Computer Science initiative.
- Ginny Adams announced that 300 girls are registered to attend Girls of Power on April 28, 2017 and that there are over 200 girls on the waitlist. She is in need of breakout session speakers if you know of any women who would be willing to serve in this capacity.

Chair Reports:

Biology

Dr. Hill reported:

- Gifford, M.E., C.D. Robinson, & T.A. Clay. 2017. The influence of invasive fire ants on survival, space use, and patterns of natural selection in juvenile lizards. *Biological Invasions*
- Gifford, M.E., C.D. Robinson, & T.A. Clay. 2017. The influence of incubation conditions and sex on growth and dispersal in hatchling lizards. *Ethology*
- T.A. Clay, & M.E. Gifford. 2017. Population level differences in thermal sensitivity of energy assimilation. *Journal of Thermal Biology*
- Deckard, C., A. Walker, and B.J.F. Hill. 2017. Using three-point bending to evaluate tibia bone strength in ovariectomized young mice. *Journal of Biological Physics*.

Chemistry

Dr. Pat Desrochers reported:

- Bill Taylor and Pat Desrochers attended AR EPSCoR retreat, January 5-6, 2017 at Winrock International on Petit Jean.
- The Department is in the process of finalizing hiring of Dr. Makenzie Provorse, a computational chemist, as our newest tenure track professor. Her expertise includes modeling coupled proton/electron transfer mechanisms and photophysical properties of DNA and nonparticles.
- STEM poster session update: 15 campuses, 110 students, 70 posters. Notices went out to students to begin preparing and to contact their legislators.
- The Department added a new high-resolution FTIR spectrometer capable of reaching beyond the IR into the near-IR region. This was purchased with funds from the EPSCoR award originally given to Don Perry.
- Karen Steelman's last day in the department was December 31, 2016. She left to assume the role of assistant research director at the Shumla Archeological Research and Education Center in

southwest Texas. Shumla is a non-profit organization – <https://shumla.org>. Karen expressed an interest in having UCA down to work with her on internships.

Computer Science

Dr. Emre Celebi reported:

- Computer Science held two Hour of Code sessions.
- Emre Celebi, Sinan Kockara, Victor Sheng, and Mahmut Karakaya jointly submitted a grant proposal to the NSF.
- Emre Celebi served as the area co-chair in the 12th International Conference on Computer Vision Theory and Applications (VISAPP 2017).
- Emre Celebi's paper has been accepted for publication in *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*.
- Sinan Kockara, Tansel Halic, and Mahmut Karakaya attended the INBRE Grant Writing Workshop at UALR.

Geography

Dr. Jeff Allender reported:

- No report.

Mathematics

Dr. Ramesh Garimella reported:

- Dr. Danny Arrigo presented a paper titled, *Nonclassical Symmetries of a Nonlinear Diffusion Equation and a System Equivalent* at the 2017 Joint Mathematical Meeting last week. The paper was co-authored by Math GTA's, Brandon Ashley (former student), Seth Bloomberg, and Thomas Deathrage.
- Math major, Andrea Weaver, presented a poster, *First Integrals of Elliptic Monge-Ampere Equation* at the 2017 Joint Mathematical Meeting last week. Andrea was a Noyce Scholar who was mentored by Dr. Arrigo.
- Dr. Ramesh Garimella reviewed a paper, *On operators for which $T^2 > -T^{*2}$* , for the American Mathematical Society Reviews in December 2016.

Physics

Dr. Carl Frederickson reported:

- Kenneth A. Jumper, Debra L. Burris, "Neutron-Capture Elements in Low Metallicity Stars within the Inner Galactic Halo," in the Stellar Evolution, Stellar Populations Poster Session at the 229th AAS Meeting, Grapevine, TX, January 3-7, 2017.

- Thomas Jacob Cameron, Debra L. Burris, “Determining Black Hole Mass of AGN using FWHM of H-beta Emission Line and Luminosity Relations,” in the AGN, QSO, Blazars Poster Session at the 229th AAS Meeting, Grapevine, TX, January 3-7, 2017.

STEM Institute

Dr. Uma Garimella reported:

- **Grants**
 - Awarded 3 grant proposals (2 for STEM Leadership for Girls) and one Commitment to excellence grant - \$4,750; \$19,095 and \$6,600
- **Trainings**
 - Hosted Hour of Code: UCA and community wide invitation to participate in the Hour of Code hosted by the STEM Institute and assisted by the Math and Computer Science departments. Dr. Celebi led a one-hour session on coding in C+, Dr. Lenin was prepared to do an R tutorial but we had no participants, and Ms. Karen Thessing helped facilitate the whole day. We had 6 participants (4 students and 2 community members). In addition, Mr. and Mrs. Ray Simon dropped by to discuss with Cara how they can partner STEM Institute to support their scholarships for girls in math at Simon Intermediate. Follow up discussions are expected. Mary Dunlap and Anita Anderson from AR Coding Academy helped
 - Computer Science Training:
 - Training of Trainers on UCA campus – April 19-21, 2017
 - Central Arkansas at Arch Ford COOP– June 8&9, 2017
 - Grasping Phenomenal Science follow-up – Jan 10 & 11 – 90 teachers are registered
 - Little Rock high school science teachers support – Jan 27
- **Conference Presentations:** Attended 2 conferences
 - Cara Cates – attended Vernier data collection training
 - Mathematics in a Professional Learning Community at Work Summit in Orlando, FL. 12/4-12/7, 2016
 - Met with top math leaders in US, Tim Kanold and Mona Toncheff, for mentoring on the vision training with the state and with local school districts (Nemo Vista, Dover, Greenbrier, Vilonia, NLR, Atkins).
 - Attended AMS/MAA joint meeting – 1/4- 1/6, 2017