



Evaluation Report

Undergraduate Research Conference at the Interface Between Biology and Mathematics

November 17-18, 2012

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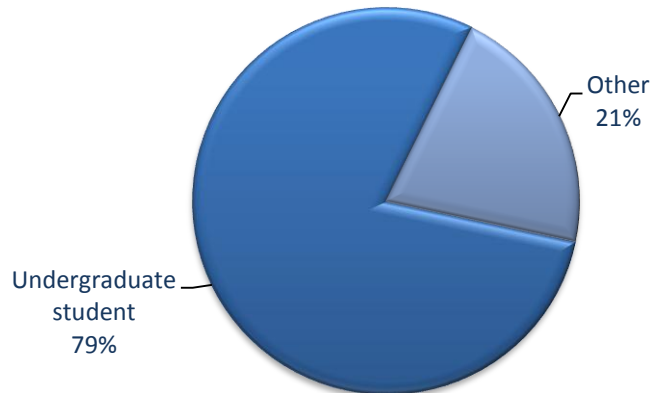
January, 2012

URC 2012 Evaluation Data Report

Findings

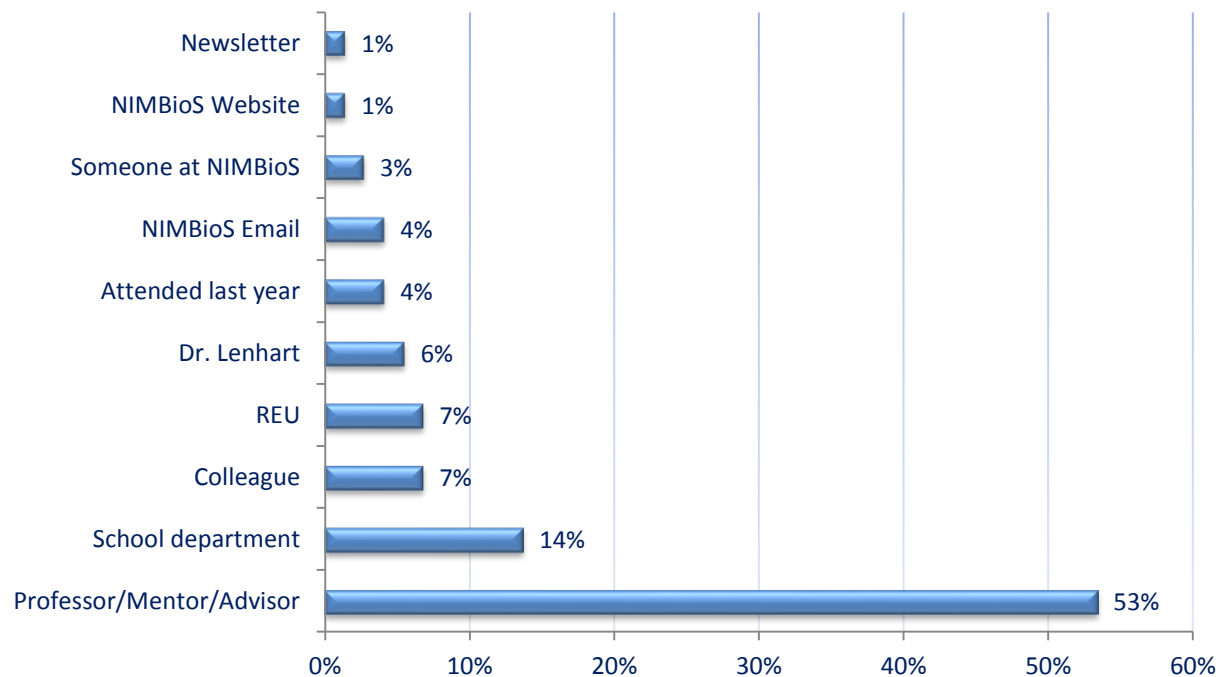
Respondent Status

Figure 1. Status of evaluation survey respondents (n = 76)



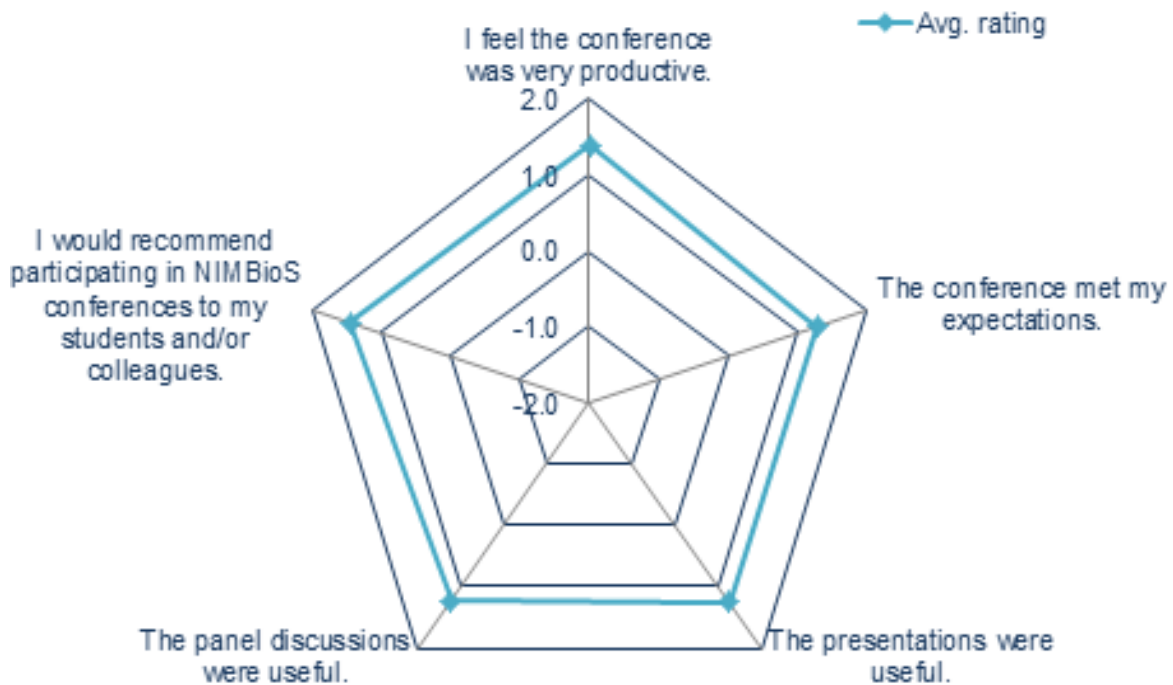
How Respondents Heard about the Event

Figure 2. Sources for hearing about URC (n = 73)



Overall Satisfaction

Figure 3. Respondent agreement levels with statements about various aspects of the conference
Scale: -2 = "Strongly disagree" to 2 = "Strongly agree"



Satisfaction with Accommodations

Figure 4. Respondent levels of satisfaction with conference accommodations
Scale: -2 = "Very dissatisfied" to 2 = "Very satisfied"



Please indicate any changes NIMBioS can make to improve the resources and/or accommodations available to conference participants: (n=14)

Have more food. It ran out quickly.

Having lunch on Saturday would be nice.

How about a board for posting messages, program adverts, etc.?

I left mid-afternoon via taxi to catch a flight, but didn't hear anything about a shuttle to the airport for those leaving after the conference ended.

It was great!

Maybe a dedicated space for groups to rehearse would be helpful.

More substantial breakfast, less on the sweet pastry side. Just a matter of taste.

My hotel room only had one bed, meaning I had to use the pull out sofa.

None, all was great!

Put salad at the front of the food line.

The resources and accommodations were wonderful!

The space for the poster sessions was odd. It seemed that some of the posters did not get visited as frequently because they were off in a side spot. It was hard to see the talk slides from the back of the main room because the screen was low and the seats did not ramp up.

