

## **Curriculum Vitae, updated April 2008**

### **Georg Jander**

Assistant Scientist  
Boyce Thompson Institute for Plant Research  
1 Tower Road  
Ithaca, NY 14850

gj32@cornell.edu  
607-254-1365 (Phone)  
607-254-2958 (Fax)

### **Education and Professional History**

1987	B.S., Computer Science, Washington University in St. Louis
1995	Ph.D., Microbiology and Molecular Genetics, Harvard University Thesis Title: Genetic studies on protein folding and protein secretion in <i>Escherichia coli</i> Advisor: Jon Beckwith
1996-1998	Postdoctoral Assistant, Massachusetts General Hospital Research Topic: Plant-insect interactions Advisor: Fred Ausubel
1998-2002	Scientist, Cereon Genomics, Cambridge, MA
2002-present	Assistant Scientist, Boyce Thompson Institute for Plant Research
2004-present	Adjunct Assistant Professor, Plant Biology, Cornell University

### **Publications**

- N. Agerbirk, M. de Vos, J. H. Kim, and G. Jander (2008) Indole glucosinolate breakdown and its biological effects, *Phytochemistry Reviews*, in press.
- J. H. Kim, B. W. Lee, F. Schroeder, and G. Jander (2008) Diindolylmethylcysteine and other indole glucosinolate breakdown products deter aphid feeding on *Arabidopsis thaliana*, *Plant Journal*, epub ahead of print.
- M. de Vos, K. Kriksunov, and G. Jander (2008) Indole-3-acetonitrile production in *Arabidopsis thaliana* deters oviposition by *Pieris rapae* (white cabbage butterfly), *Plant Physiology*, 146: 916-926.
- G. Jander, and G. Howe (2008) Plant interactions with arthropod herbivores: state of the field. *Plant Physiology*, 146: 801-803
- M. Lee, T. Huang, T. Toro-Ramos, M. Fraga, R. L. Last, and G. Jander (2008) Reduced activity of *Arabidopsis thaliana* HMT2, a methionine biosynthetic enzyme, increases seed methionine content, *Plant Journal*, 54: 310-320.
- G. Howe and G. Jander (2008) Plant immunity to insect herbivores, *Annual Review of Plant Biology*, 146: 801-803.
- J. H. Kim and G. Jander (2007) *Myzus persicae* (green peach aphid) feeding on *Arabidopsis* induces the formation of a deterrent indole glucosinolate, *Plant Journal*, 49:1008-1019.
- N. Salathia, H. N. Lee, T. A. Sangster, K. Morneau, C. R. Landry, K. Schellenberg, A.S. Behere, K. L. Gunderson, D. Cavalieri, G. Jander, and C. Queitsch (2007) The *Arabidopsis* indel array: an affordable alternative for genotyping, *Plant Journal*, 51:727-737.
- D. J. Kliebenstein, J. C. D'Auria, A. S. Behere, J. H. Kim, K. L. Gunderson, J. N. Breen, G. Lee, J. Gershenzon, R. L. Last, and G. Jander (2007) Characterization of seed-specific

