

Curriculum Vitae

Personal Data

Name: Kent D. Chapman

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Address: Department of Biological Sciences
Division of Biochemistry and Molecular Biology,
University of North Texas
PO Box 305220
Denton, TX 76203-5220

Formal Education

1983-1986 Lycoming College, Williamsport, PA, A.B. (Biology)

1986-1991 Arizona State University, Tempe, AZ, Ph.D. (Botany), Dissertation Title: "The Cellular Origin of Membrane Lipids for Enlarging Cottonseed Glyoxysomes", Supervisory Professor: Dr. Richard N. Trelease

Professional Experience

1986-1991 Graduate Research or Teaching Assistant/Associate Arizona State University, Tempe

1989-1990 Summer Instructor, Biology for Majors, Arizona State University, Tempe

1991-1993 Postdoctoral Fellow, National Science Foundation Postdoctoral Fellowship in Plant Biology, Louisiana State University, Baton Rouge, LA, Advising Professor: Dr. Thomas S. Moore, Jr. Project Title: "Biosynthesis of *N*-Acylphosphatidyl-ethanolamine"

1993-1998 Assistant Professor of Biochemistry, Department of Biological Sciences, Division of Biochemistry and Molecular Biology, University of North Texas, Denton, TX 76203

1998-2003 Associate Professor of Biochemistry, Department of Biological Sciences, Division of Biochemistry and Molecular Biology, University of North Texas, Denton, TX 76203

2003-present Professor of Biochemistry, Department of Biological Sciences, Division of Biochemistry and Molecular Biology, University of North Texas, Denton, TX 76203

1999-2003 Director, Biochemistry and Molecular Biology Division, Department of Biological Sciences, University of North Texas, Denton, TX 76203

2003-present Director, Center for Plant Lipid Research, College of Arts and Sciences, University of North Texas, Denton, TX 76203

2001-2002 Visiting Scientist, Plant Biology Division, Samuel R. Noble Foundation, Ardmore, OK 73402. Sabbatical/ Developmental Leave- Laboratory of Dr. Richard A. Dixon Honorary Societies

Honorary Societies and Scientific Memberships

- Beta Beta Beta National Biology Society
- Phi Sigma Tau National Philosophy Society
- Phi Kappa Phi National Honor Society
- Society for Sigma Xi
- American Society for Biochemistry and Molecular Biology
- American Oil Chemists Society
- American Society of Plant Biologists (formerly American Society of Plant Physiologists)
- American Association for the Advancement of Science
- National Plant Lipid Cooperative

Refereed Journal Articles

1. **Chapman, K.D.**, Turley, R.B., Trelease, R.N. 1989. Relationship between cottonseed malate synthase aggregation behavior and suborganellar location in glyoxysomes and endoplasmic reticulum. *Plant Physiol.* 89(1): 352-359.
2. **Chapman, K.D.** and Trelease, R.N. 1990. Inhibition of cottonseed choline- and ethanolaminephosphotransferases by calcium during postgerminative growth. *Plant Physiol.* 93(4): 1525-1529.
3. **Chapman, K.D.** and Trelease, R.N. 1991. Intracellular localization of phosphatidylcholine and phosphatidylethanolamine synthesis in cotyledons of cotton seedlings. *Plant Physiol.* 95(1): 69-76.
4. **Chapman, K.D.** and Trelease, R.N. 1991. Acquisition of membrane lipids by differentiating glyoxysomes-- role of lipid bodies. *J. Cell Biol.* 115(4): 995-1007.
5. **Chapman, K.D.** and Trelease, R.N. 1992. Characterization of the membrane proteins of enlarging cottonseed glyoxysomes. *Plant Physiol. and Biochem.* 30 (1): 1-10.
6. **Chapman, K.D.** and Moore, T.S., Jr. 1993. *N*-acylphosphatidylethanolamine synthesis in plants: occurrence, molecular composition, and phospholipid origin. *Arch. Biochem. Biophys.* 301: 21-33.
7. **Chapman, K.D.** and Moore, T.S., Jr. 1993. Catalytic properties of a newly-discovered acyltransferase that synthesizes *N*-acylphosphatidylethanolamine in cottonseed (*Gossypium hirsutum* L.) microsomes. *Plant Physiol.* 102(3): 761-769.
8. **Chapman, K.D.** and Moore, T.S., Jr. 1994. Isozymes of cottonseed microsomal *N*-acylphosphatidylethanolamine synthase: Detergent solubilization and electrophoretic separation of active enzymes with different properties. *Biochim. Biophys. Acta*, 1211: 29-36.
9. Cai, S.J., McAndrew, R.S., Leonard, B.P., **Chapman, K.D.**, and Pidgeon, C. 1995. Rapid purification of cotton seed membrane-bound *N*-acylphosphatidylethanolamine synthase by Immobilized Artificial Membrane (IAM) chromatography. *J. Chromatography A*, 696: 49-62.
10. McAndrew, R.S., Leonard, B.P., and **Chapman, K.D.** 1995. Photoaffinity labeling of cottonseed microsomal *N*-acylphosphatidylethanolamine synthase protein with

