

CURRICULUM VITAE

1. Personal Data:

Dr. Mitchell Loyd Sogin
Distinguished Scientist

Josephine Bay Paul Center for Comparative Molecular Biology and
Evolution
The Marine Biological Laboratory
Woods Hole, MA 02543

2. Education:

1963-1967 University of Illinois, Urbana, Illinois B.S. in Chemistry and Microbiology

1967-1969 University of Illinois, Urbana, Illinois under Z. John Ordal, M.S. in Industrial
Microbiology

Research Activities: Bacterial endospore germination

1969-1972 University of Illinois, Urbana, Illinois under Carl R. Woese, Ph.D. in Microbiology
and Molecular Biology

NIH Predoctoral fellowship
Sigma Xi Research Award

Research Activities: Ribosomal RNA processing, Molecular evolution

1972-1976 National Jewish Center, Denver, Colorado with Norman R. Pace,
NIH Postdoctoral Fellowship

Research Activities: in vitro rRNA processing

3. Professional Appointments:

1976-1989 National Jewish Center, Denver, Colorado, Senior Staff Scientist in the Department
of Molecular and Cellular Biology.

1980-1986 Assistant Professor, University of Colorado Health Sciences Center, Department of
Biochemistry and Biophysics

1986-1999 Associate Fellow of the Canadian Institute for Advanced Research,

1986-1999 Associate Professor, University of Colorado Health Sciences Center, Department of
Microbiology

1989-2014 Senior Scientist, Marine Biological Laboratory at Woods Hole

1997-1998 Visiting Miller Research Professor, University of California at Berkeley

1997-2013 Founding Director, Josephine Bay Paul Center for Comparative Molecular Biology
and Evolution, Marine Biological Laboratory at Woods Hole

2004-2017 Professor (MBL), Department of Molecular Biology, Cell Biology and
Biochemistry, Brown University, Providence, RI

2014-2024 Distinguished Scientist, Marine Biological Laboratory at Woods Hole

4. Publications: (h-index 117, i10-index 254, Citations 71,134)

a. Books/Monographs

1. Sogin ML. Relationships among precursor and Mature Ribosomal RNAs. Urbana IL: University of Illinois, Urbana; 1972.

b. Chapters in Books / Proceedings

1. Sogin ML, McCall WA, Ordal ZJ. Effect of heat activation conditions on the germinal response of *Bacillus cereus*-T spores. Spores V. Washington, D.C.: American Society of Microbiologists; 1972. p. 363.
2. Pace NR, Sogin ML, editors. In vitro maturation of precursors of 5 S ribosomal RNA from *Bacillus subtilis*. Brookhaven Symp Biol; 1975 Jul: Brookhaven National Laboratory Associated Universities INC.
3. Pace NR, Meyhack B, Pace B, Sogin ML. The interaction of RNase M5 with a 5S ribosomal RNA precursor. In: Abelson J, Schimmel P, Soll D, editors. tRNA: Biological Aspects. Cold Spring Harbor, N.Y.: Cold Spring Harbor Laboratory; 1980. p. 155-71.
4. Pace NR, Gardiner B, Meyhack B, Pace B, Sogin ML, Stahl DA. RNA processing in *Bacillus subtilis*. In: Schlessinger D, editor. Microbiology. Washington, D.C.: American Society for Microbiology; 1982. p. 32-40.
5. Sogin ML, Edman U, Elwood HJ. A single kingdom of eukaryotes in: "The Hierarchy of Life. In: Fernholm B, Bremer K, Jornvall H, editors. Molecules and Morphology in Phylogenetic Analysis. Nobel Symposium Amsterdam: Elsevier Press; 1989. p. 133-43.
6. Sogin ML. Evolution of Eukaryotic Ribosomal RNA Genes In: Parker S, editor. McGraw-Hill Yearbook of Science and Technology. New York: McGraw-Hill; 1989. p. 260-2.
7. Sogin ML. Amplification of Ribosomal RNA Genes for Molecular Evolution Studies. In: Innis MA, Gelfand DH, Sninsky JJ, White TJ, editors. PCR-Protocols: A Guide to Methods and Applications. San Diego. CA: Academic Press, INC; 1990. p. 307-14.
8. Sogin ML. The Phylogenetic Significance of Sequence Diversity and Length Variations in Eukaryotic Small Subunit Ribosomal RNA Coding Regions Wiley-Liss, Inc. ; 1991. p. 175-88.
9. Patterson DJ, Sogin ML, editors. Eukaryote origins and protistan diversity The Origin and Evolution of the Cell: Proceedings of the Conference on the Origin and Evolution of Prokaryotic and Eukaryotic Cells; 1992; Shimoda Japan. NJ: World Scientific Pub. Co.; 1992.
10. Sogin ML. Molecular Biology and Protoctist Phylogeny. In: Margulis L, McKhann H, Olendzenski L, editors. Illustrated Glossary of Protoctista. Boston: Jones and Bartlett; 1993. p. xlv-xxvii.
11. Edman JC, Sogin ML. Molecular Phylogeny of *Pneumocystis carinii*. In: Walzer PD, editor. *Pneumocystis carinii* pneumonia. 2nd ed. New York: Marcel Dekker; 1993. p. 91-105.
12. Sogin ML. The Origin of Eukaryotes and Evolution into Major Kingdoms in: "Early Life on Earth. Early Life on Earth Nobel Symposium 84. Early Life on Earth. New York: Columbia University Press; 1994. p. 181-92.

