

LAURA J. OLSEN

Arthur F. Thurnau Professor

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Current as of: December 1, 2011

Education:

B.A.	Biology, Mathematics (<i>Summa cum laude</i>)	Doane College, Crete, NE	May 1981
M.S.	Botany (Physiology)	Iowa State University	May 1985
Ph.D.	Botany (Cell Biology, Physiology)	University of Wisconsin-Madison	Dec. 1989

Professional Experience:

1981 – 1982	Laboratory Technician, Department of Biology, Creighton University, Omaha, NE
1982 – 1985	Graduate Teaching Assistant and Graduate Research Assistant with Dr. Cecil Stewart, Iowa State University
1985 – 1986	Graduate Teaching Assistant, University of Wisconsin-Madison
1985 – 1989	Graduate Research Assistant with Dr. Kenneth Keegstra, Department of Botany, University of Wisconsin-Madison
1990 – 1993	NIH Postdoctoral Fellow with Dr. John Harada, Section of Plant Biology, University of California, Davis
1993 – present	Assistant Professor, Associate Professor, and Professor, Department of Biology (until 2001) and then Department of Molecular, Cellular, and Developmental Biology, The University of Michigan
2001	Visiting Research Scientist, National Center for Genome Resources, Santa Fe, NM (sabbatical visit)
2001 – 2005	Associate Chair of Research and Facilities, Department of Molecular, Cellular, and Developmental Biology, The University of Michigan
2009 – 2011	Associate Chair of Graduate Studies, Department of Molecular, Cellular, and Developmental Biology, The University of Michigan
2001 – present	Arthur F. Thurnau Professor, Department of Molecular, Cellular, and Developmental Biology, The University of Michigan
2009 – present	Faculty Associate for the Program in the Environment, Univ of Michigan
2011 – present	Professor, Department of Ecology and Evolutionary Biology, Univ Michigan
2011 – present	Director of the Program in Biology, The University of Michigan

Professional Honors and Awards:

Award for Best Student Presentation: American Society of Plant Physiologists, Midwest regional meeting, Williams Bay, WI, 1988

National Institutes of Health Postdoctoral Fellowship, 1990-1993

Outstanding Young Alumnus Award, Doane College, 1993

Career Development Award, Michigan Agenda for Women, Office of the Provost, University of Michigan, 1996

Class of 1923 Memorial Teaching Award, University of Michigan, 1996

College of LS&A Excellence in Education Award, University of Michigan, 1998

Chair and Chair-elect, Midwest Section of American Society of Plant Physiologists, 1998, 1999

Amoco Foundation Undergraduate Teaching Award, 2000

Arthur F. Thurnau Professorship, awarded in 2001
National Committee on Women in Plant Biology, Amer Soc Plant Biol, 2002-2004, 2005-2008
Chair, National Committee on Women in Plant Biology, Amer Soc Plant Biol, 2004-2005
Member, Executive Committee, American Society of Plant Biologists, 2004-2005
Elizabeth C. Crosby Award, University of Michigan, 2003
Golden Key International Honour Society, invited Honorary Member, 2003
Excellence in Concentration Advising Award, University of Michigan, 2004
National Academies Education Fellow in the Life Sciences, title bestowed in 2006
Sweetland Writing Center Senior Fellow, University of Michigan, 2006
John Dewey Award, University of Michigan, 2011 (for long-term commitment to undergraduate education)

Current Research Support:

National Science Foundation	09/15/2009-09/14/2012	\$246,502 total (mine)
Title: TRPGR: Discovery, Revision, and Validation of Maize Genes by Proteogenomics		
Collaborative with University of California-San Diego		

Past Research Support:

