Evaluation Data Report
Modeling Anthrax Exposure Working Group
Meeting One: May 15-17, 2012

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Evaluation Design

Evaluation Questions

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

1. Were participants satisfied with the working group overall?
2. Did the meeting meet participant expectations?
3. Do participants feel the working group 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 working group’s research problem?
6. What impact do participants feel the working group will have on their future research?
7. Were participants satisfied with the accommodations offered by NIMBioS?
8. What changes in accommodations, group format, and/or content would participants like to see at future 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 mrInterview. Links to the survey were sent to 14 working group participants on May 23, 2012. Reminder emails were sent to non-responding participants on May 30 and June 4, 2012. By June 11, 2012, 12 participants had given their feedback, for a response rate of 86%.
Evaluation Data

Respondent Satisfaction

Figure 1. Satisfaction with content and format of the working group

Scale: -2 = “Strongly disagree” to 2 = “Strongly agree”
Figure 2. Satisfaction with working group accommodations

Scale: -2 = "Very dissatisfied" to 2 = "Very satisfied"

Suggestions for NIMBioS to improve the resources and/or accommodations available to working group participants:

Better define rules of taking the information gained from the workshop back to our home institutions and using it.

Great venue; great staff; solid communications. No changes needed -- just keep the high level up.

Rooms without tables so small groups can be formed and moved around.

Stronger Wi-Fi signal.

Wi-Fi was a little spotty in the working room, but when it went out completely, was quickly fixed.
Views of Group Progress

Figure 3. Do you feel the working group made adequate progress, for its first meeting, toward finding a common language across disciplines in the research area? (n = 10)

Comments about finding a common language:

A very productive first meeting!

The reading materials provided before the meeting helped me to understand the research area and the language of other disciplines. The presentations were well organized and explained.

The working group in my opinion accomplished a lot for a first meeting. We were able to clearly define the types of modeling approaches that can be used, and were effective in communicating these to the experimentalists in the group.

Very difficult challenge associated with this group’s charge. Solid, but small-ish (for needs of modeling), data sets available at this point in time. New data types required will take significant time and funding support and this may or may-not be possible. Still, there is much that CAN be accomplished with current membership and support levels.
Working Group Format and Content

Figure 4. How do you feel about the format of the working group? (n = 10)

![Format was Effective 100%](image)

Suggestions for improving group format:

No comments

Figure 5. Do you feel the participating in the working group helped you understand the research happening in other disciplines in the group’s topic area? (n = 10)

![Yes 100%](image)

Comments about understanding research in other disciplines:

This participant is on the biology side and requires remediation on modeling and statistics -- both the language and skill sets of the modeling discipline are quite new to me. Trying to catch up but it’s difficult. Feel strong on the biology though.

Participating in the working group helped me to understand the research in other disciplines in the topic area, as well as to connect the research in my disciplines.

The WG provided a very interesting and informative insight into the intersection and synergy between mathematical modeling and biological systems.
The working group helped me understand the exact datasets that are currently available and the modeling approaches that have been used till date in this area. The meeting also helped us identify where the gaps are, and importantly helped us define the immediate next steps that would help us advance the field.

Where I work, the NIMBioS model is in use every day. But this is a rarity. This NIMBioS meeting was extremely valuable in that it provided a collegial, well-organized, comfortable forum for working at the interface between mathematics and biology. In the future, I would elect to attend such meetings before I attended other national meetings which do not allow for this level of interaction.

Figure 6. Learning about issues related to the working group’s research problem

Scale: -2 = “Strongly disagree” to 2 = “Strongly agree”

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

- The research data available on the working group’s topic
- The types of data needed to better inform existing models
- New methods and modeling techniques that need to be developed
- The modeling techniques available on the working group’s topic
Most Useful Aspects of the Meeting

Discussions and reading materials

Face-to-face; talks, discussion were all useful. MOST IMPORTANT: The 2 LEADERS (Day, Taft) knew how to keep focus, expand time on topics when needed, contact time spent on topics when not needed. Keep members on task, Great Leadership!

Get to know the new question.

Meeting new people.

Meeting mathematical model specialists that have an interest in using existing biological data to its fullest extent.

The discussions.

The individuals covered many fields and everyone’s expertise can now come together and advance an area of concern to many fields.

The most useful aspect was the background presentations about the research topic on the first day. This helped immensely in orienting the group and introducing the language.

Working with biologists who were experts in their field and could give first-hand accounts of the research currently being done.

Impact on Future Research Plans

Figure 7. Do you feel that the exchange of ideas that took place during the working group will influence your future research? (n = 10)
Comments about influence on future research:

I could get a sense of overall issues on the topic during the discussions, and I could think of a certain topic to explore in my area, related to the group topic.

