College of Natural and Applied Sciences Missouri State University

MAY 3, 2019

CNAS recognized outstanding faculty and staff for the eighth year at a reception held on May 3, 2019. The award winners were nominated by departmental personnel committees, department heads, or students. The nominations were then reviewed by a faculty committee for the faculty/staff awards and by a student committee for the student-nominated award. We are proud to announce the following award winners for 2019! The award winners receive a certificate and a small monetary award.

CNAS Excellence Award – Staff

Katy Frederick-Hudson – Laboratory Supervisor, Department of Biology

Katy Frederick-Hudson, laboratory supervisor for the department of biology, supervises TA's and student workers as she coordinates the department's lab courses in microbiology. In addition she teaches lab sections and serves as academic advisor for about 55 biology students. The department head wrote, "She has become the department leader in accessibility issue. Katy is the go-to person for faculty and graduate students who need help with lab supplies and techniques."

CNAS Faculty Excellence in Service Awards

Erich Steinle - Chemistry Kyoungtae Kim – Biology Razib Iqbal – Computer Science Helena Metzker – Chemistry

Erich Steinle, associate professor of chemistry, serves on departmental, college and university committees. He chairs the department's Facilities/Equipment/Computers committee that assisted the department head with an equipment inventory and space audit this past year. The space audit was used to determine how to equitably assign research space — especially to a recent hire. Erich readily and willingly agrees to give departmental tours and speak with prospective students and their parents. He supports department/college goals in outreach by providing chemistry demonstrations and interactive experiments to second grade students at the SPS Phelps Center for Gifted Education.

Kyoungtae Kim, professor of biology, currently serves as an active member or chair of eighteen departmental, college and university committees. He has actively participated in the Regional Science Olympiad, Ozarks Science and Engineering Fair and the CNAS STEM Career Expo. Kyoungtae has done an excellent job of communicating his research and the broader impacts to human health through public interviews. When Kyoungtae accepts an appointment to a committee he is always an active member seeking solutions to the charge presented.

Razib Iqbal, assistant professor of computer science, serves on departmental, college and university committees. He has served on all recent search committees within his department, four in total. Razib is very active in student recruitment and is involved in activities to encourage members of

underrepresented groups in Computer Science. He currently advises over sixty computer science majors. Professionally, Razib serves as a grant reviewer, associate editor and technical reviewer for several journals and conferences.

Helena Metzker, instructor of chemistry, represents the college on the textbook affordability committee and the distance education committee. She is the coordinator for CHM108 – Chemistry for the Citizen and writes the annual course reports for CGEIP. Helena chairs the department's safety committee and created an online form used to assess lab instructor safety compliance. Helena is a proactive advisor for the chemistry department working closely with students who needed a some extra attention.

CNAS Faculty Excellence in Research Awards

Chris Barnhart – Biology Ridwan Sakidja – Physics, Astronomy and Materials Science Matt Siebert – Chemistry Tayo Obafemi-Ajayi – Electrical Engineering/Computer Science

Chris Barnhart, distinguished professor of biology, published six peer-reviewed articles with graduate and undergraduate students in the past year. During this time period Chris mentored one post-doctoral student, eight MS students and three undergraduate students. Funding for this research to study fresh water mussels is from Arkansas Game and Fish Commission, National Institute of Water and Atmospheric Research of New Zealand, and United States Geological Survey. Chris was invited to give lectures this past year in China and presented at the International Freshwater Mollusk Meeting in Italy.

Ridwan Sakidja, associate professor of physics, astronomy and materials science, is actively involved in computational materials research on structural and functional applications of nanomaterials. He has earned over \$400,000 in federal grant funding since joining Missouri State University. From 2017 to the present he has published fifteen articles in peer-reviewed journals. He and his students have presented over 30 presentations or invited lectures in the past two years. Ridwan is currently mentoring six graduate and two undergraduate students in the laboratory.

Matt Siebert, associate professor chemistry, maintains a very active and productive research group — typically the largest in the department. Two MS students from Matt's research group successfully defended their theses in 2018. Much of Matt's external funding comes not in cash but in node-hours and he was recently awarded 1600 node-hours from a facility supported by the National Science Foundation. Matt's work has led to four peer reviewed publications in the last two years. Professionally Matt is chair of the local section of the American Chemical Society and he will be the leader of the organizing committee to host the 2020 Midwest Regional Meeting of the American Chemical Society in Springfield.

Tayo Obafemi-Ajayi, assistant professor of electrical engineering, joined the Missouri State faculty in 2016. While she teaches in the cooperative engineering program her research is in interdisciplinary

areas that overlap with engineering and computer science. Tayo has worked with undergraduate students and graduate students. Six of Tayo's conference presentations/publications in the past two years include Missouri State University student co-authors as well as one peer reviewed journal article. In addition Tayo has research collaborations with faculty within CNAS and the College of Agriculture. In 2018 Tayo was awarded grant funding from the National Science Foundation to support minority participation in STEM as part of a Missouri Consortium. The Missouri Louis Stokes Alliance for Minority Participation (MoLSAMP) is funding several research students throughout the college.

