

Minutes from the ADMI Foundation meeting

9 January 2020

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0. Bringing the meeting to order

A meeting of the ADMI Foundation was held remotely via the application zoom.us on Thursday 9 January 2020 starting at 9am in Honolulu (11am Seattle, 8pm Copenhagen).

A total of 18 participants took part in the meeting, connecting from Copenhagen, Denmark; Bergen, Norway; Dartmouth, U.S.A, Seattle, U.S.A., and Honolulu, U.S.A.:

1. Colin Millar, ICES
2. Vanessa Trijoulet, DTU
3. Arni Magnusson, ICES
4. Kasper Kristensen, DTU
5. Christoffer Albertsen, DTU
6. Anders Nielsen, DTU
7. Casper Berg, DTU
8. Mollie Brooks, DTU
9. Hans Skaug, Bergen
10. Gavin Fay, UMass-Dartmouth
11. Ian Taylor, NOAA NWFSC
12. Allan Hicks, IPHC
13. Cole Monnahan, NOAA AFSC
14. Andrea Havron, NOAA AFSC / U Washington
15. Jim Ianelli, NOAA AFSC
16. Christine Stawitz, NOAA HQ
17. Johnnoel Ancheta, U Hawaii
18. Erik Franklin, U Hawaii



Screen shot of zoom.us application. The group in Copenhagen (top left panel) included additional participants who were not in view.

1. Recent changes in the administration of the ADMB Project

Arni, the current foundation president, reviewed events of the past year related to the project and said the largest changes since the previous meeting are John Sibert stepping down from involvement and the crisis in funding that was eventually resolved through negotiation with Rick Methot and Patrick Lynch at NOAA, who were able to extend the grant to University of Hawaii which supports Johnnoel. Patrick also reached out to Erik Franklin who thankfully stepped in to take over the role that Sibert had in managing that grant.

Arni described the process of finding new officers to be nominated to replace the existing board members: himself as president, Allan as treasurer, and Mollie as secretary. He said Erik Franklin, Ian Taylor, and Vanessa Trijoulet had agreed to be nominated and that this group provides a good geographic balance, with Erik close to Johnnoel and the Hawaii origins of the foundation, Ian close to the Seattle community working with ADMB, and Vanessa in Copenhagen close to the large group of developers there especially those involved with the TMB project.

2. Recent and upcoming milestones of the ADMB and TMB Projects

Arni noted that the underlying platforms ADMB and TMB have been stable and working well and there's lots of active development on the "second level" with models like Stock Synthesis and SAM continuing to be developed. Other ADMB- and TMB-based software that are currently being developed/extended include VAST, WHAM, ASAP, SPiCT, a4a, and Multifan.

Johnnoel said that a new version of ADMB, 12.1 would be released soon, potentially in the week ahead. He said there have been some challenges working out a few elements of the release and a bit more testing needed, but it was close.

Kasper Kristensen noted that a new release of TMB is expected soon (within a few months). He described a restructuring of the underlying AD engine, which is now developed separately from the CppAD library. The plan is that the next major release of TMB will include an option to use either CppAD or the new AD library that he has been writing. Benchmarks indicate that it performs slightly faster on average, and several times faster in special cases of importance, such as large spatial models.

3. Organization of 2020 ADMB-TMB developer workshop in Copenhagen

As background to the planning of the next developer workshop, Arni noted that there is recognition that developer workshops have led to a sprint of development and subsequent collaboration, but funding has been declining to support travel to the workshops. Rick Methot is a key person in involvement both in the development of Stock Synthesis and institutional support from NOAA for the grant to UH, and he showed interest in attending a developer workshop in Copenhagen and suggested his ideal dates would be 10-12 September, immediately following the ICES Annual Science Conference. This would be a Thursday-Saturday. The link with the ICES conference would be a good way to bring in a few extra people who would be in town. There was a discussion about the length of the workshop and general support for a 5-day program similar to past developer workshops. A plan was made to include the following Sunday and Monday for a full 5-day workshop spanning 10-14 September. A suggestion was made that planning and discussion could take place on the first part of the week with more small group development work occurring on the rest of the week.

