

## Recent publications

**Raymond, J.A., Janech, M.G., Mangiagalli, M. 2020.** Ice-Binding Proteins Associated with an Antarctic Cyanobacterium, *Nostoc* sp. HG1. App. & Env. Microbiol. <https://aem.asm.org/content/87/2/e02499-20>

**Tsformo, T. and Raymond J.A. 2020.** An ice-binding protein from an Arctic population of American dunegrass, *Leymus mollis*. F1000Research. <https://f1000research.com/articles/9-648/v2>

**Raymond, J.A., Morgan-Kiss, R. Stahl-Rommel, S. 2020.** Glycerol Is an Osmoprotectant in Two Antarctic *Chlamydomonas* Species From an Ice-Covered Saline Lake and Is Synthesized by an Unusual Bidomain Enzyme. Frontiers in Plant Science. <https://www.frontiersin.org/articles/10.3389/fpls.2020.01259/full>

**Charity M. Phillips-Lander ,Zoe Harrold,Elisabeth M. Hausrath ,Antonio Lanzirrotti,Matthew Newville,Christopher T. Adcock,James A. Raymond,Shichun Huang,Oliver Tschauner &Arlaine Sanchez. 2020.** Snow Algae Preferentially Grow on Fe-containing Minerals and Contribute to the Formation of Fe Phases. Geomicrobiology Journal. 37 (6) <https://doi.org/10.1080/01490451.2020.1739176>

**Yu Xi , Alexia Mercier , Cheng Kuang , Jingwei Yun , Ashton Christy , Luke Melo , Maria Maldonado , James Raymond and Allan Bertram (2020).** Concentrations and Properties of Ice Nucleating Substances in Exudates from Antarctic Sea-Ice Diatoms. Environ. Sci.: Processes Impacts <https://doi.org/10.1039/DOEM00398K>

**Raymond, J.A. and Remias, D. (2019)** Ice-binding proteins in a Chrysophycean snow alga: acquisition of an essential gene by HGT. Front. Microbiol. <https://doi.org/10.3389/fmicb.2019.02697>

**Z. R. Harrold, E. M. Hausrath, A. H. Garcia, A. E. Murray, O. Tschauner, J. A. Raymond, S. Huang (2018)** Bioavailability of Mineral-Bound Iron to a Snow Algal-Bacterial Coculture and Implications for Albedo-Altering Snow Algal Blooms. Appl. Env. Microbiol. 84: DOI: 10.1128/AEM.02322-17

**Raymond J.A. and Morgan-Kiss, R. (2017).** Multiple ice-binding proteins of probable prokaryotic origin in an antarctic lake alga, *Chlamydomonas* sp. ice-mdv (Chlorophyceae) J. Phycology.  
<https://doi.org/10.1111/jpy.12550>

**Mock, T. et al. (46 authors). 2017.** Evolutionary genomics of the cold-adapted diatom *Fragilariopsis cylindrus*. Nature 54:536-540.

**Raymond, J. A. 2016.** Dependence on epiphytic bacteria for freezing protection in an Antarctic moss, *Bryum argenteum*. Environmental Microbiology Reports 8:14-19.

**Raymond, J.A. 2015.** Two potential fish glycerol-3-phosphate phosphatases. Fish Physiology and Biochemistry 41: 811-818