

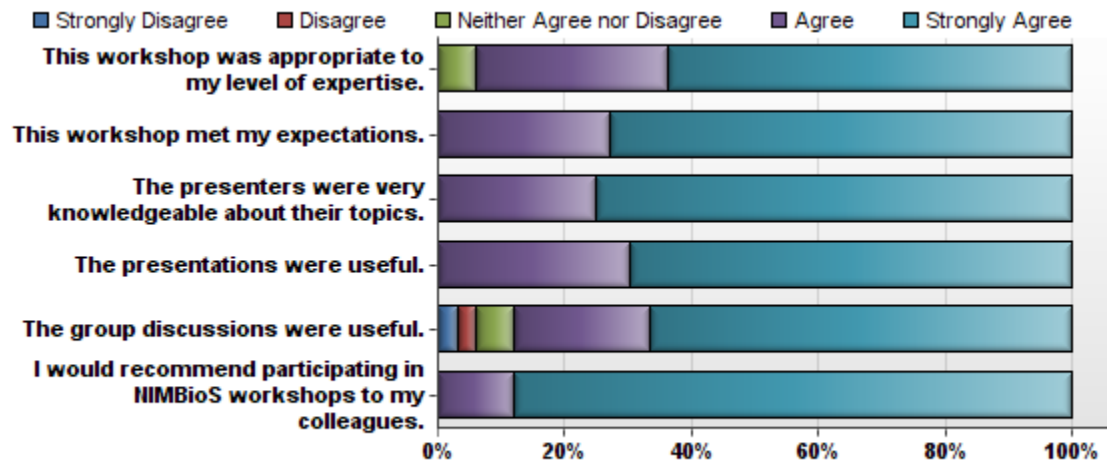


Evaluation Summary Report
Workshop: *Morphological Plant Models*

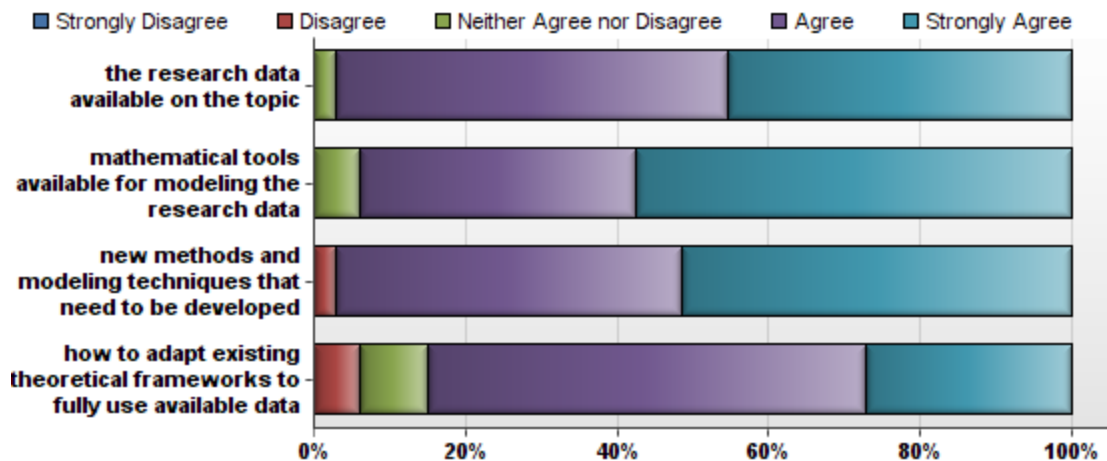
September 2-4, 2015

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Please indicate your level of agreement with the following statements about this workshop:



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



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

The interchange of ideas. The clarification of concepts across disciplines.

Team work

Exposure to new mathematical approaches for morphometrics and the professionals who develop them

Getting an overview of present topics in both biological and mathematical fields.

Exposing biologists to the possibilities of what modelling can achieve

The emphasis of an equal blend of both math and science professionals ensured that people from the two disciplines would interact and share ideas. Similarly, speakers (and participants) needed to communicate their research and goals in a way that was clear and

understandable, which forges new and creative ways in which to think about one's research.