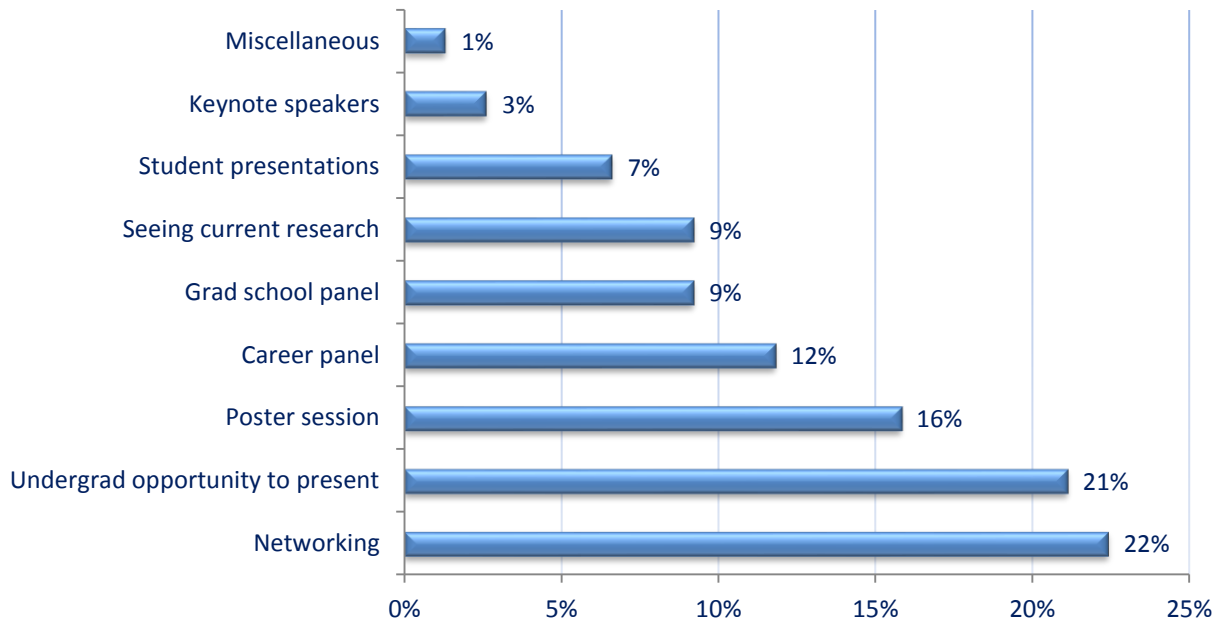
There's no need for so much dessert.

When I was there it was have for me to find a schedule online before I arrived. Maybe just a simpler website and more intuitive.

Conference Content

Most Useful Aspects

Figure 5. Respondent designated most useful aspects of the conference (n=64)



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

All were equally useful, but the time efficiency and knowledge gained from the poster session was appreciated.

Attendees were very competent, friendly, and easy to talk to. The environment of the conference was very intimate and promoted networking and conversation.

Being able to interact with other students doing similar research in biology and mathematics

Career panel

Career panel

Connecting with other individuals in the same field as myself

Everything integrated nicely, in particular the panel discussion sessions really bring students to hear the first-hand experience of being a researcher in the interface of math and biology, so they can also plan for their own future.

Faculty talking with students about their posters.

Getting a broad view of what is being done in mathematical biology.

Getting to see the kinds of research being done in math bio.

Getting to talk with other students about their research which broadened my view of the applications of bio-mathematics.

Having professors from other universities see the research students have done and start a discussion with them.

Having the experience of presenting was useful.

Having the opportunity to see the different kinds of research and modeling that people are pursuing.

I enjoyed learning what works and what doesn't in presentations and talks.

I enjoyed the presentations about grad school and the grad school fair. Also the entire experience was a great way to meet new people and learn about their research interests.

I greatly enjoyed the poster sessions. It was intriguing to see the amount of information, and specialties of all the different students.

I like how the conference focused on undergraduates and giving them an opportunity to present their work in a supportive atmosphere. The conference also dealt with issues pertaining to undergraduate needs such as the grad school fair and guest panel discussion.

I loved hearing the biological speeches. They were great!

I really liked that it was only undergraduates. I really like math conferences but often find myself unable to understand even a general picture of a talk. I feel that every talk I went to I had at least a gist of what was going on.

I think that the chance to get to know our peers through networking at the beginning of the conference was very useful in learning about their research and connecting with them later.

Learning how to present research through a presentation and through a poster session.

Making connections among other researchers in the math/bio field.

Networking

Networking opportunities for students and faculty

Networking, seeing the diverse research that goes on.

Open discuss atmosphere.

Opportunity to network.

Panels

Poster discussion, one on one talk with the students and their works.

Poster session

Presentations

Presenting because I needed to gaining experience in explaining my research and speaking to other scientist.

Presenting research among other students and faculty.

Students could present their work and interact with their peers.

