

## Curriculum Vitae

LOUISE ANN LEWIS

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### EDUCATION

Ph.D. Ohio State University, Columbus, OH, Dept. of Plant Biology, 1991  
M.S. Ohio State University, Columbus, OH, Dept. of Botany, 1986  
B.S. DePaul University, Chicago, IL, Dept. of Biology, 1983

### APPOINTMENTS

09/2013 – present Professor, University of Connecticut  
04/2009 – present Affiliated Faculty, Center for Environmental Sciences and Engineering  
09/2005 – 08/2013 Associate Professor, University of Connecticut  
01/2006 – 06/2006 Visiting Scholar, Department of Biology, Duke University  
01/1999 – 08/2005 Assistant Professor, University of Connecticut  
01/1998 – 12/1998 Visiting Assistant Professor, University of New Mexico  
11/1997 – 12/1998 Research Associate, University of New Mexico Herbarium  
01/1996 – 12/1997 Instructor & Research Assistant Professor, University of New Mexico  
06/1994 – 11/1995 A.W. Mellon Fellow in Plant Systematics, Duke University, and  
Laboratory of Molecular Systematics, Smithsonian Institution  
09/1991 – 05/1994 Postdoctoral Fellow, Duke University, Department of Botany

### EXTERNAL GRANTS, AWARDS, FELLOWSHIPS

2014: National Science Foundation, Systematic Biology Program, DEB1354146, Estimating the Bayesian Phylogenetic Information Content of Systematic Data, 09/01/2014-8/31/2017, with PI P.O. Lewis (lead), co-PIs M.-H. Chen, L. Kuo, \$600,000.

2012: National Science Foundation, Systematic Biology Program, DEB1213675, ROA supplement for ATOL: Collaborative Research: Assembling the Green Algal Tree of Life (GRAToL), \$19,840.

2010: National Science Foundation, Systematic Biology Program, DEB1036466, ATOL: Collaborative Research: Assembling the Green Algal Tree of Life (GRAToL), 09/01/2010–8/31/2015, with co-PI P.O. Lewis, \$601,590 (of \$2,706,890).

2008: National Aeronautics and Space Administration, Exobiology Program, 07-EXB07-0066, Leaping to land – physiology and phylogenetics of desert green algae, 07/01/2008–06/30/2011, Co-PI with Z.G. Cardon (MBL, lead), H. Frank (UConn, Chemistry), \$93,035 (of \$531,978).

2006: National Science Foundation, Systematic Biology and Biodiversity Inventories Program, DEB0529737, REU for PEET: Integrating classical with phylogenetic taxonomic treatments in five genera of coccoid green algae (Chlorophyta), 09/01/2006–8/31/2007, \$6,700.

2005: National Science Foundation, Systematic Biology and Biodiversity Inventories Program, DEB0529737. PEET: Integrating classical with phylogenetic taxonomic treatments in five genera of coccoid green algae (Chlorophyta), 09/01/2005–8/31/2010 (2012 with no-cost extension), \$745,825.

2004: National Science Foundation, Systematic Biology and Biodiversity Inventories Program, DEB0407752, Dissertation Research: Systematics, Colony Form Evolution and Phenotypic Plasticity within the Family Hydrodictyaceae (Sphaeropleales, Chlorophyta), 07/30/2004–07/29/2006, with Hilary McManus, \$10,516.

2003: National Aeronautics and Space Administration, Exobiology Program, EXB02-0042-0054, Phylogenetic diversity and comparative physiology of independently-evolved lineages of desert green algae (Chlorophyta), 05/1/2003–04/30/2006, Co-I with Z.G. Cardon, \$380,876.

1998: National Science Foundation, Systematic Biology and Biodiversity Inventories Program, DEB9870201, Survey of the algae, lichens, and mosses of microbiotic crusts in selected semiarid and arid sites in western North America. 09/01/1998–04/30/2003, with J. Johansen, V.R. Flechtner, and L. St. Clair, \$120,807 (of \$375,000).

1994-1995: Mellon Foundation Training Fellowship in Plant Systematics, Duke University

1990: Bold Award, Phycological Society of America

1989: Ohio State University Graduate Student Alumni Research Award, \$1500

1989: Phycological Society of America Grant-in-aid of Research

1986: Ohio Academy of Sciences Best Student Paper Award in the Plant Sciences

1985: Sigma Xi Grants-In-Aid of Research Award, \$350

### **PEER-REVIEWED PUBLICATIONS (\* UNDERGRADUATE, † GRADUATE, Δ POSTDOCTORAL AUTHORS)**

Stancheva, R., J.D. Hall, K. Herburger, L.A. Lewis, R.M. McCourt, R.G. Sheath, and A. Holzinger (in press) Phylogenetic position of *Zygonium ericetorum* Kütz. (Zygnematophyceae, Charophyta) from a high alpine habitat and ultrastructural characterization of unusual aplanospores. *Journal of Phycology*.

Δ Fučíková K., P.O. Lewis and L.A. Lewis (in press) Widespread desert affiliation of trebouxiophycean algae (Trebouxiophyceae, Chlorophyta) including discovery of three new desert lineages. *Phycological Research*. DOI: [10.1111/pre.12062](https://doi.org/10.1111/pre.12062) [cover image]

† Khan-Bureau, D.A., E.A. Morales, L. Ector, M.S. Beauchene and L.A. Lewis (2014) Observations on two nuisance stalk-forming diatoms (Bacillariophyta) from a river in Connecticut, Northeastern U.S.A.: *Didymosphenia* sp. and *Cymbella janischii*. In press, *BioInvasions Records*.