Phoenix Memorial Michigan Project	12/15/93 - 06/30/95	\$6000
Title: Molecular Mechanisms of Peroxisome Biogenesis in Higher Plants		
Rackham School of Graduate Studies	01/01/94 - 12/31/95	\$15,000
Title: Molecular Mechanisms of Peroxisome Biogenesis in Higher Plants		
Career Development Award, Michigan Agenda for Women, Office of the Provost, University of Michigan; awarded 10/27/96		\$5000
Chair's Discretionary Fund Research Support - awarded by the Department of Biology, University of Michigan; awarded 4/97 (\$15,000) and 5/98 (\$2500)		
United States Department of Agriculture	09/15/94 - 09/15/97	\$90,000
Title: Molecular Mechanisms of Protein Import into Higher Plant Peroxisomes		
United States Department of Agriculture	10/01/97 - 09/30/00	\$95,000
Title: Signals, Chaperones, and Receptors Required for Peroxisomal Protein Transport		
Rackham School of Graduate Studies	01/01/01 - 12/31/01	\$15,000
Title: Structural and Functional Analysis of the AGT Gene Family in Plants		
Margaret and Herman Sokol Endowment for Faculty and Graduate Student Research Projects in the Sciences		\$5,000 awarded 4/01
Title: Interactions Between Pathways for Peroxisomal Matrix Protein Import		
Gilbert Whitaker Fund for the Improvement of Teaching, U of M, CRLT, co-PI Marcy Osgood,		\$5000 awarded 4/02.
Title: Implementation of a computer-based writing-to-learn tool in a large lecture-based introductory biology class: CPR in Biology 162.		
University of Michigan Arthur F. Thurnau Professorship. awarded 07/01/01,		\$20,000
Elizabeth C. Crosby Award and Research Fund, University of Michigan, awarded 4/03,		\$20,000
Title: Molecular and Ultrastructural Analysis of Autophagy in Plants		
United States Department of Agriculture	09/01/02-02/28/06	\$124,000
Title: The PTS2 Protein Import Pathway of Plant Peroxisomes		
National Science Foundation	05/01/2007-04/30/08	\$6,000 total direct
Research Experience for Undergraduates – Danielle Holbrook; supplement to Arabidopsis 2010 Collaborative Proposal; PI		
National Science Foundation	05/01/2008-09/30/08	\$6,000 total direct
Research Experience for Undergraduates – Zachary Bay; supplement to Arabidopsis 2010 Collaborative Proposal; PI		
National Science Foundation	05/01/2009-12/30/09	\$6,000 total direct

Research Experience for Undergraduates – Sherry Shen; supplement to Arabidopsis
2010 Collaborative Proposal; PI

National Science Foundation 10/01/2006-09/30/2010 \$451,486 total (mine)
Title: Collaborative Proposal – Arabidopsis 2010: Understanding peroxisomal protein
networks; Jianping Hu, MSU, co-PI. On no-cost extension through 09/30/2011

Summary of Research Interests:

My research program currently focuses on several areas of cell biology in higher plants. Peroxisomes are small organelles present in all eukaryotes. We use a combination of techniques to investigate the mechanisms of protein transport into peroxisomes. In addition to being an intrinsically interesting basic biological problem, an understanding of protein trafficking in cells is critical as we design strategies to genetically engineer crop plants. Another project in the lab is the study of study of peroxisomal protein networks, using bioinformatics and proteomics to identify and analyze the function of peroxisomal proteins. In collaboration with Drs. Jianping Hu (from Michigan State University), we are developing a comprehensive model for plant peroxisome function. More recently, we have begun to investigate the process of autophagy in plants. Little is known about the molecular and biochemical components involved in plant cell responses to abiotic stresses that induce autophagy in yeast or mammalian cells. Homologs to many autophagy genes exist in the model plant Arabidopsis, but their role in plant autophagy has not been established. Thus, we have begun to examine the induction and functional expression of these proteins in response to environmental stresses.

Teaching:

			<u>Enrollment</u>	<u>Responsibility</u>
Biol 150	Introductory Biology Workshop	F'96	20	100%
Biol 152	Introductory Biology (for majors)	F'95, '97, '98	500-700	50%
Biol 162	Introductory Biology (Honors lab and discussion)	W'00	24	100%
Biol 162	Introductory Biology (for majors)	W'02,'03,'04, '05,'06,'07	500-850	50%
Biol 172	Introductory Biology (for majors)	W'09,'10, '11	550-625	50%
Biol 200	Undergraduate Tutorial	F'97-present	1-5	100%
Biol 300/MCDB 300	Undergraduate Research	F'94-present	1-20	100%
Biol 302/MCDB 302	Teaching Experience for Undergraduates	F'01, F'04, W'10		
MCDB 397/EEB 397	Writing in Biology	F'09, '10	24	100%
Biol 400/MCDB 400	Advanced Undergraduate Research	F'95-present	1-15	100%
MCDB 401	Science Writing	F'08	20	100%
MCDB 412	Teaching Biology	W'11	4	100%
UC 415	Research Methods in the Natural Sciences (Responsible Conduct of Research for undergrads)	F'11	25	100%
Biol 428	Cell Biology	W'95, '96, '97, '98	130-160	50-100%
Biol 428	Cell Biology	F'99, '00	50-70	50%
PIBS 503	Bioethics modules for grad students	F'09, '10	varies	varies
Biol 515	Molecular Biology of Plants	F'94	15	50%
Biol 601	Investigations in Biology – CPR	F'01		100%
Biol 700/MCDB 700	Graduate Student Research (First-year)	W'94-present		
MCDB 614	Model Organisms and Approaches	F'06	15	15%
Biol 800/MCDB 800	Plant Cell and Molecular Biology Journal Club	F'93,'94,'96,'97,'01,'02,'06,'07; W'94,'95,'00,'02	10-15	100%
MCDB 800	Preparing Future Faculty Seminar	W'06,'07,'08,'09	50-85	25-33%
MCDB 800	Mentoring Research Undergraduates	F'06, F'07	15	100%
MCDB 800	MCDB Departmental Seminar	F'09, '10		
Biol 990	Graduate Student Research	F'95-present		
Biol 995	Advanced Graduate Student Research	W'97-present		

