

LAURA ALINE KATZ
 Department of Biological Sciences
 Smith College
 Northampton MA 01063
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EDUCATION

- Ph.D. **Cornell University**, Ithaca NY, 1996
 Ecology and Evolutionary Biology
 Dissertation: "Molecular Evolution of Phosphoglucose Isomerase"
 Advisor: Richard G. Harrison
- A.B. **Harvard College**, Cambridge MA, 1989
Magna Cum Laude in History of Science
 Senior Honors Thesis: "Soviet Agriculture & Lysenkoism under Khrushchev"

POSITIONS HELD

- 1997- **Smith College**, Northampton MA
 Elsie Damon Simonds Professor, Department of Biological Sciences (2008-)
 Associate Professor, Department of Biological Sciences (2003-2008)
 Assistant Professor, Department of Biological Sciences (1997-2003)
- 1998- **UMass-Amherst**, Amherst MA
 Graduate faculty member of Organismic and Evolutionary Biology Program (1998-)

GRANTS RECEIVED – MAJOR (≥\$100,000)

- 2008 **NSF RUI Systematics**: Ciliate phylogeny assessed by mitochondrial markers (DEB 0816828) 9/1/08-8/31/10: \$114,782.
- 2007 **NIH AREA Award**: Patterns of inheritance within the ciliate species *Chilodonella uncinata* – a possible role for epigenetics (1R15GM081865-01) 8/1/07-7/31/10: \$158,593.
- 2007 **NSF Biological Oceanography**: Collaborative Research: Testing hypotheses about diversity, gene flow, and effective population size in marine planktonic ciliates. (OCE-0648713) 3/1/07-2/28/10: \$299,987. With Dr. G. McManus (Univ. Connecticut).
- 2004 **NSF Assembling the Tree of Life**: "Collaborative Research: Reconstructing Eukaryotic Phylogeny through Multigene Analyses of Microbial Eukaryotes" (DEB 043115) \$1,213,102 (Smith College portion). I am lead PI on this \$3M collaborative grant, which includes PIs from University of Iowa, American Type Culture Collection and Marine Biological Laboratories.
- 2002 **NSF Biological Oceanography**: Collaborative Research: Diversity and biogeography of marine oligotrich and choreotrich ciliates assessed by morphological and molecular markers. (OCE-0221062) 9/15/02-8/31/05: \$217,600 (Smith College portion). With Dr. G. McManus (Univ. Connecticut). No cost extension through 8/31/06

- 2001 **NSF CAREER Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (DEB-0092908) 6/1/01-5/31/06: \$411,874.
- 2000 **NSF-SGER:** "Multi-gene approach to understanding relationships among ciliates in the class Spirotrichea" (DEB-0079325) 5/1/00-4/30/02: \$100,000.
- GRANTS RECEIVED – MINOR**
- 2008 **NSF REU Supplement ATOL Award:** "Reconstructing Eukaryotic Phylogeny through Multigene Analyses of Microbial Eukaryotes" (DEB 043115): \$6,500
- 2007 **NSF REU Supplement ATOL Award:** "Reconstructing Eukaryotic Phylogeny through Multigene Analyses of Microbial Eukaryotes" (DEB 043115): \$13,000
- 2007 **NSF REU Supplement Oceanography Award:** Diversity and biogeography of marine oligotrich and choreotrich ciliates assessed by morphological and molecular markers. (OCE-0221062): \$6,500
- 2005 **NSF REU Supplement ATOL Award:** "Reconstructing Eukaryotic Phylogeny through Multigene Analyses of Microbial Eukaryotes" (DEB 043115): \$6,500
- 2005 **NSF REU Supplement CAREER Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (DEB-0092908): \$6,500.
- 2005 **NSF REU Supplement Oceanography Award:** Diversity and biogeography of marine oligotrich and choreotrich ciliates assessed by morphological and molecular markers. (OCE-0221062): \$6,500
- 2004 **Sloan Foundation:** With Debashish Bhattacharya (University of Iowa) "Symposium: Genome Evolution in Eukaryotic Microbes" \$8,900.
- 2004 **Burroughs Wellcome Fund:** With Debashish Bhattacharya (University of Iowa) "Symposium: Genome Evolution in Eukaryotic Microbes" \$5,000.
- 2004 **NSF Symposium Grant:** Co-PI with Debashish Bhattacharya (University of Iowa) "Genome Evolution in Eukaryotic Microbes" (MCB-0346532): \$25,000.
- 2003 **NSF REU Supplement CAREER Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (DEB-0092908): \$6,000.
- 2003 **NSF REU Supplement Oceanography Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (OCE-0221062): \$6,000
- 2002 **NSF REU Supplement CAREER Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (DEB-0092908): \$5,710.
- 2001 **NSF CAREER Award:** "Phylogeny of Ciliates in the Class Phyllopharyngea" (DEB-0092908) 6/1/01-5/31/06: \$411,874.
- 2001 **NSF REU Supplement to SGER:** "Multi-gene approach to understanding relationships among ciliates in the class Spirotrichea" (DEB-0079325): \$5,000