- benzoyloxyglucosinolate mutations in *Arabidopsis thaliana*, *Plant Journal*, 51:1062-1076.
- C. Bertin, L. A. Weston, T. Huang, G. Jander, T. Owens, J. Meinwald, and F. C. Schroeder (2007) Grass roots chemistry: *meta*-tyrosine, an herbicidal non-protein amino acid, *Proceedings of the National Academy of Sciences of the USA*, 43:16964-16969.
- J. S. Ramsey, A. C. C. Wilson, M. de Vos, Q. Sun, C. Tamborindeguy, A. Winfield, G. Malloch, D. M. Smith, B. Fenton, S. M. Gray, and G. Jander (2007) Genomic resources for *Myzus persicae*: EST sequencing, SNP identification, and microarray design, *BMC Genomics*, 8:423.
- G. Jander and C. Barth (2007) Tandem gene arrays: a challenge for functional genomics, *Trends in Plant Science*, 12:203-210.
- B. L. J. Ellerbrock, J. H. Kim, and G. Jander (2007) Contribution of glucosinolate transport to *Arabidopsis* defense responses, *Plant Signaling and Behavior*, 2:282-283.
- M. de Vos, J. H. Kim, and G. Jander (2007) Biochemistry and molecular biology of *Arabidopsis*-aphid interactions, *BioEssays*, 29:871-883.
- M. de Vos, V. R. van Oosten, G. Jander, M. Dicke, and C. M. J. Pieterse (2007) Plants under attack: multiple interactions with insects and microbes, *Plant Signaling and Behavior*, 2:527-529.
- C. Barth and G. Jander (2006), *Arabidopsis* myrosinases TGG1 and TGG2 have redundant function in glucosinolate breakdown and insect defense, *Plant Journal* 46:549-562.
- V. Joshi, K. M. Laubengayer, N. Schauer, A. D. Fernie, and G. Jander (2006) Two *Arabidopsis* threonine aldolases are non-redundant and compete with threonine deaminase for a common substrate pool, *Plant Cell*, 18:3564-3575.
- G. Jander (2006) Gene identification and cloning by molecular marker mapping. In *Arabidopsis Protocols*, 2<sup>nd</sup> edition, J. Sanchez-Serrano, ed., Humana Press, Totowa, NJ.
- J. Bush, G. Jander, and F. M. Ausubel (2006) Prevention and Control of Pests and Diseases in *Arabidopsis*. In *Arabidopsis Protocols*, 2<sup>nd</sup> edition, J. Sanchez-Serrano, ed., Humana Press, Totowa, NJ.
- G. Jander, S. R. Norris, V. Joshi, M. Fraga, A. Rugg, S. Yu, L. Li, and R. L. Last (2004) Application of a high-throughput HPLC-MS/MS assay to *Arabidopsis* mutant screening; evidence that threonine aldolase plays a role in seed nutritional quality, *Plant Journal*, 39:465-475.
- J. H. Kim, T. P. Durrett, R. L. Last, and G. Jander (2004) Characterization of the *Arabidopsis* TU8 glucosinolate mutation, an allele of *TERMINAL FLOWER2*. *Plant Molecular Biology*, 54:671-682.
- G. Jander, S. Baerson, J. A. Hudak, K. A. Gonzalez, K. J. Gruys, and R. L. Last (2003) Ethylmethanesulfonate saturation mutagenesis in *Arabidopsis* to determine frequency of herbicide resistance, *Plant Physiology*, 131:139-146.
- J. Cui, G. Jander, L. R. Racki, P. D. Kim, F. M. Ausubel, and N. Pierce (2002) Signals involved in *Arabidopsis* resistance to *Trichoplusia ni* caterpillars induced by virulent and avirulent strains of the phytopathogen *Pseudomonas syringae*, *Plant Physiology*, 129:551-564.
- G. Jander, S. R. Norris, S. D. Rounsley, D. F. Bush, I. M. Levin, and R. L. Last (2002) *Arabidopsis* map-based cloning in the post-genome era, *Plant Physiology*, 129:440-450.

