

**Andrew Ogram**

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**CITIZENSHIP:** USA; Overseas Citizen of India

**RESEARCH INTERESTS:** Microbial ecology of biogeochemical cycles and contaminant transformations in oxic and anoxic systems; dissemination of antibiotic resistance genes in soils; and impacts of different cropping systems on soil health.

**PROFESSIONAL PREPARATION:**

- B.S. (Zoology), University of Florida, Gainesville, December, 1977.
- M.S. (Soil Science), University of Florida, Gainesville, August, 1984.
- Ph.D. (Microbiology), University of Tennessee, Knoxville, December, 1988.

**EMPLOYMENT:**

- 1996-Present: Assistant, Associate, and Professor, Soil, Water, and Ecosystems Sciences Dept., University of Florida, Gainesville, FL 32611-0290.
- 2017-2018: Program Officer, Established Program to Stimulate Competitive Research (EPSCoR), National Science Foundation, Alexandria, VA.
- 1990-1996: Assistant Professor, Department of Crop and Soil Sciences, Washington State University, Pullman, WA 99164-6420.
- 1988-1990: National Research Council Post-Doctoral Fellow, US EPA, Gulf Breeze, FL.

**RECENT SYNERGISTIC ACTIVITIES**

- 2021-2022: UF/IFAS Research Dean's Fellow: to evaluate IFAS International Programs and to suggest approaches to reconstitute the Office of International Program (OIP). OIP was largely disbanded in 2017, and a need exists to reconstitute the Office.
- 2022: Keynote speaker, Ecosystem Functioning in the Anthropocene Symposium. On-line symposium organized by Banaras Hindu University, Varanasi, India.
- 2022: Keynote speaker, Kansas NSF EPSCoR annual meeting.
- 2021-present: Member, Soil Science Society of America Working Group to establish relations with the Soil Science Society of China.
  - Chair, Meetings and Workshops sub-committee. The objectives of this subcommittee are to establish a roadmap for conducting joint on-line and in-person symposia between the two societies.
- 2021: SWSD representative for Training the Trainer, a program to train senior faculty members on best approaches to mentor younger faculty. Will transfer these approaches to faculty mentors in workshops offered at the college level.
- 2021: Chair, Search and Screen Committee for Soil Scientist tenure track position at the Southwest Florida Research and Education Center, Immokalee.
- 2021: Farmer-2-Farmer project with Guyana to educate Guyanese representatives on practical applications of mycorrhizae. With Abid al-Agely.

- 2020: Chair, USDA/ARS National Program 212 Soil and Air Review. A committee of five members from various universities conducted the five-year review of NP212, which was focused on developing and evaluating approaches to management of soils resources, managing nutrients in agroecosystems, and reducing environmental risk from agricultural operations.
- 2019-present: Chair, SWSD Faculty Advisory Committee. Provide advice to SWSD chair on variety of issues. Major activities included: writing SWSD bylaws; advising the chair on the direction of new faculty hires.
- 2019-present: Member, External Advisory Committee, Kansas EPSCoR Program (MAPS). Evaluate and provide suggestions for improvement of Kansas' NSF EPSCoR Track 1 (\$20 million, four years) program to link the microbiomes of plants, soils, and surface waters along a precipitation gradient across the state.

#### **AFFILIATIONS**

- UF Center for Soil Health and Sustainability
- UF Water Institute
- UF School of Natural Resources and the Environment
- UF Center for Stress Resilient Agriculture
- UF One Health Center for Excellence

#### **HONORS AND AWARDS**

- 2022: UF/IFAS International Educator Award
- 2021-2022: UF/IFAS Research Dean's Fellow
- 2019-2021: University Term Professorship
- 2016: Global Initiative for Academic Network (GIAN) Visiting Professorship, Central University of Gujarat, India.
- 2012: Anderson Faculty Honoree (College of Liberal Arts and Sciences) for undergraduate mentoring, 2012
- 2012: Best Teacher Award: Nanjing University Summer School on Environmental Remediation
- 2009-2011: University of Florida Research Foundation Professorship
- 2007: Keynote speaker for special symposium at annual meeting of International Association of Landscape Ecology, Wageningen, NL.
- 2006: ASM Indo-US Professorship. Sponsored Dr. Krishna Sundari of Jaypee Institute of Technology, New Delhi.
- 2005: ASM Indo-US Professorship. IMTECH, Chandigarh, India. RK Jain, host.
- 1988-1990: National Research Council Fellowship
- 1985-1988: NIH Training Grant, University of Tennessee, Knoxville.
- 1984: Best thesis award, Soil Science Department, University of Florida

#### **STUDENT HONORS AND AWARDS**

- 2017: Elise Morrison, SWSD Outstanding Dissertation.
- 2015: Elise Morrison, Francis Clark Award for Outstanding Graduate Student in Soil Biology, Soil Science Society of America.
- 2015 Best Poster Awards, SWSD Research Forum: Laibin Huang and Elise Morrison
- 2013-2017: Laibin Huang, awarded Water Institute Fellowship
- 2013-2014: Arnav Gupta, Undergraduate University Scholar