Δ Fučíková K., P.O. Lewis and L.A. Lewis (in press) Gene arrangement convergence, diverse intron content, and genetic code modifications in mitochondrial genomes of Sphaeropleales (Chlorophyta). *Genome Biology and Evolution*. DOI: [10.1093/gbe/evu172](https://doi.org/10.1093/gbe/evu172)

Urban, M.C., L.A. Lewis, Δ K. Fučíková and \*A. Cordone (2014) The evolutionary ecology of pathogen resistance in wild salamander populations. *Oikos*. DOI: [10.1111/oik.01598](https://doi.org/10.1111/oik.01598)

Graham, L.E., J.J. Knack, M. Piotrowski, L.W. Wilcox, M.E. Cook, C. Wellman, W. Taylor, L.A. Lewis and P. Arancibia-Avila (2014) Lacustrine *Nostoc* (Nostocales) and associated microbiome generate a new type of clotted microbialite. *Journal of Phycology* 50: 280-291. DOI: [10.1111/jpy.12152](https://doi.org/10.1111/jpy.12152)

▲ Fučíková, K., P.O. Lewis and L.A. Lewis (2014) Putting *incertae sedis* taxa in their place: a proposal for ten new families and three new genera in Sphaeropleales (Chlorophyceae, Chlorophyta). *Journal of Phycology* 50: 14-25. DOI: [10.1111/jpy.12118](https://doi.org/10.1111/jpy.12118)

Algae Highlights: Rindi, F. Bringing order to little green balls: new insights from the Chlorophycean order Sphaeropleales. *Journal of Phycology* 50: 11-13.

Graham, L.E., M.E. Cook, L.W. Wilcox, J. Graham, W. Taylor, C.H. Wellman and L. Lewis (2013) Resistance of filamentous chlorophycean, ulvophycean, and xanthophycean algae to acetolysis: testing Proterozoic and Paleozoic microfossil attributions. *International Journal of Plant Science* 174: 947-957. DOI: [10.1086/670591](https://doi.org/10.1086/670591)

Lunch, C.K., A.M. LaFountain, S. Thomas, H.A. Frank, L.A. Lewis and Z.G. Cardon (2013) The xanthophyll cycle and NPQ in diverse desert and aquatic green algae. *Photosynthesis Research* 115: 139-151. DOI: [10.1007/s11120-013-9846-x](https://doi.org/10.1007/s11120-013-9846-x)

Kaplan, F., L.A. Lewis, K. Herburger and A. Holzinger (2013) Osmotic stress in Arctic and Antarctic strains of the green alga *Zygnema* (Zygnematales, Streptophyta): Effects on photosynthesis and ultrastructure. *Micron* 44: 317–330. DOI: [10.1016/j.micron.2012.08.004](https://doi.org/10.1016/j.micron.2012.08.004)

Flechtner, V.R., N. Pietrasiak and L.A. Lewis (2013) Newly revealed diversity of eukaryotic algae from wilderness areas of Joshua Tree National Park (JTNP). *Monographs of the Western North American Naturalist* 6: 43–63. DOI: [10.3398/042.006.0103](https://doi.org/10.3398/042.006.0103)

† Fučíková, K., V.R. Flechtner and L.A. Lewis (2013) Revision of the genus *Bracteacoccus* Tereg (Chlorophyceae, Chlorophyta) based on a phylogenetic approach. *Nova Hedwigia* 96: 15–59. DOI: [10.1127/0029-5035/2012/0067](https://doi.org/10.1127/0029-5035/2012/0067)

▲ Tippery, N.P., † K. Fučíková, P.O. Lewis and L.A. Lewis (2012) Probing the monophyly of the directly opposite flagellar apparatus group in Chlorophyceae using data from five genes. *Journal of Phycology* 48: 1482–1493. DOI: [10.1111/jpy.12003](https://doi.org/10.1111/jpy.12003)

Lewis, L.A. and F.R. Trainor (2012) Survival of *Protosiphon botryoides* (Chlorophyceae, Chlorophyta) from a Connecticut soil dried for 43 years. *Phycologia* 51: 662–665. DOI: [10.2216/11-108.1](https://doi.org/10.2216/11-108.1)

Pichrtová, M., D. Remias, L.A. Lewis and A. Holzinger (2012) Changes in phenolic compounds and cellular ultrastructure of Arctic and Antarctic strains of *Zygnema* (Zygnematophyceae, Streptophyta) after exposure to experimentally enhanced UV to PAR ratio. *Microbial Ecology* 65: 68–83. DOI: [10.1007/s00248-012-0096-9](https://doi.org/10.1007/s00248-012-0096-9)

Key Research Article in Environment Progress: <http://environmentprogress.com/key-research-articles/changes-in-phenolic-compounds-and-cellular-ultrastructure-of-arctic-and-antarctic-strains-of-zygnema-zygnematophyceae-streptophyta-after-exposure-to-experimentally-enhanced-uv-to-par-ratio/>