- G. Jander, J. Cui, B. Nhan, N. Pierce, and F. M. Ausubel (2001) The *TASTY* locus on chromosome 1 of *Arabidopsis thaliana* affects feeding of the insect herbivore *Trichoplusia ni*, *Plant Physiology*, 126: 890-898.
- G. Jander, L. G. Rahme, and F. M. Ausubel (2000) Positive correlation between virulence of *Pseudomonas aeruginosa* mutants in mice and insects, *Journal of Bacteriology*, 182:3843-3845.
- G. Jander, J. E. Cronin, and J. Beckwith (1996) Biotinylation *in vivo* as a sensitive indicator of protein secretion and membrane protein insertion, *Journal of Bacteriology*, 178:3049-3058.
- C. Guilhot, G. Jander, N. L. Martin, and J. Beckwith (1995) Evidence that the pathway of disulfide bond formation in *Escherichia coli* involves interactions between cysteines of DsbA and DsbB, *Proceedings of the National Academy of Sciences of the USA*, 92:9895-9899.
- G. Jander, N. L. Martin, and J. Beckwith (1994) Two cysteines in each periplasmic domain of the membrane protein DsbB are required for its function in protein disulfide bond formation, *EMBO Journal*, 13:5121-5127.
- J. C. A. Bardwell, J. O. Lee, G. Jander, N. L. Martin, D. Belin, and J. Beckwith (1993) Pathways of disulfide bond formation of proteins *in vivo*, *In Molecular Biology of Phosphate in Microorganisms*, A.M. Torriani, S. Silver, and E. Yagil, eds.
- D. Boyd, B. Traxler, G. Jander, W. Prinz, and J. Beckwith (1993) Gene fusion approaches to membrane protein topology, *Society of General Physiologists Series*, 48:22-37.
- J. C. Bardwell, J. O. Lee, G. Jander, N. Martin, D. Belin, and J. Beckwith (1993) A pathway for disulfide bond formation *in vivo*, *Proceedings of the National Academy of Sciences of the USA*, 90:1038-1042.
- V. J. DiRita, C. Parsot, G. Jander, and J. J. Mekalanos (1991) Regulatory cascade controls virulence in *Vibrio cholerae*, *Proceedings of the National Academy of Sciences of the USA*, 88:5403-5407.
- V. Braun, B. Neuss, Y. Ruan, E. Schiebel, H. Schoeffler, and G. Jander (1987) Identification of the *Serratia marcescens* hemolysin determinant by cloning into *Escherichia coli*, *Journal of Bacteriology*, 169:2113-2120.

## **Invited Seminars and Meeting Presentations, since 2002**

### **Seminars at universities, companies, and institutes**

“Arabidopsis-aphid interactions,” Haskell Indian Nations University, Lawrence, KS, January 16, 2008.

“Identification of aphid-deterrent secondary metabolites in *Arabidopsis thaliana*,” Michigan State University, East Lansing, MI, November 12, 2007.

“Identification of aphid-deterrent secondary metabolites in *Arabidopsis thaliana*,” Texas Tech University, Lubbock, TX, September 19, 2007.

“New insights into essential amino acid biosynthesis in Arabidopsis,” Pennsylvania State University, State College, PA, April 20, 2007.

“Dynamic plant responses to aphid infestation,” Haskell Indian Nations University, Lawrence, KS, January 17, 2007.

“Even aphids can’t avoid the mustard oil bomb,” Ithaca College, Ithaca, NY, October 26, 2006.

”Functional analysis of Arabidopsis threonine aldolases,” Max Planck Institute for Molecular Plant Physiology, Golm, Germany, September 6, 2006.

“Manipulation of metabolic pathways to increase seed threonine and methionine levels,” Monsanto Company, St. Louis, MO, April 19, 2006.

“How aphids avoid the mustard oil bomb,” University of Kansas, Lawrence, KS, March 17, 2005.

“Arabidopsis mutants with altered amino acid metabolism,” Max Planck Institute for Chemical Ecology, Jena, Germany, July 15, 2004.

“Arabidopsis-aphid interactions,” University of Arizona, Tucson, AZ, May 3, 2004.

“Aspartate-derived amino acid biosynthesis,” Rutgers University, New Brunswick, NJ, February 27, 2004.

“Arabidopsis-aphid interactions,” Department of Entomology, Cornell University, Geneva, NY, January 22, 2004.

“Arabidopsis-aphid interactions,” Department of Plant Biology, Cornell University, Ithaca, NY, November 14, 2003.

“Aspartate-derived amino acid biosynthesis,” Department of Plant Breeding, Cornell University, Ithaca, NY, November 11, 2003.