- 2013: Elise Morrison, Smithsonian Short Term Fellowship.
- 2013: Chris Weidow, Outstanding MS Thesis, SWSD
- 2009-2013: Christopher Weidow, UF Alumni Fellowship.
- 2006: Jason Smith, SWSD Award for outstanding MS thesis.
- 2005: Yun Cheng, Honorable Mention, American Chemical Society Agrichemicals Division Graduate Student Competition.
- 2005: Jason Smith, NASA Summer Fellowship
- 2003: Hector Castro, SWSD Outstanding Dissertation
- 2002: Kanika Sharma, SWSD Outstanding Dissertation
- 2002: Kanika Sharma, 2<sup>nd</sup> Place, ACS Agrochemicals Division, Student Competition
- 2001: V. Ramakrishnan, First Place, University of Florida Graduate Research Forum

#### **CURRENT TEACHING RESPONSIBILITIES:**

- SWS6363 Advanced Soil Microbial Ecology (with M. Fujimoto, J. Meyer, S. Strauss, H-L Liao).
- SWS4303/5305 Soil Microbial Ecology (on campus and DE sections)
- SWS4550/5551 Soils, Water, and Public Health (on campus and DE sections)
- Faculty Coordinator for the SWSD graduate certificates in:
  - Bioremediation and Biodegradation
  - Soils, Water, and Public Health

#### **INTERNATIONAL EDUCATION:**

- 2023, Pending safety considerations regarding COVID-19: Lead UF study abroad course (SWS4550 Soils, Water and Public Health) in India.
- 2016: GIAN short course: Microbial Ecology of Biodegradation and Bioremediation, Central University of Gujarat, India. Two weeks in January, 2016.
- 2014-2016: Educational collaboration with Dr. Milko Jorquera, Universidad de la Frontera, Temuco, Chile. Ogram visited Jorquera's lab two weeks each year, and a student of Jorquera's visited Ogram's lab for six months each year.
- 2012: Lecturer in Environmental Science summer course, Nanjing University, China
- 2006: Fundamental applications of Ecto and Endomycorrhizal Fungi; sponsored by ASM as part of Indo-US professorship awarded to Krishna Sundari (Jaypee Institute of Technology) and Ogram. Held at University of Florida.
- 2005: Molecular ecology of bioremediation; sponsored by ASM as part of Indo-US professorship awarded A. Ogram and RK Jain (IMTECH). Held at IMTECH, Chandigarh, India.
- 2003: Practical course in molecular ecology, sponsored by UF IFAS and Bangalore University. Bangalore, India.

#### **MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

- American Society for Microbiology
- American Public Health Association
- Soil Science Society of America
- International Society for Microbial Ecology
- Soil Ecology Society

## PEER REVIEWED JOURNAL PUBLICATIONS

- Huang, L., H.S. Bae, C. Young, A. Pain, J. Martin, and A. Ogram. 2021. Campylobacterota dominate the microbial communities in a tropical karst subterranean estuary, with implications for cycling and export of nitrogen to coastal waters. *Environmental Microbiology*, 23 (11), 6749-6763. <https://doi.org/10.1111/1462-2920.15746>
- Sidhu, H., H.S. Bae, A. Ogram, G. O'Connor, F. Yu. 2021. Azithromycin and ciprofloxacin can promote antibiotic resistance in biosolids and biosolids-amended soils. *Appl. Environ. Microbiol.* DOI:[https://doi.org/10.1128/AEM.00373-](https://doi.org/10.1128/AEM.00373-21)
- Campos, M., J. Rilling, J. Acuna, T. Valenzuela, G. Larama, F. Pena-Cortes, A. Ogram, D. Jaisi, and M. Jorgera. 2021. Spatiotemporal variations and relationships of phosphorus, phosphomonoesterases, and bacterial communities in sediments from two Chilean rivers. *Science of the Total Environment*. <https://doi.org/10.1016/j.scitotenv.2021.145782>
- Morrison, E., P. Thomas, A. Ogram, T. Kahveci, B. Turner, and J. Chanton. 2021. Characterization of bacterial and fungal community structure and networks in a tropical peatland. *Microbial Ecology*. **82**, 188–201. <https://doi.org/10.1007/s00248-020-01483-z>.
- Murali, V., H. Sandhu, J. Erickson, and A. Ogram. 2020. Soil chemical and biological fertility, microbial community structure and dynamics in successive and fallow sugarcane planting systems. *Agroecology and Sustainable Food Systems*, 44:6, 768-794, DOI: [10.1080/21683565.2019.1666075](https://doi.org/10.1080/21683565.2019.1666075)
- Murali, V., H. Sandhu, J. Erickson, and A. Ogram. 2019. Amending sugar cane monoculture through crop rotations and fungicides: Effects on soil chemical and microbial properties, and sucrose yields. *Crop & Pasture Science*, 70:990-1003.
- Murali, V., H. Sandhu, J.E. Erickson, and A. Ogram. 2019. Soil chemical and biological fertility, microbial community structure and dynamics in successive and fallow sugarcane planting systems. *Agroecol. Sustain. Food Systems*. <https://doi.org/10.1080/21683565.2019.1666075>
- Bae, H.S., F.E. Dierberg, and A. Ogram. 2019. Periphyton and flocculent materials are important ecological compartments supporting abundant and diverse mercury methylator assemblages in the Florida Everglades. *Appl. Environ. Microbiol.*, DOI: 10.1128/AEM.00156-19. *Featured as an "Article of Significant Interest" in the issue.*
- McCaskill, G., S. Jose, and A. Ogram. 2019. Low-dose herbicide effects on tree establishment and soil biogeochemistry within pine savannas. *Soil Sci. Soc. Am. J.*, doi:10.2136/sssaj2018.09.0347
- Sidhu, H., G. O'Connor, A. Ogram, and K. Kumar. 2019. Bioavailability of biosolids-borne ciprofloxacin and azithromycin to terrestrial organisms: Microbial toxicity and earthworm responses. *Sci. Tot. Environ.* 650:18-26.
- Ward, N., E. Morrison, T. Osborne, Y. Liu, A. Ubach, A. Ogram, and T. Bianchi. 2019. Marine microbial community responses related to wetland carbon mobilization in the coastal zone. *Limnol. Oceanog. Lett.* 4:25-33.
- Bae, H.S., L Huang, JR White, J Wang, RD DeLaune, A Ogram. 2018. Response of microbial populations regulating nutrient biogeochemical cycles to oiling of coastal saltmarshes from the Deepwater Horizon oil spill. *Environmental Pollution* 241: 136-147.
- McCaskill, G., S. Jose, A. Chauhan, AV Ogram. 2018. Soil nitrogen dynamics as an indicator for longleaf pine restoration. *Restoration Ecology* 26:264-274.
- Bae, H.S., E. Morrison, JP Chanton, A Ogram. 2018. Methanogens are major contributors to nitrogen fixation in soils of the Florida Everglades. *Appl. Environ. Microbiol.* 02222-17.

