PROMOTION RECOMMENDATION The University of Michigan College of Engineering Department of Industrial and Operations Engineering

Joi-Lynn Mondisa, assistant professor of industrial and operations engineering, Department of Industrial and Operations Engineering, College of Engineering, is recommended for promotion to associate professor of industrial and operations engineering, with tenure, Department of Industrial and Operations Engineering, College of Engineering.

Academic Degrees:

Park, IL
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Professional Record:

2016 – present	Assistant Professor, Department of Industrial and Operations Engineering,
	University of Michigan
2015 - 2016	Post-Doctoral Research Fellow, Department of Industrial and Operations
	Engineering, University of Michigan
2015 - 2015	Adjunct Faculty, Department of Business Administration, Governors State
	University, University Park, IL

Summary of Evaluation:

<u>Teaching</u>: Professor Mondisa is a dedicated and inspiring teacher. She has graduated one Ph.D. student as chair and has five more in progress with two expected to graduate this year. She has supervised research projects involving undergraduate students and serves as a faculty advisor for the Black Industrial Engineers (BIndx) Program. Professor Mondisa has developed and taught three new courses: ENGIN 100 (Continuous Improvement and Operations Management); IOE 525 (Lean Principles and Scientific Thinking in Organizations); EER 601 (Foundations of Engineering Education Research (EER)) and has also taught IOE 201 (Economic Decision Making) and EER 602 (Theoretical and Conceptual Frameworks in Engineering Education Research). These are, respectively, a required course for first-year engineering students, a graduate elective course in IOE, a required graduate course for students in EER, a required core course for all IOE majors, and a required graduate course for students in the Engineering Education Research (EER) program. This variety of courses requires a wide range of abilities and expertise, and Professor Mondisa has received consistently high student evaluations in all five.

<u>Research</u>: Professor Mondisa has established a coherent agenda of impactful research, published in high-quality peer-reviewed publications, secured significant research funding, and supported many diverse students. She has secured research funding of more than \$8M (with her share totaling more than \$2M), including a prestigious NSF CAREER Award and five other NSF grants. She has 15 peer-reviewed journal manuscripts (with six others in review) as well as over

35 peer-reviewed presentations at prestigious conferences. Her research addresses some of the most critical issues facing engineering education with the potential to have a tremendous practical impact in improving mentoring practices across the spectrum of engineering education. She has been recognized for her work through multiple awards and has established a reputation as one of the field's rising stars.

Recent and Significant Publications:

- Mondisa, Joi-Lynn, "The role of social capital in African American STEM mentoring relationships," *Journal of Women and Minorities in Science and Engineering*, 26, 2, 125-153, 2020.
- Mondisa, J.-L., Adams, R.S., "A Learning Partnerships Perspective of How Mentors Help Protégés Develop Self-Authorship," *Journal of Diversity in Higher Education*, 15, 3, 337-353, 2022.
- Bork, S.J., Mondisa, J.-L., "Engineering Graduate Students' Mental Health: A Scoping Literature Review," *Journal of Engineering Education*, 11, 3, 665-702, 2022.
- Washington, V., Mondisa, J.-L., "The Social Community Experiences of Engineering Undergraduates in a Mentoring Program," *Journal of Engineering Education*, 110, 4, 1023, 2021.
- Mondisa, J.-L., "Examining the Mentoring Approaches of African-American Mentors," *Journal of African American Studies*, 22, 4, 293-308, 2018.

<u>Service</u>: Professor Mondisa's service record both inside the University of Michigan and nationally in her professional activities bring benefit and recognition to both the university and her profession. She currently serves on the Dean's Advisory Council of Faculty for Color and has frequently been involved with the UM NextProf Workshop as a panelist or presenter. She is the faculty advisor for the Black Industrial Engineers (BIndx) Program, a partnership between the IOE Department and the UM National Society of Black Engineers (NSBE) student chapter which she developed. On the national level, Professor Mondisa has served on two NSF Advisory Boards and has been a contributor to two National Academies of Science, Engineering, and Mathematics (NASEM) Participatory Workshops. Her many contributions to Diversity, Equity, and Inclusion have been recognized by numerous awards, including the Institute for Industrial and Systems Engineering (IISE) UPS Minority Advancement Award, the Sister Mary Ambrosia Fitzgerald Mentoring Award, the Dr. Willie Hobbs Moore Aspire, Advance, Achieve Mentoring Award, the MLK Spirit Faculty Award, and the CoE Creativity, Daring, and Innovation Award.

External Reviewers:

Reviewer A: "I wish Dr. Mondisa had a larger peer group, since this area of research is centrally important to the future of engineering education and the engineering workforce of the future. There are too few scholars who specialize in mentoring in engineering education with a focus on diversity and equity... Dr. Mondisa is the top scholar in this area of her peer group."

Reviewer B: "...I enthusiastically support Dr. Mondisa's promotion to Associate Professor with tenure. Her work is comparable to engineering education colleagues in the field. What separates her, however, is her engagement in engineering *and* engineering education. In other universities, this looks a lot like a joint appointment, which presents challenges working in two cultures and meeting the expectations of those cultures at a large research-intensive university. Her

commitment to the field is evident, and I look forward to hearing more from her in the coming years."

Reviewer C: "...Dr. Mondisa's work would meet the requirements for someone being considered for promotion and tenure at my institution. She has already graduated a PhD student...has a candidate's share of well over \$1M in external grants, including a CAREER Award..."

Reviewer D: "I very strongly recommend Dr. Joi-Lyn Mondisa's tenure and promotion to associate professor. As the promotion and tenure chair in my department, I know that she would be favorably reviewed at [my institution].... Dr. Mondisa's research focuses on absolutely critical issues and challenges facing engineering education and her work has already contributed to and influenced the national discourse around broadening participation via mentoring."

Reviewer E: "Dr. Mondisa's service to the academic community and profession is far, far above what I would expect from a scholar [of her cohort]. She participates on a large number of committees, both professionally and within the academy. She conducts paper reviews and review panels for top journals; these indicate a solid level of respect for her expertise. She also participates with reviews and various editorial review boards for top journals in the field. Her review status for JEE is particularly notable!"

Summary of Recommendation:

Professor Mondisa is an outstanding researcher, a dedicated and inspiring teacher, and has developed an outstanding record of service. It is with the support of the College of Engineering Executive Committee that I recommend Joi-Lynn Mondisa for promotion to associate professor of industrial and operations engineering, with tenure, Department of Industrial and Operations Engineering.

Au Sali

Alec D. Gallimore, Ph.D. Robert J. Vlasic Dean of Engineering College of Engineering

May 2023