† Letsch, M.R. and L.A. Lewis (2012) Four gene arrangements within the chloroplast genome of a closely related group of green algae (Trebouxiophyceae, Chlorophyta). *Molecular Phylogenetics and Evolution* 64: 524–532. DOI: [10.1016/j.ympev.2012.05.027](https://doi.org/10.1016/j.ympev.2012.05.027)

Rodríguez-Salinas, E., H. Riveros-Rosas, Z. Li, † K. Fučíková, J.J. Brand, L.A. Lewis and D. González-Halphen (2012) Lineage-specific fragmentation and nuclear relocation of the mitochondrial *cox2* gene in chlorophycean green algae (Chlorophyta). *Molecular Phylogenetics and Evolution* 64: 166–176. DOI: [10.1016/j.ympev.2012.03.014](https://doi.org/10.1016/j.ympev.2012.03.014)

† Fučíková, K. and L.A. Lewis (2012) Intersection of *Chlorella*, *Muriella*, and *Bracteacoccus*: Resurrecting the genus *Chromochloris* Kol & Chodat (Chlorophyceae, Chlorophyta). *Fottea* 12: 83–93.

- ▲ McManus, H.A., P. Haugen, † K. Fučíková and L.A. Lewis (2012) Invasion of protein coding genes by green algal ribosomal group I introns. *Molecular Phylogenetics and Evolution* 62: 109–116. DOI: [10.1016/j.ympev.2011.09.027](https://doi.org/10.1016/j.ympev.2011.09.027)
- Kaplan, F., L.A. Lewis, J. Wastian and A. Holzinger (2012) Plasmolysis effects and osmotic potential of two *Klebsormidium* strains from alpine habitats. *Protoplasma* 249: 789–804. DOI: [10.1007/s00709-011-0324-z](https://doi.org/10.1007/s00709-011-0324-z)
- † Fučíková, K., \*J.C. Rada, A. Lukešová and L.A. Lewis (2011) Cryptic Diversity within the Genus *Pseudomuriella* Hanagata (Chlorophyta, Chlorophyceae, Sphaeropleales) Assessed Using Four Barcode Markers. *Nova Hedwigia* 93: 29–46.
- † Fučíková, K., \* J.C. Rada and L.A. Lewis (2011) The tangled taxonomic history of *Dictyococcus*, *Bracteacoccus* and *Pseudomuriella* (Chlorophyceae, Chlorophyta) and their distinction based on a phylogenetic perspective. *Phycologia* 50: 422–429.
- † McManus, H.A. and L.A. Lewis (2011) Molecular phylogenetic relationships in the freshwater family Hydrodictyaceae (Sphaeropleales, Chlorophyceae), with an emphasis on *Pediastrum duplex*. *Journal of Phycology* 47: 152–163.
- † McManus, H.A., E. Schultz and L.A. Lewis (2011) Distinguishing multiple lineages of *Pediastrum duplex* Meyen 1829 with morphometrics, and a proposal for *Lacunastrum* N. Gen. *Journal of Phycology* 47: 123–130.
- Hall, J.D., † K. Fučíková, \* C. Lo, L.A. Lewis and K.G. Karol (2010) An assessment of proposed DNA barcodes in freshwater green algae. *Cryptogamie, Algologie* 31: 529–555.
- † Letsch, M.R., G. Muller-Parker, T. Friedl and L.A. Lewis (2009) *Elliptochloris marina* n. sp. (Trebouxiophyceae, Chlorophyta), green symbiont of *Anthopleura xanthogrammica* and *A. elegantissima* (Anthozoa, Cnidaria). *Journal of Phycology* 45: 1127–1135.
- Cardon, Z.G., ▲ D.W. Gray and L.A. Lewis (2008) The green algal underground – evolutionary secrets of desert cells. *BioScience* 58: 114–122.
- ▲ Gray, D.W., Z.G. Cardon and L.A. Lewis (2007) Photosynthetic recovery following desiccation of desert green algae (Chlorophyta) and their aquatic relatives. *Plant Cell and Environment* 30: 1240–1255. [cover image]
- Haugen, P., D. Bhattacharya, J.D. Palmer, S. Turner, L.A. Lewis and K.M. Pryer (2007) Cyanobacterial ribosomal RNA genes with multiple, endonuclease-encoding group I introns. *BMC Evolutionary Biology* 7: 159.
- ▲ Gray, D.W., Z.G. Cardon and L.A. Lewis (2006) Simultaneous collection of chlorophyll fluorescence induction kinetics, fluorescence quenching parameters, and environmental data using an automated PAM-2000/CR10X data logging system. *Photosynthesis Research* 87: 295–301.
- Lewis, L.A. and P.O. Lewis (2005) Unearthing molecular phylodiversity of desert soil green algae. *Systematic Biology* 54: 936–947.
- † McManus, H.A. and L.A. Lewis (2005) Systematics, morphological variation and implications for colony-form evolution in the family Hydrodictyaceae (Sphaeropleales, Chlorophyta). *Phycologia* 44: 582–595.
- Adl, S.M., A.G.B. Simpson, M.A. Farmer, R.A. Andersen, R.A. Anderson, J. Barta, S. Bowser, G. Brugerolle, R. Fensome, S. Fredericq, T.Y. James, S. Karpov, P. Kugrens, J. Krug, C. Lane, L.A. Lewis, J. Lodge, D.H. Lynn, D. Mann, R.M. McCourt, L. Mendoza, Ø. Moestrup, S.E. Mozeley-Standridge, T.A. Nerad, C. Shearer, F. Spiegel and M.F.J.R. Taylor (2005) A new higher level classification of eukaryotes and taxonomy of protists. *Journal of Eukaryotic Microbiology* 52: 399–432.