- a substrate analogue, 12-[(4-azidosalicyl)amino]dodecanoic acid. *Biochim. Biophys. Acta*, 1256: 310-318.
11. **Chapman, K.D.**, Lin, I., and Desouza, A.D. 1995. Metabolism of cottonseed microsomal *N*-acylphosphatidylethanolamine. *Arch. Biochem. Biophys.*, 318: 401-407.
 12. Maier, C.G.-A., **Chapman, K.D.**, and Smith, D.W. 1995. Estrogenic activity of female plant extracts from two dioecious species. *Plant Science*, 109: 31-43.
 13. **Chapman, K.D.**, Jackson, A.C., Moreau, R.A., and Tripathy, S. 1995. Increased *N*-acylphosphatidylethanolamine biosynthesis in elicitor-treated tobacco cells. *Physiologia Plantarum*, 95:120-126.
 14. Sandoval, J.A., Huang, Z-H., Garrett, D.C., Gage, D.A., and **Chapman, K.D.** 1995. *N*-Acylphosphatidylethanolamine in dry and imbibing cotton (*Gossypium hirsutum* L.) seeds: amounts, molecular species and enzymatic synthesis. *Plant Physiology*, 109: 269-275.
 15. **Chapman, K.D.** and Sprinkle, W.B. 1996. Developmental, tissue-specific, and environmental factors regulate the biosynthesis of *N*-acylphosphatidylethanolamine in cotton (*Gossypium hirsutum* L.). *Journal of Plant Physiology* 149: 277-284.
 16. **Chapman, K.D.**, McAndrew, R.S., and Huynh, T.T. 1997. Cottonseed calnexin: identification and isolation of a membrane-bound molecular chaperone. *Plant Physiology and Biochemistry* 35(6): 483-490.
 17. Maier, C.G.-A., **Chapman, K.D.**, and Smith, D.W. 1997. Phytoestrogens and floral development in dioecious *Maclura pomifera* (Raf.). *Plant Science* 130(1):27-40.
 18. **Chapman, K.D.**, and Sriparameswaran, A. 1997. Intracellular localization of *N*-acylphosphatidylethanolamine synthesis in cotyledons of cotton seedlings. *Plant and Cell Physiology*; 38(12): 1359-1367.
 19. Hemphill, J.K., Maier, C.G.A., **Chapman, K.D.** 1998. Rapid *in-vitro* plant regeneration of cotton (*Gossypium hirsutum* L.). *Plant Cell Reports*, 17(4): 273-279.
 20. McAndrew, R.S., and **Chapman, K.D.** 1998. Enzymology of cottonseed *N*-acylphosphatidylethanolamine synthase: kinetic properties and mechanism-based inactivation *Biochimica Biophysica Acta* 1390: 21-36.
 21. **Chapman, K.D.**, Tripathy, S., Venables, B.J., Desouza, A.D. 1998. *N*-Acylethanolamines: formation and molecular composition of a new class of plant lipids. *Plant Physiology*, 116: 1163-1168.
 22. Pappan, K., Austin-Brown, S., **Chapman, K.D.**, Wang, X. 1998. Substrate selectivities and lipid modulation of plant phospholipase Dalpha, beta, and gamma. *Arch. Biochem. Biophys.* 353: 131-140.
 23. **Chapman, K.D.** 1998. Phospholipase activity during plant growth and development and in response to environmental stress. *Trends in Plant Science*, 3(11): 419-426. (Review)
 24. Pirtle, R.M., Huynh, T.T., Yoder, D., Nampaisansuk, M., Pirtle, I., **Chapman, K.D.** (1999) Characterization of a palmitoyl-acyl carrier protein thioesterase (FatB1) in Cotton (*Gossypium hirsutum* L.). *Plant Cell Physiology* 40: 155-163.
 25. **Chapman, K.D.**, Venables, B., Markovic, R.M., Blair, R., Bettinger, C. (1999) *N*-Acylethanolamines in seeds: quantification of molecular species and their degradation upon imbibition. *Plant Physiology* 120: 1157-1164.