No, unless we build new research collaboration that can lead to NEW funding support. Until we can do that, I am not qualified to add a "modeling Aim" into my NIH-sponsored wet bench research program.

The discussions will influence the way I design future studies and assist in selecting the parameters to evaluate.

The interface between math and biology was not novel for me, but the broach discussion of methods and data and experimental options was very useful in defining the approach we will take in the next 5 years. This cannot be done effectively without working groups like this.

The working group involved a broad interdisciplinary group of experts. I believe the integrated approach that will be developed as part of this group can be translated to other research problems in risk assessment.

Figure 8. Did you develop plans for collaborative research with working group participants with whom you have not previously collaborated?

<table>
<thead>
<tr>
<th>Plan for Collaborative Research</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70%</td>
</tr>
<tr>
<td>No</td>
<td>30%</td>
</tr>
</tbody>
</table>

Comments about plans for collaborative research:

1st meeting, so not yet. But that is a real possibility as we work/interact more.

I will be collaborating with biologists who are experts in the area of anthrax biology to better understand the problem. I also foresee productive collaborations with the applied mathematicians in the group.

Not yet. I need to explore more on the topic.
Figure 9. Do you feel the expectations for the next working group are clear (in the sense that you are leaving this meeting with a good idea of what your contribution will be at the next meeting)? (n = 10)

Comments about understanding what is expected of working group members:

I know what I would like to accomplish but it is not clear what exactly the group expects to be accomplished by the next meeting.

Somewhat…

We know what we need to do and have a reasonable plan for accomplishing the mission.

Suggestions for Future Meetings

Adding people who model other types of infections. We know anthrax, what can/could we learn from other agents and other models?

Cut time from 2.5 days to 2.0 days even if we have to hold an extra session on one of the nights (due to other work obligations and travel burdens).

Have more of a balance between mathematicians and biologists. It seemed like the biologists really drove the discussions will little discussion about the specifics of how mathematician is and can be used to help understand the problem.

I think that organizers did not have a clear idea of how the major goal of the working group will be achieved. The discussion was poor regarding what data are available and what types of modeling can be done given these available data.

Nothing at this stage.

Additional Comments about working group

Great discussions and outcomes!
Highly professional not a single slip everyone was KEEN (participants/hosts/support staff)!

Thank you for the great organization and facilitation of the meeting. The food, facilities, hotel, and personnel were all fantastic. I am looking forward to the next meeting.

The first meeting went really well and there were a lot of great ideas and discussions.

The overall experience was excellent. It was a unique opportunity to have detailed, intense and lively conversations with a wide range of experts. I look forward to future meetings and am confident that the group can make significant progress towards understand low dose anthrax exposures.

Very enjoyable. I look forward to productive collaborations with this group.

Very enjoyable. Well done, unique, impactful.
Appendix

Modeling Anthrax Exposure Working Group Evaluation Survey
Modeling Anthrax Exposure Working Group Survey

Thank you for taking a moment to complete this survey. Your responses will be used to improve the working groups 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 working group: (Very satisfied, Satisfied, Neutral, Dissatisfied, Very dissatisfied)

- I feel the working group was very productive.
- The working group 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 working groups 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 working group, I have a better understanding of:

(Strongly agree, Agree, Neutral, Disagree, Strongly disagree)

- the research data available on the working group’s topic
- the modeling techniques available on the working group’s topic
- the types of data needed to better inform existing models
- new methods and modeling techniques that need to be developed

Do you feel the working group made adequate progress, for its first meeting, toward finding a common language across disciplines in the research area?

- Yes
- No
- Comments:

Do you feel the participating in the working group helped you understand the research happening in other disciplines in the group's topic area?

- Yes
- No
- Comments:

Do you feel the expectations for the next working group are clear (in the sense that you are leaving this meeting with a good idea of what your contribution will be at the next meeting)?

- Yes
- No
- Comments:
Do you feel that the exchange of ideas that took place during the working group will initiate or influence your future research?
   Yes
   No
   Please explain:

Did you develop unanticipated plans for collaborative research with other working group participants?
   Yes
   No
   Please explain:

What do you feel was the most useful aspect of the working group?

What would you have changed about the working group?

How do you feel about the format of the working group?
   This was a very effective format for achieving our goals
   This was not a very effective format for achieving our goals
   The working group format would have been more effective if:

Please indicate your level of satisfaction with the working group accommodations:
(Very satisfied, Satisfied, Neutral, Dissatisfied, Very dissatisfied)
   Travel arranged by NIMBioS
   Housing arranged by NIMBioS
   Comfort of the facility in which the working group took place
   Resources of the facility in which the working group took place

Please indicate any changes NIMBioS can make to improve the resources and/or accommodations available to working group participants:

Please provide any additional comments about your overall experience with the working group: