

## Gary Andersen Publications as of 10/11/2017

### Peer-Reviewed

1. Vaziri, N. D., Wong, J., Pahl, M., Piceno, Y. M., Yuan, J., DeSantis, T. Z., Ni, Z., Nguyen, T. H., and G. L. Andersen (2012) Chronic kidney disease alters intestinal microbial flora. *Kidney Int.* 2012 Sep 19 [Epub ahead of print] PMID: [22992469](#)
2. Korves, T. M., Piceno, Y. M., Tom, L. M., DeSantis, T. Z., Jones, B. W., Andersen, G. L., and G. L. Hwang (2012) Bacterial communities in commercial aircraft high-efficiency particulate air (HEPA) filters assessed by PhyloChip analysis. *Indoor Air.* 2012 May 7 [Epub ahead of print] PMID: [22941076](#)
3. Lam, V., Moulder, J. E., Salzman, N. H., Dubinsky, E. A., Andersen, G. L., and J. E. Baker (2012) Intestinal microbiota as novel biomarkers of prior radiation exposure. *Radiation Research* 177: 573-583. PMID: [22439602](#)
4. Dubinsky, E.A., Esmaili, L., Hulls, J. R., Cao, Y., Griffith, J. F., and G. L. Andersen. (2012) Application of phylogenetic microarray analysis to discriminate sources of fecal pollution. *Environmental Science & Technology* 46: 4340-4347. PMID: [22360280](#)
5. McDonald, D., Price, M. N., Goodrich, J., Nawrocki, E. P., DeSantis, T. Z., Probst, A., Andersen, G. L., Knight, R., and P. Hugenholtz. (2012) An improved Greengenes taxonomy with explicit ranks for ecological and evolutionary analyses of bacteria and archaea. *ISME J.* 6:610-618. PMID: [22134646](#)
6. Lee, P. K., Warnecke, F., Brodie, E. L., Macbeth, T. W., Conrad, M. E., Andersen, G. L., and L. Alvarez-Cohen. (2012) Phylogenetic Microarray Analysis of a Microbial Community Performing Reductive Dechlorination at a TCE-Contaminated Site. *Environ Sci Technol.* 46:1044-1054. PMID: [22091783](#)
7. Kellogg, C. A., Piceno, Y. M., Tom, L. M., DeSantis, T. Z., Zawada, D. G., and G. L. Andersen. (2011) PhyloChip™ microarray comparison of sampling methods used for coral microbial ecology. *J Microbiol Methods.* 88:103-109. PMID: [22085912](#)
8. DeAngelis, K. M., Wu, C. H., Beller, H. R., Brodie, E. L., Chakraborty, R., DeSantis, T. Z., Fortney, J. L., Hazen, T. C., Osman, S. R., Singer, M. E., Tom, L. M., and G. L. Andersen. (2011) PCR amplification-independent methods for detection of microbial communities by the high-density microarray PhyloChip. *Appl. Environ. Microbiol.* 77:6313-6322 PMID: [21764955](#)
9. Mendes, R., Kruijt, M., de Bruijn, I., Dekkers, E., van der Voort, M., Schneider, J. H., Piceno, Y. M., DeSantis, T. Z., Andersen, G. L., Bakker, P. A., and J. M. Raaijmakers. (2011) Deciphering the rhizosphere microbiome for disease-suppressive bacteria *Science* 332:1097-1100. PMID: [21551032](#)
10. DeSantis, T. Z., Keller, K., Karaoz, U., Alekseyenko, A. V., Singh, N. N., Brodie, E. L., Pei, Z., Andersen, G. L., and N. Larsen. (2011) Simrank: Rapid and sensitive general-purpose k-mer search tool. *BMC Ecol.* 11:11. PMID: [21524302](#)
11. Swarbreck, S. M., Lindquist, E. A., Ackerly, D. D., and G. L. Andersen. (2011) Analysis of Leaf and Root Transcriptomes of Soil-Grown *Avena barbata* Plants. *Plant Cell Physiol.* 52:317-32. PMID: [21310848](#)

12. Hazen, T. C., Dubinsky, E. A., Desantis, T. Z., Andersen, G. L., Piceno, Y. M., Singh, N. et. al. (2010) Deep-Sea Oil Plume Enriches Indigenous Oil-Degrading Bacteria. *Science*. 330:204-208 PMID: [20736401](#)
13. Wu, C. H., Sercu, B., Van de Werfhorst, L. C., Wong, J., DeSantis, T. Z., Brodie, E. L., Hazen, T. C., Holden, P. A., and G. L. Andersen. (2010) Characterization of coastal urban watershed bacterial communities leads to alternative community-based indicators. *PLoS One*. 5:e11285 PMID: [20585654](#)
14. Andersen, G. L., He, Z., DeSantis, T. Z., Brodie, E. L., and J. Zhou. (2010) The Use of Microarrays in Microbial Ecology, pp 87-110. In: *Environmental Molecular Microbiology*. Liu, W.T. and Jansson J. K. (Ed), Caister Academic Press, Norwich, UK. ISBN 978-1-904455-52-3
15. Rastogi, G., Osman, S., Kukkadapu, R., Engelhard, M., Vaishampayan, P. A., Andersen, G. L., and R. K. Sani. (2010) Microbial and mineralogical characterizations of soils collected from the deep biosphere of the former Homestake Gold Mine, South Dakota. *Microb Ecol*. 59:94-108. PMID: [20386898](#)
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17. Andersen, G. L., Frisch, A.S., Kellogg, C.A., Levetin, E., Lighthart, B., Paterno, D. (2009) Aeromicrobiology/Air Quality, pages 11-26. In: *The Encyclopedia of Microbiology*, Third Edition. Moselio Schaechter (Ed), Elsevier, Oxford, UK. ISBN 978-0-12-373939-1
18. Caporaso, J. G., Bittinger, K., Bushman, F. D., DeSantis, T. Z., Andersen, G. L., and R. Knight. (2009) PyNAST: A flexible tool for aligning sequences to a template alignment. *Bioinformatics* 26:266-267. PMID: [19914921](#)
19. Fan, C., Lee, P. K, Ng, W. J., Alvarez-Cohen, L., Brodie, E. L., Andersen, G. L., and He, J. (2009) Influence of trace erythromycin and erythromycin-H<sub>2</sub>O on carbon and nutrients removal and on resistance selection in sequencing batch reactors (SBRs). *Appl Microbiol Biotechnol*. 85:185-95.
20. Wu, C. H., Bernard, S. M., Andersen, G. L., Chen, W. (2009) Developing microbe-plant interactions as biotechnological tools. *Microbial Biotechnology* 2:428-440.
21. Johnson, D. R., Nemir, A., Andersen, G. L., Zinder, S. H., Alvarez-Cohen L. (2009) Transcriptomic microarray analysis of corrinoid responsive genes in *Dehalococcoides ethenogenes* strain 195. *FEMS Microbiol. Lett*. 294:198-206.
22. Cruz-Martínez, K., Suttle, K. B., Brodie, E. L., Power, M. E., Andersen, G. L., and J. F. Banfield. (2009) Despite strong seasonal responses, soil microbial consortia are more resilient to long-term changes in rainfall than overlying grassland. *ISME J*. 3:738-744. PMID: [19279669](#)
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24. Sunagawa, S., DeSantis, T. Z., Piceno, Y. M., Brodie, E. L., DeSalvo, M. K., Voolstra, C. R., Weil, E., Andersen, G. L., Medina, M. (2009) Bacterial diversity and White Plague Disease-associated community changes in the Caribbean coral *Montastraea faveolata*. *ISME J.* 3:512-521.
25. Yergeau, E., Schoondermark-Stolk, S. A., Brodie, E. L., Déjean, S., DeSantis, T. Z., Gonçalves, O., Piceno, Y. M., Andersen, G. L., and G. A. Kowalchuk. (2008) Environmental microarray analyses of Antarctic soil microbial communities. *ISME J.* 3:340-351. PMID: [19020556](#)
26. DeAngelis, K. M., Brodie, E. L., DeSantis, T. Z., Andersen, G. L., Lindow, S. E., Firestone, M. K. (2008) Selective progressive response of soil microbial community to wild oat roots. *ISME J.* 2008 Nov 13. [Epub ahead of print]
27. Tsiamis, G., Katsaveli, K., Ntougias, S., Kyrpides, N., Andersen, G., Piceno, Y., Bourtzis, K. (2008) Prokaryotic community profiles at different operational stages of a Greek solar saltern. *Research in Microbiology* 159:609-627
28. Chivian, D., Brodie, E. L., Alm, E. J., Culley, D. E., Dehal, P. S., DeSantis, T. Z., Gihring, T. M., Lapidus A, Lin, L. H., Lowry, S. R., Moser, D. P., Richardson, P. M., Southam, G., Wanger, G., Pratt, L. M, Andersen, G. L., Hazen, T. C., Brockman, F. J., Arkin, A. P., and T. C. Onstott. (2008) Environmental genomics reveals a single-species ecosystem deep within Earth. *Science* 322:275-278. PMID: [18845759](#)
29. Wrighton, K. C., Agbo, P., Warnecke F., Weber, K. A., Brodie, E. L., Desantis, T. Z., Hugenholtz, P., Andersen, G. L., and Coates, J. D. (2008) A novel ecological role of the Firmicutes identified in thermophilic microbial fuel cells. *ISME J.* 2008 2:1146-1156.
30. Liu, Z., Desantis, T. Z., Andersen, G. L., and Knight R. (2008) Accurate taxonomy assignments from 16S rRNA sequences produced by highly parallel pyrosequencers. *Nucleic Acids Res.* 36:e120
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32. Vogler A. J., Driebe E. M., Lee J., Auerbach R. K, Allender C. J., Stanley M., Kubota K, Andersen G. L., Radnedge L., Worsham P. L., Keim P, Wagner D. M. (2008) Assays for the rapid and specific identification of North American *Yersinia pestis* and the common laboratory strain CO92. *Biotechniques* 44: 201-207.
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44. DeSantis, T. Z., Hugenholtz, P., Larsen, N., Rojas, M., Brodie, E. L., Keller, K., Huber, T., Dalevi, D., Hu P, and G. L. Andersen. (2006) Greengenes, a chimera-checked 16S rRNA gene database and workbench compatible with ARB. *Appl. Env. Micro.* 72:5069-5072. PMID: [16820507](#)
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64. Andersen, G. L., Harrell, L., and Wilson, K. H. (1995) Genetic variability of *Bacillus anthracis* and related species. *J. Clin. Microbiol.* 33: 1847-1850.
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66. Andersen G. L., Menkissoglou, O., and Lindow, S. E. (1991) Occurrence and properties of copper-tolerant strains of *Pseudomonas syringae* isolated from fruit-trees in California. *Phytopathology* 81:648-656.

### **Book Chapters**

1. Andersen, G. L., He. Z., DeSantis, T. Z., Brodie, E. L., and Zhou, J. (2010) The Use of Microarrays in Microbial Ecology, pp 87-110. In Liu, W.T. and Jansson J. K. (ed), *Environmental Molecular Microbiology*. Horizon Scientific Press (In press).
2. Andersen, G. L., Frisch, A.S., Kellogg, C.A., Levetin, E., Lighthart, B., Paterno, D. (2009) *Aeromicrobiology/Air Quality*. In Schaechter, M (editor-in-chief) *Encyclopedia of Microbiology*, Third Edition. Academic Press (May 15, 2009).
3. Brodie, E. L., DeSantis, T.Z., Piceno, Y. M. and Andersen, G. L. (2009) High density DNA microarray analysis for monitoring microbial community composition and dynamics. In Kowalchuck, G.A. (ed), *Molecular Microbial Ecology Manual*. Kluwer Academic Publishers. (In press.)
4. Andersen, G.L., Piceno, Y. M., DeSantis, T. Z. and Brodie, E. L. (2006) What DNA Microarrays Can Tell Us About Bacterial Diversity: A New Light on an Old Question. In Bailey, M.J. (ed), *Microbial Ecology of Aerial Plant Surfaces* Oxford University Press, pp. 251-267.

### **Invited Talks**

1. A Phylogenetic Microarray Approach to Monitoring and Source Tracking Coastal-Zone Pollution. November 11, 2009, Santa Clara University. Center for Science, Technology and Society, Innovation for Social Benefit Program.



2. Uncovering Microbial Diversity with Phylogenetic Microarrays. November 6, 2009, Stanford University. Fall Seminar Series, Civil & Environmental Engineering Department
3. Advances in High-Density PhyloChip Technology for Understanding the Dynamics of Microbial Communities Important to Human Health. May 2009, Philadelphia, PA. Annual meeting of the American Society for Microbiology.
4. Phylochip Analysis of Microbial Diversity, March 25-27, 2009 Walnut Creek, CA. JGI's 4th Annual User Meeting
5. Phylogenetic Microarrays for Analysis of Microbial Community Dynamics. February 2009, UC Davis, CA. Department of Plant Pathology 290 Seminar Speaker.
6. A Systems Biology Approach to Environmental Biotechnology using Ecogenomics. January 2009, Singapore. National University of Singapore.
7. Roundtable: Ecogenomics, Which Methods are Best? August 2008, Cairns, Australia. International Symposium of Microbial Ecology (ISME XII).
8. Historical overview of broad-range DNA target amplification and sequencing. June 2008, Boston, MA. Annual meeting of the American Society for Microbiology.
9. PhyloChip microarray analysis of bacterial diversity on the Phoenix Spacecraft and associated Astrobiology Science Conference (AbSciCon) April 14-17, 2008 Santa Clara, California.
10. Application of 16S rRNA arrays in microbial ecology. February, 2008, Singapore. National University of Singapore.
11. Towards the development of a fungal microarray for microbial community characterization. September, 2007, Copenhagen, Denmark. FEISN/UNITE Mycology Meeting.
12. Application of 16S rRNA arrays in microbial ecology. September 3-6, 2007, Edinburgh Scotland. 161st Meeting of the Society for General Microbiology.
13. Characterization of microbial diversity with high-density microarrays. August, 2007, Baton Rouge, LA. Mycological Society of America Annual Meeting.