26. Hoang, C.V., Wessler, H.G., Local, A., Turley, R.B., Benjamin, R.C., **Chapman, K.D.** (1999) Identification and expression of cotton (*Gossypium hirsutum* L.) plastidial carbonic anhydrase. *Plant Cell Physiology* 40(12):
27. Yoder, D.W., Nampaisansuk, M., Pirtle, I. **Chapman, K.D.**, Pirtle R.M. (1999) Molecular cloning and nucleotide sequence of a gene encoding a cotton palmitoyl-acyl carrier protein thioesterase. *Biochimica et Biophysica Acta*, 1446: 403-413.
28. Tripathy, S., Venables, B., **Chapman, K.D.** (1999) *N*-Acylethanolamines in elicitor signal transduction: Attenuation of alkalization and activation of defense gene expression. *Plant Physiology* 121: 1299-1308.
29. Morefield, S.I., Keefer, E.W., **Chapman, K.D.**, Gross, G.W. (2000) Drug evaluations using neuronal networks on microelectrode arrays: characteristic effects of cannabinoid agonists anandamide and methandamide on cortical and spinal cultures. *Biosensors and Bioelectronics* 15:383-396.
30. Petersen, G., **Chapman, K.D.**, Hansen, H.S. (2000) A rapid phospholipase D assay using zirconium precipitation of anionic substrate phospholipids: application to *N*-acylethanolamine formation in vitro. *Journal of Lipid Research* 41(9): 1532-40.
31. **Chapman, K.D.** (2000) Emerging physiological roles for *N*-acylphosphatidylethanolamine metabolism in plants: membrane protection and signal transduction. *Chemistry and Physics of Lipids* 108: 221-230. (Review)
32. **Chapman, K.D.**, Austin-Brown, S. Sparace, S.A., Kinney, A.J., Ripp, K.G., Pirtle, I.L, Pirtle, R.M. (2001) Transgenic cotton plants with increased seed oleic acid content. *Journal of the American Oil Chemists' Society (JAOCS)* 78(9): 941-947.
33. Pirtle, I., Kongcharoensuntorn, W., Nampaisansuk, M., Knesek, J., Chapman K.D., Pirtle R.M. (2001) Molecular cloning and functional expression of the gene for a cotton delta-12 desaturase (FAD2) *Biochimica et Biophysica Acta* 1522(2): 122-129.
34. Huynh, T., Pirtle, R.M., **Chapman, K.D.** (2002) Expression of a *Gossypium hirsutum* cDNA encoding a FatB palmitoyl-acyl carrier protein thioesterase in *Eschericia coli*. *Plant Physiology and Biochemistry*, 40: 1-9.
35. Hoang C.V. and **Chapman, K.D.** (2002) Biochemical and molecular inhibition of plastidial carbonic anhydrase reduces the incorporation of acetate into lipids in cotton embryos and tobacco cell suspensions and leaves. *Plant Physiology* 128 (April): 1417-1427.
36. Hoang, C.V. and **Chapman, K.D.** (2002) Regulation of plastidial carbonic anhydrase gene expression in cotton (*Gossypium hirsutum*, L) seedlings during post-germinative growth. *Plant Molecular Biology* 49: 449-458.
37. Austin-Brown, S. and **Chapman, K.D.** (2002) Inhibition of phospholipase Dalpha by *N*-acylethanolamines. *Plant Physiology* 129: 1892-1898.
38. Shrestha, R., Noordemeer, M., Van der Stelt, M., Veldink, G.A., and **Chapman, K.D.** (2002) *N*-Acylethanolamines are metabolized by lipoxygenase and amidohydrolase in competing pathways during cotton (*Gossypium hirsutum*, L.) seed imbibition. *Plant Physiology* 130: 391-401.
39. **Chapman, K.D.**, Venables, B.J., Dian, E.E. and Gross, G.W. (2003) Identification and quantification of neuroactive *N*-acylethanolamines in cottonseed processing fractions. *Journal of the American Oil Chemists' Society (JAOCS)*, 80(3): 223-229.

