



Evaluation Data Report

Investigative Workshop:

Modeling Dengue Fever

July 23-24, 2012

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Modeling Dengue Fever Workshop

Evaluation Data Report

Background

Introduction

This report contains evaluation data for the NIMBioS Investigative Workshop entitled “*Modeling Dengue Fever*” (Dengue workshop), which took place at NIMBioS July 23-24, 2012. NIMBioS Investigative Workshops are relatively large (30-40 participants), focus on a broader topic or a set of related topics than Working Groups, attempt to summarize/synthesize the state of the art and identify future directions, and have potential for leading to one or more future Working Groups. Participants may include post-docs and graduate students with less experience in the particular topic than those participating in Working Groups.

The Dengue workshop comprised 40 participants, including co-organizers Derek Cummings (Johns Hopkins Bloomberg School of Public Health), Zhilan Feng (Mathematics, Purdue University), Jorge Velasco-Hernandez (Mathematics, UAM-Iztapalapa, Mexico), and Michael Johansson (Centers for Disease Control and Prevention).

Organizer Pre-Workshop Description

Objectives: More than one-third of the world's population lives in areas at risk for the transmission of Dengue, a vector-transmitted disease that is one of the leading causes of death and illness in the tropics and subtropics. This workshop will bring together public health officials as well as mathematicians, biologists and epidemiologists to identify important modeling issues and to establish possible new collaborations on modeling dengue disease dynamics and control.

Specifically, this workshop will (1) promote an interdisciplinary approach to identify important issues in modeling Dengue transmission dynamics and control, (2) encourage the establishment of new collaborations for research on Dengue and other infectious diseases with non-human transmission components, and (3) develop DENV models that incorporate important features such as vector dynamics and control, serotype interactions and immunity, and at the same time allow for model testing/validation.

Organizer Post-Workshop Summary

No summary available at the time of report.

Evaluation Design

Evaluation Questions

The evaluation of the workshop was both formative and summative in nature, in that the data collected from respondents was intended to both gain feedback from respondents about the quality of the current workshop and also to inform future similar meetings. Several questions constituted the foundation for the evaluation:

1. Were participants satisfied with the workshop overall?
2. Did the meeting meet participant expectations?
3. Do participants feel the workshop made adequate progress toward its stated goals?
4. Do participants feel they gained knowledge about the main issues related to the research problem?
5. Do participants feel they gained a better understanding of the research across disciplines related to the workshop's research problem?
6. What impact do participants feel the workshop will have on their future research?
7. What changes in accommodations, group format, and/or content would participants like to see at future similar meetings?

