2017 Withrow Awards

March 17, 2017

Eleven receive top honors during 27th Annual Engineering Awards Luncheon

It was a celebration of teaching, scholarship, and service when members of the Michigan State University College of Engineering convened in the University Club on Thursday, March 16, at the 27th Annual Engineering Awards Luncheon.

Leo Kempel, dean of the College of Engineering, greeted award winners and about 100 guests from the college during the annual spring ceremony.

The Withrow Endowed Teacher/Scholar/Service Award Program was established by the Withrow family to recognize faculty of the MSU College of Engineering who have demonstrated excellence in instructional and scholarly activities and rendered distinguished service to the university and the student body. Jack Withrow earned a bachelor’s degree in mechanical engineering from MSU in 1954 and an MBA in 1971. He retired as executive vice president at Chrysler Corp. in 1988, and then served as president and chief operating officer at Lectron Products Inc., from 1989 to 1995. He received the MSU Distinguished Alumni Award in 1984. Dottie Withrow earned a bachelor’s degree in speech therapy and elementary education from MSU in 1955 and a master’s degree in teaching from Oakland University. She was a special education teacher in West Bloomfield Schools for many years and published a children’s book that promotes responsible pet care and a second book that teaches children about opera.

Recipients of the 2017 Withrow Teaching Excellence Awards are:

Bradley Marks, a professor in the Departments of Biosystems and Agricultural Engineering, and Food Science and Human Nutrition, is recognized for his dedication and effort both in and outside of the classroom. Students note his ability to make difficult problems easy and fun to solve, and appreciate class time that is interactive and engaging, using interesting “real life” examples and limited lecturing. Marks conducts annual ABET accreditation efforts and successfully leads the highly demanding re-accreditation process on the six-year cycle. He is a major contributor to the
growth of MSU's biosystems engineering program through his leadership in recruiting, curriculum development, program coordination, and employer interactions. His efforts are often praised for helping students build and launch their professional careers. Alumni are unanimous in recognizing his significant contribution to preparing them for their careers. Possibly one student best summarizes the feelings in stating, “Most engaging professor I have ever had. I attribute this to his raw passion and enthusiasm for not only the subject matter, but teaching itself.”

Nathan P. Mellott, a materials science and engineering teaching specialist within the Department of Chemical Engineering and Materials Science, employs discovery-, discussion- and project-based learning in his classroom. His industrial experience lends itself to integration of practical, timely, and industry-relevant examples in his teaching. His passion for teaching, accessibility, and ability to relate were consistent threads in student comments. They note that he has demonstrated the ability to be “down-to-earth” and “approachable” while holding his students to “high academic standards.” Typical student comments include: “Dr. Mellott is exceptional, as he clearly explains concepts and will present the same information in different ways to reach as many students as possible. He is extremely patient and helpful with students who reach out to him,” and “Dr. Mellott is very good at preparing students for any field or research. He enjoys making sure that we learn course content. He is an asset to the department.”

Anthony J. Ingle is a teaching specialist in the Department of Civil and Environmental Engineering. He brings a unique combination of industry and academic experience to his classroom - including practical experience from both state government (Michigan Department of Transportation) and the corporate world - which has proven invaluable to the students he instructs. He teaches classes ranging from 200-level introductory courses to capstone design. Students noted consistent excellence across all classes. As one student stated, “Mr. Ingle's class prepared me more for my career than any other.” Many additional student comments highlighted his teaching skills, dedication to helping students, and passion for his field. He strongly and consistently exhibits caring, clear explanations, organization, professionalism and respect.

Joshua Nahum, a teaching specialist in the Department of Computer Science and Engineering, is an excellent instructor who creates a positive learning environment in his classes and effectively communicates complex ideas. Students say he integrates new and relevant technologies into projects. Among his innovations, he restructured the database systems class to expand the curriculum. He emphasizes active learning and immediate feedback in all homework and project assignments. This creative approach engages students more fully by regularly surveying them regarding lecture material. He provides semester-long projects that help students to learn material thoroughly.