“Arabidopsis-aphid interactions,” Department of Plant Pathology, Cornell University, Ithaca, NY, August 10, 2003.

#### **Meeting presentations**

“Genomics tools for non-model organisms,” USDA Principal Investigator Meeting, San Diego, CA, December 9, 2007.

“Microarray Analysis of Agriculturally Relevant Gene Expression in the Peach-Potato Aphid (*Myzus persicae*),” USDA Principal Investigator Meeting, Tucson, AZ, May 19, 2006.

“The role of indole glucosinolates in Arabidopsis-aphid interactions,” International Glucosinolate Meeting, Jena, Germany, September 13, 2006.

“Glucosinolate breakdown during Arabidopsis-aphid interactions,” American Chemical Society Annual Meeting, Atlanta, GA, March 30, 2006.

“Glucosinolate and myrosinase effects on aphid feeding,” New England Arabidopsis Meeting, Cambridge, MA, February 2, 2005.

“Glucosinolate and myrosinase effects on insect feeding,” Entomological Society of America annual meeting, Salt Lake City, UT, November 15, 2004.

“Arabidopsis-aphid interactions,” International Aphid Genomics Meeting, Paris, July 1, 2003.

#### **Informal meetings and university presentations**

“Identification of aphid-deterrent secondary metabolites in *Arabidopsis thaliana*,” Ithaca Arabidopsis Meeting, Ithaca, NY, March 4, 2008.

“Arabidopsis-aphid interactions,” Penn State chemical ecology meeting, State College, PA, May 4, 2007.

“The role of indole glucosinolates in Arabidopsis-aphid interactions,” Chemistry and Chemical Biology Seminar, Cornell University, Ithaca, NY, October 10, 2006.

“The role of Arabidopsis glucosinolates in aphid defense,” Ithaca Arabidopsis Meeting, Ithaca, NY, January 9, 2006.

“Threonine aldolase, a previously uninvestigated component of plant amino acid metabolism,” University of Nebraska, Lincoln, NE, July 1, 2005.

“Arabidopsis-aphid interactions,” Kansas State University, Manhattan, KS, November 25, 2003.

“Arabidopsis-aphid interactions,” Kansas State University, Manhattan, KS, June 28, 2005.

## **Poster Presentations, since 2002**

### **Posters presented by me at meetings**

J. H. Kim and G. Jander, “Responses to aphid feeding in the Landsberg *erecta* and Columbia Arabidopsis ecotypes,” U. Mass. Amherst Plant Biology Symposium, Amherst, MA October 4, 2003.

V. Joshi and G. Jander, “Threonine aldolase, a previously uninvestigated component of plant amino acid metabolism,” 15<sup>th</sup> International Conference on Arabidopsis Research, Berlin, Germany July 11-14, 2004.

C. Barth and G. Jander, “Arabidopsis myrosinases TGG1 and TGG2 have redundant function in glucosinolate breakdown and insect defense,” U. Mass. Amherst Plant Biology Symposium, Amherst, MA October 4, 2005.

V. Joshi and G. Jander, “Threonine aldolase, a previously uninvestigated component of plant amino acid metabolism,” Plant Metabolic Engineering Gordon Conference, Tilton, NH July 10-15, 2005.

J. H. Kim, C. Barth, and G. Jander, “Identification of aphid-repellent indole glucosinolate breakdown products,” Molecular Insect Science meeting, Tucson, AZ May 20-24, 2006.

J. H. Kim and G. Jander, “Identification of aphid-repellent indole glucosinolate breakdown products,” ASPB Annual Meeting, Boston, MA August 5-9, 2006.

J. H. Kim, C. Barth, and G. Jander, “Identification of aphid-deterrent indole glucosinolate breakdown products,” U. Mass. Amherst Plant Biology Symposium, Amherst, MA October 14, 2006.