Lewis, L.A. and V.R. Flechtner (2004) Cryptic species of *Scenedesmus* from desert soils of western North America. *Journal of Phycology* 40: 1127–1137.

Lewis, L.A. and R.M. McCourt (2004) Green algae and the origin of land plants. *American Journal of Botany* 91: 1535–1556. [cover image]

Lewis, L.A. and G. Muller-Parker (2004) Phylogenetic placement of “zoochlorellae” (Chlorophyta), green algal symbiont of the anemone *Anthopleura elegantissima*. *Biological Bulletin* 207: 87–92. [cover image <http://www.biolbull.org/content/207/2.cover-expansion>]

† Shoup, S. and L.A. Lewis (2003) Polyphyletic origin of parallel basal bodies in swimming cells of chlorophycean green algae (Chlorophyta). *Journal of Phycology* 39: 789–796.

Lewis, L.A. and V.R. Flechtner (2002) Green algae (Chlorophyta) of desert microbiotic crusts: diversity of North American taxa. *Taxon* 51: 443–451.

Watanabe, S., A. Himizu, L.A. Lewis, G.L. Floyd and P.A. Fuerst (2000) *Pseudoneochloris marina*, a new coccoid ulvophycean alga, and its phylogenetic position inferred from morphological and molecular data. *Journal of Phycology* 36:596–604.

Lewis, L.A. (1997) Phylogenetic placement of *Bracteacoccus Tereg* (Chlorophyceae, Chlorophyta) based on 18S ribosomal RNA gene sequence data. *Journal of Phycology* 33: 279–285.

Lewis, L.A., B.D. Mishler and R. Vilgalys (1997) Phylogenetic relationships of the liverworts (Hepaticae), a basal embryophyte lineage, inferred from nucleotide sequence data of the chloroplast gene, *rbcl*. *Molecular Phylogenetics and Evolution* 7: 377–393.

Hershkovitz, M.A. and L.A. Lewis (1996) Deep-level diagnostic value of the rDNA-ITS region. *Molecular Biology and Evolution* 13: 1276–1295.

Hanelt, B., D. van Schyndel, C.M. Adema, L.A. Lewis and E.S. Loker (1996) The phylogenetic position of *Rhopalura opiocomae* (Orthonectida) based on 18S ribosomal RNA sequence data. *Molecular Biology and Evolution* 13: 1187–1191.

Mishler, B.D., L.A. Lewis, M.A. Buchheim, K.S. Renzaglia, D.J. Garbary, C.F. Delwiche, F.W. Zechman, T.S. Kantz and R.L. Chapman (1994) Phylogenetic relationships of the “green algae” and “bryophytes.” *Annals of the Missouri Botanical Garden* 81: 451–483.

Lewis, L.A., L.W. Wilcox, P.A. Fuerst and G.L. Floyd (1992) Concordance of molecular and ultrastructural data in the study of zoosporic green algae. *Journal of Phycology* 28: 375–380.

Wilcox, L.W., L.A. Lewis, P.A. Fuerst and G.L. Floyd (1992) Assessing the relationships of autosporic and zoosporic chlorococcalean green algae with 18S rDNA sequence data. *Journal of Phycology* 28: 381–386.

Wilcox, L.W., L.A. Lewis, P.A. Fuerst and G.L. Floyd (1992) Group I introns within the nuclear-encoded SSU rRNA gene of three green algae. *Molecular Biology and Evolution* 9: 1103–1118.

Wawrzyniak, L.A. and R.A. Andersen (1983) Silica-scaled Chrysophyceae from North American boreal forest regions in northern Michigan, U.S.A. and Newfoundland, Canada. *Nova Hedwigia* 41: 127–145.

## **MONOGRAPHS, BOOK CHAPTERS AND REVIEWS**

Hall, J.D., L.A. Lewis, R.M. McCourt, C.F. Delwiche, B. Mishler and K.G. Karol (accepted) Chlorophyta Reichenbach 1834. *In*: Cantino, P.D., de Queiroz, K., and Gauthier, J.A. (ed), *Phylonyms: A Companion to the PhyloCode*. University of California Press, Berkeley, CA.

Graham, L., L.A. Lewis, W. Taylor, C. Wellman and M. Cook (2014) Early terrestrialization: transition from algal to bryophyte grade. In: D. Hanson and S. Rice (eds.) *Advances in Photosynthesis and Respiration, Vol. 37: Photosynthesis in Early Land Plants*, pp. 9-28. Springer, Dordrecht.

Lewis, L.A., J.D. Hall, and F.W. Zechman (2011) Green Algae. In: eLS. John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0000333.pub2

Lewis, L.A. (2007) Chlorophyta on land. Independent lineages of green eukaryotes from arid lands. Pp. 571-582, In: J. Seckbach (ed.) *Extremophilic Algae, Cyanobacteria and non-photosynthetic Protists: From Prokaryotes to Astrobiology*. Kluwer Academic Publishers, Dordrecht.