Ramakrishna Mukkamala, a professor in the Department of Electrical and Computer Engineering, has demonstrated exemplary dedication to undergraduate and graduate education throughout his tenure. His lectures are highly interactive, and he injects his personality into his lectures, providing content and context that thoroughly engages his students. Student evaluations testify to his effectiveness. Among them: “Hard class, but Dr. Mukkamala made it very understandable.” “Excellent Professor. Knew the material really well and wanted to see students succeed.” He often talked about life beyond MSU, with the specific goals of helping prepare students for the future and motivating them to strive to make a professional difference. His office hours have been particularly popular in recent semesters. As one student noted, “Most helpful office hours of any professor I've had at MSU.” Last spring, to accommodate the large number of students taking advantage of his office hours, he needed to hold them in a classroom. His SIRS evaluations are consistently among the best in the department. In the words of a former student: “Dr. Mukkamala was one of the best, if not the best ECE professor I've had here at MSU.”

Geoffrey D. Recktenwald, an academic specialist in the Department of Mechanical Engineering, is described by many of his students as a professor who motivates them to put in the time and effort needed to be successful in class. Students are enthusiastic to declare, “He challenges us, but does not try to break us.” He teaches with “enthusiasm that is hard to find, making sure that the concepts are understood so that everyone understands the material.” He is passionate about his courses and his teaching. This is reflected in the comments of students who refer to him as “patient and caring.” His interests do not stop at the equation or figure; he embraces the potential in each of his students demonstrated by the effort he genuinely makes for each individual in his classes. His students say that he sets all of them up to succeed and champions the high expectations he demands. By being thought provoking and fair, he “resonates, inspires, and drives one to succeed.”

Distinguished Scholar—Junior Award: Peter Lillehoj
(Nominees have been in service to the university as instructors, assistant professors, or associate professors for not more than seven years.)

**Peter Lillehoj** is an assistant professor in the Departments of Mechanical Engineering and Biomedical Engineering, and an adjunct professor in the Institute of International Health. He has quickly established himself as an internationally recognized authority in the areas of BioMEMS, lab-on-a-chip and biosensors with applications toward mHealth, wearable sensing, and point-of-care testing since joining MSU less than five years ago.

Lillehoj was the first to demonstrate the use of a mobile phone for quantitative electrochemical measurements of disease biomarkers, which has opened up a new direction in mHealth technology. Additionally, his pioneering work in wearable sensors for biomolecular detection was recognized by a prestigious NSF CAREER Award in 2014.

Through a strong network of collaborators, both within and outside of MSU, his research has been acknowledged by the scientific community through publications in respected scientific journals, and invited talks at premier scientific meetings and universities. His recognition by the research community and professional societies has resulted in invitations to serve on proposal review committees for multiple funding agencies including NSF, NIH and The Wellcome Trust, and as a reviewer for top scientific journals such as the *Proceedings of the National Academy of Sciences* (PNAS) and PLOS ONE.

He has published eight journal papers in respected peer-reviewed journals, and five articles in peer-reviewed international conference proceedings in collaboration with his colleagues and students. In 2014, he was recognized with the *Annals of Biomedical Engineering* Award for Most Downloaded Article. His work has also been featured in various news media including *The Huffington Post, CBS Detroit, Gizmodo, Bioscience Technology, Malaria.com*, and others.

**Distinguished Scholar—Senior Award: Joyce Chai**

(Nominees have been in service to the university for more than five years and hold the rank of professor.)

**Joyce Chai** is a professor in the Department of Computer Science and Engineering, is an eminent computer scientist and superb scholar who has made important contributions to the field of language processing. Her work lies in the intersection of natural language processing, artificial intelligence, and human machine communication, and she has established herself as a leading researcher in the field.
She joined MSU in January 2003, after having been a researcher for the IBM T. J. Watson Research Center, in Hawthorne, N.Y. Since she has been at MSU, her research has been primarily in the area of multi-modal interfaces that integrate speech, gaze, gesture, and other forms of user input - combining the best aspects of traditional graphical user interfaces with more advanced natural-language interfaces using speech input.

She is a prolific researcher and has published more than 80 papers with her students. Most of these papers were selected by rigorous review processes and appeared in highly selective, top-tier conferences in natural language processing (NLP) and artificial intelligence (AI). She received the Best Long Paper Award at the 48th Annual Meeting for Association of Computational Linguistics, the top conference in NLP.