CMB 995 Advanced Graduate Student Research W'04-W'08
CBTP 504 Cellular Biotechnology (3-4 lectures) W'99, W'00 20
Guest Lectures: Biology 155 (W'98), Biology 201 (W'99), Biology 163 (F'02), Biology 230
(F'07), MCDB 614 (F'08)

Major Service Activities:

Departmental:

Biology Department Executive Committee, Fall-term sabbatical replacement, 1994
Biology Department Executive Committee (2-year terms), 1995 - 1997, 1999 - 2001
Plant Molecular Biologist Search Committee (both successful), 1993 - 1994, 2004 - 2005
Molecular Animal Physiologist Search Committee (successful), 1994 - 1995
Systematics and Evolution of Land Plants Faculty Search Committee, 2000 - 2001
Cell Biologist Search Committees, member - 3 searches (2 successful), 1997-98, 1998-99
Chair, Cell Biologist Search Committees - 2 searches, 2001-2002, 2003-2004
Howard Hughes Summer Institute for High School Teacher Education, Summer 2000
Faculty Sponsor of 'Students of Biology' (undergraduates), 1996 - 2000, 2001- 2004
Associate Chair of Research and Facilities, MCDB, 2001 - 2005
MCDB Curriculum Committee, 2004 - 2005
New MCDB Building Committee, 2004 - 2005
Introductory Biology Review/Revision Committee, 2005
Introductory Biology Curriculum Development Committee, 2006 - 2007
Academic Advising for CMB and Biology Concentrations, 1994 - present
MCDB Departmental Executive Committee, 2001 - 2005, 2006 - 2008, 2009 - 2011
Appointed Faculty Co-Mentor for Amy Chang, Fall 2003 - 2008
Plant Biology Concentration Advisory Committee, chair, 2005 - present
Plant Biochemist Search Committee, member, 2007
Associate Chair of Graduate Studies for MCDB, 2009 - 2011
Tenure Review Panel: Yangzhuang Wang, 2010
STEP committee to improve the Graduate Program, May 2010 - 2011
Development of a Thesis-Based Master's Program, May 2010 - present
Quantitative Biologist Faculty Search Committee, co-chair, 2010 - 2011
Tenure Review Panel: Cathy Collins, 2010 - present

College/University:

Member, Rackham Graduate School Divisional Board for Biological and Health Sciences; 1994-1995, 1999-2001, 2005-2007
Chair, Rackham Grad. School Divisional Board for Biological and Health Sciences, 1995-1996
Evaluation and Selection Committee - Howard Hughes Summer Medical Research Program - through Undergraduate Research Opportunity Program, 1996
Reviewer for Fellowship applications for summer support from the Initiatives in Biomolecular Recognition program, 1997
Michigan Road Scholars program - May 2000
Life Sciences Initiative Curriculum Subcommittee - Molecular Biology & Biocomplexity. 2000
Life Sciences Initiative Subcommittee: L-Building Curriculum and Pedagogy, 2001
Center for Research on Learning and Teaching (CRLT) Advisory Board Member, 2001-2003
Faculty Marshal - for Mary Sue Coleman Presidential Inauguration, March 27, 2003
LS&A College Curriculum Committee, 2002-2004 and 2006-2009
LS&A College Course Approval Subcommittee, 2002-2004, 2007-2009
LS&A College Subcommittee on Race and Ethnicity courses 2006-2007
Committee on Improvement of Research Space (Lab) Renovation Process - 2003-2004