Talking to grad students/professors

The career panel was most useful for me. It was very beneficial to hear how different (yet successful) each panelist's career is. It was also great to hear about the scientific world from women (esp. those with families), and hear how they prioritize their lives.

The faculty networking opportunities.

The forum was really helpful with providing insight into this career path.

The graduate school section. It gave the opportunity to see math combined with aspects of biology at graduate schools.

The graduate school session was very informative.

The interaction with the students and professors.

The keynote talks and informal opportunities to talk to faculty.

The most useful aspect of the conference was the professional conference feel that the undergrads were able to experience, along with being able to understand most of the talks because the talks were by and for undergrads explicitly. The networking time during the SET mixer and the meals was good for both students and faculty; there were an easy way to meet and chat with others.

The most useful aspect was being able to actually talk one on one with the discussion panelist.

The most useful part of the conference was the two poster sessions.

The opportunity to present research

The opportunity to present research and answer questions.

The oral and poster presentation. And the grad school fair

The panel discussion on the speakers' career paths and their advice.

The panel discussion.

The panel on graduate school was the most informative to me, personally, because the advice given really impacted my perspective on how and even whether to choose a graduate program.

The panel where we could ask questions about graduate school or careers.

The poster presentation because it gives the opportunity to directly interact with professors and students

The poster session was a great opportunity to share my research with others in the field.

The practice of presenting.

The presentations given by the students on their research

The presentations/posters for the undergrads.

The student presentations.

The undergraduate students presenting their oral/poster presentations.

The wide variety of different talks and presentations

There was a talk on the geographical spread of White Nose Syndrome and I'm doing my thesis on the spread of White Nose Syndrome within a population. It was helpful to see the models used and how they analyzed the model.

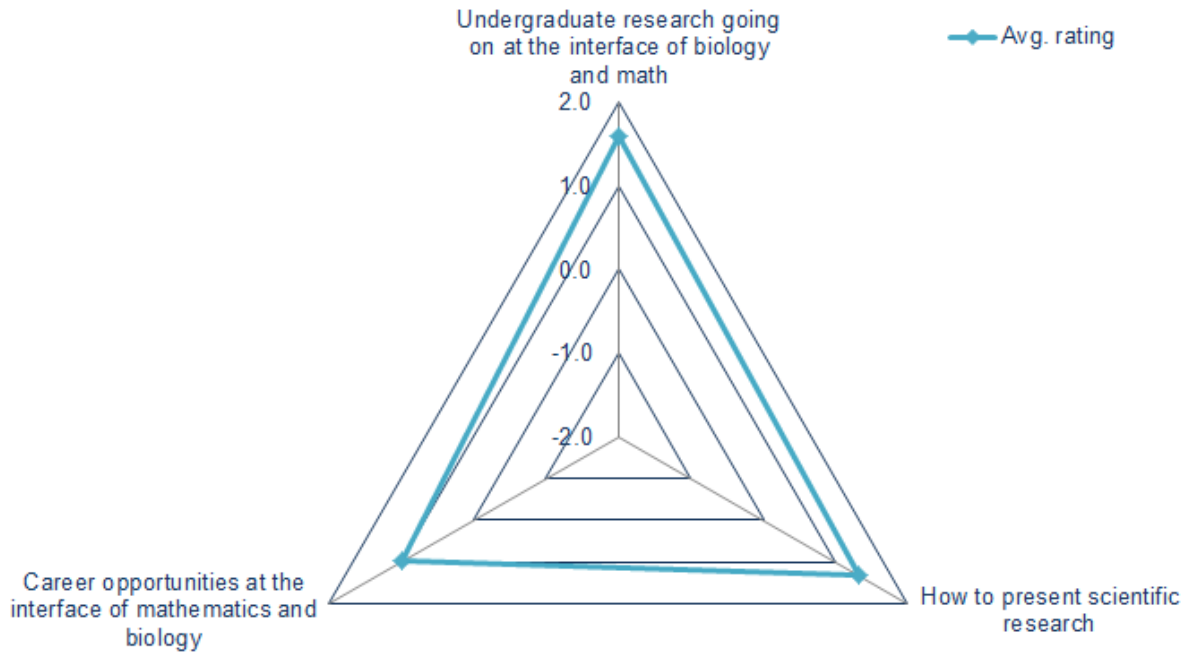
This is too hard to answer. I found several to be equally useful. Giving students a venue to present their work at a national conference is great; students are able to learn from each other, to meet new peers and faculty and to see other projects in math biology.