Evaluation Procedures

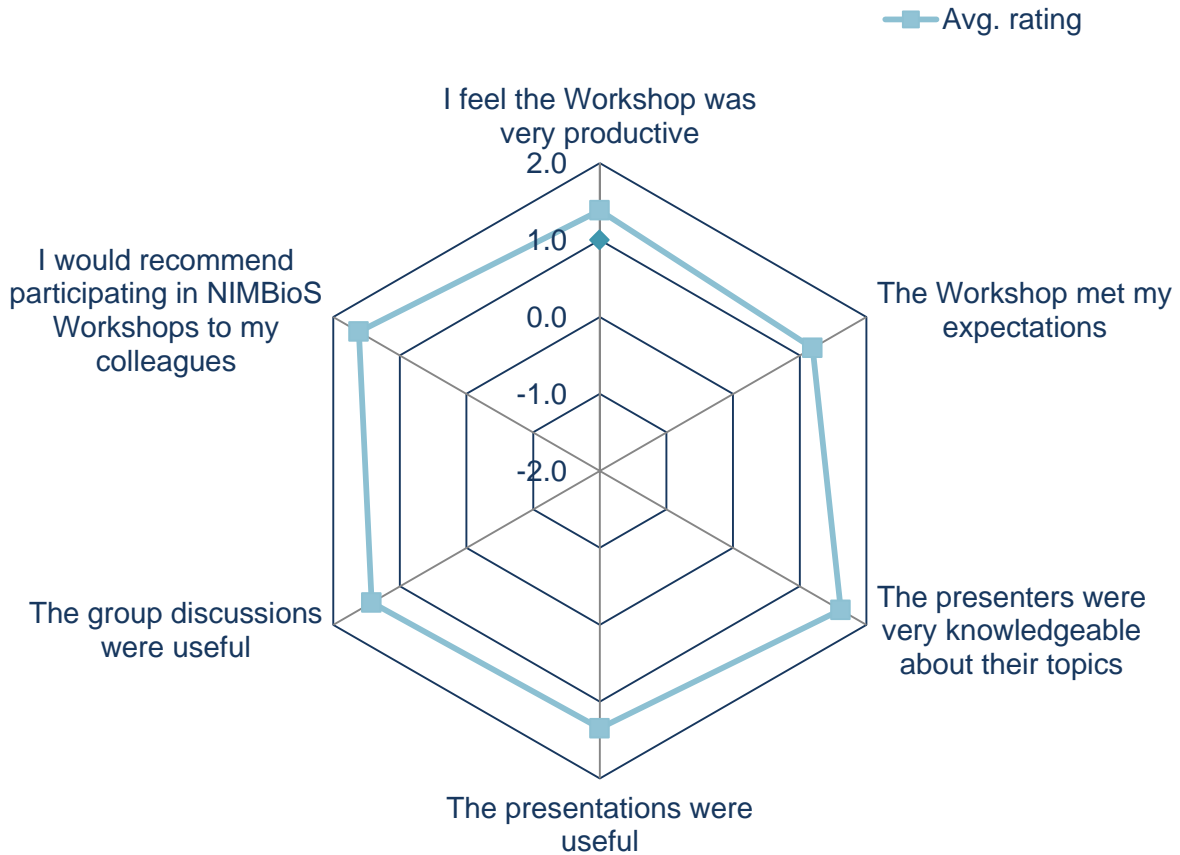
An electronic survey aligned to the evaluation questions was designed by the NIMBioS Evaluation Coordinator with input from the NIMBioS Director and Deputy Director. The final instrument was hosted online via the University of Tennessee's online survey host mrlInterview. Links to the survey were sent to 36 registered workshop participants on July 24, 2012. Workshop organizers were sent evaluation forms, but were only asked questions about (1) connections made with other workshop attendees and (2) satisfaction with the way NIMBioS handled their event. These data are internal to NIMBioS and not reported here.

Reminder emails were sent to non-responding participants on July 31 and August 6, 2012. By August 13, 2012, 26 of the participants had given their feedback, for a response rate of 72%.

