

Investigative Workshop Bio-Acoustic Structure

EVALUATION SUMMARY REPORT
25-27 JUNE 2018

Dr. Pamela Bishop

NIMBioS Associate Director for STEM Evaluation

Figure 1. Agreement with the following statements about this workshop:

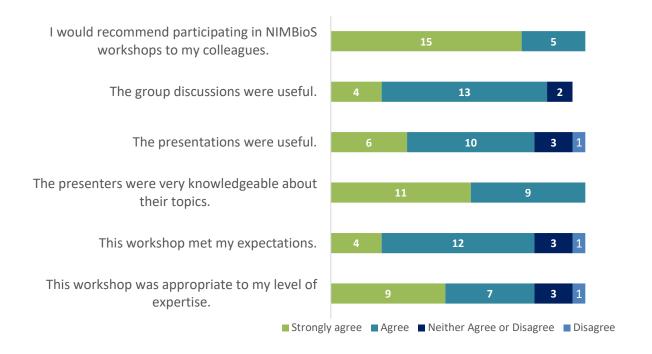


Figure 2. Agreement with "As a result of participating in this workshop, I have a better understanding of..."

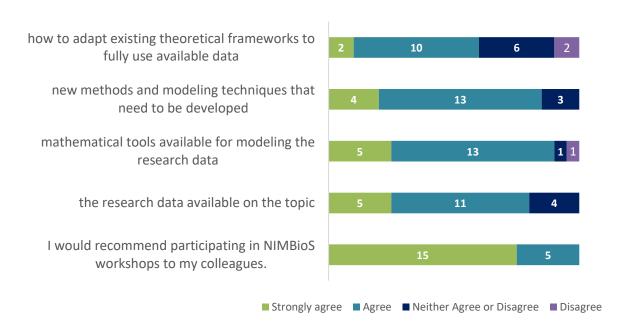


Figure 3. Level of satisfaction with the opportunities provided during workshop presentations and discussions to ask questions and/or make comments:



Please indicate any suggestions you have for facilitating communication among participants during the workshop:

If we had had time for a tutorial, that would've generated a lot of useful questions! But I thought discussion was free-flowing and quite open.

Overall, between the leadership of the workshop and the congeniality of participants, I felt the communication during the workshop was excellent.

The workshop could have been more effective if:

More structure would have been beneficial.

A bit more of structure.

If we had kept to a pre-planned agenda or at least figured out a goal beforehand of what we wanted to achieve at the workshop.



Do you feel participating in the workshop helped you better understand the research going on in disciplines other than your own on the workshops topic?

I appreciated the opportunity to talk to researchers working with other taxa, who I would not normally have come into contact with, particularly those working in the marine environment.

I very much enjoyed talking to researchers who study other taxa, as well as those with expertise in machine learning. It is so valuable to get people with different experience and interests together like this.

To me, this is the strongest aspect of NIMBioS workshops (this is my second) - a chance to talk about a shared topic of interest with folks from vastly different backgrounds and with vastly different technical expertise. I would otherwise never, in any other professional context, have the

opportunity to have these conversations. It opens new avenues of analysis for me and clarifies what is and isn't possible with current analytical approaches.

Everyone was very patient with my questions that came from a related-but-outside perspective and gave clear responses that were useful to me.

I liked the diverse taxa represented at the workshop - it was fun learning about issues facing people working with other animal groups.

I come from a machine learning approach to Bioacoustics and I don't have much knowledge about the domain specific techniques that have been used for years. I think that understanding the classical approach to Bioacoustics should lead part of the development of new machine learning techniques in order to improve the interpretability of results.



Participants felt the workshop helped them better understand the research going on in disciplines other than their own on the workshops topic.

Do you feel the workshop made adequate progress toward finding a common language across disciplines for research on the workshop's topic?

I think we made a good start, but I hope that discussions will continue and more progress will be made remotely and/or through other meetings.

I'm not optimistic that we'll ever all agree on common language but talking to each other facilitates "bilingual" (or "multilingual") skills necessary to cross disciplinary boundaries. I think we did a lot of that - teaching each other how we talk about and approach our disciplines - at the workshop.

We came to understand that some of us meant different things by "population" and "label", for example!

I think a lot of progress was made, but in 2 days only so much can be accomplished. The challenge will be to try to keep the momentum going when everyone gets back to their busy lives. Perhaps a follow-up workshop in a year's time could be a good way to solidify what was accomplished?

We made progress. I would not characterize it as "adequate" progress. I believe that efforts, including intended deliverables, may further the progress.

It is still hard to say that a common language has been stablished but this is certainly the beginning of an effort to translate.



Participants felt the workshop made adequate progress towards finding a common language across disciplines for research on the workshop's topic.

Do you feel that the exchange of ideas that took place during the workshop will influence your future research?

I gained insights that I will look into further and also made contacts with people who I will talk to more as I develop analyses.

Especially a technical forum could be useful to me in playing with the open source software other participants use.

I am exploring a collaboration with someone I met at the workshop and am optimistic!



Participants felt the exchange of ideas that took place during the workshop will influence their future research.

Did you develop plans for collaborative research with other workshop participants with whom you had not previously collaborated?

Ideas of possible future collaborations were discussed, but we're all already so overcommitted...



Participants developed plans for collaborative research with other workshop participants with whom they had not previously collaborated.