Undergraduate poster sessions.

Undergraduate Participant Learning

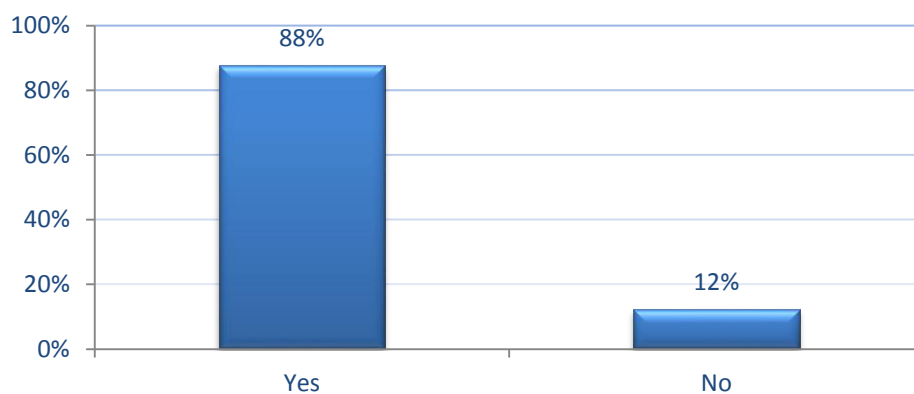
Figure 6. Undergraduate respondent learning levels (n = 60)
Scale: -2 = "Strongly disagree" to 2 = "Strongly agree"

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



Progress Toward Goals

Figure 7. Do you feel that participating in the conference helped you make connections with others within the interdisciplinary field of math and biology? (n = 73)



Comments about making connections: (n=21)

As a faculty member, I wish there were more time to network.

Due to similar interests, it seemed like everyone got along extremely well and networking was easy.

I enjoy how you included both agency and university speakers.

I enjoyed the social mixer. The game of set was a great idea for a partially math based conference. The only thing I would recommend is having so faculty for UT who are looking for grad students there so that we can get a better idea of what the departments and opportunities at UT are like.

I felt that the conference was very productive, especially as a senior undergraduate. It gave me the opportunity to make connections with graduate schools, such as UT-Knoxville, that are interested in biological and mathematical research.

I had the opportunity to network with another participant who is working with a similar program. We have exchanged e-mails and will be in touch.

I learned of another undergraduate conference that I hope to take some students to.

I made one connection with a representative from a graduate program that I was not interested in.

It was a great place to network for both students and faculty.

It was wonderful meeting researchers (both students and professors) from all over the country interested in the same topics.

Met lots of people.

More grad school recruiters would have been nice.

My impression is that the conference is beneficial for making such connections, but my agenda for attending was different.

Networking with faculty was valuable.

No, but that was due to my own participation and not anything on the part of NIMBioS.

Not so useful in this way this particular year. But I'll admit I did not go to the faculty networking session on Sunday.

Seeing the current research areas was very helpful.

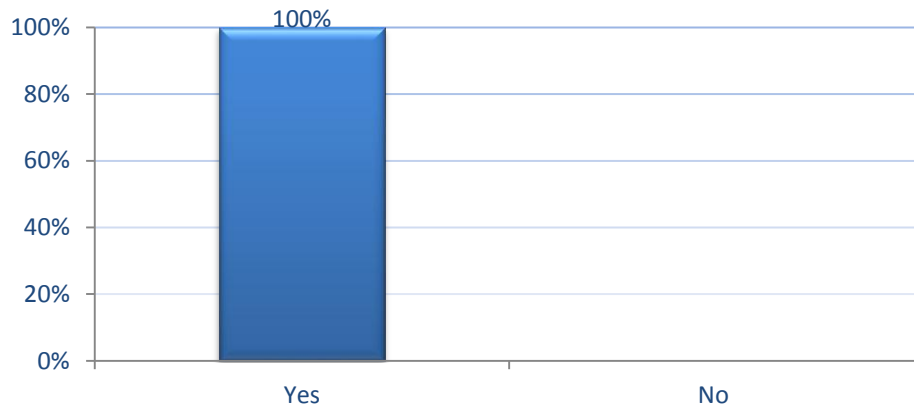
The graduate school session was particularly helpful.