Evaluation Findings

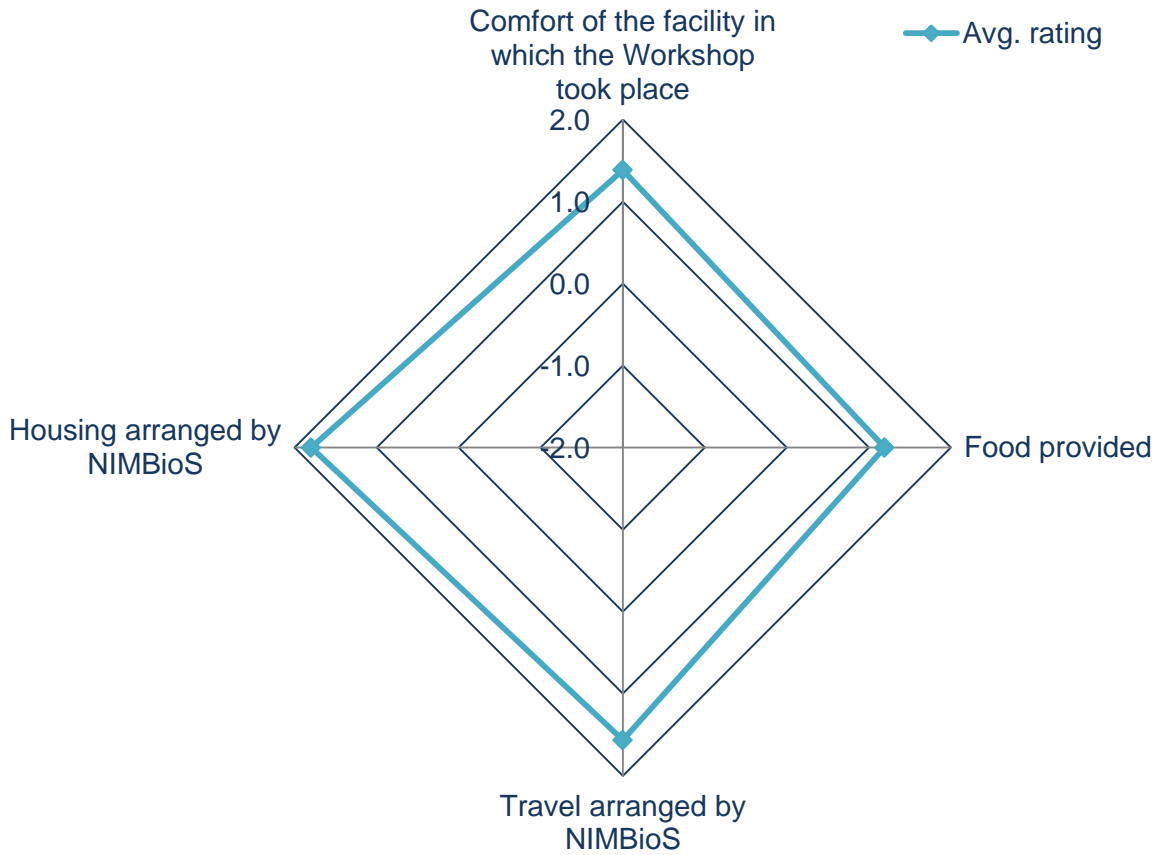
Overall Satisfaction

Figure 1. Satisfaction with various aspects of the workshop



Scored on a 5-point Likert scale from -2 to 2 for “strongly disagree” to “strongly agree”

Figure 2. Satisfaction with accommodations



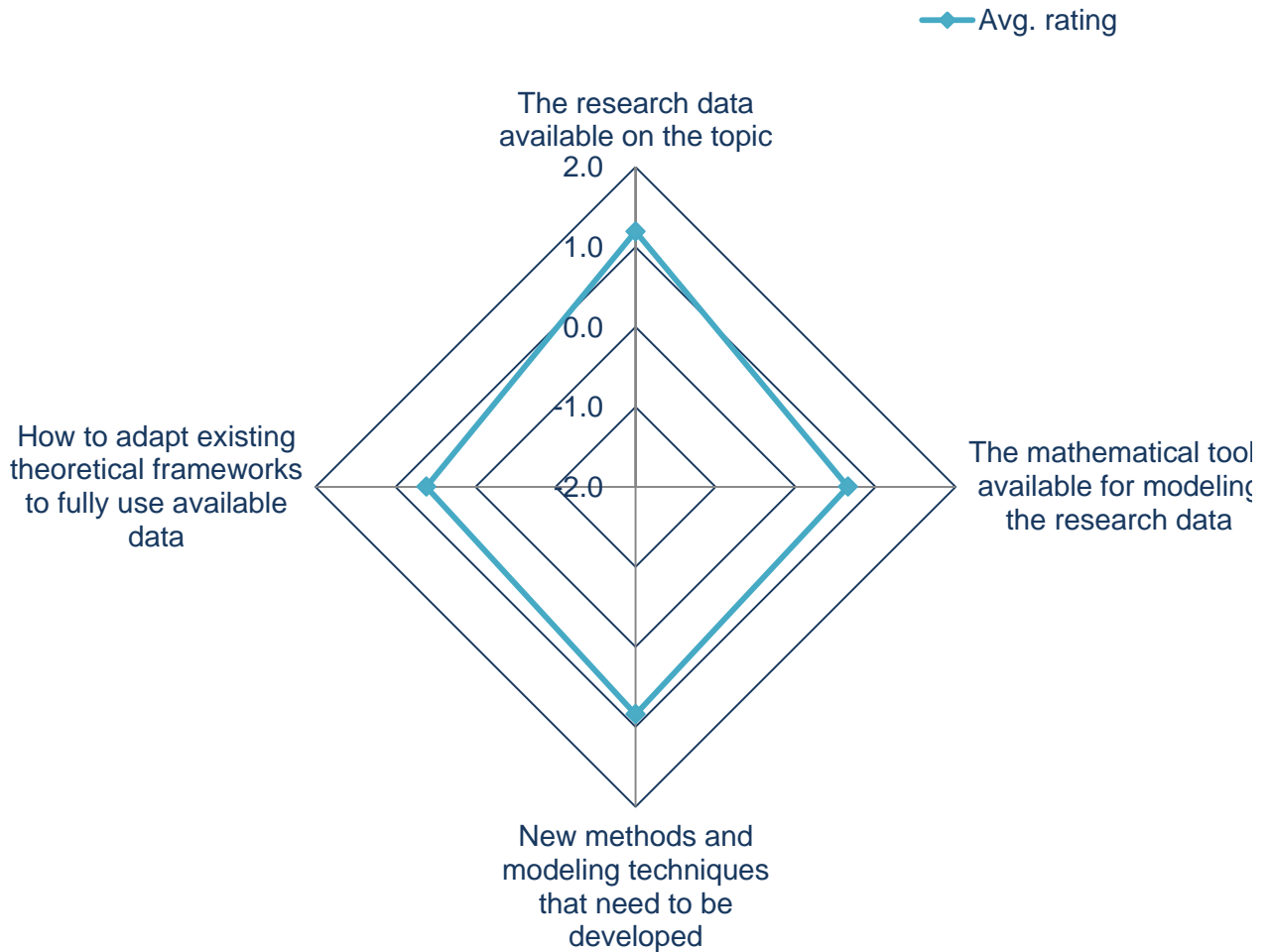
Scored on a 5-point Likert scale from -2 to 2 for “very dissatisfied” to “very satisfied”

Workshop Content and Format

Participant Learning

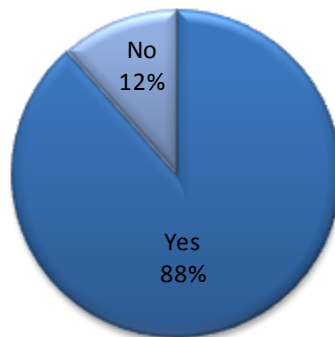
Figure 3. Participant learning

As a result of attending this workshop, I have a better understanding of:



Scored on a 5-point Likert scale from -2 to 2 for “strongly disagree” to “strongly agree”

Figure 4. Do you feel that participating in the Workshop helped you better understand the research going on in disciplines other than your own regarding the workshop's topic?



Comments

I now feel I have a much better understanding of the field - what has been done, what is being worked on now, and what is still to be done.

I think the participants in the workshop were strongly opinionated (which is fine) but they were not necessarily open to new/different ideas. However, there were a few people that made the workshop very worthwhile to me.

The workshop was a good opportunity for me to learn about ongoing studies in Iquitos and Morelos. However, the modeling talks tended to focus on work that was several years old, and I assume most modelers were already familiar with the literature. Overall, I enjoyed talking to the other dengue modelers and other scientists, and I look forward to keeping in touch with them.

The workshop was highly focused on dengue and the vector mosquito.

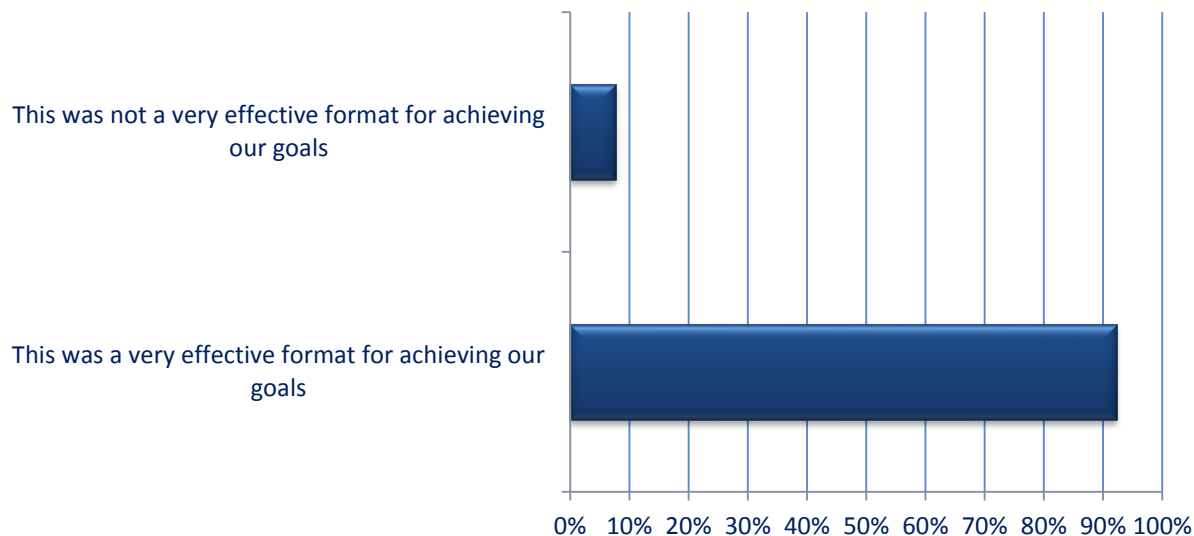
The workshop was very productive. It showcased several researchers that have been actively working on dengue system, and we got a chance to see (i) what sort of data people had gathered from different parts of the world; (ii) what kind of questions people were trying to answer; and (iii) what kind of models and techniques were being used.