Chapman, R.L., M.A. Buchheim, C.F. Delwiche, T. Friedl, V.A.R. Huss, K.G. Karol, L.A. Lewis, J. Manhart, R.M. McCourt, J.L. Olsen and D.A. Waters (1998) Molecular systematics of the green algae. Pp. 508-540 In: D.E. Soltis, P.S. Soltis and J. J. Doyle (eds.) *The Molecular Systematics of Plants II*, Chapman and Hall, New York.

Lewis, P.O. and L.A. Lewis (1995) Review of S. Kumar, K. Tamura and M. Nei. 1993. MEGA: Molecular Evolutionary Genetics Analysis, Version 1.02. Pennsylvania State University, University Park, Pennsylvania. *Systematic Biology* 44: 576-577 [book review].

Lewis, L.A. (1991) Molecular phylogenetic analysis of *Neochloris* (Chlorophyceae). Ph.D. Thesis, Department of Plant Biology, Ohio State University.

Wawrzyniak, L.A. (1986) Ultrastructural and cinemicrographic analysis of *Stephanosphaera pluviales* (Chlorophyta, Chlorophyceae). M.S. Thesis. Department of Botany, Ohio State University.

## OTHER ARTICLES

Lewis, L.A. (2013) The Phycological Society of America. *Limnology and Oceanography Bulletin* 22(4): 104-107.

Shubert, L.E., L.A. Lewis and P.A. Siver (2013) In Memoriam: Francis R. Trainor (11 February 1929—12 February 2013). *Phycologia* 52: 457-459.

## IN REVIEW / ACCEPTED (\* UNDERGRADUATE, † GRADUATE, Δ POSTDOCTORAL AUTHORS)

Herburger K., L.A. Lewis, A. Holzinger (accepted) Photosynthetic efficiency, desiccation tolerance and ultrastructure in two phylogenetically distinct strains of alpine *Zygnema* sp. (Zygnematophyceae, Streptophyta): Role of akinete formation. *Protoplasma*.

Δ Fučíková K., F. Leliaert, E.D. Cooper, P. Škaloud, S. D'Hondt, O. De Clerck, C.F.D. Gurgel, L.A. Lewis, P.O. Lewis, J.M. Lopez-Bautista, C.F. Delwiche, and H. Verbruggen (in review) New phylogenetic hypotheses for the core Chlorophyta based on chloroplast sequence data. Submitted to *Frontiers in Ecology and Evolution*.

## RESEARCH DATABASE

Lewis, L.A. Biotic Crust Project. <http://hydrodictyon.eeb.uconn.edu/bcp/>

This relational database developed by P. O. Lewis presents information resulting from a collaborative project funded by the Biodiversity Surveys and Inventories Program of the National Science Foundation. For each of over fifty geographically distinct habitats in western North America, we present soil chemistry and texture data, representative habitat images, and a list of green algae (determined through cell isolations). My laboratory also maintains a living culture collection of over 300 green algae from desert habitats, which forms the foundation of my research and serves as a resource to the algal scientific community.

## CONTRIBUTED PAPERS (\* UNDERGRADUATE, † GRADUATE, Δ POSTDOCTORAL AUTHORS)

Hall, J.D., K. Karol, L. Lewis, P. Lewis, Δ K. Fučíková, B. Wysor, Δ F. Leliaert, J. Lopez-Bautista, Δ E. Cooper, H. McManus, C. Delwiche, R. McCourt (2014) Assembling the Green Algal Tree of Life. Botanical Society of America, 26-30 July, The Boise Center, Boise, ID.

Lewis, L.A., \* C. Xue, M.C. Urban (2014) Phylogenetic investigation of green algae that symbiose with spotted salamander eggs. Abstract 535, Evolution 2014, 20-24 June, Raleigh Convention Center, Raleigh, NC.

Lewis, P.O., M.-H. Chen, L. Kuo, L.A. Lewis, Δ K. Fučíková (2014) Bayesian estimation of phylogenetic information content and its implications for site-stripping. Abstract 415, Evolution 2014, 20-24 June, Raleigh Convention Center, Raleigh, NC.

Δ Fučíková, K., P.O. Lewis and L.A. Lewis (2014) Mitochondrial genomes of Sphaeropleales: a balance between variation and conservation. Phycological Society of America, 18-23 May, Oregon Convention Center, Portland, OR.

Δ Fučíková, K., P.O. Lewis and L.A. Lewis (2014) Mitochondrial genomes of Sphaeropleales: a balance between variation and conservation. 53rd Northeast Algal Society Symposium, 25-27 April, Salve Regina University, Newport, RI.

\* Xue, Crystal, Louise A. Lewis, Mark C. Urban, Kurt Schwenk (2014) Phylogenetic investigation of green algae that symbioses with salamander eggs. 53rd Northeast Algal Society Symposium, 25-27 April, Salve Regina University, Newport RI. [President's Award Winner]

Lewis, L.A. M.C. Urban, K. Schwenk, \*C. Xue and T. Landberg (2013) Natural history of the green algae-salamander symbiosis. Abstract 162, 10th International Phycological Congress, 4-10 August, Orlando FL.