13. Wainright PO, Patterson DJ, Sogin ML. Monophyletic Origin of Animals: A Shared Ancestry with the Fungi. In: Fambrough DM, editor. Molecular evolution of Physiological Processes 47th Symposium Society of General Physiologists. Marine Biological Laboratory, Woods Hole MA: The Rockefeller University Press; 1994. p. 39-53.
14. Bennett MV, Zheng X, Sogin ML, editors. The connexins and their family tree. Soc Gen Physiol Ser; 1994 1994; Marine Biological Laboratory, Woods Hole MA: The Rockefeller University Press; New York.
15. Sogin ML, Silberman JD, Hinkle G, Morrison HG, editors. Problems with Molecular Diversity in the Eukarya. Society for General Microbiology; 1996 1996; University of Warwick: Cambridge University Press.
16. Sogin ML, Hinkle G, editors. Common Measures for Studies of Biodiversity: Molecular phylogeny in the eukaryotic microbial world. Biodiversity II; 1997; Washington, DC: Joseph Henry Press.
17. Clark CG, Silberman JD, Diamond LS, Sogin ML. Molecular systematics of the intestinal amoebae. In: Coombs GH, Vickerman K, Sleight MA, Warren A, editors. Evolutionary Relationships Among Protozoa. 56. London: Chapman & Hall; 1998. p. 169-80.
18. Amaral Zettler LA, Anderson OR, Nerad TA, Sogin ML, editors. The phylogenetic position of *Comandonia operculata* and its implications for the taxonomy of the genus *Acanthamoeba*. Ixth International Meeting on the Biology And Pathogenicity of Free-living Amoebae Proceedings; 2001; Paris. Paris: John Libbey Eurotext Ltd.
19. Patterson DJ, Sogin ML, McArthur AG. The micro*scope web tool. In: Sullivan WT, Baross JA, editors. Planets and Life: The emerging Science of Astrobiology. Cambridge: Cambridge University Press; 2007. p. 579-84.
20. Sogin ML, Patterson DJ. The origin and diversification of eukaryotes. In: Sullivan WT, Baross JA, editors. Planets and Life: The emerging Science of Astrobiology. Cambridge: Cambridge University Press; 2007. p. 265-74.
21. Sogin ML. Characterizing Microbial Population Structures through Massively Parallel Sequencing In: Epstein SS, editor. Uncultivated Microorganisms. Dordrecht Heidelberg London New York Springer Press; 2009. p. 19-34.
22. Amaral-Zettler LA, Artigas LF, Baross JA, Bharathi L, Boetius A, Chandramohan D, et al. A global census of marine microbes. In: McIntyre A, editor. Life in the World's Oceans: Diversity, Distribution and Abundance. Oxford: Wiley-Blackwell Publishing Ltd; 2010. p. 223-45
23. Shanks OC, McLellan S, Huse SM, Sogin ML. Characterization of Microbial Community Structures in Recreational Waters and Primary Sources of Faecal Pollution with a Next-generation Sequencing Approach. Environmental Microbiology: Current Technology and Water Applications. 2011:203-23. PubMed PMID: WOS:000283818300009.
24. Sogin ML. Trying to Make Sense of the Microbial Census. In: Maloy S, Kolter R, editors. Microbes and Evolution: The World That Darwin Never Saw. Washington, DC: ASM Press; 2012. p. 31-7.
25. Huse SM, Mark Welch DB, Sogin ML, editors. Sequencing Errors, diversity Estimates, and the Rare Biosphere. The Science and Applications of Microbial Genomics; 2013 2013; Washington, DC. Washington, DC: The National Academies Press.