The varied backgrounds of participants and topics discussed allowed me to be exposed to work being done by those I would not normally follow.

I wish I would've have had more knowledge in modeling dengue because it seemed as if prior knowledge was expected. Having suggested readings in the form of papers, books, etc. would have been beneficial.

Workshop Format

Figure 5. Effectiveness of workshop format



Format could be improved if:

If objectives of small working groups were clearer and themes were selected based on pre-identified knowledge gaps, rather than interests of organizers.

Better goals were outlined at the beginning. Expected contribution from participants was outlined first. Coordination among groups was encouraged.

Most Useful Aspects of Workshop

Contacts, knowledge of what colleagues are focused on.

Presentations and group discussion.

Discussion between ecologists and mathematicians.

The discussion sections.

The opportunity to meet people studying all aspects (e.g. biology, field work, modeling, genetics) in one room at one time was very useful.

Break out groups.

Meeting all of the dengue modelers and other researchers in person.

Integrating researchers from different disciplines to study a common problem.

To meet and to talk with other investigators that they are working in dengue transmission.

The brainstorm about the problem definition.

The opportunity for focused discussion with modelers about a couple key areas of research. This helps me understand and appreciate what the gaps are and what people are interested in.

The presentations.

The meetings to discuss possible topics for working groups were very beneficial.

Relatively small number of delegates - it was possible to speak with everyone.

The discussions on the second day of the workshop that focused on future research topics.

Discussions.

The groups discussions.

The contact with people working on the same subject.

Meeting others and being able to discuss ideas.

The first day of presentations was excellent.

Discussion about possible future research driven by smaller group discussions.

The participants spanned several important areas of dengue research, and the presentations were very very informative.

Meeting with people working in the same area and getting to know, kind of research people are doing in this field other than mine.

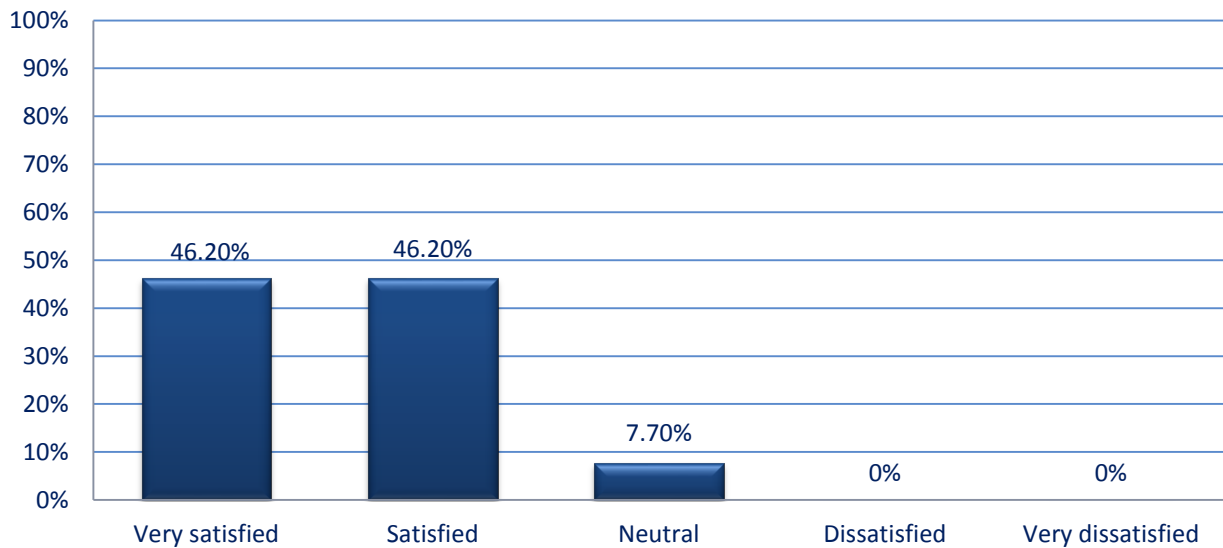
I found the group work was most useful as it gave me and a smaller group of people a chance to discuss things at a much finer level of detail.