Presentations from forerunners in the field who have succeeded in integrating modeling tools into their biology, or biological relevance into their mathematic frameworks have been informative and inspiring.

Discussion in working groups

Help us understand how people think things in different perspectives

The overlap in research interests among the participants.

Networking and community development

The breakout groups.

Learning new techniques, potential future collaborations!

Small group discussions

Ample time for informal discussions

Both the quality and diversity of the participants. And the very good organization.

Letting biologists know what I have been done in mathematical modeling. And they are very interested in my work. It also may be helpful for my post-doc application.

The breadth of topics was well designed. Also I learned much about what to do and not to do in organizing such groups.

The presentations. It exposed us to new research and methods, and made it simple to understand the applications. I learned the most during the presentations.

The realization by both plant biologists and mathematicians that much can be accomplished, even in the short term, by teaming up and establishing a productive dialogue. The workshop participants made a special effort to break common communication barriers.

The organizers did an excellent job of pulling in speakers from a variety of disciplines and levels. It was very helpful to have paired talks between biologists and mathematicians.

The appreciation of participants of the importance topology to optimizing data driven models.

Bridging the gap between data-driven and mathematically focused scientists

Size and format of the workshop. Plenty of breaks to discuss with colleagues, long Q&As

Familiarity and community. I know who to reach out to across disciplines

The small group brainstorming afternoon sessions

The most useful was getting everyone in the same room to discuss challenges involved in bringing together mathematicians and plant biologist together.

Ideas for collaborations.

Networking with new people interested in the same topic but from a different field.

The format: - 2 conf in the morning, 1h discussion - 2 chalk talk, 1h discussion - brainstorming.

Sparking up a new collaboration with a modeling group that are working on similar topics.

The talks (although being local and not being able to completely open my schedule, I missed the discussion portions).

What would you change about the workshop?

Modeling at the cellular/subcellular level. This was a big gap in the whole idea of modeling an organism.

More days

Question sections were a bit too long and not always structured toward a direction of common interest. Perhaps decreasing the whole group discussion times and increasing smaller group discussion with alternating membership.

I don't think most of the chalk talks were that useful - people just gave a talk using the blackboard - the talk would have been better as a PowerPoint-delivered talk or a true chalk talk (with a few exceptions)

The coffee ran out on the first morning - I would make sure the coffee didn't run out :)

An additional half day could have benefited group discussion regarding a white paper we are interested in writing after this workshop.

Chalk talks were not easy to understand as PowerPoint presentations.

As I said, I would have let people organize into focal areas of common interest. More progress would have been made I think.

Food supplied was uneven quality

More time for discussion in groups!

More time to discuss in groups and share with entire group

Give each participants the opportunity to present in a few minutes (chalk talk) their own research.

The time is a little limited. It would be better to have more time to group discussion.

Better organization of breakout groups and social events. Fewer grad student talks chosen on dynamic ability rather than academic nepotism. The diversity of peoples and national representations was great but in several cases language barriers prevented effective interaction--some method to assure fluency in the conference language would be great.

The discussion format. While we did eventually come to some semblance of a conclusion, the lack of structure impeded progress.

I think this was a wonderful workshop and cannot really think of anything to change. In the future, I am sure some of the discussions will have to be more focused, but this was a terrific start.

Waiting for questions after the paired talks only worked when the two talks were very closely related. It might have been better to have a short question session after each and then a general question session after both.

I won't change anything except a possible addition of a short field tour to visit an experimental site/lab/ practical demonstration that relates mathematics to biology.

The format was pretty optimal. Maybe it would be good to structure the dinners more, so that one has time for more interaction. Now, a number of people dropped out of that part.

Maybe some more hands on training/hacking on specific subjects?

Slightly more time perhaps would allow us to generate more defined outcomes

Ask questions at the end of each presentation

I would give a bit more time to discuss the output generated from our break out groups. Other than that, I really enjoyed the format.