26. Agogue H, Lamy D, Neal PR, Sogin ML, Herndl GJ. Water mass-specificity of bacterial communities in the North Atlantic revealed by massively parallel sequencing. *Molecular Ecology*. 2011;20(2):258-74. doi: 10.1111/j.1365-294X.2010.04932.x. PubMed PMID: WOS:000285970200008.

c. Refereed Journal Articles

1. Sogin M, Pace B, Pace NR, Woese CR. Primary structural relationship of p16 to m16 ribosomal RNA. *Nat New Biol*. 1971;232(28):48-9. PubMed PMID: 4935733.
2. Schaup HW, Sogin M, Woese C. Characterization of an RNA "binding site" for a specific ribosomal protein of *Escherichia coli*. *Mol Gen Genet*. 1972;114(1):1-8. PubMed PMID: 4552495.
3. Sogin ML, Pechman KJ, Zablen L, Lewis BJ, Woese CR. Observations on the post-transcriptionally modified nucleotides in the 16S ribosomal ribonucleic acid. *J Bacteriol*. 1972;112(1):13-6. PubMed PMID: 4342811; PubMed Central PMCID: PMCPMC251375.
4. Sogin SJ, Sogin ML, Woese CR. Phylogenetic measurement in procaryotes by primary structural characterization. *J Mol Evol*. 1972;1(2):173-84. doi: 10.1007/BF01659163. PubMed PMID: 24173440.
5. Schaup HW, Sogin ML, Kurland CG, Woese CR. Localization of a binding site for ribosomal protein S8 within the 16S ribosomal ribonucleic acid of *Escherichia coli*. *J Bacteriol*. 1973;115(1):82-7. PubMed PMID: 4577755; PubMed Central PMCID: PMCPMC246216.
6. Sogin ML, Woese CR, Pace B, Pace NR. The relationship between precursor and mature forms of the 23S ribosomal RNA. *J Mol Evol*. 1973;2(2-3):167-74. PubMed PMID: 4219972.
7. Dobson PR, Doolittle WF, Sogin ML. Precursor of 5S ribosomal ribonucleic acid in the blue-green alga *Anacystis nidulans*. *J Bacteriol*. 1974;117(2):660-6. PubMed PMID: 4204437; PubMed Central PMCID: PMCPMC285557.
8. Woese CR, Sogin ML, Sutton LA. Procaryote phylogeny. I. Concerning the relatedness of *Aerobacter aerogenes* to *Escherichia coli*. *J Mol Evol*. 1974;3(4):293-9. PubMed PMID: 4606938.
9. Pribula CD, Fox GE, Woese CR, Sogin ML, Pace NR. Nucleotide sequence of *Bacillus megaterium* 5 S RNA. *FEBS Lett*. 1974;44(3):322-3. PubMed PMID: 4213268.
10. Sogin ML, Pace NR. In vitro maturation of precursors of 5S ribosomal RNA from *Bacillus subtilis*. *Nature*. 1974;252(5484):598-600. PubMed PMID: 4215038.
11. Doolittle WF, Woese CR, Sogin ML, Bonen L, Stahl D. Sequence studies on 16S ribosomal RNA from a blue-green alga. *J Mol Evol*. 1975;4(4):307-15. PubMed PMID: 813006.
12. Woese C, Sogin M, Stahl D, Lewis BJ, Bonen L. A comparison of the 16S ribosomal RNAs from mesophilic and thermophilic bacilli: some modifications in the Sanger method for RNA sequencing. *J Mol Evol*. 1976;7(3):197-213. PubMed PMID: 819656.
13. Marotta CA, Varricchio F, Smith I, Weissman SM, Sogin ML, Pace NR. The primary structure of *Bacillus subtilis* and *Bacillus stearothermophilus* 5 S ribonucleic acids. *J Biol Chem*. 1976;251(10):3122-7. PubMed PMID: 818086.

14. Sogin ML, Pace NR. Nucleotide sequence of 5 S ribosomal RNA precursor from *Bacillus subtilis*. *J Biol Chem*. 1976;251(11):3480-8. PubMed PMID: 179998.
15. Sogin ML, Pace B, Pace NR. Partial purification and properties of a ribosomal RNA maturation endonuclease from *Bacillus subtilis*. *J Biol Chem*. 1977;252(4):1350-7. PubMed PMID: 402365.
16. Schroeder E, McKibbin J, Sogin ML, Pace NR. Mode of degradation of precursor-specific ribonucleic acid fragments by *Bacillus subtilis*. *J Bacteriol*. 1977;130(3):1000-9. PubMed PMID: 405368; PubMed Central PMCID: PMCPMC235320.
17. Sogin ML, Olsen GJ. Identification and mapping of a 60 bp EcoRI fragment in the *Dictyostelium discoideum* ribosomal DNA. *Gene*. 1980;8(3):231-8. PubMed PMID: 6244213.
18. Peffley DM, Sogin ML. A putative tRNA^{Trp} gene cloned from *Dictyostelium discoideum*: its nucleotide sequence and association with repetitive deoxyribonucleic acid. *Biochemistry*. 1981;20(14):4015-21. PubMed PMID: 6269578.
19. Olsen GJ, Sogin ML. Nucleotide sequence of *Dictyostelium discoideum* 5.8S ribosomal ribonucleic acid: evolutionary and secondary structural implications. *Biochemistry*. 1982;21(10):2335-43. PubMed PMID: 7093192.
20. McCarroll R, Olsen GJ, Stahl YD, Woese CR, Sogin ML. Nucleotide Sequence of the *Dictyostelium Discoideum* Small-Subunit Ribosomal Ribonucleic Acid Inferred from the Gene Sequence: Evolutionary Implications. *Biochemistry*. 1983;22(25):5858-68. doi: 10.1021/bi00294a027.
21. Olsen GJ, McCarroll R, Sogin ML. Secondary structure of the *Dictyostelium discoideum* small subunit ribosomal RNA. *Nucleic Acids Res*. 1983;11(22):8037-49. PubMed PMID: 6359065; PubMed Central PMCID: PMCPMC326558.
22. Elwood HJ, Olsen GJ, Sogin ML. The small-subunit ribosomal RNA gene sequences from the hypotrichous ciliates *Oxytricha nova* and *Stylonychia pustulata*. *Mol Biol Evol*. 1985;2(5):399-410. PubMed PMID: 3939705.
23. Lane DJ, Pace B, Olsen GJ, Stahl DA, Sogin ML, Pace NR. Rapid determination of 16S ribosomal RNA sequences for phylogenetic analyses. *Proc Natl Acad Sci U S A*. 1985;82(20):6955-9. PubMed PMID: 2413450; PubMed Central PMCID: PMCPMC391288.
24. Sogin ML, Elwood HJ, Gunderson JH. Evolutionary diversity of eukaryotic small-subunit rRNA genes. *Proc Natl Acad Sci U S A*. 1986;83(5):1383-7. PubMed PMID: 2419907; PubMed Central PMCID: PMCPMC323080.
25. Sogin ML, Swanton MT, Gunderson JH, Elwood HJ. Sequence of the small subunit ribosomal RNA gene from the hypotrichous ciliate *Euplotes aediculatus*. *J Protozool*. 1986;33(1):26-9. PubMed PMID: 3007752.
26. Sogin ML, Elwood HJ. Primary structure of the *Paramecium tetraurelia* small-subunit rRNA coding region: phylogenetic relationships within the Ciliophora. *J Mol Evol*. 1986;23(1):53-60. PubMed PMID: 3084799.

27. Dingermann T, Bertling W, Brechner T, Nerke K, Peffley DM, Sogin ML. Structure of two tRNA genes from *Dictyostelium discoideum*. *Nucleic Acids Res.* 1986;14(2):1127. PubMed PMID: 3633086; PubMed Central PMCID: PMC339487.
28. Gunderson JH, McCutchan TF, Sogin ML. Sequence of the small subunit ribosomal RNA gene expressed in the bloodstream stages of *Plasmodium berghei*: evolutionary implications. *J Protozool.* 1986;33(4):525-9. PubMed PMID: 3540280.
29. Gunderson JH, Sogin ML. Length variation in eukaryotic rRNAs: small subunit rRNAs from the protists *Acanthamoeba castellanii* and *Euglena gracilis*. *Gene.* 1986;44(1):63-70. PubMed PMID: 3095190.
30. Sogin ML, Ingold A, Karlok M, Nielsen H, Engberg J. Phylogenetic evidence for the acquisition of ribosomal RNA introns subsequent to the divergence of some of the major Tetrahymena groups. *EMBO J.* 1986;5(13):3625-30. PubMed PMID: 3830129; PubMed Central PMCID: PMC1167402.
31. Sogin ML, Miotto K, Miller L. Primary structure of the *Neurospora crassa* small subunit ribosomal RNA coding region. *Nucleic Acids Res.* 1986;14(23):9540. PubMed PMID: 2948156; PubMed Central PMCID: PMC311989.
32. Sogin ML, Gunderson JH. Structural diversity of eukaryotic small subunit ribosomal RNAs. Evolutionary implications. *Ann N Y Acad Sci.* 1987;503:125-39. PubMed PMID: 3304074.
33. Lau PP, DeBrunner-Vossbrinck B, Dunn B, Miotto K, MacDonnell MT, Rollins DM, et al. Phylogenetic diversity and position of the genus *Campylobacter*. *Syst Appl Microbiol.* 1987;9:231-8. PubMed PMID: 11542086.
34. Gunderson JH, Elwood H, Ingold A, Kindle K, Sogin ML. Phylogenetic relationships between chlorophytes, chrysophytes, and oomycetes. *Proc Natl Acad Sci U S A.* 1987;84(16):5823-7. PubMed PMID: 3475703; PubMed Central PMCID: PMC298955.
35. Gunderson JH, Sogin ML, Wollett G, Hollingdale M, de la Cruz VF, Waters AP, et al. Structurally distinct, stage-specific ribosomes occur in *Plasmodium*. *Science.* 1987;238(4829):933-7. PubMed PMID: 3672135.
36. McCutchan TF, de la Cruz VF, Lal AA, Gunderson JH, Elwood HJ, Sogin ML. Primary sequences of two small subunit ribosomal RNA genes from *Plasmodium falciparum*. *Mol Biochem Parasitol.* 1988;28(1):63-8. PubMed PMID: 2836731.
37. Lynn DH, Sogin ML. Assessment of phylogenetic relationships among ciliated protists using partial ribosomal RNA sequences derived from reverse transcripts. *Biosystems.* 1988;21(3-4):249-54. PubMed PMID: 2456107.
38. Edman JC, Kovacs JA, Masur H, Santi DV, Elwood HJ, Sogin ML. Ribosomal RNA sequence shows *Pneumocystis carinii* to be a member of the fungi. *Nature.* 1988;334(6182):519-22. doi: 10.1038/334519a0. PubMed PMID: 2970013.
39. Looker D, Miller LA, Elwood HJ, Stickel S, Sogin ML. Primary structure of the *Leishmania donovani* small subunit ribosomal RNA coding region. *Nucleic Acids Res.* 1988;16(14B):7198. PubMed PMID: 3405771; PubMed Central PMCID: PMC338379.

40. Medlin L, Elwood HJ, Stickel S, Sogin ML. The characterization of enzymatically amplified eukaryotic 16S-like rRNA-coding regions. *Gene*. 1988;71(2):491-9. PubMed PMID: 3224833.
41. Sogin ML, Gunderson JH, Elwood HJ, Alonso RA, Peattie DA. Phylogenetic meaning of the kingdom concept: an unusual ribosomal RNA from *Giardia lamblia*. *Science*. 1989;243(4887):75-7. PubMed PMID: 2911720.
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43. Edman JC, Kovacs JA, Masur H, Santi DV, Elwood HJ, Sogin ML. Ribosomal RNA genes of *Pneumocystis carinii*. *J Protozool*. 1989;36(1):18S-20S. PubMed PMID: 2540326.
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45. Sogin ML. Evolution of Eukaryotic Microorganisms and Their Small Subunit Ribosomal RNAs. *American Zoologist*. 1989;29(2):487-99.
46. Sogin ML, Edman JC. A self-splicing intron in the small subunit rRNA gene of *Pneumocystis carinii*. *Nucleic Acids Res*. 1989;17(13):5349-59. PubMed PMID: 2788266; PubMed Central PMCID: PMC318115.
47. Bhattacharya D, Elwood HJ, Goff LJ, Sogin ML. The Phylogeny of *Gracilaria lemaneiformis* (Rhodophyta) Based on Sequence Analysis of its Small Subunit Ribosomal RNA Coding Region. *J Phycol*. 1990;26:181-6. doi: 10.1111/j.0022-3646.1990.00181.x.
48. Forster H, Coffey MD, Elwood H, Sogin ML. Sequence-Analysis of the Small Subunit Ribosomal-Rnas of 3 Zoospore Fungi and Implications for Fungal Evolution. *Mycologia*. 1990;82(3):306-12. doi: Doi 10.2307/3759901. PubMed PMID: WOS:A1990DK08100003.
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50. De Wit D, Steyn L, Shoemaker S, Sogin M. Direct detection of *Mycobacterium tuberculosis* in clinical specimens by DNA amplification. *J Clin Microbiol*. 1990;28(11):2437-41. PubMed PMID: 2123884; PubMed Central PMCID: PMC318115.
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252. Klein, S., Frazier, V., Readdean, T., Lucas, E., Diaz-Jimenez, E. P., Sogin, M., Ruff, E. S., & Echeverri, K. (2021). Common Environmental Pollutants Negatively Affect Development and Regeneration in the Sea Anemone *Nematostella vectensis* Holobiont. *FRONTIERS IN ECOLOGY AND EVOLUTION*, 9(ARTN 786037). <https://doi:10.3389/fevo.2021.786037>
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258. Vineis, J. H., Reznikoff, W. S., Antonopoulos, D. A., Koval, J., Chang, E., Fallon, B. R., . . . Sogin, M. L. (2024). A novel conjugative transposon carrying an autonomously amplified plasmid. *mBio*, 15(2), e02787-02723. doi:10.1128/ mbio.02787-23

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d. Non-Refereed Journal Articles

1. Sogin ML. Early evolution and the origin of eukaryotes. *Curr Opin Genet Dev*. 1991;1(4):457-63. PubMed PMID: 1822277.
2. Sogin ML. Microbiology. Giants among the prokaryotes. *Nature*. 1993;362(6417):207. doi: 10.1038/362207a0. PubMed PMID: 8459847.
3. Sogin ML. Introductory remarks. *Biological Bulletin*. 1999;196(3):307-. PubMed PMID: WOS:000081104800009.
4. Sogin ML. Concluding Remarks. *Biol Bull*. 1999;196(3):415-6. doi: 10.1086/BBLv196n3p415. PubMed PMID: 28296482.
5. Sogin M, Jennings DE. Introduction. *Biol Bull*. 2003;204(2):159. doi: 10.1086/BBLv204n2p159. PubMed PMID: 27690524.

5. Research Grants:

a. Current Grants

Title of Project: Host and microbial basis of human ulcerative colitis and pouchitis:

Agency: NIH Co-IM. L. Sogin (PI E. Chang–Univ. Chicago)

Grant Number:1RC2DK122394

Project Period: 9/1/19-11/30/2024

Title of Project: Microbiome dynamic and discovery through transfer RNA

Agency: W.M. Keck Foundation Co-Is M.L. Sogin and A.M. Eren, PI - Tao Pan,

Project Period: 6/1/18-6/30/2022

b. Completed Grants

Title of Project: Role of Repetitive DNA sequences in Gene Expression

Agency: NIH Principal Investigator: **M. L. Sogin**

Grant Number: 1 R01 GM23464-01-06

Project Period: 2/1/77-1/31/1982

Title of Project: Molecular Evolution of Eukaryotes

Agency: NIH Principal Investigator: **M. L. Sogin**

Grant Number: 1 R01 GM32964-01-18

Project Period: 7/1/84-6/30/2000

Title of Project: Workshops in Molecular Evolution

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**

Project Period: 6/1/88-11/30/1990—Three serial awards over three years.

Title of Project: Workshops in Molecular Evolution

Agency: NSF Principal Investigator: **M. L. Sogin**

Grant Number: BSR-DEB-9615098

Project Period: 6/1/91-5/31/1999

Title of Project: Workshops in Molecular Evolution

Agency: NASA (NAG5-6662) Principal Investigator: **M. L. Sogin**

Project Period: 8/1/97-5/31/1999

**Title of Project: Accretion of Cells with Nuclear Genomes: Calibrating Eukaryote
Ultrastructure Innovation through Studies of Molecular Evolution**

Agency: NASA (NAG5-4895) Principal Investigator: **M. L. Sogin**

Project Period: 6/1/97-5/31/2000

**Title of Project: Core Funding for Center for Comparative Molecular Biology and
Evolution**

Agency: Josephine Bay Paul Foundation Principal Investigator: **M. L. Sogin**

Project Period: 12/1/97-12/31/2002

Title of Project: *Giardia*: A Model for Ancient Eukaryote Genome Functions

Agency: NIH(5 U01 AI43273-05) Principal Investigator: **M. L. Sogin**

Project Period: 2/15/98-4/31/04

**Title of Project: Environmental Genomes and the Evolution of Complex Systems in
Simple Organisms**

Agency: NASA (NCC2-1054) Principal Investigator: **M. L. Sogin**

Project Period: 7/1/98-10/31/03

Title of Project: W.M. Keck Ecological and Evolutionary Genetics Facility

Agency: W.M. Keck Foundation Principal Investigator: **M. L. Sogin**

Project Period: 1/1/2001-12/31/2003

Title of Project: Adaptation of Unicellular Eukaryotes to Extremely Acidic Eukaryotes

Agency: NSF (DEB-0085486) Principal Investigator: **M. L. Sogin**

Project Period: 2/1/01-1/31/05

Title of Project: Microsporidia and the Next Generation of Genome Scientists

Agency: NSF(MCB-0135272) Principal Investigator: **M. L. Sogin**

Project Period: 2/1/01-10/31/05

Title of Project: Laboratory Equipment for Post-Genomic Studies in Environmental Biology

Agency: NSF(DBI-0100193) Principal Investigator: **M. L. Sogin**

Project Period: 6/15/01–5/31/03

Title of Project: The Program in molecular pathogenesis and global infectious disease at the Marine Biological Laboratory

Agency: Ellison Biomedical Foundation Co-Principal Investigators: **M. L. Sogin, W.T. Speck**

Project Period: 11/1/01-10/31/06

Title of Project: Support for Education and Research

Agency: The Irving Weinstein Foundation Principal Investigator: **M. L. Sogin**

Project Period: 8/1/2002-12/31/2003

Title of Project: Advances in Genome Technology and Bioinformatics -

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**

Project Period: 9/1/2002-8/30/2002–Supported four week course

Title of Project:Unveiling the Ocean’s hidden majority: a roadmap-

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**

Project Period: 8/30/2003-3/30/2004–Supported Nov 2003 strategic planning workshop

Title of Project:Unveiling the Ocean’s hidden majority: a roadmap-

Agency: G. and B, Moore Foundation Principal Investigator: **M. L. Sogin**

Project Period: 9/30/2003-3/30/2004–Supported Nov 2003 strategic planning workshop

Title of Project: From Early Biospheric Metabolisms to the Evolution of Complex Systems

Agency: NASA(NNA04CC04A) Principal Investigator: **M. L. Sogin**

Project Period: 11/1/03-10/31/08

Title of Project: Molecular Evolution of Eukaryotes: a protistan emphasis

Agency: NIH (1 R01 AI058054-01) Principal Investigator: **M. L. Sogin**

Project Period: 1/1/04-12/31/08

Title of Project: Bioinformatics Resource Centers for Biodefense and Emerging/Re-emerging Infectious Disease

Agency: NIH (NIAID-DMID-04-34) Co-I–**M.L. Sogin, PI -R. Shuerman**

Project Period: 2/2/04-2/1/09

Title of Project: Woods Hole Center for Oceans and Human Health
Agency: NIH/NIEHS (1 P50 ES012742-01) Co-I–**M.L. Sogin, P.I. -J. Stegeman**
Project Period: 2/16/04-12/31/08

Title of Project: Woods Hole Center for Oceans and Human Health
Agency: NSF (OCE- 0430724) Co-I–**M.L. Sogin, P.I. -J. Stegeman**
Project Period: 5/1/04-4/30/09

Title of Project: Microbial Population Structure of the World's Oceans
Agency: Keck Foundation (DT063006) Principal Investigator: **M.L. Sogin**
Project Period: 7/1/06-6/30/08

Title of Project: Anthropogenic impacts and profiling fecal microbial populations at a salt marsh
Agency: NIH (1 P50 ES012742-01)–Pilot project -Woods Hole Center for Oceans and Human Health Principal Investigator: **M.L. Sogin**
Project Period: 01/01/2007–12/31/2007

Title of Project: International Census of Marine Microbes
Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**
Project Period: 2/1/07–1/31/10

Title of Project: Visualization & Analysis of Microbial Population Structures
Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**
Project Period: 06/01/2007–05/31/2009

Title of Project: New Paradigms for Remote Sensing and Monitoring of Microbial Ecosystems
Agency: NASA (NNA04CC04A) Principal Investigator: **M.L. Sogin**
Project Period: 06/01/2007–05/31/2008

Title of Project: Biogeochemical forensics of Fe-based microbial systems: defining mission targets and tactics for life detection on Mars
Agency: NASA (NNA04CC04A) Principal Investigator: **M.L. Sogin**
Project Period: 06/01/2007–05/31/2008

Title of Project: Genomics of Terrestrial Microbial Communities Associated with the Production and Consumption of Greenhouse Gases”.
Agency: NSF/USDA Co-I–**M.L. Sogin, PI -T. Schmidt**
Project Period: 11/01/07-10/31/12

Title of Project: The Rare Biosphere and the Human Habitat
Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**
Project Period: 07/01/08-5/31/12

Title of Project: Microbial community profiling of sewage contamination in the Great Lakes” Produce & analyze a pyrotag data set corresponding to hypervariable regions in ribosomal RNA.

Agency: NIH (1R21AI076970 01A1) Co-I–**M.L. Sogin, PI:S. McLellan**
Project Period: 06/15/08-05/31/10

Title of Project: The Woods Hole Center for Oceans and Human Health

Agency: NSF/NIH (OCE-0911031) Co-I–**M.L. Sogin, PI -J. Stegeman**
Project Period: 06/01/09-05/31/12

Title of Project: Microbial Observatory Examining Microbial Abundance, Diversity, Association and Activity at Seafloor Brine Seeps

Agency: NSF EF-0801740 Co-I–**M.L. Sogin, PI -S. Joye**
Project Period: 09/01/09-08/31/13

Title of Project: VAMPS (MBL) data analysis and visualization module for MoBe DAC: A data analysis core for the Indoor Environment Microbiology Program

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**
Project Period: 10/01/2012-03/31/14

Title of Project: IGERT: Reverse Ecology: Computational Integration of Genomes, Organisms and Environments

Agency: NSF 0966060 Co-I–**M.L. Sogin, PI -D. Rand**
Project Period: 08/01/10 - 07/31/15

Title of Project: MRI Acquisition of an Illumina GAIIx for Genomics and Microbial Ecology

Agency: NSF-DBI-1039946 Principal Investigator: **M. L. Sogin**
Project Period: 8/15/10-7/31/13

Title of Project: Development of a TILLING Resource for the Xenopus Research Community

Agency: NIH (1R21HD065713) Co-I–**M.L. Sogin, PI-R. Grainger**
Project Period: 08/20/10-07/31/12

Title of Project: Molecular Microbial Inventories of space vehicles bound for Mars and their assembly facilities.

Agency: NASA NNX10AT90G Principal Investigator: **M. L. Sogin**
Project Period: 11/01/10-10/31/15

Title of Project: MoBe DAC: A data analysis core for the Indoor Environment Microbiology Program.

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**
Project Period: 01/01/2011-12/31/14

Title of Project: Scientific Steering Committee of the Deep Life Directorate

Agency: Alfred P. Sloan Foundation Principal Investigator: **M. L. Sogin**
Project Period: 03/01/11-6/30/15

Title of Project: Exploring Diversity and Distribution of Deep Life

Agency: Alfred P. Sloan Foundation Co-I – **M.L. Sogin, PI - R. Colwell**

Project Period: 04/06/11-10/31/13

Title of Project: The Role of the Gut Microbiota in Ulcerative Colitis

Agency: NIH 4UH3DK083993-04 Co-I – **M.L. Sogin, PI - V. Young**

Project Period: 08/01/12-07/31/14

Title of Project: Deep Life Community- The Deep Carbon Observatory

Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**

Project Period: 01/01/2014-12/31/2015

Title of Project: Microbial community profiles identify new indicators of waterborne pathogens

Agency: NIH 10734207 Co-I – **M.L. Sogin, PI - S. McLellan**

Project Period: 05/01/11-04/30/16

Title of Project: Microbial Community Structure of Hydrocarbon Reservoirs and Associated Seep

Agency: ExxonMobil Principal Investigator: **M.L. Sogin**

Project Period: 08/15/2013-02/01/2017

Title of Project: An integrated data platform for democratized sequencing

Agency Alfred P. Sloan Foundation# 2014-3-04 Co-I – **M.L. Sogin, PI - Rob Knight**

Project Period: 01/03/15-03/31/16

Title of Project: Diversity and functional capacity of dynamic microbiomes in human health

Agency: Bay and Paul Foundation Principal Investigator: **M.L. Sogin**

Project Period: 01/01/2014-12/31/2017

Title of Project: Dynamics of Bacterial-Fungal Interactions in Chronic Lung Infection

Agency NIH:1R01GM108492-01: Co-I – **M.L. Sogin, PI Debra Hogan**

Project Period: 02/10/14-12/31/17

Title of Project: Strategies and Techniques for Analyzing Microbial Population Structures

Agency: NIH (R25 GM106988-01) Co-Investigators **M.L. Sogin, D. Mark Welch**

Project Period: 07/01/2013-06/30/2018

Title of Project: Deep Life Community- The Deep Carbon Observatory

Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**

Project Period: 01/01/2016-12/31/2017

Title of Project: The Deep Life Community- 2018-2019

Agency: Alfred P. Sloan Foundation Principal Investigator: **M.L. Sogin**

d. Other foundation funding

Title of Project: Molecular Evolution

Agency: Unger G. Vetlesen Foundation Principal Investigator:

Project Period: 11/1/1989-10/31/2021

6. Service

(i) Institutional

1994-2000 Science Advisory Council: Marine Biological Laboratory at Woods Hole.

1997-2013 Founding Director, Josephine Bay Paul Center for Comparative Molecular Biology and Evolution

2016-2021 Science Advisory Council: Marine Biological Laboratory at Woods Hole.

(ii) Professional

Society Memberships

American Society of Microbiology

Society of Protozoologists

International Society of Evolutionary Protozoologists

Society for Molecular Biology and Evolution

American Association for the Advancement of Science

American Society for Cell Biology

(ii) Community

1989-1990 National Science Foundation Minority Post Doctoral Fellowship Program

1994-1996 National Science Foundation/Sloan Foundation Molecular Evolution Post-Doctoral Program

1999-2004 National Research Council- Space Studies Board.

2001-2015 Sloan Research Fellowship in Marine Biology Selection Committee

2016- current American Academy of Microbiology Fellows Selection Committee

Editorial Board: Journal of Eukaryotic Microbiology: (Journal of Protozoology)

Editorial Board: Molecular Phylogenetics and Evolution

Editorial Board: Protist (Formerly Archiv fur Protistenkunde)

Editorial Board: Applied and Environmental Microbiology

Editorial Board: Astrobiology

Editorial Board: Environmental Microbiology

7. Academic Honors:

1992 Division Lecturer - American Society for Microbiology

1993 Stoll Stunkard Award - American Society of Parasitologists

1995 Elected Chairman - Division R, American Society of Microbiologists

1996 Elected - Fellow of the American Academy of Microbiology

1998 Elected - Fellow of the American Academy of Arts and Sciences

1998 Elected - Fellow of the American Association for the Advancement of Science

2007 American Society for Microbiology – Roger Porter Award

8. Teaching:

- 1985-1986 Nucleic Acids module in Biochemistry graduate course at University of Colorado Health Sciences Center, Department of Biochemistry and Biophysics
- 1988-2000 Director - Workshop in Molecular Evolution at the marine Biological Laboratory
- 1997-1998 Lectures in Microbial Diversity and Evolution at University of California, Berkeley
- 2002-2003 Director - Advances in Genome Technology and Bioinformatics
- 2011-2017 Co-Director (w David Mark Welch) Strategies and Techniques for Analyzing Microbial Population Structures (STAMPS)