Lewis, P.O., K. Fučíková and L.A. Lewis (2013) Bayes Factor for data combinability: application to the phylogeny of Sphaeropleales. Abstract 163, 10th International Phycological Congress, 4-10 August, Orlando FL.

Letsch, M.R. and L.A. Lewis (2013) Extensive genome rearrangements among species of the genus *Elliptochloris* (Trebouxiophyceae, Chlorophyta). Abstract 161, 10th International Phycological Congress, 4-10 August, Orlando FL.

† Khan-Bureau, D.A., M.S. Beauchene and L.A. Lewis (2013) A putative new species in the freshwater diatom genus *Didymosphenia* (Bacillariophyta) in a River in Connecticut, USA. Abstract 135, 10th International Phycological Congress, 4-10 August, Orlando FL.

† Augyte, S., L.A. Lewis and C. Yarish (2013) Non-native *Bryopsis maxima* (Ulvophyceae, Chlorophyta) Introduction to Long Island Sound. Abstract 14, 10th International Phycological Congress, 4-10 August, Orlando FL.

† Khan-Bureau, D., M. Beauchene and L.A. Lewis (2013) Monitoring the distribution of *Didymosphenia geminata* and other "rock snot" species in the Farmington River in Connecticut. 52nd Northeast Algal Society Symposium, 19-21 April, Mystic CT.

Lewis, L.A., T. Landberg, \*C. Lo and \*A. Fuller (2013) Natural History of the Spotted Salamander Symbiosis. 52nd Northeast Algal Society Symposium, 19-21 April, Mystic CT.

† Augyte, S., L.A. Lewis and C. Yarish (2013) Invasive Green Alga, *Bryopsis maxima*, First Record in Long Island Sound. Connecticut Conference on Natural Resources, 18 March, Storrs, CT.

Graham, L., M. Trest, M. Cook, L.A. Lewis, W. Taylor and C. Wellman (2012) Acetolysis as a screen for degradation-resistant modern algal structures for paleontological comparisons. Phycological Society of

America, 20–23 June, Charleston, SC.

## **VISITING SCHOLARS HOSTED**

Valerie R. Flechtner, John Carroll University, OH, July 30-Aug. 30, 2008.

Adesalu Taofikat Abosedede, University of Lagos Akoka, Lagos, Nigeria, Sept. 1-Nov. 30, 2010.

Hilary McManus, LeMoyne College, June 10-July 21, 2012.

Shin Watanabe, Toyama University, June 1-August 23, 2014.

## **MENTORING**

M.S. Students: Jordan Bishop (Fall 2014-present); Nikolaus Schultz (Fall 2014-present); Suzanne Shoup, Biology, University of New Mexico (1997 – 1999).

Ph.D. Students: Diba Khan-Bureau, Natural Resources and Environment (2012 – present); Karolina Fučíková, Ecology and Evolutionary Biology, University of Connecticut (2006 – 2011); Molly R. Letsch, Ecology and Evolutionary Biology, University of Connecticut (2004 – 2011); Hilary A. McManus, Ecology and Evolutionary Biology, University of Connecticut (2001 – 2007).

Postdoctoral Advising: Dennis W. Gray (Ph.D., Stony Brook University) (2004 – 2007); Hilary McManus (Ph.D., University of Connecticut, now at LeMoyne University) (2008); Nicholas Tippery (Ph.D. University of Connecticut, now at University Wisconsin, Whitewater) (2010 – 2011), Karolina Fučíková (2012–).

Advisory Committees (University of Connecticut unless noted)

Simona Augyte, Ph.D. 2012–present, Ecology and Evolutionary Biology

Lily Lewis, Ph.D., 2012–present, Ecology and Evolutionary Biology

Summer Payne, M.S., 2012, Ecology and Evolutionary Biology

Diba Khan-Bureau, Ph.D., 2010–2012, Natural Resources and Environment

Jessica Budke, Ph.D., 2011, Ecology and Evolutionary Biology

Juan Carlos Villareal, Ph.D., 2011, Ecology and Evolutionary Biology

Kristina Catanese, M.S., 2009, Biodiversity and Conservation Biology

Yubo Hou, Ph.D., 2008, Marine Sciences

Norman Wickett, Ph.D., 2007, Ecology and Evolutionary Biology

Claire Healy, Ph.D., 2006, Ecology and Evolutionary Biology

Jessica Budke, M.S., 2005, Ecology and Evolutionary Biology

Jonathan Lang, M.S., Natural Resources Management and Engineering

Are Pedersen, Ph.D., Ecology and Evolutionary Biology

John Gabel, Ph.D.(currently ABD), Ecology and Evolutionary Biology

Neva Hax, M.S., 2006, Ecology and Evolutionary Biology

Lorraine Olendzenski, Ph.D., 2004, Molecular and Cell Biology

Elisheva Crowell, M.S., 1999, Biology, University of New Mexico

Phil Tonne, M.S., 1999, Biology, University of New Mexico

Jane Mygatt, M.S., 1998, Biology, University of New Mexico

Kirsten Meyer, M.S., 1998, Biology, University of New Mexico



#### University Scholars and Honors Students Advised

Alexis Cordone, 2013-14 (University Scholar)

Alexis Cordone, 2012-14 (Honors Student)

Crystal Xue, 2013-14 (Honors Student) Recipient of Office of Undergraduate Research (OUR) Research Supply Award (\$500), and of a Life Sciences Honors Thesis Award (\$500) for 2013-14.