Team Leader for Education/Communication on Research Space (Lab) Renovation Process Re-engineering Subcommittee – 2003-2004
Faculty Sponsor, University Students Against Cancer, elected 2004
CEW panel member: “Pathway to Tenure” – UM, February 2004
University Library Council, Director’s Appointment, 2002 – 2005
Campus Orientation for incoming freshmen, faculty presentations, 2005
Faculty Marshal for LS&A, 1997 – present (many Commencements and Honors Convocations)
Cellular Biotechnology Graduate Training Program - Program Committee. 2000 – 2008
Faculty Mentor, University Mentorship Program, 2002 – 2009
Dean’s Life Sciences Advisory Committee, invited member, 2002 – 2007
Campus Day Panels – faculty presenter, LSA, 2003 – 2010
Dean’s Advisory Committee on Gender and the Natural Sciences, invited member, 2003–present
University Undergraduate Teaching Awards selection committee, UM 2005 – present
UM Honors Faculty Board, 2005 – 2008
LSA Newnan Advising Center Director Search and Screen Committee, 2006 – 2007
Rackham Merit Fellowship Committee – Division I, Winter 2007
Professor of the Year nomination review committee – Winter 2007
Michigan Mentoring Initiative Planning Committee, Winter 2007
Sweetland Writing Center, 30th Anniversary Conference, ULWR Panel member, November 2008
MORE (Mentoring Others Results in Excellence) member, Rackham, Spring 2007 – present
MORE (Mentoring Others Results in Excellence) Facilitator, Rackham, Winter 2010 – present
IDEA (Instructional Development and Educational Assessment) Institute Internal Advisory Board, 2008 – present
Fellow in the Science of Learning, CRLT, 2008 - 2009
Appointed Faculty Co-Mentor for Josepha Kurdziel (EEB), Fall 2008 – present
Advisory Board on Intercollegiate Athletics (ABIA), appointed member, 2008 – present
Academic Planning Committee, part of ABIA, appointed member, 2008 – present
Academic Performance Committee, Athletic Department, appointed member, 2008 – present
Honors Faculty Council, LSA Honors College, Fall 2008 – present
Advisory Committee for the Michigan Postbaccalaureate Research Education Program (Michigan PREP), February 2009 – present
Sweetland Writing Center Executive Committee, 2009 – present
Rackham Executive Board, Division I, elected member, 2009 – present
REU Fellow Selection Committee; Interdisciplinary REU on Protein Structure and Function, administered through Pharmacology, Winter 2010
Facilitated an HHMI-funded Workshop for Community College Faculty on Active Learning and Student Success in Biology; August 12, 2011
University Tenure Committee, 2011 – present

National:

ad hoc reviewer of manuscripts for journals: Science, Proceedings of the National Academy of Sciences, The Plant Cell, Plant Physiology, Journal of Biological Chemistry, Molecular Biology of the Cell, Protoplasma, Trends in Plant Science, Plant Molecular Biology, The Plant Journal, The International Journal of Biochemistry and Cell Biology, Plant Physiology Journal, Plant Physiology and Biochemistry, Planta, Journal of Experimental Botany, Plant Science, Autophagy, Physiologia Plantarum, Biochimica et Biophysica Acta (BBA - Molecular Cell Research)
ad hoc reviewer of grants for: United States Department of Agriculture, National Science Foundation, U.S. Department of Energy, The Consortium for Plant Biotechnology Research, Inc., NATO, BARD, ERA-NET Plant Genomics
ad hoc reviewer for Biology textbooks: Prentice Hall, W.C. Brown Publishers, W.H. Freeman & Co., Harcourt Brace & Co., Sinauer Associates, Inc., Simon and Schuster

United States Department of Agriculture Grant Study Panel for Plant Growth and Development Program, May 1996
United States Department of Agriculture Grant Study Panel for Plant Growth and Development Program, June 1998
United States Department of Agriculture Grant Study Panel for Plant Growth and Development Program, April 2003
Chair-elect, Midwest Section of the American Society of Plant Physiologists, 1998
Chair, Midwest Section of the American Society of Plant Physiologists, 1999
National Science Foundation Grant Study Panel for Plant Genome Research Program, 2001
National Science Foundation Grant Study Panel; Young Investigator's Awards in Plant Genome Research, 2002
National Science Foundation Grant Study Panel; Integrative Plant Biology, 2006
National Science Foundation Grant Study Panel; Cellular Regulation, 2009
Committee on Women in Plant Biology, American Society of Plant Biologists, 2002-2004, and 2005-2008
Chair, Committee on Women in Plant Biology, American Society of Plant Biologists, 2004-2005
Executive Committee, American Society of Plant Biologists, 2004-2005
Editorial Board member for *Autophagy* journal, 2007-2011
Organizer of American Society of Plant Biologists Workshop on Lab Leadership, Chicago, IL; July 2007; also Panel member for RI/RII Job-search Issues; Source and Facilitator for cases studies discussion
Organizer of American Society of Plant Biologists Workshop on Lab Leadership, Minneapolis, MN; August 2011 – in planning stages, 2010 - present