The most useful aspect was learning about the variety of approaches in modeling dengue.

Meeting other researchers face to face, both the big names (in a forum where I could easily interact with them, unlike at conferences generally) and the more junior people (whom I might not be aware of). Possible future collaborations - too early to tell whether anything will come off - and mutual respect (we were all selected to be there).

Communication

Figure 6. How satisfied were you with the opportunities provided during workshop presentations and discussions to ask questions and/or make comments?



Comments

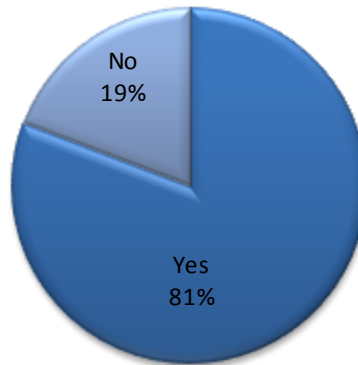
Since many of the presentations were on published work, I think less time should have been allocated to the presentations and more for discussion.

A longer question/answer period would have been nice.

I think that the opportunity of giving a talk should be open for everybody, even if a formal acceptance would be necessary. I would like to have presented my work opening a discussion in the topic which would be of my main interest.

Progress Toward Goals

Figure 7. Do you feel the workshop made adequate progress toward finding a common language across disciplines for research on the workshop's topic?



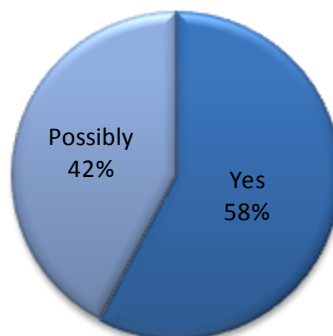
Comments

It could have been better. Perhaps pairing up a biologist with a modeler to provide common language would have been nice, or providing 3-5 readings before the workshop to bring everyone to the same level. That would have helped.

Yes, in as far as it covered several topics, approaches, and questions.

Impact on Future Research Plans

Figure 8. Do you feel that the exchange of ideas that took place during the workshop will influence your future research?



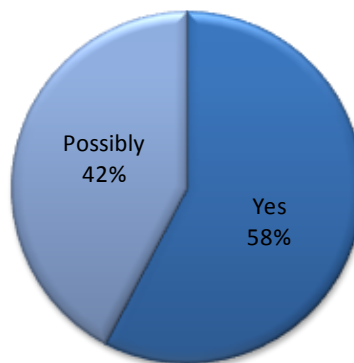
Comments

We could do new projects with meeting participants to obtain financial support. The big leaf theory looks interesting.

Some of the ideas that we discuss on the group are highly controversial, so, depending on the outcome my research could be influenced.

Impact on Future Collaborations

Figure 9. Did you develop plans for collaborative research with other Workshop participants?



Comments

The group discussion led to some good, workable ideas for future research. We are hoping to continue working on the project. I am not yet sure how much I will be involved in my group's plan. I did meet with 2-3 people with whom I might collaborate, but I'm not yet sure what priority that should take.

There were a few people that made the workshop extremely worthwhile.

We may put together a position paper..

We talked about a short time visiting of a PhD student to analyze data.

I am an infectious disease modeler, and developed plans for collaborative research with some of the participants of the meeting who focus more on epidemiological surveys and case report data.

As a result of the group discussion we plan to prepare a review article, one research proposal and two scientific collaborations

We split into smaller groups to work towards a collaborative project.