Hans noted that past workshops have benefitted from external speakers, such as somebody from the STAN community and suggested that someone from the R community (Simon Wood who has developed a suite of spline-related methods--the mgcv package--though it's not clear if

he would have the time to attend). Ian mentioned that Rick Methot had suggested looking at Steven Johnson (MIT) who has developed some nonlinear optimization libraries. Mollie noted that Ben Bolker (developer of glmmTMB) would be another good person to invite.

Arni noted that documentation for new users is another area that has been successfully worked on in past workshops.

There was a discussion about whether anyone has heard from Dave Fournier lately. Jim Ianelli reported some active work on Multifan-CL.

There was a discussion of options for remote participation in a developers workshop. Arni noted that the technology has improved and there are reasons to travel less. Ian noted that the choice of remote connection could be made after assessing who would be interested in participating remotely. However, it was widely agreed that the U. Hawaii Zoom account used for this meeting seems to be working well, so could potentially be used to just stream all sessions whether anyone was listening or not.

Ian noted a sequence of steps needed for the workshop planning: settle on the dates, spread the word to interested parties, and then figuring out who would receive funding for travel (which in turn depends on the current state of the finances and any potential new funding sources). He suggested that this last step could occur after the past and newly elected treasurers could work together to take stock of the Foundation's finances.

4. Election of new Foundation Members

The following people were nominated to be new Foundation members

- Vanessa Trijoulet (proposed by Arni),
- Erik Franklin (proposed by Arni),
- Colin Millar (proposed by Arni),
- Christoffer Albertsen (proposed by Anders), and
- Christine Stawitz (proposed by Cole).

The proposed foundation members accepted their nominations. The additional foundation members were approved unanimously by the existing members at the meeting.

Arni said he looked over the list of current foundation members to check that all are fairly active and none need to be retired from the foundation. There were 22 members prior to this meeting, so with the 5 members, the total is now 27.

5. Election of new Foundation Board

Arni nominated the following candidates to the Foundation Board:

- Ian Taylor, President,
- Vanessa Trijoulet, Secretary, and
- Erik Franklin, Treasurer.

The proposed board members accepted the nominations. A call for additional nominations was made. Hearing none, Arni as president called for a vote and the new board was approved unanimously by the members present at the meeting. The 18 members present represent two thirds of the 27 total members of the ADMB Foundation.

6. Any other business

Ian raised a question about the name of the organization. The name “AD Foundation” had been chosen at a previous meeting as a more inclusive name than “ADMB Foundation”. This change was supported but there may be some confusion associated with existing organizations with that name. Arni suggested that we let the issue slide for now.

Mollie noted the possibility of working groups that could be formed to tackle specific spin-off projects. The German Centre for Integrative Biodiversity Research (iDiv) is potentially a source of funding for a working group; contact Marten Winter, the coordinator of the synthesis centre (sDiv) (https://www.idiv.de/en/groups_and_people/employees/details/64.html). Erik mentioned NIMBioS (http://www.nimbios.org/workinggroups/workinggroup_details), but Mollie said they are not currently accepting proposals.

Discussion of funding sources: industry hasn’t supported in the past, but could in the future (Steve Martell now works for the fishing industry and has some ideas). Commissions like IPHC have supported in the past, but that well appears to have run dry. Mark Maunder (first Foundation president) at the IATTC could be approached for funding and sending people to a developer’s workshop. Nathan Myhrvold at Intellectual Ventures was also mentioned.

Kasper said NOAA had provided \$30,000 to support TMB and it funds about 2 months of work, including overhead to DTU.

There was a discussion about NOAA funding and whether there’s any conflict for Ian as newly elected president. Ian noted that the grant from NOAA to UH that supports Johnnoel is separate from funding provided to the Foundation which has not come from NOAA.

Colin noted that the Marine Stewardship Council has a pathway to apply for grants to support a specific fishery. FAO was also brought up as an organization that has provided significant funding for fisheries research projects.

Jim noted that we could reach out to scientists in Asia, such as Momoko Ichinokaw in Japan. Mollie has contact with some Japanese researchers who are interested in a gear-selectivity application that she is developing using TMB and she would like to make more statistical connections as well for a fellowship application. Billy Ernst and others in South America could be contacted to see if they know people who would want to attend. Andrea offered to check with folks at U. Auckland.

The meeting was brought to a close at 10:35am (Hawaii time).