Mentoring:

Thesis Advisor for 9 Graduate Students
23 Ph.D. Thesis committees, member
1 M.S. Thesis committee, member
14 Additional Graduate Student Research Projects
28 Prelim Exam Committees
4 Postdoctoral Research Associates and Research Assistants
2 Visiting Research Scientists:
49 Undergraduate Honors Research Students (includes only students I sponsored or co-sponsored; does not include students whose Honors thesis I read and evaluated, or non-Honors students whose research I co-sponsored - that would be another 200 students):
51 Undergraduate Student Mentoring (non-Honors students in **my lab**):
UM Mentorship, 2002 - present
High School Student Mentoring, multiple students and various activities
Faculty Mentoring, assigned career advisor for 2 faculty members

Membership in Professional Societies:

American Society of Plant Biologists
American Society for Cell Biology
American Association for University Women

Research Training Program Participation:

Cellular Biotechnology Training Program
Genetics Training Program
Cellular and Molecular Biology Training (and degree-granting) Program
Undergraduate Research Opportunity Program
Summer Research Opportunity Program for Underrepresented Minority Undergraduates

Interdisciplinary REU Program in the Structure and Function of Proteins
Michigan Postbaccalaureate Research Education Program (Michigan PREP) – NIH R25

Publications:

Keegstra K., Bauerle C., Friedman A., Lubben T., Olsen L., and Theg S. 1988. Transport of proteins into chloroplasts. In: *Applications of Molecular Biology in Bioenergetics of Photosynthesis*. eds. G. Singhal, J. Barber, R. Dilley, Govindjee, R. Haselkorn, and Mohanty. Narosa Publishing House. New Delhi. pp. 389-397.

Olsen L.J., Theg S.M., Selman B.R., and Keegstra K. 1989. ATP is required for the binding of precursor proteins to chloroplasts. *J. Biol. Chem.* 264:6724-6729.

Keegstra K., Olsen L.J., and Theg S.M. 1989. Chloroplastic precursors and their transport across the envelope membranes. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 40:471-501.

Theg S.M., Bauerle C., Olsen L.J., Selman B.R., and Keegstra K. 1989. Internal ATP is the only energy requirement for the translocation of precursor proteins across chloroplastic membranes. *J. Biol. Chem.* 264:6730-6736.

Olsen L.J. and Harada J.J. 1991. Biogenesis of Peroxisomes in Higher Plants. In: *Molecular Approaches to Compartmentation and Metabolic Regulation*. eds. A.H.C. Huang, L. Taiz. American Society of Plant Physiologists. Rockville, MD. pp. 129-137.

Olsen L.J. and Keegstra K. 1992. The binding of precursor proteins to chloroplasts requires nucleoside triphosphates in the intermembrane space. *J. Biol. Chem.* 267:433-439.

Olsen L.J., Ettinger W.F., Damsz B., Matsudaira K., Webb M.A., and Harada J.J. 1993. Targeting of glyoxysomal proteins to peroxisomes in leaves and roots of a higher plant. *Plant Cell* 5:941-952.

Olsen L.J., and Harada J.J. 1995. Peroxisomes and their assembly in higher plants. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* 46:123-146.

Brickner D.G., Harada J.J., and Olsen L.J. 1997. Protein transport into higher plant peroxisomes: In vitro assay provides evidence for receptor involvement. *Plant Physiol.* 113:1213-1221.

Brickner D.G., and Olsen L.J. 1998. Nucleotide triphosphates are required for the transport of glycolate oxidase into peroxisomes. *Plant Physiol.* 116:309-317.

Crookes W.J., and Olsen L.J. 1998. The effects of chaperones and the influence of protein assembly on peroxisomal protein import. *J. Biol. Chem.* 273:17236-17242.

Liepman A.H., and Olsen L.J. 1998. Sequence analysis of a cDNA encoding alanine:glyoxylate aminotransferase from *Arabidopsis thaliana* (Accession No. AF063901). *Plant Physiol.* 117:1125.