Suggestions for Future workshops

We split into smaller groups to work towards a collaborative project.

More structured/organized social interactions in the evening. Two days was too short. Group was a little too big. It seemed like not much thought was given by the organizers to what would happen after the presentations, and I think doing so would have made the second day more productive.

It would be helpful to be more specific and give better guidelines for the groups that want to continue working together after the meeting. We were left hanging a little about whether we should try to apply for a working group or just work on our own or what.

I went in Monday "blind"- it would have been good if the organizers provided some basic info to have everyone start at the same page.

Adding a section on work-in-progress (in contrast to already published work, which most of us had read). And maybe more on available data, which is a huge problem for modelers.

Organization was not clear in terms of the goals and expected outcomes of the workshop. At the end, working groups proposed different projects, but no guidelines were provided on how to proceed next under the auspices of NIMBIOS.

Smaller discussion groups with a wider variety of topics. Also, better defined problems and possibly, more short discussion sessions earlier on in the workshop. Possibly randomly assign people to the groups, so people get a little more outside their comfort zone.

It would have helped to have understood the objective from the outset. That is, the specific objectives of this workshop. Also, group discussion periods could have been better organized. There seemed to be some confusion among the organizers how the transition from talks to groups was to be handled. Laying out clearer expectations of the participants would have helped, perhaps.

Give people a bit more time to prepare a detailed workplan and a time schedule to work on the proposed ideas.

I think that more meeting time for discussions would have been beneficial.

Pre-appoint strong chairs for the breakout discussions.

The lunch breaks were wonderful for starting up research discussions. Because of this, I wish the breaks throughout the day, especially the afternoon ones, would have been a little longer.

Nothing. It would be great to have a follow-up one where we get together and work on the ideas we talked about.

In regards to this experience, nothing.

Could have being be longer.

It was a great workshop, really.

Maybe a few more epi/ clinical people who would be able to advise on those aspects.

I don't know if there is a way to do it, but I thought the group discussion times were a bit disorganized. I am sure that this was very group dependent.

1. The talks were squeezed into 20-25 minute slots, and there not enough time for discussions on the talks itself. 2. The groups of participants conspicuously lacked researchers with immunological background -- having experts in this area would have added more towards the workshop.

While it is probably not possible, I would have liked an extra day for further group work.

It would be nice if background material had been suggested so that I could have better prepared for this conference.

It was very unclear what would happen, after the meeting ended, to the proposals put forward by the four groups. Will NIMBioS select some to turn into formal Working Groups, for example?

Additional Comments

None

Appendix

Modeling Dengue Fever Workshop Evaluation Survey

Modeling Dengue Fever Workshop Survey

Thank you for taking a moment to complete this survey. Your responses will be used to improve the workshops hosted by the National Institute for Mathematical and Biological Synthesis. Information supplied on the survey will be confidential, and results will be reported only in the aggregate.

Please check the appropriate box to indicate your level of agreement with the following statements about this workshop: (Very satisfied, Satisfied, Neutral, Dissatisfied, Very dissatisfied)

- I feel the workshop was very productive.
- The workshop met my expectations.
- The presenters were very knowledgeable about their topics.
- The presentations were useful.
- The group discussions were useful
- I would recommend participating in NIMBioS workshops to my colleagues.

Please check the appropriate box to indicate your level of agreement with the following statements. As a result of participating in this workshop, I have a better understanding of: (Strongly agree, Agree, Neutral, Disagree, Strongly disagree)

- The research data available on the workshop's topic
- Mathematical tools available for modeling
- New methods and modeling techniques that need to be developed
- How to adapt existing theoretical frameworks to fully use available data

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

- Yes
- No
- Comments:

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

- Yes
- No
- Comments:

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

- Yes
- No
- Possibly
- Comments:

Did you develop unanticipated plans for collaborative research with other workshop participants?

- Yes
- No
- Possibly
- Comments:

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

What would you have changed about the workshop?

How do you feel about the format of the workshop?

- This was a very effective format for achieving our goals
- This was not a very effective format for achieving our goals ->
- The workshop format would have been more effective if:

How satisfied were you with the opportunities provided during workshop presentations and discussions to ask questions and/or make comments?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied

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

Please use this space for additional comments: