

Evolutionary Geobiology Consortium

Public website

Joint funding

2023 - 2024 Geocenter Danmark

Microplastics as an accelerator of the antibiotic resistance crisis (PI: KKS, Co-PI: NP)

2023 - 2026 DFF-RP1

The role of marine fungi in coastal carbon cycling and storage: mechanisms and implications for plastic in the estuarine ecosystem (PI: NP, Co-PI: KKS)

Teaching

**2022 MSc course: Introduction to Geomicrobiology.
7.5 ECTS (NP, KKS, EH)**

Department of Geosciences and Natural Resource Management University of Copenhagen

**2018 PhD course: Molecular geobiology course.
4 ECTS (KKS and LJ)**

Department of Chemistry, University of Copenhagen.

Student projects

2023-2024 Postdoc Project: Saghar Hendiani (KKS, LJ)

Propagation of horizontal gene gain in bacterial colonies

2023-2024 MSc Thesis: Nusrat Amena (EH, NP, LJ)

The effects of microenvironment carbon limitation on human cancer cells

2021-2023 PhD Thesis: Emma Haxen (EH, NP)

Dual PhD - Lund University + University of Copenhagen. Tracing cellular access to oxygen and carbon over time, size, and space

2022 Postdoc Project: Veneta Gerganova (EH, LJ)

the motility of giant cancer cells.

2022 MSc Thesis: Hazal Polat (EH, LJ)

the motility of giant cancer cells.

2021 PhD Project Course: Rocío Rodríguez Torres (KKS, NP)

Methods in microbial plastic interactions

2019 MSc Thesis: Xi Xhen (KKS, LJ)

Biofilm formaion on mineral surfaces

Joint Conference presentations

2022

Distribution of antibiotic resistance genes in the environment: An interfacial geochemical perspective. KKS and LJ. Biofilm Workgroup Meeting, Helsingør, April 19-20.

Publications

Peer-reviewed

Haxen E.R., Schovsbo N.H., Nielsen A.T., Richo S., Loydell D.K., Posth N.R., Canfield D.E., Hammarlund E.U. "Hypoxic" Silurian oceans suggest early animals thrived in a low-O₂ world, Earth and Planetary Science Letters, <https://doi.org/10.1016/j.epsl.2023.118416>, in press.

Under review/submitted

Hammarlund E., Jauffred L., Posth N.R., Sand K.K. Collective scientific efforts predict and tackle the future—let's prioritize them. In review, Geobiology

Verma T., Hendiani S., Moral C. K. C., Andersen S. B., **Hammarlund E.**, Burmoelle M., **Sand K. K.**, Recurrence and propagation of past functions through mineral facilitated horizontal gene transfer. Submitted to Science Advances.

Hammarlund E., Bukkuri A., Norling M., **Posth N.**, Carroll C., Baratchart E., Amend S., Gatenby R., Pienta K., Brown J., Peters S., and Hancke, K. Benthic daily oxygen variability and stress as drivers for animal diversification in the Cambrian. In Review.