What would you change about the workshop?

Increase level of focus

More time for/more structured breakout group discussion

I think if we had another day or two, we could have completed a draft of an article which would have made it easier or more likely to have published. Currently, we have a few outlines

and some of us have been assigned to subsections, but there is still a lot of work to do and motivation for bringing everything together has a tendency to drop off as time goes on.

Nothing, I liked the open-ended format.

I would add slightly more structure so that less time was spent deciding what to do and more time spent actually doing it.

I think the presentations were largely useful, but didn't really "set the stage" for the group discussions, and so could have been interspersed through the workshop period (rather than being all at the beginning) - would have both provided breaks to the group discussions (maybe helping them re-focus when needed as well as just providing a chance for reflection) and would have gotten us to the discussions earlier in the workshop.

Group division dynamics, assigning participants to larger groups, involving more general topics.

I don't know how to streamline everyone finding out what they can contribute to a review or tutorial publication together, but it felt like we took a lot of the time just to cast about for what we could write together that would be worthwhile and within our professional time constraints.

Hard to say, I feel really motivated after the workshop. The outcome of the product beside of the potential papers could be more practical like in live use of methods, developing practical skills, however it would need more time. So, I would be happy to spend more time among such skillful and dedicated people.

I'm not sure. It may have been useful to have 1 more day, but that could have easily been unproductive. Hard to say.

Duration: too short

Maybe some more specific aims.

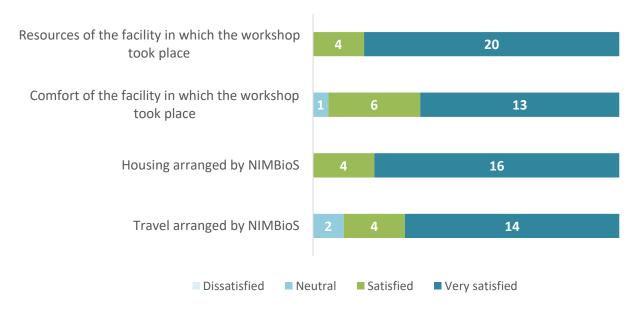
Make it more structured.

Although some people did switch between groups, I felt it was hard to switch once I started in a group. I think it might have been more productive if there was mandatory switching, if that could be incorporated somehow (could be tricky, as some continuity would be necessary so that people wouldn't be starting from scratch).

I would have liked more presentations on the first day aimed at cutting edge research in the field, as well as introductory materials on bioacoustic research in general.

At first, I wished there had been greater direction and focus. Looking back now, I think the ability to voice all the different needs was valuable in and of itself. We will see whether interested persons persist with the energy necessary to keep progress moving forward.

Figure 4. Level of satisfaction with the workshop accommodations:



Comments about accommodations:

Air conditioning in rooms was somewhat high and even when the thermostat temperature was turned up they remained chilly.

It was freezing inside, but I also like being warm.

What do you feel was the most useful aspect of the workshop?

Discussions with fellow participants

The ability to discuss my work and new ideas with other, more experienced, researchers in the field was extremely for me

If we are able to write a summary of our discussions, I think it will be beneficial for anyone entering the bioacoustics field.

Learning about different approaches people are using in bioacoustics analysis

Spending time discussing issues with people from diverse backgrounds was the most useful aspect of the workshop. The discussions were useful and fruitful and took entirely different routes than they would have taken had all of the researchers been from the same field.

Interacting with folks from the machine learning community working specifically on acoustic analysis - being able to discuss how these approaches could (and couldn't) be applied to my system-specific bioacoustics questions.

Plenary (whole group) discussions felt somewhat more useful than small-group discussions (focused on a single topic each). For a diverse and broad topic such as bioacoustics, knowledge and skills of the whole group were necessary at all steps.

Getting to talk with other researchers about what they think is state of the art, and how they support field research questions.

Aggregating people with specialized topics, potential of help to each other in the future, getting broader knowledge about other studies in various taxa

It was most useful to me to see how I personally fit into the broader landscape of the field. I now feel like I am a valuable member of the community.

Researchers working on several different species

Gathering with a group of experts for three days was unique opportunity for discussing and finding a common language in the widely interdisciplinary field that is bioacoustics.

The discussion about machine learning.

The diversity of backgrounds represented.

Open group discussion on the nature, preparation, collection, and use of the data.

The diversity of disciplines present, and the ability to learn about needs across disciplines -- and in particular, learning the varying needs of researchers studying different taxa. Just as importantly, the opportunity to meet, network, and form collaborations across areas that would not have otherwise happened.

For me this kind of workshop provides another view of the "state of the art", one that can't be obtained from reading, only by intensive exchange of ideas.

Please use this space for any additional comments:

This was a great workshop. I'm very happy that I participated and I think that it was an extremely worthwhile way to spend a few days. Thank you for organizing it!

Thank you so much for making this possible. I am energized to try new methods that I otherwise wouldn't have known where to start with.

I'm very happy that I had the opportunity to participate on this workshop. Really nice organization, many thanks!

Very inclusive and welcoming atmosphere. Thanks to the organizers for making it happen!

I would like to see the efforts commenced by this workshop continue. Perhaps this means a working group, or perhaps this simply means independent collaborations among subsets of participants, I'm not sure. I am very glad to have participated and would be glad to do so again.