

Some publications from the Kirchman Lab

- *Lankiewicz, T. S., M. T. Cottrell, and D. L. **Kirchman**. in press. Growth rates and rRNA:rDNA of four abundant marine bacteria in pure cultures and in the Delaware estuary. *ISME J.*
- Kirchman**, D. L. 2016. Growth rates of microbes in the oceans. *Annu. Rev. Mar. Sci.* 8: in press.
- *Stegman, M. R., M. T. Cottrell, and D. L. **Kirchman**. 2014. Leucine incorporation by aerobic anoxygenic phototrophic bacteria in the Delaware estuary. *ISME J.*: 10.1038/ismej.2014.1075.
- *Nikrad, M. P., M. T. Cottrell, and D. L. **Kirchman**. 2014. Growth activity of gammaproteobacterial subgroups in waters off the west Antarctic Peninsula in summer and fall. *Environ. Microbiol.* 16: 1513-1523.
- *Nikrad, M. P., M. T. Cottrell, and D. L. **Kirchman**. 2014. Uptake of dissolved organic carbon by gammaproteobacterial subgroups in coastal waters of the West Antarctic Peninsula. *Appl. Environ. Microbiol.* 80: 3362-3368.
- *Lami, R., and D. L. **Kirchman**. 2014. Diurnal expression of SAR11 proteorhodopsin and 16S rRNA genes in coastal North Atlantic waters. *Aquat. Microb. Ecol.* 10.3354/ame01716.
- Kirchman**, D. L., M. R. Stegman, M. P. Nikrad, and M. T. Cottrell. 2014. Abundance, size, and activity of aerobic anoxygenic phototrophic bacteria in coastal waters of the West Antarctic Peninsula. *Aquat. Microb. Ecol.* 73: 41-49.
- Kirchman**, D. L., T. E. Hanson, M. T. Cottrell, and L. J. Hamdan. 2014. Metagenomic analysis of organic matter degradation in methane-rich Arctic Ocean sediments. *Limnol. Oceanogr.* 59: 548-559.
- Kirchman, D. L. 2013. Microbial oceanography: Killers of the winners. *Nature* 494: 320-321.
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- Kirchman**, D. L., and T. E. Hanson. 2013. Bioenergetics of photoheterotrophic bacteria in the oceans. *Environ. Microbiol. Rep.* 5: 188-199.
- *Campbell, B. J., and D. L. **Kirchman**. 2013. Bacterial diversity, community structure and potential growth rates along an estuarine salinity gradient. *ISME J.* 7: 210-220.
- Kirchman, D. L. 2012. Marine archaea take a short cut in the nitrogen cycle. *Proc. Natl. Acad. Sci. USA* 109: 17732-17733.
- *Nikrad, M. P., M. T. Cottrell, and D. L. **Kirchman**. 2012. Abundance and single-cell activity of heterotrophic bacterial groups in the western Arctic Ocean in summer and winter. *Appl. Environ. Microbiol.* 78: 2402-2409.
- *Cottrell, M. T., and D. L. **Kirchman**. 2012. Virus genes in Arctic marine bacteria identified by metagenomic analysis. *Aquat. Microb. Ecol.* 66: 107-116.
- *Straza, T. R. A., and D. L. **Kirchman**. 2011. Single-cell response of bacterial groups to light and other environmental factors in the Delaware Bay, USA. *Aquat. Microb. Ecol.* 62: 267-277.

- *Michelou, V. K., M. W. Lomas, and D. L. **Kirchman**. 2011. Phosphate and adenosine-5'-triphosphate uptake by cyanobacteria and heterotrophic bacteria in the Sargasso Sea. *Limnol. Oceanogr.* 56: 323-332.
- *Christman, G. D., M. T. Cottrell, B. N. Popp, E. Gier, and D. L. **Kirchman**. 2011. Abundance, diversity, and activity of ammonia-oxidizing prokaryotes in the coastal Arctic Ocean in summer and winter. *Appl. Environ. Microbiol.* 77: 2026-2034.
- *Campbell, B. J., L. Yu, J. F. Heidelberg, and D. L. **Kirchman**. 2011. Activity of abundant and rare bacteria in a coastal ocean. *Proc. Natl. Acad. Sci. USA* 108: 12776-12781.
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