- 1999 **The Foundation for Microbiology** for support of publication "Evolutionary relationships among eukaryotes:" \$5,800
- 1999 **Burroughs-Wellcome Fund** for support of publication "Evolutionary relationships among eukaryotes:" \$2,500
- 1998 **Sloan Foundation** for support of symposium "Evolutionary relationships among eukaryotes," co-organized with Mitch Sogin (MBL, Woods Hole MA): \$7,260
- 1998 **Burroughs-Wellcome Fund** for support of symposium "Evolutionary relationships among eukaryotes," co-organized with Mitch Sogin (MBL, Woods Hole MA): \$2,500
- 1998 **Society for the Study of Evolution and Society of Systematic Biologists** for support of symposium "Evolutionary relationships among eukaryotes," co-organized with Mitch Sogin (MBL, Woods Hole MA): \$1,000
- 1998 **Society for Molecular Biology and Evolution** for support of symposium "Evolutionary relationships among eukaryotes," co-organized with Mitch Sogin (MBL, Woods Hole MA): \$1,500
- 1998-2007 **Smith College Blakeslee Research Fund:** "Evolution of chromosomal rearrangements in ciliates (and various other projects)" 9/02-8/03: \$6,000-\$7,000

AWARDS AND FELLOWSHIPS

- 2008 **Seymour H. Hutner Prize** for 'an outstanding scientist in the field of Protozoology', International Society of Protistology
- 2000 **Jean Picker Fellowship**, Smith College
- 1996-1998 **NSF-Sloan Postdoctoral Fellowship**
with John Tyler Bonner, Princeton University, Princeton NJ
"Evolution of DNA deletion and gene scrambling in ciliates"
- 1996 **Sigma Xi**, Full Member
- 1995 **R.H. Whittaker award for outstanding graduate presentation**
Cornell University, Ithaca NY

PROFESSIONAL ACTIVITIES

- 2007- Member, NIH Pathogen and Vector Genome Sequencing Working Group
- 2006-2009 Associate Editor, *Journal of Exper. Zoology Part B: Molecular & Developmental Evolution*
- 2003-2008 Associate Editor for *Molecular Biology and Evolution*
- 2005-2007 Councilor for the International Society of Protistology
- 2005-2007 Invited participant in Smithsonian "Biodiversity Science and Education Initiative"
- 2005-2007 Science board for NESCent (National Evolutionary Synthesis Center)
- 2004-2006 Councilor for the Society of Molecular Biology and Evolution
- 2003-2005 Associate Editor for *Evolution*
- 2004 Co-organizer (with Debashish Bhattacharya) of a workshop and a symposium on genome evolution in microbial eukaryotes

- 2003 Chair of "Evolution and Natural Populations" sections. FASEB conference on ciliate molecular biology.
- 2002 Chair of "Tree of Life" section. Gordon conference on molecular evolution. Ventura, CA
- 2001-2002 Participant in NSF funded workshops on developing an 'Evolutionary Synthesis Center.'
- 2001 Organizer for New England Molecular Evolutionary Biologists (NEMEB) conference. Smith College.
- 2007- Co-founder of AEMES (Achieving Excellence in Mathematics, Engineering and Sciences) for underrepresented and first generation college students.
- 2000-2007 Founded research program in the biological sciences at Smith College for students from underrepresented groups. Supported by the Dean of Faculty's office.
- 2000-05 Member, board of reviewers, *Journal of Eukaryotic Microbiology*.
- 1999, 2001 Faculty advisor for two students at the Council for Undergraduate Research's "Posters on the Hill" session: Tovah Salcedo (2001) and Jennifer L. Riley (1999).
- 1999 Guest Editor for supplemental volume of *American Naturalist* "Evolutionary relationships among eukaryotes"
- 1998 Co-organizer (with M.L. Sogin) of first SMBE/SSE/SSB symposium "Evolutionary relationships among eukaryotes," Vancouver Canada.
- Ongoing *Ad hoc* reviewer for intro biology and microbiology textbooks from Sinauer Press Assoc.
- Ongoing *Ad hoc* reviewer for *Molecular Biology & Evolution*, *Trends in Ecology & Evolution*, *International Journal of Systematic and Evolutionary Microbiology*

PROFESSIONAL SOCIETIES

American Society of Microbiologists
 International Society of Evolutionary Protistology
 Society for Molecular Biology & Evolution
 Society for the Study of Evolution
 Society of Protozoology

INVITED TALKS

- "Dynamic genomes: inter- and intraspecific genome variation across the eukaryotic tree of life." American Society of Microbiology, Philadelphia PA, May 2009.
- "Dynamic genomes: inter- and intraspecific genome variation across the eukaryotic tree of life." Indiana University, March 2009.
- "Phylogeography of coastal ciliates: estimates of biodiversity and effective population sizes" Gordon Conference on Marine Microbes, Italy 2008.
- "Eukaryotic Diversity: Insights from Microbes" Harvard University, March 2008.
- "Dynamic genomes: inter- and intraspecific genome variation across the eukaryotic tree of life." Duke University, December 2007.
- "Dynamic genomes: inter- and intraspecific genome variation across the eukaryotic tree of life." University of Washington, November 2007.
- "The eukaryotic tree of life assessed through increased taxon and gene sampling" International Society of Protistology, Providence RI, August 2007.
- "Intraspecific macronuclear variation in *Chilodonella uncinata*" FASEB meeting: Ciliate Molecular Biology; Tucson AZ, July 2007.

"The tree of life and the diversification of eukaryotes" keynote address at symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

"Challenging principles of genome evolution: insights from microbial eukaryotes" Dalhousie University, November 2006.

"Challenging principles of genome evolution: insights from microbial eukaryotes" University of Massachusetts, October 2006.

"Non-Mendelian inheritance of cytoskeleton genes in ciliates." International Society of Protistology, June 2006.

"Genome Evolution in Microbial Eukaryotes." Microbial Diversity Course, Woods Hole, July 2006.

"Through the Looking Glass: Insights into Genome Evolution from Microbial Eukaryotes." University of Georgia, December 2005.

"Supergroups and other myths about eukaryotic diversity" Protistology Workshop, MBL, November 2005.

"Supergroups and other myths about eukaryotic diversity" World Summit on Evolution, Galapagos, June 2005.

"Challenging principles of genome evolution: insights from microbial eukaryotes" Wesleyan University, November 2004.

"Expanding principles of genome evolution: insights from microbial eukaryotes" Environmental Health Sciences Program: Insights from Comparative Genomic and Toxicogenomic Analyses. Mount Desert Biological Labs, July 2004.