40. Tripathy, S., Kleppinger-Sparace, K., Dixon, R.A., and **Chapman, K.D.** (2003) *N*-Acylethanolamine signaling in tobacco is mediated by a membrane-associated, high affinity binding protein. *Plant Physiology*, 131: 1781-1791.
41. Blancaflor, E.B., Hou, G., and **Chapman, K.D.** (2003) Elevated levels of *N*-lauroylethanolamine, an endogenous constituent of desiccated seeds, disrupt normal root development in *Arabidopsis thaliana* seedlings. *Planta*, 217: 206-217.
42. Shrestha, R., Dixon, R.A., **Chapman, K.D.** (2003) Molecular Identification of a Functional Homologue of the Mammalian Fatty Acid Amide Hydrolase in *Arabidopsis thaliana*. *Journal of Biological Chemistry* 278(37): 34990-34997.
43. **Chapman, K.D.** (2004) Occurrence, metabolism and prospective functions of *N*-acylethanolamines in plants. *Progress in Lipid Research* 43: 302-327.
44. Venables, B.J., Waggoner, C.A., **Chapman, K.D.** (2005) *N*-Acylethanolamines in Selected Legumes. *Phytochemistry* 66:1913-1918.
45. Motes, C.M., Pechter, P., Yoo, C.M., Wang, Y.S., **Chapman, K.D.**, Blancaflor, E.B (2005) Differential effects of two phospholipase D inhibitors, 1-butanol and *N*-acylethanolamine (NAE), on *in vivo* cytoskeletal organization and *Arabidopsis* seedling growth. *Protoplasma*, 226:109-123.
46. Wanjie, S.W., Welti, R., Moreau, R.A., **Chapman, K.D.** (2005) Identification and Quantification of Glycerolipids in Cotton Fibers: Reconciliation with Metabolic Pathway Predictions from DNA Databases. *Lipids*, 40(8):773-785.
47. Shrestha, R., Kim, S.-C., Dyer, J., Dixon, R.A., **Chapman, K.D.** (2006) Plant Fatty Acid (Ethanol) Amide Hydrolases. *Biochimica et Biophysica Acta (BBA)-Molecular and Cell Biology of Lipids*, 1761(3):324-334 and on-line-[doi:10.1016/j.bbalip.2006.03.004](https://doi.org/10.1016/j.bbalip.2006.03.004).
48. Wang Y-S, Shrestha, R., Wiant, W., Venables, B.J., **Chapman, K.D.**, Blancaflor, E.B. (2006) Manipulation of *Arabidopsis* Fatty Acid (Ethanol) Amide Hydrolase Expression Leads to Plants with Modified Growth Characteristics and Altered Sensitivity to *N*-Acylethanolamines. *Proceedings of the National Academy of Sciences; in press*.
49. Binns, D., Januszewski, T., Chen, Y., Hill, J., Markin, V., Zhao, Y., Gilpin, C, **Chapman, K.D.**, Anderson, R.G.W., Goodman, J.M. (2006) Pexopodia and Gnarlis, Novel Structures that Indicate an Intimate Collaboration Between Peroxisomes and Lipid Bodies. *Journal of Cell Biology*, 173: 719-731.
50. Welti R, Shah J, Li W, Li M, Chen J, Burke JJ, Fauconnier ML, **Chapman K**, Chye ML, Wang X (2007) Plant lipidomics: discerning biological function by profiling plant complex lipids using mass spectrometry. *Front Biosci* 12:2494-2506
51. Bartz R, Li WH, Venables B, Zehmer JK, Roth MR, Welti R, Anderson RG, Liu P, **Chapman KD** (2007) Lipidomics reveals adiposomes store ether lipids and mediate phospholipid traffic. *J Lipid Res* 48(4):837-47
52. Bartz R, Seemann J, Zehmer JK, Serrero G, **Chapman KD**, Anderson RG, Liu P (2007) Evidence that mono-ADP-ribosylation of CtBP1/BARS regulates lipid storage. *Mol Biol Cell* 18(8):3015-25.
53. Kilaru A, Blancaflor EB, Venables BJ, Tripathy S, Mysore KS, **Chapman KD** (2007) The *N*-acylethanolamine-mediated regulatory pathway in plants. *Chem Biodivers* 4(8):1933-55. Review.

54. Teaster ND, Motes CM, Tang Y, Wiant WC, Cotter MQ, Wang YS, Kilaru A, Venables BJ, Hasenstein KH, Gonzalez G, Blancaflor EB, **Chapman KD** (2007) N-Acylethanolamine metabolism interacts with abscisic acid signaling in *Arabidopsis thaliana* seedlings. *Plant Cell* 19(8):2454-69.

Book Chapters

Blancaflor, E.B. and **Chapman, K.D.** (2006) Similarities between endocannabinoid signaling in animal systems and N-acylethanolamine metabolism in higher plants. *In* Communication in Plants, F. Baluska, S. Mancuso, and D Volkmann eds., Ch. 14, Springer-Verlag, pp 205-219.

Invited Seminars and Meeting Presentations (1996-present)

Regulation of N-Acylphosphatidylethanolamine (NAPE) Metabolism. United States Department of Agriculture- Agriculture Research Service. Beltsville, MD, Sept 30, 1996.

Regulation of N-Acylphosphatidylethanolamine Metabolism. Department of Botany, University of Texas, Austin, TX, October 10, 1996.

An Unusual Phospholipid (NAPE) in Cottonseeds. Department of Plant and Soil Sciences, Texas Tech University, Lubbock, TX, Nov 4, 1996.

N-Acylphosphatidylethanolamine Metabolism and Signal Transduction in Plant Defense. Salk-Noble Foundation Annual Plant Biology Retreat. October 23, 1998. Palm Springs, CA.

N-Acylphosphatidylethanolamine Metabolism and Signal Transduction in Plant Defense. Swedish Biotechnology Network Meeting. November 11, 1998. Umea, Sweden.

N-Acylphosphatidylethanolamine Metabolism in Plants. Department of Pharmacology, Medical College of Wisconsin. April 29, 1999.

Regulation of Lipid Metabolism in Plants. Department of Biological Sciences, University of North Texas, Environmental Sciences Seminar Series, Spring 1999.

N- Acylethanolamines in Elicitor Perception. Keystone Symposium, Signals and Signal Perception in Plant-Biotic Interactions, Feb 2000, Taos, NM.

N-Acylethanolamines in Plants. Consumer Products Sector, Monsanto Co. St.Louis MO, July 1999.

Modification of Cottonseed Fatty Acid Composition. Biology Department, Midwestern State University. Wichita Falls, TX. Dec 6, 2000.

Topics in Plant Lipid Metabolism: seed oils, lipid mediators, and human health. Genetics Seminar Series, Texas A&M University, College Station, TX. Jan 24, 2002

Metabolism of N-Acylethanolamines in Plants: A New Group of Membrane-Derived Lipid Mediators. Samuel R. Noble Foundation, Plant Biology Division, Ardmore, OK, Feb 4, 2002

Concepts in Plant Development: Comparative Developmental Physiology Roundtable Forum, Glen Rose, TX, June 3, 2002

Natural Sources of Neuroactive N-Acylethanolamines. American Osteopathic Association, National Convention, Las Vegas, NV, Oct 8, 2002.

Identification and Characterization of a Binding Protein for N-Acylethanolamines. 15th International Symposium on Plant Lipids, Okazaki, Japan, May 16, 2002

***N*-Acylethanolamines: a new group of lipid mediators in plants.** Biochemistry and Molecular Biology Department Seminar Series, Oklahoma State University, Stillwater OK, Nov 22, 2002.

Metabolism of *N*-Acylethanolamines in Plants: A New Group of Membrane-Derived Lipid Mediators. Midwestern State University, Biology Department, Wichita Falls, TX, April 2003

Functional Identification of an *Arabidopsis thaliana* *N*-Acylethanolamine Amidohydrolase. National Plant Lipid Cooperative- Symposium on the Biochemistry and Molecular Biology of Plant Fatty acids and Glycerolipids, June 7, 2003, Fallen Leaf Lake, CA

Identification and Accumulation of Neuroactive *N*-Acylethanolamines in Oilseeds. 226th American Chemical Society National Meeting, Division of Agriculture and Food Chemistry—Session: Biochemistry for Designing Industrial Crops. Sept 10, 2003, New York, NY

Metabolic Engineering of Cottonseed Oil. Midwestern State University, Spring 2004 (Departmental Seminar Series), Wichita Falls, TX.