- Henson, W., L. Huang, W. Graham, A. Ogram. 2017. Nitrate reduction mechanisms and rates in an unconfined eogenetic karst aquifer in two sites with different redox potential. *Journal of Geophysical Research: Biogeosciences* 122: 1062-1077.
- Morrison, E., L. Lagos, A. Al-Agely, H. Glaab, W. Johnson, M. Jorquera, and A. Ogram. 2017. Mycorrhizal inoculation increases genes associated with nitrification and improved nutrient retention in soil. *Biology and Fertility of Soils* 53: 275-279.
- Kim, H., A. Ogram, and H.S. Bae. 2017. Nitrification, anammox, and denitrification along a nutrient gradient in the Florida Everglades. *Wetlands* 37: 391-399.
- Pathak A., Ashvini Chauhan, Jochen Blom, Karl J. Indest, Carina M. Jung, Paul Stothard, Gopal Bera, Stefan J. Green, and Andrew Ogram. 2016. Comparative Genomics and Metabolomics Reveals Peculiar Characteristics of *Rhodococcus opacus* strain M213 Particularly for Naphthalene Degradation. *PLOS One*, DOI:10.1371/journal.pone.0161032.
- Kim, H., H.S. Bae, K.R. Reddy, and A. Ogram. 2016. Distributions, abundances and activities of microbes associated with the nitrogen cycle in riparian and stream sediments of a river tributary. *Water Res.* 106:51-61.
- Banik, C., W. Harris, A. Ogram, V. Nair. 2016. Carbon, iron, and aluminum responses to controlled water table fluctuations in sandy soil material. *J. Soil. Sediments.* DOI 10.1007/s11368-016-1444-z.
- Jorquera, M.A., F. Maruyama, A. Ogram, O. Navarrete, L. Lagos, N. Inostroza, J. Acuña, J. Rilling, M. de La Luz Mora. 2016. Rhizobacterial community structures associated with native plants grown in Chilean extreme environments. *Microbial Ecology*, DOI: 10.1007/s00248-016-0813-x.
- Acuña, J., Paola Durán, Lorena M. Lagos, Andrew Ogram, María de la Luz Mora, and Milko A. Jorquera. 2016. Bacterial alkaline phosphatase in the rhizosphere of plants grown in Chilean extreme environments. *Biol. Fert. Soils*, DOI 10.1007/s00374-016-1137-1
- Morrison, E., S. Newman, H.S. Bae, Z. He, J. Zhou, K.R. Reddy, and A. Ogram. 2016. Microbial genetic and enzymatic responses to an anthropogenic phosphorus gradient within a subtropical peatland. *Geoderma* 268:119-127.
- Bae, H-S., M. Elizabeth Holmes, Jeffrey P. Chanton, K. Ramesh Reddy, A. Ogram. 2015. Distribution, Activities, and Interactions of Methanogens and Sulfate Reducing Prokaryotes in the Florida Everglades. *Appl. Environ. Microbiol.*, 81:7431-7442.
- Lagos, L., F. Maruyama, P. Nannipieri, M. Luz Mora, A. Ogram, and M.A. Jorquera. 2015. Current overview on the study of bacteria in the rhizosphere by modern molecular techniques: a mini-review, *Journal of Soil Science and Plant Nutrition*, 15: 504-523.
- Weidow, C., H.S. Bae, A. Chauhan, and A. Ogram. 2015. Diversity and distribution of actinobacterial aromatic ring oxygenase genes across contrasting soil properties. *Microbial Ecology*, 69:676-683.
- Holmes, B.E., J. Chanton, M. Tfairly, and A. Ogram. 2015. CO<sub>2</sub> and CH<sub>4</sub> isotope compositions and production pathways in a tropical peatland. *Global Biogeochemical Cycles*, 29:1-18.
- Gohil, H., A. Ogram, and J. Thomas. 2014. Stimulation of anaerobic biodegradation of DDT and its metabolites in a muck soil: laboratory microcosm and mesocosm studies. *Biodegradation* 25:633-642.
- Bae, H.S., F.E. Dierberg, and A. Ogram. 2014. Syntrophs Dominate Sequences Associated with the Mercury Methylation-Related Gene *hgcA* in the Water Conservation Areas of