"Evolution and implications of genome rearrangements in ciliates." Society of Protozoologists, Rhode Island, June 2004.

"Through the Looking Glass: Insights into Genome Evolution from Microbial Eukaryotes." New England Molecular Evolutionary Biologists meeting, UConn, November 2003.

"Untangling the Web: Lateral Gene Transfers and Genome Evolution in Microbial Eukaryotes" Keynote address for the Society of Industrial Microbiology, Minneapolis, August 2003.

"Novel Protein Evolution in Ciliates" FASEB meeting on Ciliate Molecular Biology, Vermont July 2003.

"Genome Evolution in Eukaryotes" Society of Molecular Biology and Evolution, California, July 2003.

"The Dynamic Duo – Genome Evolution in Ciliates." University of Rochester, October 2002.

"Through the Looking Glass: The Protists." International Congress of Systematic and Evolutionary Biology, Patras Greece, September 2002.

"Insights into Eukaryotic Diversity." Gordon Conference on Molecular Evolution, Ventura CA, January 2002.

"Evolutionary Genetics of Microbial Eukaryotes." University of Rhode Island Program in Marine Sciences, October 2001.

"Multi-Gene Genealogies and the Evolution of Chromosomal Rearrangements." FASEB Ciliate Molecular Biology Meetings, Vermont, July 2001.

"Patterns of chromosomal rearrangements among ciliates." XI International Congress of Protozoology, Salzburg Austria, July 2001.

"Through the looking glass: molecular evolution of microbial eukaryotes." Clark University, April 2001.

"A shifted paradigm: impact of lateral gene transfer on the origin and diversification of eukaryotes" Society for General Microbiology, Edinburgh, Scotland, March 2001.

"Through the looking glass: molecular evolution of microbial eukaryotes." Brown University, October 2000.

"Through the looking glass: molecular evolution of microbial eukaryotes." Dartmouth College, December 1999.

"Evolution of developmental processes in microbial eukaryotes: chromosomal rearrangements in ciliates." Gordon Conference on molecular evolution, Japan, October 1999.

"The Dynamic Duo: somatic and germline nuclei within single-celled ciliates." University of Rhode Island, November 1998.

"The Dynamic Duo: somatic and germline nuclei within single-celled ciliates." Invited speaker. Yale University, October 1998

"The tangled the web of life: interpreting conflict among gene genealogies." Evolution meetings, Vancouver, June 1998.

"The tangled the web of life: interpreting conflict among gene genealogies." American Society of Microbiology, Atlanta, May 1998.

"Molecular approaches to understanding the diversity of microbial eukaryotes." Harvard University Population Genetics Seminar Series, April 1998.

"Molecular approaches to understanding the diversity of ciliates." Hofstra University, April 1998.

"Evolution of nuclear dimorphism in ciliates" Invited speaker, SUNY-Albany, March 1997.

SOME RECENT CONTRIBUTED TALKS AND POSTERS (presenter, * = undergraduate author)

Kovner, A. and Laura A. Katz. Discovering Gene Scrambling in the Phyllopharyngean Ciliate *Chilodonella uncinata*. International Society of Protistology, Bristol RI, June 2009.

*DeBerardinis, J., *Hall, M., Kovner, A., Katz, L.A. Discordance in patterns of molecular evolution among mitochondrial and macronuclear loci within the ciliate morphospecies *Chilodonella uncinata*. International Society of Protistology, Bristol RI, June 2009.

Parfrey, LW and LA Katz. Genome dynamics in Foraminifera. Society for the Study of Evolution, Moscow Idaho, June 2009.

- Dunthorn, M., Foissner, W. and Katz, L.A. Expanding character sampling in ciliate phylogenetic reconstruction through analyses of mitochondrial sequences." Society for the Study of Evolution, Moscow Idaho, June 2009.
- Parfrey, L.W. and LA Katz. Heterogeneity of genome content during the life cycle of *Allogromia laticollaris* CSH (Foraminifera). American Society of Microbiology, Philadelphia PA, May 2009.
- Parfrey, L.W. and LA Katz. Heterogeneity of genome content during the life cycle of *Allogromia laticollaris* CSH (Foraminifera). Society for Integrative and Comparative Biology, Boston MA, January 2009.
- Tamura, M., Costas, B., McManus, B.G. and Katz, L.A. Intraspecific variation in ciliates. Gordon Research Conference on Marine Microbes, Italy, July 2008
- *Jaris, H., Tamura, M. and Katz, L.A. Genetic diversity of ciliates in coastal sediments. Gordon Research Conference on Marine Microbes, Italy July 2008.
- Katz, L.A. "Phylogeography of coastal ciliates: estimates of biodiversity and effective population sizes" Society for Molecular Biology and Evolution, Barcelona, June 2008.
- *DeBerardinis, J., Kovner, A. and Katz, L.A. Patterns of non-Mendelian inheritance in the ciliate *Chilodonella uncinata*. Society for Molecular Biology and Evolution, Barcelona, June 2008.
- Doherty, M., Tamura, M., *Jaris, H., Costas, B., McManus, G. and Katz, L.A. Phylogeography of coastal ciliates: estimates of biodiversity and effective population size. Society of Molecular Biology and Evolution, Barcelona June 2008.
- Dunthorn, M.S. and Katz L.A. Mitochondrial small subunit ribosomal DNA as a molecular marker for higher-level systematics in colpodean and spirotrich ciliates. International Society of Protistologists, Halifax, Nova Scotia, June 2008.
- Dunthorn, M.S. and Katz L.A. Are colpodean ciliates scandalous? International Society of Protistologists, Halifax, Nova Scotia, June 2008.
- Tamura, M., Doherty, M., *Jaris, H., Costas, B., McManus, G. and L.A. Katz Diversity of oligotrich and choreotrich ciliates in nearshore sediments and plankton. International Society of Protistology, Providence RI, August 2007.
- Parfery, L.W., Tekle, Y.I., Grant, J., Bowser, S. and L.A. Katz Morphological evolution of the *Corallomyxa*, foraminifera, *Gromia*, haplosporidia clade. International Society of Protistology, Providence RI, August 2007.
- Tekle, Y. I., Grant, J, and L. A. Katz. Placement of diverse amoebae on the eukaryotic tree of life. International Society of Protistology, Providence RI, August 2007.
- Dunthorn, M., W. Foissner, and L. A. Katz. Reassessment of the order Cyrtolophosidida and subclass Oligotrichia (phylum Ciliophora) based on broader sampling. FASEB meeting: Ciliate Molecular Biology; Tucson AZ, July 2007.
- *Lyman, C., Grant, J. and L.A. Katz Unusual patterns of evolution in the ciliate clade Heterotrichea. FASEB meeting: Ciliate Molecular Biology; Tucson AZ, July 2007.

Grant, J., Tekle, Y. I., Cole J. C., T. A. Nerad., Anderson O. R., Patterson D. J., L. A. Katz. Placement of diverse amoebae on the eukaryotic tree of life. Society for Molecular Biology and Evolution, Halifax, June 2007.

Parfery, L.W., and L.A. Katz. Molecular analysis of Antarctic *Gromia*. Society for Molecular Biology and Evolution, Halifax, June 2007.

Tekle, Y. I., Grant, J, Cole J. C., T. A. Nerad., Anderson O. R., Patterson D. J., L. A. Katz. Phylogenetic position of *Corallomyxa tenera* sp. nov. inferred from multigene analysis. Society for Molecular Biology and Evolution, Halifax, June 2007.

Dunthorn, M., W. Foissner, and L. A. Katz. Reassessment of the order Cyrtolophosidida and subclass Oligotrichia (phylum Ciliophora) based on broader sampling. Society for Molecular Biology and Evolution, Halifax, June 2007.

