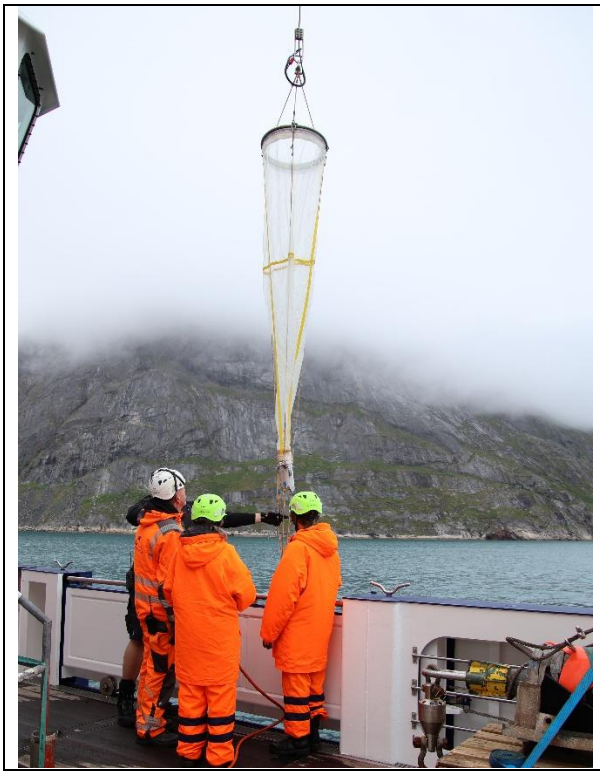
Expedition MSM-139 GreenHAB
Reykjavík – Reykjavík
Weekly Report No. 4
11. – 17. August 2025

In the fourth week of our expedition, we sailed from the Uummannaq Fjord system to Disko Bay to welcome and introduce the students of the Aasiaat School to the ship, marine research, and our project. We also took samples and conducted detailed investigations within Disko Bay, working through various stations.

At all stations on our trip, we take plankton samples with plankton nets. These samples are then examined under a microscope and identified to species level where possible. This gives us a good insight into the composition of the community and its condition. We also isolate individual representatives of each species for further molecular analysis. Sometimes we also find completely unexpected plankton species with surprising abilities. At many stations in the North and in the Uummannaq fjord system, we saw a particularly interesting specimen in the 20 µm plankton net. This single-celled species can swim and has a highly complex eye with which it can detect its prey. When it touches its prey, it shoots a kind of harpoon and can then completely engulf the prey (sometimes of the same size). At a station with a lot of glacier ice, we saw some cells/species with a “foot”-like structure that they use to hold on. A single-celled organism with a functioning eye can swim and hold on with a “foot.” This has never been described before and requires further detailed investigation.



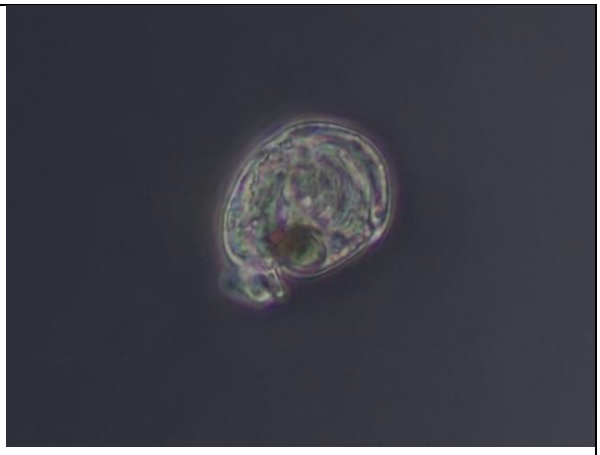


Photo: Nancy Kühne and Nina Lundholm, Wenche Eikrem

On the morning of the 13th, we were greeted by whales off the coast of Aasiaat, so we spent the time until we docked observing them. After mooring in Aasiaat, we were visited by students from the local high school. In an intensive and highly interesting exchange, we discussed marine research and climate change with the students.

Photo: Nancy Kühne

In the evening, we continued on to our station off Disko Bay (68° 28.5 N, 53° 59.9 W). We worked our way counterclockwise through Disko Bay, following the currents. At the two stations near Ilulissat and the Jakobshavn Isbræ glacier, the most active glacier in the northern hemisphere, as well as in Vaigat, we encountered a lot of ice and large icebergs. Off the Arctic station at Qeqertarsuaq on Disko Island, we took samples at the local marine measuring station and successfully extracted sediment cores. We will use these to support the long-term measurements taken there and thus better understand the changes in the bay.

Photo: Julia Oelker

Best regards on 17 August, at 69° 16,4’N / 54° 00,2’W

Uwe John
Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung (AWI)