D. J. Kliebenstein, J. C. D’Auria, A. S. Behere, J. Kim, K. L. Gunderson, J. N. Breen, G. Lee, J. Gershenzon, R. L. Last, and G. Jander, “Identification of a plant benzoyl-CoA ligase involved in benzoyloxyglucosinolate biosynthesis,” Penn State Chemical Ecology meeting, State College, PA May 4, 2007.

J. H. Kim, M. de Vos, and G. Jander, “Indole glucosinolates play a central role in Arabidopsis-aphid interactions,” ASPB Annual Meeting, Chicago, IL July 7-11, 2007.

Tengfang Huang, Frank Schroeder, and Georg Jander, “*m*-Tyrosine, an allelopathic compound produced by fescue, inhibits amino acid metabolism”, Fifth Annual Symposium in Plant Biology – Plant Biology and Bioenergy, U. Mass. Amherst, Amherst MA October 13, 2007.

### Posters presented by others, with me as a co-author

- J. H. Kim and G. Jander, "Induction of Arabidopsis glucosinolates by *Myzus persicae* (green peach aphid) feeding," 14<sup>th</sup> International Conference on Arabidopsis Research, Madison, WI June 20-24, 2003.
- C. Barth and G. Jander, "Understanding the molecular mechanism of the glucosinolate-myrosinase system in plant-aphid interactions," 15<sup>th</sup> International Conference on Arabidopsis Research, Berlin, Germany July 11-14, 2004.
- D. Ruezinsky, G. Jander, C. Weigel, C. Hewitt, R. L. Last, and K. Bennett, "Identification of Arabidopsis seed color mutants with altered oil content," 15<sup>th</sup> International Conference on Arabidopsis Research, Berlin, Germany July 11-14, 2004.
- V. Joshi and G. Jander, "Threonine aldolase, a previously uninvestigated component of plant amino acid metabolism" ASPB Annual Meeting, Lake Buena Vista, FL July 24-28, 2004.
- J. H. Kim and G. Jander, "Induction of Arabidopsis glucosinolates by *Myzus persicae* (green peach aphid) feeding" Entomological Society of America annual meeting, Salt Lake City, UT November 14-17, 2004.
- V. Joshi and G. Jander, "Threonine aldolase: Exploring a new pathway of plant amino acid metabolism," U. Mass. Amherst Plant Biology Symposium, Amherst, MA October 4, 2005.
- T. Toro-Ramos, M. Lee, and G. Jander, "The role of homocysteine methyltransferase and methionine methyltransferase in methionine synthesis and transport," Annual Biomedical Research Conference for Minority Students, Atlanta, GA November 3-5, 2005.
- C. Bertin, F. C. Schroeder, L. A. Weston, and G. Jander, "Towards Elucidation of the in planta Mode of Action of m-Tyrosine, a Phytotoxin Isolated from Fine Leaf Fescue," Plant Genomics Workshop, Ottawa, Canada June 19-22, 2006.
- M. de Vos, J. S. Ramsey, and G. Jander, "Identification of secreted salivary proteins from the green peach aphid (*Myzus persicae*) and their possible role in suppression of host defenses," ASPB Annual Meeting, Boston, MA August 5-9, 2006.
- N. Salathia, K. Morneau, H. Lee, T. Sangster, C. Landry, G. Jander, and C. Queitsch, "Oligonucleotide Arrays for Rapid Genotyping of Arabidopsis populations," ASPB Annual Meeting, Boston, MA August 5-9, 2006.
- T. Huang, C. Bertin, F. Schroeder, L. A. Weston, and G. Jander, "Allelopathic potential of fine leaf fescue: towards the elucidation of the mode of action of *m*-tyrosine *in planta*," ASPB Annual Meeting, Boston, MA August 5-9, 2006.
- E. Fox and G. Jander, "The Plant Genome Research Program: ethics and the undergraduate researcher," REU project leader meeting, Washington, DC February 2007.
- K. Kriksunov, M. de Vos, and G. Jander, "Indole glucosinolate breakdown products in *Arabidopsis thaliana* differentially regulate oviposition by *Pieris rapae*," Penn State Chemical Ecology Meeting, State College, PA May 4, 2007.
- J. H. Kim, and G. Jander, "Identification of a novel aphid-repellent indole glucosinolate breakdown product," Penn State Chemical Ecology Meeting, State College, PA May 4, 2007.

J. S. Ramsey, M. de Vos, C. Tamborindeguy, and G. Jander, "Response of the green peach aphid (*Myzus persicae*) to plant defenses: cDNA library construction, SNP identification, and microarray design," Penn State Chemical Ecology Meeting, State College, PA May 4, 2007.

Ksenia Kriksunov, Martin de Vos, and Georg Jander, "Indole glucosinolate breakdown products differentially regulate *Pieris rapae* oviposition," Joint international workshop on: PR-proteins and induced resistance against pathogens and insects, Doorn, Netherlands May 12, 2007.

V. Joshi and G. Jander, "Arabidopsis threonine aldolases are non-redundant and compete with threonine deaminase for threonine," Plant Metabolic Engineering Gordon Conference, Tilton, NH July 15-20, 2007.

T. Huang, F. C. Schroeder, and G. Jander, "When arabidopsis meets fescue: allelopathic potential of a non-protein amino acid," ASPB Annual Meeting, Chicago, IL July 7-11, 2007.

L. Rehak, and G. Jander, "Biosynthesis of *m*-tyrosine in fescue," ASPB Annual Meeting, Chicago, IL July 7-11, 2007.

Jae Hak Kim, and Georg Jander, "A defensive role of indole glucosinolates in *Arabidopsis thaliana* against *Myzus persicae*," Fifth Annual Symposium in Plant Biology – Plant Biology and Bioenergy, U. Mass. Amherst, Amherst MA October 13, 2007.

Martin de Vos and Georg Jander, "Interaction between *Arabidopsis* and *Myzus persicae*: host responses to aphid saliva," Fifth Annual Symposium in Plant Biology – Plant Biology and Bioenergy, U. Mass. Amherst, Amherst MA October 13, 2007.

Minsang Lee and Georg Jander, "Reduced activity of *Arabidopsis thaliana* HMT2, a methionine biosynthetic enzyme, increases seed methionine content," Fifth Annual Symposium in Plant Biology – Plant Biology and Bioenergy, U. Mass. Amherst, Amherst MA October 13, 2007.

Vijay Joshi and Georg Jander, "Functionally non-redundant *Arabidopsis* threonine aldolases contribute to threonine catabolism," Fifth Annual Symposium in Plant Biology – Plant Biology and Bioenergy, U. Mass. Amherst, Amherst MA October 13, 2007.

## **Current Grant Support**

**NSF MCB-0416567** "Threonine and methionine metabolism in *Arabidopsis*"

**USDA-NRI 2005-35604-15446** "Microarray analysis of agriculturally relevant gene expression in the peach-potato aphid, *Myzus persicae*"

**NSF DBI-0500550** "Multi-user equipment: A gas chromatograph – mass spectrometer for measurement of plant metabolites"

**BARD US-3910-06** "Genetic, genomic and biochemical analysis of *Arabidopsis* threonine aldolase and associated molecular and metabolic networks"

**NSF IOS-0718733** "Dynamic plant responses to aphid infestation"

**DARPA W31P4Q-08-1-0004** "Methods for extracting electrical energy from living plants"

**NSF IOS-0718733** "Towards the functional identification of strictosidine synthase-like genes in *Arabidopsis*"

**NSF DBI-0453331** "REU site: plant genome research"

## **Prior Grant Support**

NSF OISE-0436554 “Analysis of glucosinolate breakdown products and aphid defense in *Arabidopsis thaliana*”

NSF MCB-031347 “Array-based genotyping: an affordable approach”

## **External funding obtained by lab members**

- 2005 Carina Barth, ASPB travel grant to attend the annual meeting in Seattle
- 2006 Martin de Vos, NWO Talent Stipendium, postdoc fellowship
- 2006 John Ramsey, Chemistry-Biology Interface NIH training grant, Ph.D. fellowship
- 2006 Ludmila Rehak, American Society for Plant Biologists, SURF fellowship
- 2007 Ludmila Rehak, Weed Science Society of America, undergraduate research fellowship
- 2007 Tengfang Huang, Arabidopsis 2010 travel grant for research in Germany
- 2008 Martin de Vos, ASPB travel grant to attend the annual meeting in Merida

## **Lab members, past and present**

**Postdocs (8):** Carina Barth, Aditi Behere, Cécile Bertin, Martin De Vos, Jae Hak Kim, Vijay Joshi, Minsang Lee, and Jennifer Wong-Deyrup

**Graduate Students (2):** Tengfang Huang and John Ramsey (both Plant Biology)

**Rotation Students (2):** Robert Bode and Yi Wang (both Plant Biology)

**Undergraduates (13):** Tatum Davis (Haskell Indian Nations University), Bryan Ellerbrock (Cornell), Jianyuan Hua (Cornell), Amanda Koszewski (Cornell), Karen Laubengayer (Heidelberg College), Bari Morris (Cornell), Ludmila Rehak (Cornell), Brandon Smetana (Cornell), Joel Sun (Cornell), Tatiana Toro-Ramos (University of Puerto Rico, Mayaguez), Kaitlyn van Arsdell (Cornell), Alyssa Whu (Cornell), and Nicole Yu (Loyola Marymount University)

**High School Students (7):** Sarah Cohen, Bryan Ellerbrock, Nedjie Exantus, Lydia Hoffstaetter, Ksenia Kriksunov, and Teresa Rojas (all Ithaca High School), and Kim Hall (Trumansburg High School)

## **Teaching**

2006-2008, BioEE369, Chemical Ecology, six lectures each year

2005-2006, BioPI641, plant molecular biology lab class, four sessions each year

2004-2008, BioPB606, Advanced Plant Genetics, guest lecturer

2006-2007, BioPI741, graduate student literature seminar, one session each year

2007-2008, BioPI744, graduate student research seminar, co-organizer, with Wojtek Pawlowski

2004-2008, BioEE754, plant-herbivore interactions seminar, participant

## **Scientific Service Activities**

2005-present, Monitoring Editor, *Plant Physiology*

2004, 2005, 2006, 2007, NSF panel member

2007, USDA panel member

2007-present, Organizing Committee for ASPB annual meetings

2008, co-editor, with Gregg Howe, for a “Plant-Arthropod Interactions” special issue of *Plant Physiology*

2002-present, *ad hoc* grant reviewer for: NSF, USDA, BARD, NWO (Netherlands), ISF (Israel), Genoplante (France), BBSRC (Britain)

2002-present, *ad hoc* manuscript reviewer for: *Basic and Applied Ecology*, *Bulletin of Entomological Research*, *Canadian Journal of Botany*, *Current Biology*, *Ecology Letters*, *Genetics*, *Genome Research*, *Insect Biochemistry and Molecular Biology*, *Insect Molecular Biology*, *Molecular Ecology*, *Journal of Biochemical and Biophysical Methods*, *Journal of Chemical Ecology*, *New Phytologist*, *Nucleic Acids Research*, *Phytochemistry Reviews*, *Plant Cell*, *Plant Cell and Environment*, *Plant Journal*, *Plant Methods*, *Plant Physiology*, *Plant Science*, *Plant Signaling and Behavior*, *Planta*, *Proceedings of the National Academy of Sciences of the USA*, and *Trends in Plant Science*

### **Society Memberships**

American Association for the Advancement of Science

American Society of Plant Biologists

International Society of Chemical Ecology