- the Florida Everglades. *Appl. Env. Microbiol.*, 20:6517-6526. *Featured on October 2014 (vol. 20) cover and recommended by Faculty of 1000.*
- Holmes, B.E., J. Chanton, H.S. Bae, and A. Ogram. 2013. Effect of nutrient enrichment on  $\delta^{13}\text{C}$  and the methane production pathway in the Florida Everglades. *J. Geophys. Res.* 118:1-11.]
  - Zeleke, J., Shui-Long Lu, Jian-Gong Wang, Jing-Xin Huang, Bo Li, Andrew Ogram, and Zhe-Xue Quan. 2013. Methyl coenzyme M reductase A (*mcrA*) gene-based investigation of methanogens in the mudflat sediments of Yangtze River estuary, China. *Microbial Ecology* 66: 257-267.
  - Pathak, A., S. Greene, A. Ogram, and A. Chauhan. 2013. Draft Genome Sequence of *Rhodococcus opacus* strain M213 Shows a Diverse Catabolic Potential. *Genome Announcements*, doi:10.1128/genomeA.00144-12.
  - Chauhan, A., A. Pathak, and A. Ogram. 2012. Phylogeny of methane oxidizing prokaryotes along a nutrient gradient in the Florida Everglades. *Microbial Ecol.* 64:750-759.
  - Inglett, K.S., H.S. Bae, K. Hatfield, and A. Ogram. 2011. *Clostridium chromireducens*, a novel chromium reducing bacterial species. *Int. J. Syst. Evol. Microbiol.* 61: 2626–2631
  - Ye, R., A.L. Wright, K. Inglett, Y. Wang, A.V. Ogram, and K.R. Reddy. 2010. Land use effects on soil nutrient cycling and microbial community dynamics in the Everglades Agricultural Area, Florida. *Commun. Soil Sci. Plant Anal.*
  - Araujo, Q., A. Al-Agely, A. Ogram, N. Comerford, R. Veluci, E. Gross, V. Baligar. 2008. Mycorrhizae associated with Brazilian coastal tableland soils. *Agrotropica* 20:45-52.
  - Smith, J., and A. Ogram. 2008. Genetic and functional variation in denitrifier populations along a short term restoration chronosequence in the Florida Everglades. *Appl. Environ. Microbiol.* 74: 5615-5620.
  - Jasrotia, P., and A.V. Ogram 2008. Diversity of *nifH* Genotypes in Floating Periphyton Mats Along a Nutrient Gradient in the Florida Everglades. *Current Microbiology* 56:563-568.
  - Uz, I., A. Chauhan, and A. Ogram. 2007. Cellulolytic, fermentative, and methanogenic guilds in benthic periphyton mats from the Florida Everglades. *FEMS Microbiol. Ecol.* 61:337-347.
  - Smith, J., H. Castro, and A. Ogram. 2007. Methanogenesis and Methanogens along a short term chronosequence in the Florida Everglades. *Appl. Environ. Microbiol.* 73:3135-3141.
  - Corstanje, R., K. R. Reddy, J.P. Prenger, S. Newman and A.V. Ogram. 2007. Soil microbial eco-physiological response to nutrient enrichment in a sub-tropical wetland. *Ecological Indicators* 7:277-289.
  - Chauhan, A., and A. Ogram. 2006. Phylogeny of acetate utilizing microorganisms in soils along a nutrient gradient in the Florida Everglades. *Appl. Environ. Microbiol.* 72:6837-6840.
  - Chauhan, A., and A. Ogram. 2006. Fatty acid oxidizing guilds in the Florida Everglades. *Appl. Environ. Microbiol.*, 72:2400-2406.
  - Chauhan, A., K.R. Reddy, and A.V. Ogram. 2006. Syntrophic-Archaeal associations in a nutrient-impacted freshwater marsh. *J. Appl. Microbiol.*, 100:73-84.
  - Uz, I., and A. Ogram. 2006. Cellulolytic and fermentative guilds in the Florida Everglades. *FEMS Microbiol. Ecol.* 57:396-408.