Metabolic Engineering of Cottonseed Oil. Brookhaven College, Spring 2004 (Evening Series), Dallas County Community College, Dallas TX

Regulation of *N*-Acylethanolamine Metabolism in Seedlings. 16th International Symposium on Plant Lipids, Budapest, Hungary, June 4, 2004.

Occurrence, metabolism and emerging functions of *N*-acylethanolamines in plants. University of Texas, Molecular Cell and Developmental Biology Series, Austin, TX, Oct. 2004

Occurrence, metabolism and emerging functions of *N*-acylethanolamines in plants. Midwestern State University, Wichita Falls, TX, February 2005

Occurrence, metabolism and emerging functions of *N*-acylethanolamines in plants. University of Louisiana Lafayette, February 2005

Lipid Composition of Adiposomes, a Lipid-Rich Organelle in Chinese Hamster Ovary Cells. Symposium on Mass Spectrometry. 96th Annual American Oil Chemists Society Meeting, Salt Lake City, UT, May1-4, 2005.

***N*-Acylethanolamine Metabolism and Seedling Development in *Arabidopsis*.** International Symposium on Plant Lipid Signaling. Raleigh, NC, Oct 26-30, 2005.

Production of Low-Oil Cottonseed. Beltwide Cotton Conferences. Conference on Cotton Physiology. San Antonio, TX Jan 5, 2006.

Other Professional Activities

Faculty Supervisor, Electron Microscopy Facility, Department of Biological Sciences, UNT 94-99

Coordinator, UNT Department of Biological Sciences Fall Seminar Series 1999, 2000, 2002

Chair, UNT Department of Biological Sciences, Faculty Search Committee 1999/00 (Biochemistry)

Member, UNT Department of Biological Sciences, Faculty Search Committee 2002/03 (Biochemistry)

Member, UNT Department of Biological Sciences, Faculty Search Committee 2002/03 (Environmental Chemistry)

Director, Biochemistry and Molecular Biology Division, member of Departmental Executive Committee, 1999-Present (Except Fall 2001 when on developmental leave)

Ad-hoc reviewer on research grant applications to the National Science Foundation, U.S. Dept of Agriculture, National Science and Engineering Research Council (Canada), and the U.S. Department of Energy

Ad-hoc reviewer of manuscripts submitted to Plant Physiology, Plant Cell, Plant Journal, Trends in Plant Sciences, Biochimica et Biophysica Acta, Nature (Cell Biology), Proceedings of the National Academy of Sciences, the Journal of Lipid Research, Lipids, Plant Physiology and Biochemistry, the Journal of Plant Physiology, Agronomy Journal, Journal of Agriculture and Food Chemistry.

Invited Lecturer, Plant Biochemistry Summer Course (NSF, DOE, USDA-sponsored), July 1999, 2001 Washington State University. Signaling Role of Plant Lipids.

Member, Texas Food and Fiber Commission, Industry Advisory Committee. (1997-present).

Workshop Co-organizer, Keystone Symposium on Signal Perception in Biotic Interactions of Plants "Biochemical and Genetic Approaches to the Identification of Signaling Molecules" Feb 2000.

Member, Scientific Organizing Committee, biannual meeting of the National Plant Lipid Cooperative, held June 4-8, 2003, Stanford Sierra Camp, S. Lake Tahoe, CA.

Local Host Annual meeting of the Southern Section American Society of Plant Biologists, March 15-17, 2003, Radisson Hotel, Denton, TX.

Panel member, USDA- National Research Initiative Competitive Grants Program, Plant Growth and Development.

Panel member, USDA- National Research Initiative Competitive Grants Program, Value-Added Products Program.

Panel member, USDA- National Research Initiative Competitive Grants Program, Plant Biochemistry.

Panel member, NSF- Program in Metabolic Biochemistry

Assistant Editor, Journal of Cotton Science, published on-line by the National Cotton Council.

Member, Scientific Organizing Committee, biannual meeting of the National Plant Lipid Cooperative, to be held June 10-14, 2005, Stanford Sierra Camp, S. Lake Tahoe, CA