*Lyman, C., Grant, J. and L.A. Katz. Unusual patterns of evolution in the ciliate clade Heterotrichea. Society for Molecular Biology and Evolution, Halifax, June 2007.

Tekle, Y. I., Grant, J., Cole J. C., T. A. Nerad., Anderson O. R., Patterson D. J., L. A. Katz. Revealing the evolutionary history of an unknown Amoeba: Multigene analysis of *Corallomyxa tenera* sp. nov. Symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

Parfrey, L.W., E. Barbero*, D.J. Patterson, L.A. Katz. Evaluating support for the current classification of eukaryotic diversity. Symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

Doherty, M., B. Costas, G. McManus, and L.A. Katz. Assessing diversity of ciliates in marine coastal waters. Symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

Dunthorn, M., W. Foissner, and L. A. Katz. Molecular phylogenetic analysis of class Colpodea (Phylum Ciliophora) using increased taxon sampling. Symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

Grant, J., Y. Tekle, J. Cole and L.A. Katz. Placement of diverse amoebae on the eukaryotic tree of life. Symposium *Small Matters: microbes and their role in conservation*. American Museum of Natural History, April 2007.

Doherty, M., G. McManus and L.A. Katz. Ciliate diversity in marine sediments: a potential seed bank for the water column. New England Molecular Evolutionary Biologists (NEMEB), Amherst MA, 2006.

Dunthorn, M.S., W. Foissner and L.A. Katz. Extensive paraphyly within the class Colpodea. New England Molecular Evolutionary Biologists (NEMEB), Amherst MA, 2006.

*Robinson, T. Genome diversity within the ciliate species *Chilodonella uncinata*. International Society of Evolutionary Protistology, Poland, August 2006.

Doherty, M., B. Costas, G. McManus and L.A. Katz. Molecular data reveal distinct diversity 'footprint' in coastal ciliates (poster). Gordon Research Conference on Marine Microbes, Maine June 2006.

Katz, L.A., . Disentangling the complexity of coastal ciliates. International Society of Evolutionary Protistology, Poland, August 2006.

- *Barbero, E., D. Lahr, J. Grant, L.A. Katz. Evidence for a Diverse Actin Gene Family in the Freshwater Testate Amoeba *Arcella hemisphaerica*. International Society of Protistologists, Portugal, June 2006.
- Parfrey, L.W., E. *Barbero, E. *Lasser, J. Grant, D.J. Patterson and L.A. Katz. Evaluating Support for Eukaryotic Supergroups and the Search for Sister Groups of Foraminifera (poster). International Society of Protistologists, Portugal, June 2006.
- *Terry, F., G. McManus, B. Costas, L.A. Katz. Spatial and temporal variation in populations of tide pool ciliates. International Society of Protistologists, Portugal, June 2006.
- *Robinson, T. Genome diversity within the ciliate species *Chilodonella uncinata*. Society for Molecular Biology and Evolution, Arizona, May 2006.
- Dunthorn, M.S., W. Foissner and L.A. Katz. Problems and prospects for the phylogenetic resolution of the class Colpodea (Ciliophora). German Society of Protozoologists, Berlin, Germany, 2006.
- *Robinson, T., R.A. Zufall and L.A. Katz. Rapid Genome Evolution in the Ciliate *Chilodonella* (talk). New England Molecular Evolutionary Biologists, November 2005.
- Doherty, M. B.A. Costas, G.B. McManus and L.A. Katz. Culture-independent Analyses of Coastal Ciliates in the North Atlantic (talk). New England Molecular Evolutionary Biologists, November 2005.
- Zufall, R.A., *C. McGrath and L.A. Katz. Title: Exploring Genome Landscapes: Evolution of Proteins and Processing in Ciliates with Extensively Fragmented Genomes (poster). New England Molecular Evolutionary Biologists, November 2005.
- *Barbero. E.M., J. Grant, *E. Lasser, L.W. Parfrey and L.A. Katz. Testate Amoeba Phylogeny and the Eukaryotic 'Tree of Life' (poster). New England Molecular Evolutionary Biologists, November 2005.
- #Toulson, A.T., R.B. Merritt, and L.A. Katz. Chloroplast haplotype diversity and phylogeography of *Yucca brevifolia*, the Joshua Tree. (poster). New England Molecular Evolutionary Biologists, November 2005.
- *Terry, F.E., B. Costas, G.B. McManus and L.A. Katz. Biogeography of marine ciliates *Strombidium oculatum* and *S. stylifer*. (poster). New England Molecular Evolutionary Biologists, November 2005.
- Costas, B.A., G.B. McManus, L.B. Connel, M. Doherty, and L.A. Katz. Understanding microzooplankton community structure both temporally and spatially in long island sound using species-specific molecular probes (talk). ASLO (Advancing the science of limnology and oceanography). June 2005.
- *McGrath, C.L. and L.A. Katz. Genome Evolution in Ciliates with Extensively Fragmented Chromosomes: Insights from Armophorea and Phyllopharyngea (poster). FASEB Ciliate Molecular Biology. July 2005.
- Zufall, R.A., *C.L. McGrath and L.A. Katz. Exploring Genome Landscapes: Evolution of Proteins and Processing in Extensively Fragmenting Ciliates (talk). FASEB Ciliate Molecular Biology. July 2005.
- *Lasser, E., *F. Terry, J. Grant and L.A. Katz. Diversity of amoebae among eukaryotes: insights from multigene analyses (poster). Society of Molecular Biology and Evolution. June 2005.
- Katz, L.A., O.L.O. Snoeyenbos-West, A. Griffin, K. Pirog, W. Foissner, G. Costas and G.B. McManus. Reframing the microbial "Everything is Everywhere" debate: Evidence for high gene flow and diversity in ciliate morphospecies (poster). Society of Molecular Biology and Evolution. June 2005.

Katz, L.A., O.L.O. Snoeyenbos-West, A. Griffin, K. Pirog, W. Foissner, G. Costas and G.B McManus. Reframing the microbial "Everything is Everywhere" debate: Evidence for high gene flow and diversity in ciliate morphospecies (poster). Society of Molecular Biology and Evolution. June 2005.

[#]Doherty, M. B.A. Costas, G.B. McManus and L.A. Katz. Diversity of coastal ciliates (poster). New England Molecular Evolutionary Biologists, November 2004.

UNDERGRADUATES MENTORED SINCE '99: <50 total

Jennifer Riley '99, Rachel Israel '00, Jessica Linzmeier '00, Jill Testerman '00, Juliet Christian-Smith '01, Anna Campbell '01, Tracy Levin '01, Erica Lasek-Nesselquist '02, Kim Porter '02, Tovah Salcedo '02, Nisha Gandhi '03, Alexandra Houston '03, Kimberly Wade '03, Lindsey Able '03, Tarka Ayres '03, Nora Wilkins '03, Angela Baron AC, Jessica Cardillo '04, Kaveri Rajaraman '04 (MHC), Kate Pirog '04, Amanda Schack '04, Autumn Griffin '05, Casey McGrath '05, Irma Torres-Leon '05, Jessica Wallis '05, Erika Barbero '06, Kate Brenneman '06, Elyse Lasser '06, Nancy Ramirez '06, Tessa Robinson '06, Frances Terry '06, Nikki Knight '07, Laura Vann '07, Robin Bennet '08, Kimberly Hamper '08, Lizmarie Lopez '08J, Kim Mc Nelly '08, Kelly Pruden '08, Alex Webster '08, Yi Zhang '08, Hannah Jaris '09, Pelmo Takza '09, Sarah Bashiruddin '10, Crista Burke '10, Vivian Chen '10, Ivrose Joseph '10, Maggie McCaffrey '10, Shanita Williams '10, Jennifer DeBerardinis '11, Jian Hua Lin '11, Lily Maynard '11, Truc Nguyen '11, Yvanka de Soysa '11, Susie Parsons '12, Anais Lugo-Guercio '12, Gianna Teague '12.

GRADUATE STUDENTS:

Daniel Lahr, Ph.D. candidate Organismic & Evolutionary Biology, UMass, 2006-
 Laura Wegener Parfrey, Ph.D. candidate Organismic & Evolutionary Biology, UMass, 2005-
 Micah Dunthorn, Ph.D. candidate Organismic & Evolutionary Biology, UMass, 2003-
 Mary Doherty, M.S. candidate, Smith College 2003-2005, Ph.D. candidate UMass 2005-
 Jacob Bornstein, Ph.D. candidate: Organismic & Evolutionary Biology, UMass, 2002-2003
 Louise Mead, Ph.D., Organismic & Evolutionary Biology, UMass-Amherst, 1998-2000

POSTDOCTORAL FELLOWS:

Maiko Tamura, Ocean Biogeography Postdoc, 2007-
 Yonas Tekle, ATOL EuTree Postdoc, 2006-2009
 Rebecca Zufall, NSF Microbiology Postdoc, 2003-2005

PUBLICATIONS (* = undergraduate author)**Articles in Preparation (note: titles and author lists/order tentative)**

Doherty, M., B.A. Costas, M. Tamura, M.E. Ritchie, G.B. McManus and L.A. Katz. In Prep. Ciliate diversity across an environmental and depth gradient in Long Island Sound, USA.

Dunthorn, M.S. and L.A. Katz. In Prep. Mitochondrial small subunit ribosomal DNA as a molecular marker for higher-level systematics in colpodid and spirotrich ciliates

Dunthorn, M.S., W. Foissner and L.A. Katz. In prep. Molecular phylogenetic placement of the Halteriidae (Ciliophora, Spirotrichea): Description of new genera and cryptic species

Tekle, Y. I., Grant J., Kovner, A., L.A. Katz. In Prep. Identification of new molecular markers for assembling the eukaryotic tree of life.

Submitted Articles

Cole J., Andersen O.R., Tekle Y. I., J. Grant, Katz L. A., and T. Nerad. Submitted. A description of a new 'Amoebozoa' isolated from the American Lobster, *Homarus americanus*. In review *J. Euk. Micro.*

Doherty, M., M. Tamura, J.A.C. Vriezen, G.B. McManus and L.A. Katz. Submitted. Diversity of Oligotrich and Choreotrich ciliates in coastal marine sediments: relationships with overlying plankton

Peer-reviewed articles

Grant J., Tekle, Y. I., L.A. Katz. 2009. Phylogenetic placement of *Leukarachnion* Geitler, 1942 inferred from multigene analyses. *Protist.* **160**: 376-385.

Tekle, Y.I., Parfrey, L.W. and L.A. Katz. 2009. Molecular data are transforming hypotheses on the origin and diversification of eukaryotes. *Bioscience.* **59**: 471-481.

Dunthorn, M. M. Eppinger, M. V. J. Schwarz, M. Schweikert, J. Boenigk, L. A. Katz, T. Stoeck. 2009. A redescription of *Aristerostoma marinum* Kahl, 1931 and the phylogenetic placement of the Cyrtolophosididae Stokes, 1888 (Ciliophora; Colpodea). *Int. J. Syst. Evol. Microbiol.* **59**: 167-180.

Tekle, Y.I., J.R. Grant, L. O.R. Anderson, J.C. Cole, T. Nerad, and L.A. Katz. 2008. Phylogenetic placement of diverse amoebae inferred from multigene analyses and assessment of clade stability within 'Amoebozoa' upon removal of varying rate classes of SSU-rDNA. *Mol. Phylo. Evol.* **47**: 339-352.

Parfrey, L.W., D. Lahr and L.A. Katz. 2008. The dynamic nature of eukaryotic genomes. *Mol. Biol. Evol.* **25**: 787-794.

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