- Ogram, AV, H. Castro, E. Stanley, W. Chen, and J. Prenger. 2006. Distribution of methanotrophs in managed and highly degraded watersheds. *Ecological Indicators* 6:631-643.
- Castro, H., S. Newman, K.R. Reddy, and A.V. Ogram. 2005. Distribution and stability of sulfate reducing prokaryotic and hydrogenotrophic methanogenic assemblages in nutrient-impacted regions of the Florida Everglades. *Appl. Environ. Microbiol.* 71:2695-2704.
- Sharma, K., P. W. Inglett, K. R. Reddy, and A. V. Ogram. 2005. Microscopic examination of photoautotrophic and phosphatase-producing bacteria in phosphorus-limited Everglades periphyton mats. *Limnol. Oceanog.* 50:2057-2062.
- Chauhan, A., and A. Ogram. 2005. Evaluation of support matrices for immobilization of anaerobic consortia for efficient carbon cycling in waste regeneration. *Biochem. Biophys. Res. Com.* 327:884-93.
- Ramakrishnan, V., A. Ogram, and A. Lindner. 2005. Impacts of co-solvent flushing on microbial populations capable of degrading trichloroethylene. *Environmental Health Perspectives* 113:55-61.
- Araujo, Q.R., N. B. Comerford, A.V. Ogram, A. Al-Agely, L. P. Santos Filho, J. G. Santos. 2004. Soil carbon and physical property changes in Brazilian Coastal Tableland soils with land use following deforestation. *Agroforestry Systems* 63:193-198.
- Chauhan A., A.V. Ogram, and K.R. Reddy. 2004. Novel syntrophic-methanogenic associations along a nutrient gradient in the Florida Everglades. *Appl. Environ. Microbiol.* 70:3475-3484.
- Uz, I., M. Rasche, A. Ogram, and A. Lindner. 2003. Characterization of methanogenic and methanotrophic assemblages in landfill soils. *Proc. R. Soc. Lond. B (Suppl.)*, *Biology Letters*, 270: S202-S205.
- Duan, Y.P., H. Castro, T. Hewlett, J. White, and A. Ogram. 2003. Phylogeny and detection of *Pastueria* species. *Int. J. Evol. System. Microbiol.* 53: 105-112.
- Castro, H., K.R. Reddy, and A. Ogram. 2002. Composition and function of sulfate-reducing prokaryotes in eutrophic and pristine areas of the Everglades. *Appl. Environ. Microbiol.* 68:6129-6137.
- Ou, L.T., J. Thomas, K. Chung, and A. Ogram. 2001. Degradation of 1,3-dichloropropene by a soil bacterial consortium and *Rhodococcus* sp. AS2C isolated from the consortium. *Biodegradation* 12: 39-47.
- Trabue, S.L., A.V. Ogram, and L.-T. Ou. 2000. Dynamics of carbofuran-degrading microbial communities in soil during three successive annual applications of carbofuran. *Soil Biology & Biochemistry.* 33:75-81.
- Ogram, A.V. 2000. Soil molecular ecology at age 20: Methodological challenges for the future. *Soil Biology & Biochemistry* 32:1499-1504.
- Castro, H.F., N. Williams, and A.V. Ogram. 2000. Phylogeny of sulfate reducing bacteria. *FEMS Microbiology Ecology* 31:1-9.
- Uz, I., Y.P. Duan, and A.V. Ogram. 2000. Characterization of the novel naphthalene-metabolizing bacterium, *Rhodococcus opacus* M213. *FEMS Microbiology Letters* 185:231-238.
- Ogram, A.V., Y.P.-Duan, S. Trabue, X. Feng, H. Castro, L. Ou. 2000. Comparison of plasmids mediating metabolism of carbofuran. *FEMS Microbiology Ecology* 32:197-203.
- Ogram, A.V. 1998. Teaching soil microbiology from a phylogenetic perspective. *J. Nat. Resources Life Sci. Edu.* 27:93-96.