#### Independent Study Students (University of Connecticut undergraduates, unless noted)

Crystal Xue, Spring 2013, Fall 2013, Spring 2014

Wilda Merant, Biology, Spring 2013, Fall 2013

Andrew Fuller, EEB, Spring 2013

Summer Payne, EEB BS/MS in Biodiversity and Conservation Biology, Spring 2011, Spring 2012

Jared Rada, Biology, Spring 2009, Fall 2009, Spring 2010, Recipient of a 2009 UConn OUR grant, \$415, "A Comparison of ITS phylogeny and Ecological Diversity in Selected Strains of Microscopic Soil Algae."

Kristina Catanese, Ecology and Evolutionary Biology, Spring 2008

Miracle Tali, American Samoa Community College, NSF REU, Summer 2007

Chien Lo, Ecology and Evolutionary Biology, Summer 2007, Fall 2007

Nicole Piatt, Biology, Univ. Connecticut Presidential Scholar Award, Summer 2007

Kreig Embriano, Ecology and Evolutionary Biology, Spring 2007

Brad Goupil, Ecology and Evolutionary Biology, Spring 2003

Gizele Richards, Ecology and Evolutionary Biology, Spring 2003

Roslyn Censky, Ecology and Evolutionary Biology, Spring 2001

Amy Piorkowski, Ecology and Evolutionary Biology, Fall 2001

David L. Hoover, Ecology and Evolutionary Biology, University of Connecticut, Fall 2001, Spring 2001, Spring 2002, Fall 2003

Stephen Yingling, Biology, University of New Mexico, 1998

#### **DEPARTMENTAL SERVICE**

Search Committee Member for Plant Ecology Position, EEB (2013–14)

EEB Undergraduate Curriculum Committee (Fall 2013, Spring 2014)

EEB Promotion, Tenure, and Reappointment Committee Member (Spring 2013, Fall 2013)

EEB Faculty Retreat Committee (Fall 2013)

EEB Course Assessments Committee (May 2010–present)

EEB Botany Student Award Committee (April 2012)

Search Committee Member for Plant Genomics Position, EEB (2011–2012)

EEB Promotion, Tenure, and Reappointment Committee Member (Fall 2011)

EEB Representative to University Open House (Sept. 18, 2011)

EEB Botany Student Award Committee (April 2010)

Search Committee Member for EEB Assistant Professor-in-Residence (April–May 2010)

EEB Promotion, Tenure, and Reappointment Committee Member (Fall 2009)

Advisory Committee Member, BS/MS Program in Biodiversity and Conservation Biology (2004–10)  
EEB Botany Student Award Committee (Spring 2009)  
Anonymous reviews of graduate student research prospectuses in EEB (various semesters)  
EEB Promotion, Tenure, and Reappointment Committee Member (Fall 2008)  
Search Committee Member for Ecology Position, EEB (2007–2008)  
Chemical Safety Liaison for EEB (2007–present)  
EEB Promotion, Tenure, and Reappointment Committee Member (Fall 2006)  
Graduate Admissions Committee Member, EEB (Spring 2007)  
Monday Evening Seminar Organizer, EEB Department (1999–2000, 2000–01, 2001–02, 2002–03).  
Review of graduate student proposals, Center for Conservation and Biodiversity (Fall 2003)  
Open House Committee (2001–2002). This committee presents information on the EEB undergraduate major to prospective students during the university-wide open house.  
Departmental Self-Study, Undergraduate Curriculum Committee Member (2001–2002)  
EEB Departmental Seminar Committee (1999–2000)  
Summer Undergraduate Research Fellowship Committee (1999)  
Search committee for one-year teaching Postdoc in EEB (Spring 1999)  
Review of student proposals for the Bamford, Andrews, Trainor funds in EEB (Spring 1999)  
Member, H. W. Springfield Scholarship Committee, University of New Mexico, Department of Biology (1997–1998)

### **UNIVERSITY OR INTERDEPARTMENTAL SERVICE**

Graduate Faculty Council Member (2010–present)  
CLAS Policies and Procedures Committee Member (2009–2011)  
Graduate Faculty Council, Member (Fall 2009)  
Anonymous Proposal Reviews, University of Connecticut Research Foundation (various times)  
University Student Fulbright Scholarship Committee Member (2007–2009)  
Graduate Faculty Council, Alternate Member for Botany, Entomology, Zoology (2007–2009)  
University Student Fulbright Scholarship Committee Member (2005–2007)  
Search Committee Member for 2 Microbiology positions, MCB (Fall 2006)

### **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Botanical Society of America  
Phycological Society of America  
Northeast Algal Society  
Society for Systematic Biologists

### **PROFESSIONAL SERVICE**

Editor, *Phycological Newsletter*, 2011–2014. (<http://psaalgae.org/website/publications/newsletters.html>)  
Chair, Communications Committee, Phycological Society of America, 2011–2014.  
Panel Member, National Science Foundation (DEB, Systematic Biology Program), 6–8 June 2012.  
Associate Editor, *American Journal of Botany*, 2007–2011.

Participant Faculty Member in the NSF Town Hall / Career Meeting for Graduate Students and Postdocs at the PSA 2011 conference.