Chai has a prolific record in obtaining research grants from federal agencies (NSF, ONR, DARPA, etc.). She received a NSF CAREER Award in 2004 - on her first attempt upon arrival at MSU. Since then, she has been awarded $4.5 million federal funding as principle investigator. Many of her grants have been awarded by exceptionally competitive programs (such as the National Robotics Initiative with a funding rate of less than 5 percent).

The visibility and reputation of her work is also demonstrated by her participation in a high number of invited talks in the research community. She has been an invited speaker at workshops, and at universities and research labs. She delivered a keynote speech at the Karles Invitational Conference at Naval Research Lab, which convened the most prominent researchers in AI, computer vision, and cognitive science. She has been invited to participate in the Ernst Strüngmann Forum at the Frankfurt Institute for Advanced Studies in May 2017. The forum is known for providing “a creative environment within which top international scientists discuss themes that transcend classic disciplinary boundaries.”

Withrow Student Service Award – Kyle Foster

This award is presented to an advisor, academic specialist, or non-tenure-track instructor for outstanding service to students in the college. Nominations are submitted to the dean, and selection of the winner is made by the Engineering Undergraduate Studies Committee.

Kyle Foster, assistant director of the Diversity Programs Office, is an advisor, mentor, tutor and friend to the students in the College of Engineering. Foster’s footprint extends beyond the College of Engineering, as ESSA students in Lyman Briggs College, and the colleges of Education, Natural Science, and Agriculture and Natural Resources have benefitted from his leadership. Theo Caldwell, director of the Diversity Programs Office, said, “His involvement in the
creation and expansion of the Engineering and Science Success Academy (ESSA) retention initiative is one of the main reasons for the success of the program...His daily interaction with participants in this retention initiative has assisted us in creating a program that, in my opinion has become the model for the entire campus.”

**Gloria Stragier Award for Dedicated and Creative Service – Jennifer Keddle**

The Gloria Stragier Award for Dedicated and Creative Service is presented annually to a staff member in the College of Engineering to recognize exceptional and creative job performance and/or concerned and creative leadership.

Jennifer Keddle, an administrative assistant in the Department of Chemical Engineering and Materials Science, wears many hats. She is fiscal officer and research administrator for the department, managing accounts for department faculty members and major research centers. She is a coordinator of logistics for annual conferences, seminar speakers, and faculty candidates. And, she is a human resources facilitator for hiring, work authorization, and reappointment for faculty and staff, as well as hiring and tracking student employees. Keddle functions as fiscal officer for the Institute for Advanced Composites Manufacturing Innovation (IACMI) and serves as the administrative assistant to its director. Faculty members from throughout the department praise Keddle’s professionalism. Professor Christine Chan wrote, “From my experience with individuals working on accounting and reconciliation of accounts, Jennifer is one of the best, if not the best, I've encounter thus far.”

See more award photos in the 2017 Photo Gallery.

**Withrow Exceptional Service Award – Gilbert Baladi**

This award recognizes a faculty member who has demonstrated exceptional institutional, public, and community service. Nominations are submitted by department chairpersons to the dean and associate deans for final selection.

Gilbert Baladi, a professor in the Department of Civil and Environmental Engineering, holds an exemplary record of service to the CEE department, the College of Engineering, and MSU. His professional service has also enhanced the work of the U.S. Department of Transportation, the World Bank, and many state departments of transportation. He has been engaged in the engineering field for more than 43 years, beginning as a teaching and research assistant at Purdue University while pursuing his master’s and PhD degrees. In his four decades of service, he has become an industry leader in the design, preservation and management of the transportation infrastructures.

Former student Johnathon Crince, now an intel research specialist with Home Land Security in New York, stated, “Professor Baladi works tirelessly for the student body at MSU: creating online coursework to reduce the cost of materials for students, mentoring undergraduates, managing research assistants, taking on Ph.D. and master’s degree candidates, and working with professional societies.”

Associate Dean Emeritus Ronald C. Rosenberg added, “The most striking attribute to me is Dr. Baladi’s devotion to the welfare of his students. He has been unflagging in his efforts to create a learning environment that will induce greater learning by employing somewhat novel tools. He has contributed countless hours, going above and beyond what even a dedicated educator might be expected to offer.”