

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Laura J. Olsen, associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1989	University of Wisconsin, Madison
M.S.	1985	Iowa State University
B.A.	1981	Doane College

Professional Record:

2001 – present	Associate Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
1999 – 2001	Associate Professor, Department of Biology, University of Michigan
1993 – 1999	Assistant Professor, Department of Biology, University of Michigan
1990 – 1993	NIH Postdoctoral Fellow, Section of Plant Biology, University of California, Davis

Summary of Evaluation:

Teaching – Professor Olsen has an outstanding record as an instructor and mentor. She has taught required large courses and smaller enrollment electives for juniors and seniors. Students consistently give her high evaluations. She has an unusually extensive record of research mentorship. Since 1999 she has graduated five Ph.D.s, but her real contribution has been in undergraduate research mentoring. She has sponsored eleven undergraduate Honor's theses in cell and molecular biology, co-sponsored 29 Honor's theses, and served as sponsor for over 200 independent study projects. Students constantly seek out her advice even when she is not officially a concentration advisor. She always makes time to see a student. In recognition of her teaching excellence, she was awarded an Arthur F. Thurnau Professorship in 2001.

Research – The research interests of Professor Olsen are centered on the peroxisomes – a key cellular organelle in animals, fungi, and plants that localizes and constrains biochemical reactions that require specific conditions that would otherwise kill the cell. She is widely respected in the plant community for her contributions in this area, as evidenced by her involvement as a collaborator on two large consortium projects funded by the National Science Foundation. She has consistently maintained funding for her research and has been highly successful in obtaining fellowships and other support mechanisms for her students. Professor Olsen has a long and consistent publication record.

Recent and Significant Publications:

“In-depth proteome analysis of Arabidopsis leaf peroxisomes combined with *in vivo* subcellular targeting verification indicates novel metabolic and regulatory functions of peroxisomes,” with S. Reumann, et al., *Plant Physiology*, 150, 2009, pp. 125- 143.

“Autophagy protein 6 (ATG6) is required for pollen germination in *Arabidopsis thaliana*,” with N. J. Harrison-Lowe, *Autophagy*, 4, 2008, pp. 339-348.

“Genomic analysis of aminotransferases in *Arabidopsis thaliana*,” with A. H. Liepman, *Critical Reviews in Plant Sciences*. 23(1), 2004, pp. 73-89.

“Import of the peroxisomal targeting signal type 2 protein 3-ketoacyl-Coenzyme A thiolase into glyoxysomes,” with T. L. Johnson, *Plant Physiology*, 133, 2003, pp. 1991-1999.

Service – Professor Olsen has an exceptional service record. She served as associate chair for research and facilities (2001-2005) and is currently associate chair for graduate studies (2009-present). She has elected to take on a disproportionately large share of concentration advising. Former advisees have commented on the strong personal ties they formed with Professor Olsen and how they stayed in touch after they graduated. In recognition of her excellent advising, she received a University Excellence in Concentration Advising Award in 2004. She served two terms on the college’s Curriculum Committee (2002-2004, 2006-2009). Since 2008 she has served on the Board of Intercollegiate Athletics, the Honors Faculty Council of the LSA Honors College, and as a member of the internal advisory board of the IDEA Institute. She has served on the Rackham Executive Board (2009-present) and the board of the Sweetland Writing Center.

External Reviews:

Reviewer (A)

“What impressed me most was that she had almost single handedly made an organelle, which was of little significance to most plant biologists at the time... Laura has pioneered the research in peroxisome biogenesis and to my knowledge is still considered the world’s expert on peroxisomes in plants. ... While her commitment to undergraduate education and undergraduate research would be expected to slow the pace of her research, it has not affected the quality. This is a credit to her dedication to research and to the quality of her training.”

Reviewer (B)

“Dr. Olsen has made significant contributions to our understanding of peroxisome biology; she has had a long track record of securing competitive grant funds and she has published in high quality plant journals. When I consider the total package I was asked to review, I have no reservations in recommending that she be promoted to full professor...”

Reviewer (C)

“Dr. Olsen’s well conceived experiments have allowed her to make substantial contributions to our understanding of peroxisome biology. She has a solid record of publication and success at obtaining competitive grant support. The broad impact of her work has led to invitations to speak, write synthetic review articles, and serve on grant panels.”

Reviewer (D)

“Dr. Olsen’s most in-depth work is...on alanine aminotransferases. The work was pioneering and well done, and the papers from this work are highly cited. ... It is clear she is working to improve the quality of classroom teaching, undergraduate research experiences, and career development of graduate students. ...her contributions to the education and success of your students are very valuable, and she will continue to make significant contributions in her field...”

Reviewer (E)

"I write several promotion evaluations each year...and I rarely see such a superb teaching portfolio as that presented by Laura. ... This combination of outstanding teaching and service activities along with her excellent research program makes it clear to me that a decision in favor of her promotion should be an easy one."

Reviewer (F)

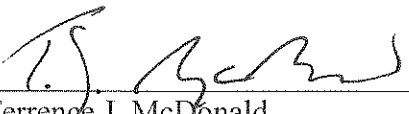
"The Plant Genome Research Program at the NSF, from which she currently derives support, is an elite and highly competitive program. There is no element of legacy funding in this program. Each funded project has gotten there the hard way, by earning it."

Reviewer (G)

"...Laura has international standing and has published notable work that is foundational in the field. ...her overall contributions in teaching and mentoring...are clearly outstanding, and far beyond even the above average professor."

Summary of Recommendation:

Professor Olsen's research program is highly valued by those in her field. She is an outstanding educator in the classroom and at the lab bench. Her service to her department, college, and university has been exceptional. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Laura J. Olsen be promoted to the rank of professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.



Terrence J. McDonald
Arthur F. Thurnau Professor,
Professor of History and Dean
College of Literature, Science, and the Arts

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