Co-convener, Northeast Algal Society, 50<sup>th</sup> Annual Meeting, Marine Biological Laboratories, Woods Hole, MA, 15–17 April 2011 (approximately 150 participants).

Editorial Board Member, *Taxon*, 2006–2010.

Advisory Committee Chair, University of Texas Culture Collection of Algae, May 2010.

External Reviewer, Promotion Packet, September 2010.

Associate Editor, *Journal of Phycology*, 2006–2009.

Secretary, Northeast Algal Society (elected), 2006–2011.

Nominations Committee, Society for Systematic Biologists, Spring 2009.

PEET-L email listserv administrator 2006–2009.

Panel Member, National Science Foundation (DEB, Systematic Biology, Biodiversity Surveys and Inventories), 22–24 October 2007.

Advisory Committee Member, University of Texas Culture Collection of Algae, 2006–2008.

External Reviewer, Promotion Packet, May 2007.

International Travel Award Committee Member, Society for Systematic Biologists, April 2005.

Mini-PEET Award Committee Member, Society for Systematic Biologists, April 2005.

Panel Member, National Aeronautics and Space Administration, Exobiology Program, November 30–3 December 2004.

Panel Member, National Science Foundation (DEB, Systematic Biology, Biodiversity Surveys and Inventories), 7–9 April 2004.

Co-convener, Northeast Algal Society, 43<sup>rd</sup> Annual Meeting, University of Connecticut, Avery Point, 23–25 April 2004 (over 150 participants).

Executive Committee Member, Green Plant Phylogeny Research Coordination Group, 2002–2004.

Executive Committee Member, Northeast Algal Society, 2003–2005.

Student Awards Committee Member, Northeast Algal Symposium, April 25–27, 2003.

Chair, Phycological Section, Botanical Society of America, 1999–2002, 2002–03.

Chair, Darbaker Award Committee, Botanical Society of America, 2002.

Editorial Board Member, *Journal of Phycology*, 1999–2000, 2000–01, 2001–2002.

Darbaker Award Committee Member, Botanical Society of America, 2001.

Nominations Committee Member, Society for Systematic Biologists, 2002.

Student Awards Committee Member, Northeast Algal Symposium, 8–9 April 2000.

Judge, Mayr Award, Society of Systematic Biologists, 1999.

Chair, Student Grants and Fellowships Committee, Phycological Society of America, 1998–1999.

Student Grants and Fellowships Committee Member, Phycological Society of America, 1997.

Bold Award Committee Member, Phycological Society of America, 1996–1998.

Reviewer for the following journals: Proceedings of the National Academy of Sciences, Systematic Biology, Molecular Biology and Evolution, Molecular Phylogenetics and Evolution, American Journal of Botany, Journal of Phycology, Nova Hedwigia, Phycological Research, The Bryologist, Western North American Naturalist (formerly Great Basin Naturalist), Cell Stress and Chaperones

*Ad hoc* reviewer of research proposals for the following agencies or organizations:

National Science Foundation (DEB, Systematics and Population Biology Program, IGERT Program, NSF/USDA Microbial Genome Sequencing Program, Functional and Regulatory Systems in the Division of Integrative Organismal Biology)

National Oceanographic and Atmospheric Association

National Aeronautics and Space Administration (Exobiology Program, Interdisciplinary Exploration Science)

National Geographic Society

## **PUBLIC SERVICE AND OUTREACH**

Guest speaker, 5th Annual Tribal Utility Summit, Mashantucket Pequot Tribal Nation, CT, "New Stalk-forming Diatoms in Connecticut Rivers." 8 April, 2014.

Guest speaker at the fall seminar series of the Laboratory Analysts of Connecticut, Connecticut DEEP Marine Headquarters Educational Center. "New Stalk-forming Diatoms in Connecticut Rivers." 6 December 2013.

BioBlitz Twig Leader for the following 24-h species inventories, Connecticut State Museum of Natural History: Keney Park- Goodwin College, Hartford, 12–13 June 2009; Wilber Snow School, Middletown, 8–9 June 2007; Two Rivers Magnet School, East Hartford, 3–4 June 2005; Bates Woods Park, New London, 6–7 June 2003; Mohegan Park, Norwich, 31 May–1 June 2002; Tarrywile Park, Danbury, 8–9 June 2001; Hubbard Park, Meriden, 2–3 June 2000; Keney Park, Hartford, 11–12 June 1999.

Public outreach during bloom of *Titan Arum* in EEB greenhouse, 11–12 May 2007.

Interviewed for feature story on algae, "Ode to Pond Scum," by Laurie Sanders for the program Field Notes, WFCR Public Radio Station (88.5 FM), 19 December 2005.

Participating Scientist, "Multiply Your Options" Tool Clues Workshop for elementary school girls. University of Connecticut Campus. 8 May 2002.

Special Award Judge (representing the New Mexico Native Plant Society), 39th Annual Northwestern New Mexico Regional Science & Engineering Fair. University of New Mexico, 20 March 1998.

Guest speaker, Native Plant Society of New Mexico, Albuquerque Chapter. "Soil Algal Biodiversity and Why You Might Care." 4 Sept. 1997.

Speaker during the "Expanding your horizons" program for elementary school girls, March 1996, University of New Mexico.