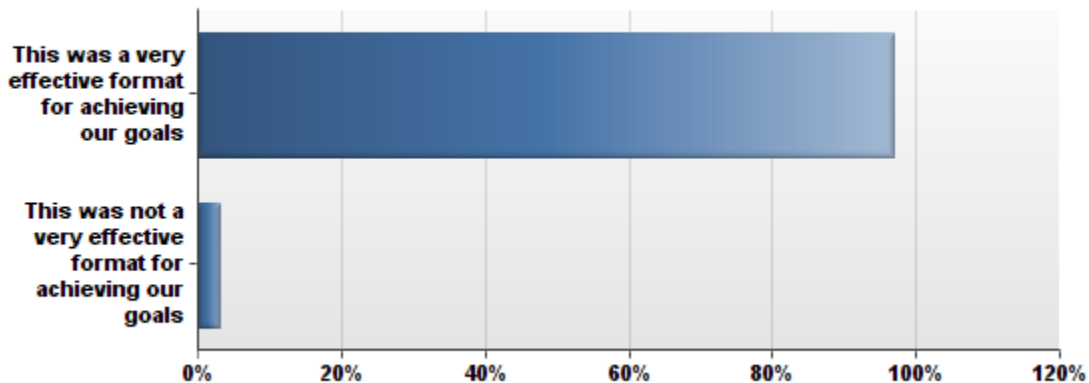
More seminars, the days didn't feel fully utilized

Another full day would be useful.

A bit more time (1/2 to 1 day)

More guidance on the small group discussions.

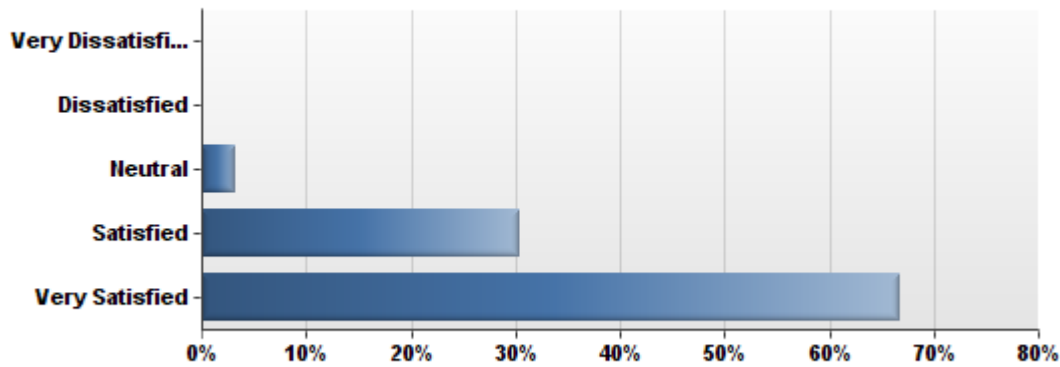
How do you feel about the format of the workshop?



The workshop format would have been more effective if:

No comments

How satisfied were you 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:

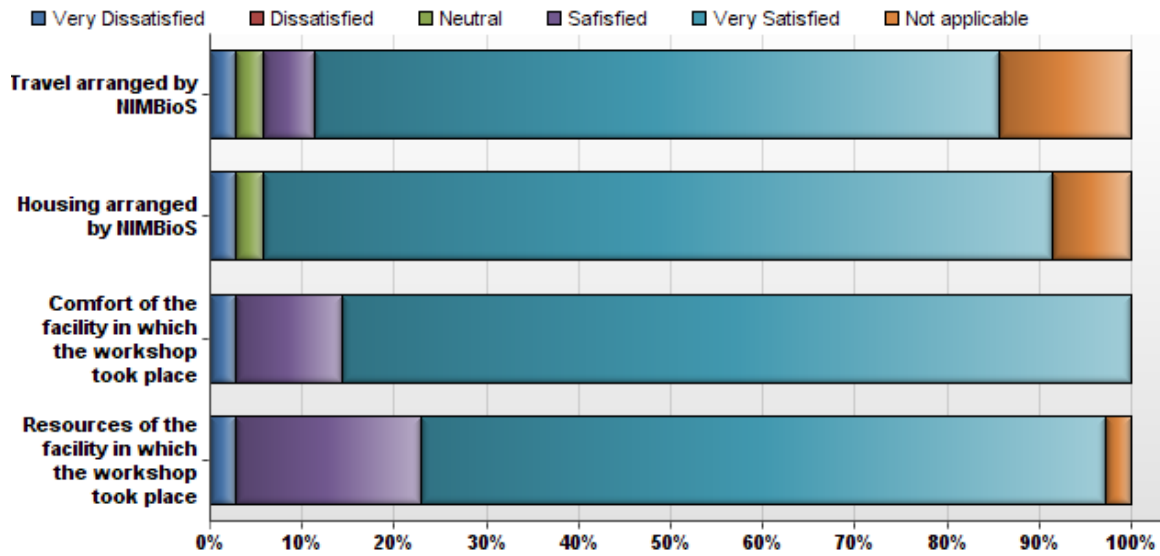
Organizers can promote their agendas as part of the idea swarm but not by excluding other views and driving toward monadic focus. More cleanly designed breakout agendas, and mixing of groups from day to day would seem more profitable than what we experienced.

This was already quite optimal!

Just more time - we had to cut a few things short to keep within the agenda

They were good, but I would rather have asked questions after each presentation rather than waiting until after two presentations were done.

Please indicate your level of satisfaction with the workshop accommodations:



Comments about accommodations:

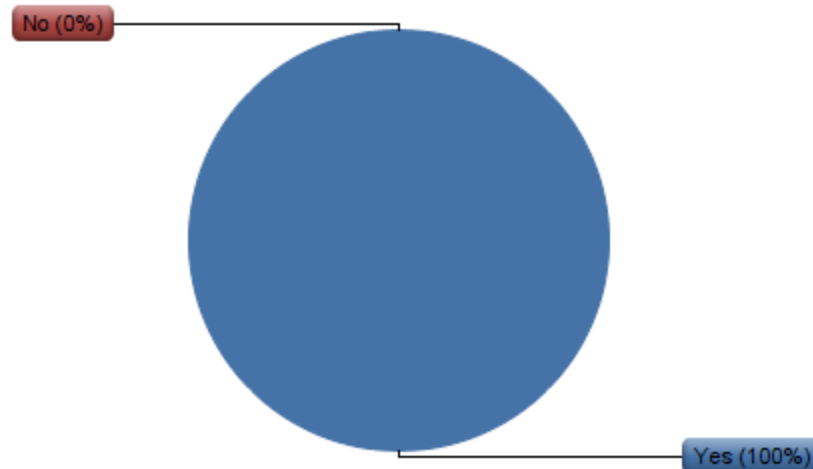
I heard lots of compliments about how stimulating the building is to start discussions on the white boards.

Internet access interruptions in workshop building

Excellent.

Every NIMBioS component of organization was EXCELLENT

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?



Comments about understanding research in other discipline areas:

Yes, absolutely.

I was introduced to new mathematical methods useful to model the morphology of plants.

There was a nice breadth in research areas represented by the participants.

The level of expertise of participants and their "open mind" about other related disciplines was impressive. I think both the content of the workshop and the method (brainstorming, chalk talks) was extremely efficient

Very exciting and got a lot possible collaborations

I was grateful to be exposed to a broad array of research on a well-conceived topic in need of integration. No inroads for integration were achieved but perhaps that is more a job for working groups. The context and need for integration was apparent from the investigative workshop--just no hint of how to create or move toward integration.

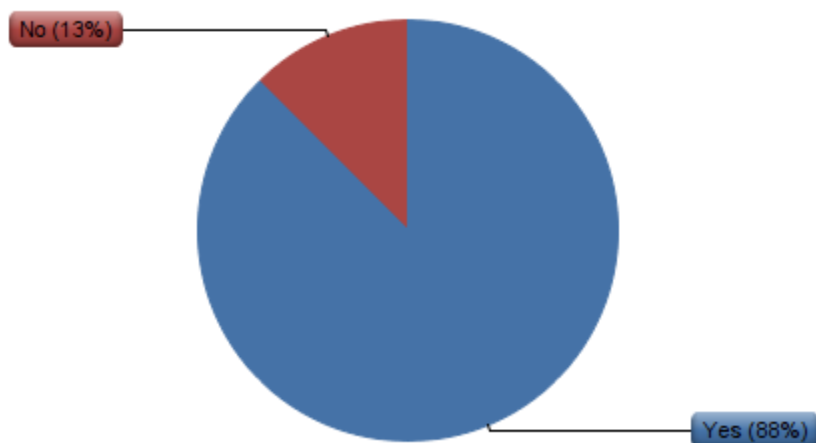
Having participated Over the years in many meetings that bring together people from different disciplines, I think this was one of the most successful in quickly establishing a very productive cross-disciplinary dialogue

I now know of useful tools applicable to current constraints in my research

Coming from the modeling side of research I found the information on shape analysis very stimulating and new.

Very interesting organization: activities (conf, chalk talk, and brainstorming) where always organized with to persons: a math/comp.sc person and a bio person. In many occasions, discussions were enriching, empowering people.

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



Comments about finding a common language:

The mix of biology plus models/math was great, but I don't think it helped on this question at all.

This was a weakness of the workshop design in my opinion. We broke into small groups and were charged with identifying a problem that might require mathematical tools to make progress. However, because no attempt was made to group people with similar research interests, everybody worked on different problems that required different mathematical tools.

The breakout groups were particularly useful for this.

Brainstorming session was useful to found shared research directions

But not much (progress finding common language across disciplines).

Based on what I saw at the workshop, I have high hopes in this regard

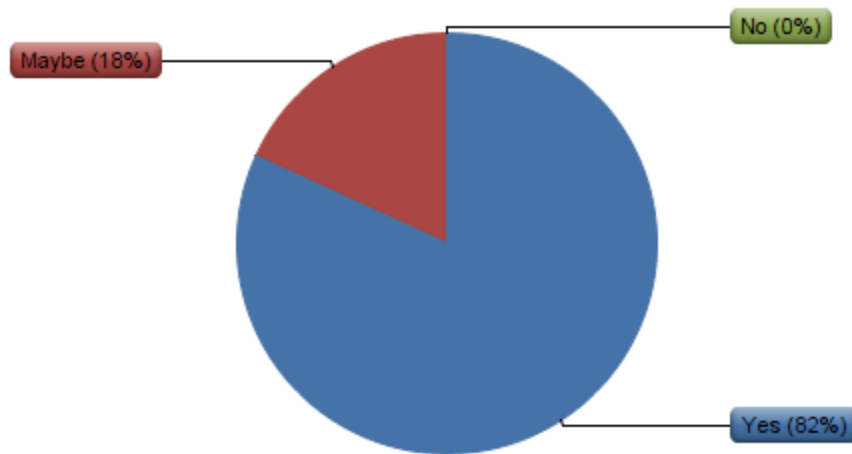
There is a wide gap between modelers and data people. We have not bridged that gap in 3 days, that would be impossible, but it is good to have these interactions, which are difficult to achieve otherwise.

Absolutely, for me as a biologist, it was a fantastic experience to be able to approach and discuss about science with the mathematicians that attended the workshop. I really appreciated their effort to make math understandable by us. It was common in the workshop to see people showing their data to mathematicians.

Just too big a topic to make adequate progress in 2 days

There needed to be more guidance for the small group discussion. Like specific topics.

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



Comments about influence on future research:

The scale of modeling focused on in this workshop were not really applicable to my research.

I had hoped to recruit a collaborator, and I did - excellent outcome

I am implementing some tools discussed at the workshop for the immediate analysis of incoming data.

Very much in my research area, so nice to see what people were working on.

Both in mathematics and biology. Sure.

I will propose a working group that will more solidly address some aspects of integration among the broad topic array we discussed in the investigative workshop.

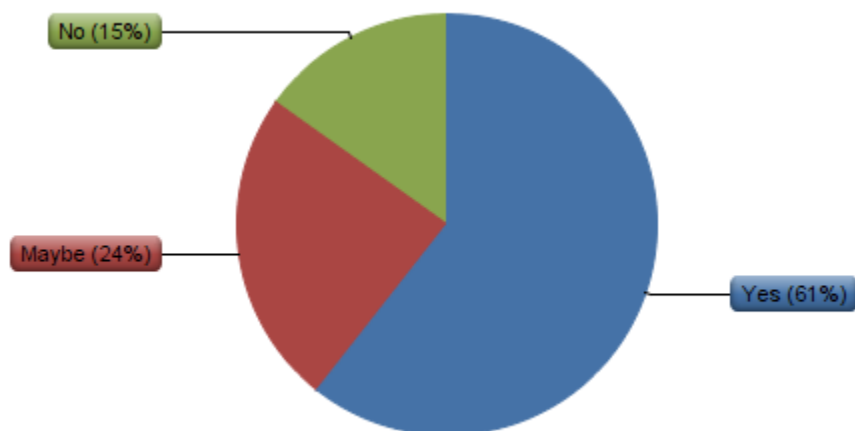
Some fundamental problems involving the morphology of plants open significant new research opportunities for my group. As a result of the workshop, my students and I already are collaborating with some plant biologists and analyzing their data

I have learned some interesting techniques I am going to try to apply.

I am likely to hire a postdoc from across disciplines as a direct result

I LOVED the exchange of ideas and the brainstorming sessions - they were the best part about it

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



Comments about plans for collaborative research:

I will write a paper for publication in the journal "Frontiers in Plant Science" with other participants with whom I had not previously collaborated.

I plan to follow up with several people.

A first project of publication is on the way

This was another significant strength of the workshop. As already mentioned, several collaborative projects with other workshop participants already are underway.

Yes, I have already shared data with people I did not know before the workshop.

We are already working together!

Please use this space for any additional comments:

The format of the workshop was great. I'd love to see this replicated in other workshops.

Provide a list of restaurants that take reservations for large groups.

I think maybe instead of chalk talks, you might have had a few talks from people actually showing us how to use certain software? I.e. the "workshop" aspect of the 3 days implied something would be taught, whereas I left feeling that I learned a lot but really had no new skill (although I certainly got a list of places to go)

Nice event well organized

A great workshop and definitely much needed in plant biology. This workshop served to fill a hole in the plant research community and bring together different disciplines.

I have nothing but praise for my experience as an organizer with NIMBioS. I hope to participate in future workshops and working groups and the resulting collaborations will keep me busy in the future for quite a while. Great job!

I would like to thank the organizers for this opportunity to network with the scientists in this field

I enjoyed the workshop and learned a lot. I am fantastically impressed by NIMBioS. I felt the workshop could have been better run--the format was excellent but the selection of speakers from the group and the organization of breakout groups and social events could have been better. Again, however, topical breadth was well designed and the need for integration of the topic made this an excellent choice for an investigative workshop.

I just reiterate that I think this workshop was extremely successful, far beyond my expectations

I hope the same set of participants could be invited after a year to learn of new research progress/ contributions that emanated from the workshop.

I was pleasantly impressed by the great facilities on site! IN that sense I would not easily find improvements...

Just wanted to thank you for making this possible. It was a fantastic experience.

Kudos!

I thoroughly enjoyed the interactions and discussions that I had during this workshop and hope to continue several of them in the future. Several of us are preparing a paper for the Frontiers issues associated with this meeting.

Thanks for such a great workshop!