- Feng, X., L.T. Ou, and A.V. Ogram. 1997. Plasmid mediated mineralization of the insecticide carbofuran by *Sphingomonas* sp. CFO6. *Appl. Environ. Microbiol.* 63:1332-1337.
- Feng, X., L.T. Ou, and A.V. Ogram. 1997. Cloning and sequence analysis of a novel IS element from the carbofuran degrading bacterium *Sphingomonas* sp. CFO6. *Plasmid* 37:169-179.
- Guo, C., W. Sun, J.B. Harsh, and A.V. Ogram. 1997. Comparison of concentrations of genes involved in aromatic hydrocarbon degradation in contaminated and non-contaminated soils. *Microbial Ecology* 34:178-187.
- Trabue, S., X. Feng, A.V. Ogram, and L.T. Ou. 1997. Degradation of carbofuran in soil profiles. *J. Environ. Sci. Health*, B32:861-878.
- Lee, S.Y., J. Bollinger, D. Bezdicek, and A.V. Ogram. 1996. Estimation of numbers of an unculturable soil bacterial strain by a competitive PCR method. *Appl. Environ. Microbiol.*, 62: 3787-3793.
- Sutton, M., M. Malik, and A.V. Ogram. 1996. Experiments on the analysis of gender of coprolites by DNA analysis. *J. Archaeol. Sci.* 23:263-267.
- Xia, X., J. Bollinger, and A.V. Ogram. 1995. Molecular genetic analysis of the response of three soil microbial communities to 2,4-D. *Mol. Ecol.* 4:17-28.
- Ogram, A.V., W. Sun, F. Brockman, and J. Fredrickson. 1995. Isolation and characterization of RNA from low-biomass deep-subsurface sediments. *Appl. Environ. Microbiol.* 61:763-768.
- Ogram, A.V., M. Mathot, J.B. Harsh, J. Boyle, and C. Pettigrew. 1994. Effects of polymer length on the adsorption of DNA to soils. *Appl. Environ. Microbiol.* 60:393-396.
- Lobaugh, S., F. Farrow, X. Feng, and A.V. Ogram. 1994. The effects of triclopyr on 2,4-D mineralization in two soils. *J. Env. Sci. Health*, B:459-471.
- Malik, M., J. Kain, C. Pettigrew, and A.V. Ogram. 1994. Purification and molecular genetic analysis of microbial DNA from compost. *J. Microbiol. Meth.* 20:193-196.
- Ogram, A.V., and G.S. Saylor. 1988. The use of gene probes in the rapid analysis of natural microbial communities. *J. Indust. Microbiol.* 3:281-292.
- Ogram, A.V., G.S. Saylor, D. Gustin, and R. Lewis. 1988. DNA adsorption to soils and sediments. *Env. Sci. Technol.* 22:982-984.
- Ogram, A.V., G.S. Saylor, and Tamar Barkay. 1987. The extraction and purification of microbial DNA from sediments. *J. Microbiol. Methods*, 7:57-66.
- Ogram, A.V., R.E. Jessup, L.T. Ou, and P.S.C. Rao. 1985. Effects of sorption on biological degradation rates of 2,4,-D in soils. *Appl. Env. Microbiol.* 49:582-587.

### **Book Chapters**

- Nkedi-Kizza, A. Muwamba, H. Gohil, and A. Ogram. Determination of sorption coefficient (K<sub>oc</sub>) of persistent organic pollutants (POPs) using mixed solvent systems: DDT as a probe compound. Submitted.
- Gohil, H., and A. Ogram. 2020. The microbial degradation of DDT and potential remediation strategies. In: *Bioremediation Technology: Hazardous Waste Management* (M.H Fulekar and B. Pathak, eds). CRC Press. Chapter 1; pp. 1-24.



- Gohil, H., and A. Ogram. 2020. Enhanced bioavailability and biodegradation of DDX in an anoxic organic soil. In: *Bioremediation Technology: Hazardous Waste Management* (M.H Fulekar and B. Pathak, eds). CRC Press. Chapter 8; pp. 145-164.
- Ogram, A., H. Bae, and A. Chauhan. 2019. The ecology of methanogenic archaea in a nutrient impacted wetland. In: *The Structure and Function of Aquatic Microbial Communities* (ed. C. Hurst); *Advances in Environmental Microbial Ecology*, Vol. 7, pp. 157-172.
- J. Sharpe and A. Ogram. 2019. Interactions Between Nonpolar Compounds and Soil Organic Carbon Under Low Redox Potentials: Implications for Bioavailability. In: Chang, Y, and Yajima, Y. (eds), *Microbial Biodegradation of Xenobiotic Compounds*, CRC Press. In press.
- Gottlieb, A., J. Entry, A. Ogram, and K. Jayachandran. 2015. Importance of Microbiology to the Everglades Ecosystem. In: *Microbiology of the Everglades Ecosystem*, CRC Press, Orlando, FL. J. Entry, A. Gottlieb, K. Jayachandran, and A. Ogram, eds. pp 1-8.
- Weidow, C., and A. Ogram. 2015. The microbial ecology of mercury methylation and demethylation in the Florida Everglades. In: *Microbiology of the Everglades Ecosystem*, CRC Press, Orlando, FL. J. Entry, A. Gottlieb, K. Jayachandran, and A. Ogram, eds. pp. 375-385.
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**Books Edited:**

- Microbial Ecology of the Everglades. J. Entry, A. Gottlieb, K. Jayachandran, and A. Ogram, eds. CRC Press.

**Invited Presentations:**

- Ogram, A., H.S. Bae, and FE Dierberg. 2017. Phylogenetic Distribution of Mercury Methylators in the Water Conservation Areas. Greater Everglades Environmental Restoration Conference. Coral Springs, FL.
- Ogram, A., HS Bae, and FE Dierberg. 2016. Diversity of mercury methylating processes in the Florida Everglades. 2<sup>nd</sup> International Conference on Biotechnology and the Environment. Pucon, Chile.
- Huang, L., A. Pain, C. Young, J. Martin, and A. Ogram 2016. Analysis of Microbial Communities Associated With Groundwater Discharge in the Yucatan Peninsula. American Water Resources Association, Orlando, FL.
- Ogram, A., 2014. The relationship between redox potential and bioavailability of nonpolar contaminants in sediments. Environmental Remediation Conference, Nanjing University, Nanjing, China. Unable to attend due to family emergency.
- Ogram, A. 2013. Life at the Bottom: the interplay between methanogens and sulfate reducers in a nutrient impacted wetland. 4<sup>th</sup> International Workshop on Advances in Science and Technology of Bioresources, Pucon, Chile.
- Ogram, A. 2013. The molecular ecology of phosphorus cycling under shifting nutrient limitations. 4<sup>th</sup> International Workshop on Advances in Science and Technology of Bioresources, Pucon, Chile.
- Ogram, A. 2013. Coupled Cycles and Mercury Transformations in Wetlands. Amity University, Noida, India.
- Ogram, A., H.S. Bae, J. Chanton, B. Huettel. 2013. Methanogenesis, Methanogens, and nutrient limitation in the Florida Everglades. ASLO Aquatic Sciences Meeting, New Orleans.
- Morrison, E., and A. Ogram. 2013. The composition and abundance of phosphorus-utilizing genes within Everglades microbial communities. Organic Phosphorus 2013, Panama City, Panama.

- Ogram, A. 2012. Life at the front: Methanogenesis and shifting nutrient limitations in the Everglades. INTECOL Wetlands, Orlando, FL.
- Ogram, A. 2012. The Microbial Ecology of Wetland Pollution. Nanjing University, Nanjing, China.
- Ogram, A. 2012. Life at the front: Methanogenesis and shifting nutrient limitations in the Everglades. INTECOL Wetlands, Orlando, FL.
- Ogram, A. 2009. Impacts of nutrients on methanogenic pathways. Society of Wetland Scientists, Madison, WI.
- Ogram, A. A microbe's view of nutrient impacts in the Everglades. School of Forest Resources and Conservation, UF. January, 2009.
- Ogram, A., A. Chauhan, K. Inglett, K. Jayachandran, S. Newman. Linking Nutrient Impacts on Microbial Community Structure and Function with Biogeochemistry in the Everglades. Greater Everglades Ecosystem Restoration Conference (GEER), Naples, FL. August, 2008.
- Ogram, A., R. Corstanje, M. Christman. Approaches to link microbial structures and processes at the microscale to ecosystem functioning. International Association of Landscape Ecology, Wageningen, NL., July, 2007.
- Ogram, A. Linking Microbial Community Structure with Function in the Everglades. Department of Agricultural Chemistry, University of Agricultural Sciences, Bangalore, India. April 2006.
- Ogram, A. Linking Microbial Community Structure with Function in the Everglades. South Florida Water Management District, West Palm Beach, FL. 2005.
- Ogram, A. Linking Microbial Community Structure with Function in the Everglades. Department of Chemical Engineering, IIT Madras, Chennai, India. March 2005.
- Ogram, A. Linking Microbial Community Structure with Function in the Everglades. Department of Botany, Centre of Advanced Study, Banaras Hindu University, Varanasi, India. April, 2005.
- Ogram, A., H. Castro. Cloning Soil DNA and Microbial Community Analysis. Annual Meeting of Agronomy Society of American-Soil Science Society of America, Salt Lake City, UT, Nov. 2005.
- Ogram, A., H. Castro., A. Chauhan, K.R. Reddy. Microbial Ecology of Carbon Cycling in Everglades Soils. International Association of Ecology (INTECOL) Wetlands Conference, Utrecht, NL. July 2004.
- Ogram, A., H. Castro., A. Chauhan, K.R. Reddy. Microbial Ecology of Carbon Cycling in Everglades Soils. Ann. Meeting. American Soc. Limnol. Oceanog. Savannah, GA. June, 2004.
- Ogram, A. 2004. Microbial ecology of carbon cycling in the Everglades. Microbiology and Cell Sciences Dept., University of Florida.
- Ogram, A., H. Castro, and K.R. Reddy. 2003. Impacts of nutrient enrichment on assemblages of sulfate reducing prokaryotes and methanogens in the Florida Everglades. International Biogeochemistry Symposium, Ghent, Belgium.
- Ogram, AV. 2003. Microbial Ecology of carbon cycling in the Everglades. Indian Institute of Technology, Chennai, India.
- Ogram, AV. 2003. Microbial Ecology of carbon cycling in the Everglades. Institute of Microbial Technology, Chandigarh, India.
- Ogram, AV. 2002. Phylogeny of *Pasteuria penetrans*. Fujian Agricultural University, Fuzhou, China.

- Ogram, AV. 2002. Chromium reduction by *Clostridium* species. Fujian Academy of Agricultural Sciences, Fuzhou, China.
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- Ogram, AV. 2002. Microbial ecology of carbon cycling in the Everglades. Shanghai Jiaotong University, Shanghai.
- Ogram, A.V. 1998. Plasmid-mediated metabolism of the insecticide carbofuran. Center for Clean Environment and Biotechnology, Bangalore University, Bangalore, India.
- Ogram, A.V. 1998. Molecular genetic approaches to the analysis of soil microbial communities. Assam Agricultural University, Jorhat, India.
- Ogram, A.V. 1998. Plasmid-mediated metabolism of the insecticide carbofuran. Regional Research Center, Jorhat, India.
- Ogram, A.V. 1998. Plasmid-mediated metabolism of the insecticide carbofuran. Regional Research Center, Jorhat, India.
- Ogram, A.V. 1995. Molecular genetic approaches to the analysis of soil microbial communities. DuPont Chemical Corp., Wilmington, DE.
- Ogram, A.V. 1995. Molecular genetic approaches to the analysis of soil microbial communities. Purdue University, West Lafayette, IN.
- Ogram, A.V. 1994. Molecular genetic approaches to the analysis of soil microbial communities. Dept. Soil Science, University of California, Berkeley.
- Ogram, A.V. 1993. Molecular genetic analysis of soil microbial communities. Dept. Micro., Mol. Biol., and Biochem., University of Idaho.
- Ogram, A.V. 1991. Effect of sorption on availability of organic compounds to biodegradation. Procter & Gamble Co., Cincinnati, OH.

## SERVICE

### Service to the discipline:

- 2020: Chair, USDA/ARS National Program 212 Review Panel
- 2019-present: External Advisory Committee, Kansas EPSCoR Program (MAPS)
- 2017-2018: Program officer (rotation), EPSCoR, National Science Foundation, Alexandria, VA. Duties included management of large (\$20 million and \$6 million) awards, assembly and conduct of proposal review panels, recommendation of funding awards.
- Recent symposia organized and convened:
  - 2015: Mercury in the Everglades; Greater Everglades Environmental Restoration (GEER) Conference, Coral Springs, FL.
  - 2014: Insights into the Molecular Ecology of Phosphorus Biogeochemistry From Diverse Aquatic Ecosystems; Joint Aquatic Sciences Meeting, Portland, OR.
  - 2012: Linking Microbial Community Structure with Green House Gas Emissions; INTECOL Wetlands, Orlando, FL.
  - 2009: Microbial Ecology and Wetland Biogeochemistry session, Annual meeting of Society of Wetland Scientists, Madison.
  - 2008: Its not always about acetate: alternate pathways toward methanogenesis; symposium at General Meeting of the American Society for Microbiology, Boston.
  - 2004: Linkages Between Microbial Community Composition and Biogeochemical Processes Across Scales: INTECOL, Utrecht, NL.

- USDA National Institute of Food and Agriculture Program Review: Department of Land Resources and Environmental Sciences, Montana State University, 2012.
- Journal Editorial Boards: Microbial Ecology; Applied and Environmental Microbiology; Journal of Microbiological Methods (1993-2016).
- Ad Hoc Journal Reviewer: ISME Journal; Applied and Environmental Microbiology; Environmental Science & Technology; Soil Biology & Biochemistry; FEMS Microbiology Ecology; etc.
- Proposal review panels:
  - NSF: 1997-1998; BIO 2000; 2002-2006; 2007; 2009; 2016; EPSCoR 2015, 2016.
  - US EPA: 1996; 1997; 2001
  - US Department of Energy: 2007 (2 panels)
  - Water Environment Research Federation Project Subcommittee
- Recent Promotion and Tenure Reviews: Distinguished Professor: one; Professor: four; Associate Professor with tenure: three
- External Dissertation Reviews: West Bengal University of Technology, Kolkata, India (1 review); Thapar University, Patiala, India (3 reviews); IIT Madras (1 review);
- General Reviewing Activities: *American Public Health Association*: Reviewed abstracts related to environmental health for annual meeting (2016; 2019).

#### **Service to the Department, College, and University:**

##### Soil and Water Science Department

- 2019-present: Chair's advisory committee (Chair).
  - Chair: SWSD Bylaws review committee
  - Chair: SWSD Strategic planning committee
- 2014-2017: SWSD representative, IFAS Faculty Assembly
- 2014-2017: Member, chair's advisory committee
- 2009-2012: Graduate coordinator

##### College (Institute of Food and Agricultural Sciences; IFAS)

- 2016-2017: Commencement marshal
- 2014-2017: IFAS Faculty Assembly Infrastructure and Resources Committee;
  - Member (2014-2016)
  - Chair (2016-2017)
- 2016-2017 member of IFAS Faculty Assembly Executive Committee
- 2016-2017: Advisory Committee, Dean for Research

##### University:

- 2016- 2019: Hydrologic Biology Representative, Hydrologic Sciences Academic Cluster Faculty Committee
- 2011-2015: General Education Committee
- 2014: Distance Education Platform Working Group.
- Review Panels, Internal Competition:
  - Pew Scholars Program in the Biomedical Sciences (2016);
  - Review Panel, Internal Competition for UF Research Opportunity Seed Fund, Biology (2014).