

### Subproject: Sensitivity of juvenile Arctic char to heavy metals

Actual field dates: 13. August – 14. October 2016

Field site: Nuuk/Kobbefjord

Number of man-days in the field: 108

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#### Summary:

Fieldwork was conducted in August, September and October of 2016. The juvenile Arctic char was successfully caught with electrofishing equipment in the river at the bottom of Kobbefjord and transported to Nuuk. The juvenile Arctic char was kept in a series of custom-made flow-through holding tanks at a stream close to Nuuk and a pulse exposure experiment with a mix of rare earth elements (lanthanum, yttrium and cerium) were successfully completed. Tissue samples for specific body burdens were gathered. Data for REE time integrated bioaccumulation as well as baseline element and biometry concentrations will be made available. These datapoints will contribute to the limited knowledge on REE accumulation in fish species, and will be available for future biomonitoring efforts related to REE. Additionally, a total of 51 sculpins were caught at five stations including the harbor around Nuuk. These sculpins will be used to establish baseline histopathological data and contaminant concentrations.

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#### Photos:

Photo 1: Credit: Rasmus Dyrmosø Nørregaard  
Caption: Henrik Kaarsholm assembling the exposure setup next to a stream at Qinngorput, Nuuk.

Photo 2: Credit: Henrik Kaarsholm  
Caption: Rasmus Nørregaard electrofishing juvenile Arctic char in a river in Kobbefjord

Photo 3: Henrik Kaarsholm  
Caption: Tissue sampling from juvenile Arctic char

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#### Participants:

AU: Rasmus Dyrmosø Nørregaard, Henrik Kaarsholm

GINR: Ole Geertz Hansen

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Photo 1



Photo 2



Photo 3