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    BODY {
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  </style>
</head><body><fieldset
class="elhs7de1e8aa571f318863d73fec3b99f3df"><legend>Project
information</legend><dl class="afwelementview" data-
idstr="222j59f4a9f798199d1050cealf2ebd77402"><dt class="elname
">Project title</dt><dd style="" class="elvalname " >WP2-OA-3:
Effects of Ocean Acidification and temperature on Arctic vs. boreal
zooplankton species and populations</dd><dt class="elyear
">Year</dt><dd style="" class="elvalyear " >2013/2014</dd><dt
class="elproject_leader " >Project leader</dt><dd style=""
class="elvalproject_leader " >Haakon Hop, NPI</dd><dt
class="elparticipants editor">Participants</dt><dd style=""
class="elvalparticipants editor" ><ul> <li>Haakon Hop, NPI-
Leader</li> <li>Howard Browman (IMR)-Co-leader</li> <li>Peter
Thor (NPI-post doc)</li> <li>Claudia Halsband (Akvaplan-niva-
researcher)</li> <li>Anne Berit Skiftesvik (IMR -
researcher)</li> <li>Caroline Durif (IMR - researcher)</li>
<li>Reidun Bjelland (IMR s between 27 and 29 d old. Lipid volume

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increased exponentially with prosome length as the copepods developed. Similar to the growth rates, there were some differences between treatments, but no significant difference between the lipid volume or slope against prosome length for C5s salary and he is central to the continuation of the studies. Moreover, conducting experiments such as these requires expensive specialized facilities, equipment and materials and is also very labour intensive.

Funds from the Fram Centre supported collaboration with V. Thiyagarajan at the University of Hong Kong who works on global proteome expression, a skill not available in the Fram-IMR team. Similarly, funds have also facilitated collaboration with P. de Wit (Univ. of Gothenburg), which enabled another extension of our research into full genome expression.

Could results from the project be subject for any commercial utilization

No

<!-- grab append -->

Conclusions

The copepod studies continue on true arctic species (*Calanus glacialis* and, potentially, *C. hyperboreus*). A cold water OA facility has been established at IMR- and we are initiating long- term studies on *C. glacialis* and *P. acuspes* there. It is our intention to study evolutionary trans-generation effects should we succeed in culturing the copepods for two generations. We will conduct various acute OA tests on several other arctic pelagic species (extending beyond copepods) during the summer 2014. Moreover, we will be involved in the RV *Lance* freeze- in during the winter 2014-15. During the expeditions, it is our intention to monitor effects of natural changes in sea water pH during the winter-spring transition north of Svalbard. This may provide important information on the resilience of planktonic animals to natural fluctuations in pH in the Arctic.