Olsen L.J. 1998. The surprising complexity of peroxisome biogenesis. *Plant Molecular Biology* 38(1-2):163-189. Invited, refereed review for special issue of *Plant Molecular Biology*.

Brickner D.G., Brickner, J.H., and Olsen L.J. 1998. Sequence analysis of a cDNA encoding Pex5p, a peroxisomal targeting signal type 1 receptor from *Arabidopsis thaliana*. (Accession No. AF07843). *Plant Physiol.* 118:330.

- Crookes W.J., and Olsen L.J. 1999. Peroxin puzzles and folded freight: peroxisomal protein import in review. *Naturwissenschaften* 86(2):51-61. Invited, refereed review
- Pratt W.B., Krishna P., and Olsen L.J. 2001. Hsp90-binding immunophilins in plants: the protein movers. *Trends Plant Sci.* 6(2):54-58.
- Liepman A.H., and Olsen L.J. 2001. Peroxisomal alanine:glyoxylate aminotransferase (AGT1) is a photorespiratory enzyme with multiple substrates in *Arabidopsis thaliana*. *Plant J.* 25(5):487-498
- Johnson T.L., and Olsen L.J. 2001. Building new models for peroxisome biogenesis. *Plant Physiol.* 127:731-739
- Liepman A.H., and Olsen L.J. 2003. Alanine aminotransferase homologs catalyze the glutamate:glyoxylate aminotransferase (GGT) reaction in peroxisomes of *Arabidopsis thaliana*. *Plant Physiol.* 131:215-227.
- Johnson T.L., and Olsen L.J. 2003. Import of the peroxisomal targeting signal type 2 protein 3-ketoacyl-Coenzyme A thiolase into glyoxysomes. *Plant Physiol.* 133:1991-1999.
- Liepman A.H., and Olsen L.J. 2004. Genomic analysis of aminotransferases in *Arabidopsis thaliana*. *Critical Reviews in Plant Sciences.* 23(1):73-89.
- Goyer A., Johnson T.L., Olsen L.J., Collakova E., Shachar-Hill Y., Rhodes D., and Hanson A.D. 2004. Characterization and metabolic function of a peroxisomal sarcosine and pipecolate oxidase from *Arabidopsis*. *J. Biol. Chem.* 279:16947-16953.
- Harrison-Lowe, N.J., and Olsen L.J. 2005. Isolation of Plant Glyoxysomes. In *Current Protocols in Cell Biology, Chapter 3 – Subcellular Fractionation*. Edited by J.S. Bonifacino, J. Lippincott-Schwartz, M. Dasso, J. Harford, and K. Yamada. 3.19.1-3.19.8
- Bassham, D.C., Laporte, M., Marty, F., Moriyasu, Y., Ohsumi, Y., Olsen, L.J., and Yoshimoto, K. 2006. Autophagy in development and stress responses of plants. *Autophagy* 2:2-11.
- Klionsky, DJ, *et al.* 2008. Guidelines for the use and interpretation of assays for monitoring autophagy in higher eukaryotes. *Autophagy* 4:151-175.
- Harrison-Lowe, N.J., and Olsen, L.J. 2008. Autophagy protein 6 (ATG6) is required for pollen germination in *Arabidopsis thaliana*. *Autophagy*, 4:339-348.
- Reumann, S., Quan, S., Aung, K., Yang, P., Manandhar-Shrestha, K., Holbrook, D., Linka, N., Switzenberg, R., Wilkerson, C., Weber, A.P.M., Olsen, L.J., and Hu, J. 2009. In-depth proteome analysis of *Arabidopsis* leaf peroxisomes combined with *in vivo* subcellular targeting verification indicates novel metabolic and regulatory functions of peroxisomes. *Plant Physiology*, 150:125-143.
- Widhalm, J.R., Ducluzeau, A.-L., Buller, N.E., Elowsky, C.G., Olsen, L.J., and Basset, G.J.C. Phylloquinone (vitamin K₁) biosynthesis in plants: two peroxisomal thioesterases of lactobacillales origin participate in the hydrolysis of 1,4-dihydroxy-2-naphthoyl-CoA in peroxisomes. (re-submitted to *Plant J.*)

Harrison-Lowe, N.J., Reumann, S., and Olsen, L.J. SAPP1 is a senescence-associated peroxisomal protein with a novel peroxisomal targeting signal (PTS1). (manuscript in preparation)

Other:

Interview and picture of me included in article: Reaching Gender Equity in Science: The importance of role models and mentors. By Laura Bonetta; *Science* 327: 889-895 (issue of February 12, 2010)