CNAS Faculty Excellence in Teaching Awards

La Toya Kissoon-Charles – Biology

Mike Reed – Physics, Astronomy and Materials Science

Debra Finn – Biology

Helena Metzker – Chemistry

La Toya Kissoon-Charles, assistant professor of biology, has impressed both undergraduate and graduate students with her caring demeanor and high expectations for learning. She has taught BIO101 - Biology in your World and senior/graduate level courses - Stream Ecology and Wetland Ecology. La Toya has also developed one new course for biology. She is very interested in the scholarship of teaching and learning as evidenced by her attendance at teaching workshops and submitting a proposal to FCTL. She is mentoring research undergraduate and graduate students.

Mike Reed, professor of astronomy, is a successful teacher who shows a high level of concern for his students at all levels. He teaches all astronomy courses – from general education to junior level. Students indicate that he is enthusiastic and capable of getting scientific concepts across to them. He is currently mentoring five undergraduate and one graduate student in his research lab. Mike has taught at college section of GEP101. Mike is a Master Advisor and currently has fourteen advisees.

Deb Finn, assistant professor of professor biology, was nominated for this award for her boundless energy and enthusiasm for teaching which impacts both undergraduate and graduate students. She has already taught a large section of general biology as well as senior/graduate level courses. She serves as the faculty advisory for the MSU American Fisheries Society. Deb went through training this past year to become a proactive advisor and she has helped us to understand the challenges of this program so it can be better in the future. She currently has 34 advisees. Deb has mentored over 25 undergraduate and graduate students in her research lab over the past two years.

Helena Metzker, instructor of chemistry, teaches 100 level labs and lectures along with coordinating several labs and groups of teaching assistants in chemistry. The nomination letter indicated that one of her skills is that she is a reflective practitioner of teaching – actively looking for new ways to implement online teaching and technology. She's not afraid to make mistakes or try new things. In the spring of 2018 Helena won the "Best Interaction Award" for CHM107 from Missouri State in recognition for her

excellence in online education. Helena also went through training to become a proactive advisor for chemistry. She currently has 26 advisees.

CNAS Student Nominated Awards for Faculty/Staff Excellence

Nine faculty were nominated by students for this award and the nominees included: Dr. Tony Clark (CSC), Dr. Paul Durham (BIO), Dr. Deb Finn (BIO), Tina Hopper, (BIO), Dr. Kyoungtae Kim (BIO), Dr. Sean Maher (BIO), Breanna Michelfelder (GGP), Dr. Alan Schick (CHM), and Dr. Keichii Yoshimatsu (CHM). In the words of the students, these faculty/staff truly understand the power of knowledge and they are always willing to help. They provide a learning environment where every student has the potential to succeed. One student also said that the nominee was the most effective teacher that he had ever had! And everyone used the word "passion" in their nomination. Although each person on the list is a winner the students chose three to receive the award for excellence this year.

- Alan Schick One student said, "He has been my most influential teacher, since he has always believed, helped and encouraged me to try hard, something I will dearly appreciate and never forget."
- O Kyoungtae Kim Students submitted four different nominations for Dr. Kim. One student said, "The relationships Dr. Kim fosters, and the overall inclusiveness in his lab with such a diverse group is beyond exceptional and I can't believe how lucky I am to be part of such a wonderful and caring lab family."
- Deb Finn Two students nominated Dr. Finn. One student said, "I never expected to find a
 mentor in biology so late in my academic career. She is the reason I now have such a love and
 appreciation for environmental study, aquatic systems and outdoor field science. I am so
 thankful and blessed that she was so patient and instructive with me."

Atwood Research and Teaching Award

The Atwood Research and Teaching Award was endowed by Dr. Jerry Atwood a 1964 graduate of MSU and now an internationally known chemist. He started his career at University of Alabama in 1967 but was the department head at University of Missouri-Columbia from 1994 to 2016. In addition, he was appointed a Curators Professor starting in 1999. The award winner receives a certificate and \$2500 to be spent over the next year on students, research supplies, summer salary or travel.

The 2018 recipient of the Atwood Research and Teaching Award is Dr. Kartik Ghosh from the department of physics, astronomy and materials science.

Dr. Ghosh's research group is a leader in the field of nanostructures for spintronic, renewable energy and biomedical applications. He has earned external funding from National Science Foundation, Office of Naval Research and the National Institute of Health. Kartik teaches a variety of advanced physics and materials science courses. He is known for his great capacity in exposing the essence of difficult topics to students at all levels. During the past two years, Dr. Ghosh has served as major advisor for over 20 graduate students, five of whom are working in his research lab. As of August 2019 Dr. Ghosh will be a

Distinguished Professor at Missouri State University teaching are recognized with this award.	. Dr. Ghosh's excellent work in both research and