The presentations really showed the different applications research is being performed.

There should be a "somewhat" option.

Yes, it definitely helped me make connections by getting exposure to research going on in different fields of biology.

Figure 8. Do you feel the conference was successful in achieving its goal of creating a forum through which undergraduates can present research and make new connections at the interface of math and biology? (n = 73)



Comments: (n = 14)

Got to see what other undergraduates are doing in math and biology

I loved the variety of Math Bio topics presented, it was very exciting!

It is excellent experience.

It thought it was very well done.

It was a good experience and environment to present research.

It was a great experience.

My research student connected with students from other institutions. It was wonderful.

Overall, yes, but many of the advisors need to be reminded to step back and let the students answer questions during presentations. One point of the conference is to present research, but considering the audience, the main purpose is to encourage undergraduate research by giving students a chance to practice presenting independently.

Seemed to be very good practice speaking and networking for the undergrads involved.

Students were exposed to different areas of research, some of which they would never have imagined!

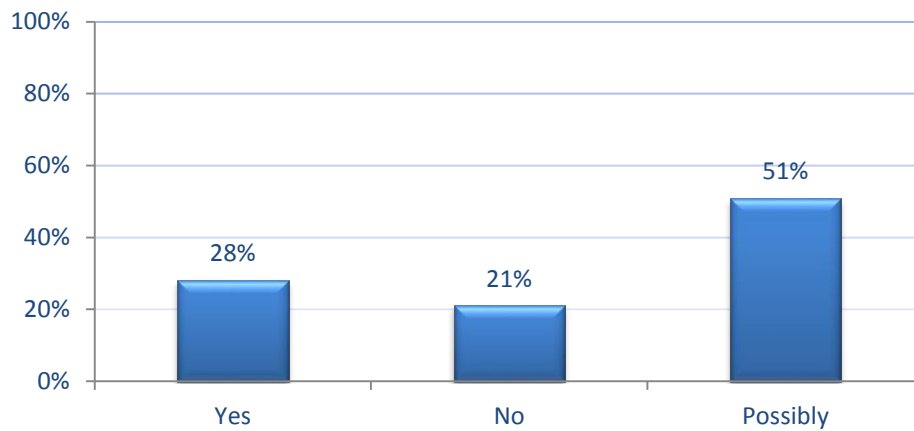
Talks were very diverse in topic but still very informative. It would be difficult to attend and not learn something.

The voice of undergraduate research present at the conference was phenomenal.

Very friendly and supportive atmosphere

Yes, it provided a great opportunity to present their research.

Figure 9. [Undergraduates only] Do you feel that the exchange of ideas that took place during the conference will influence your career plans? (n = 57)



Please explain the impact on your career plans: (n = 18)

Because of the graduate school session, I found out about some other graduate programs that interest me, so I'm considering different programs from what I have been considering previously.

Both the career panel and graduate school fair made me more aware of career opportunities, especially in industry.

Helped me look at other grad school programs.

I already had career plan set in stone.

I am currently focused on another career path, but the conference has certainly alerted me to the demand present in the biomath field. It presents me with a plan "b," should my current plans not work out.

I am interested in pursuing a PhD in a related field.

I am more confident in picking mathematical biology as my career choice.

I felt that there was an under-representation of Ecology related MathBio projects. This gave the impression that there are few career paths for ecology within MathBio.

I have already received a job offer prior to the conference; therefore, the conference didn't have an impact on my career choice.

I look forward to do undergrad research now, and I know that this kind of background will help me in the medical field.

I was able to connect with faculty about programs in the science and math fields which I believe will help give me an idea of what I would like to do and aim towards.

I was not previously aware of the breadth of mathematics applicable to biological systems. Differential systems and agent based simulations were familiar to me, but the application of graph theory, topology and spatial geometry were areas I hadn't considered before. Because there is more breadth of mathematical research at the interface between math and biology, I am more likely to pursue a career directly related to this kind of research.

I will be applying to UT now. Not changing my overall career direction but definitely opened up some grad school possibilities.

It didn't change career plans, but did give me more information about graduate schools, so that may have a lasting effect.

It is dependent on whether I get into the pharmacy school of my choice. If I don't get admitted, then I will explore other viable options.

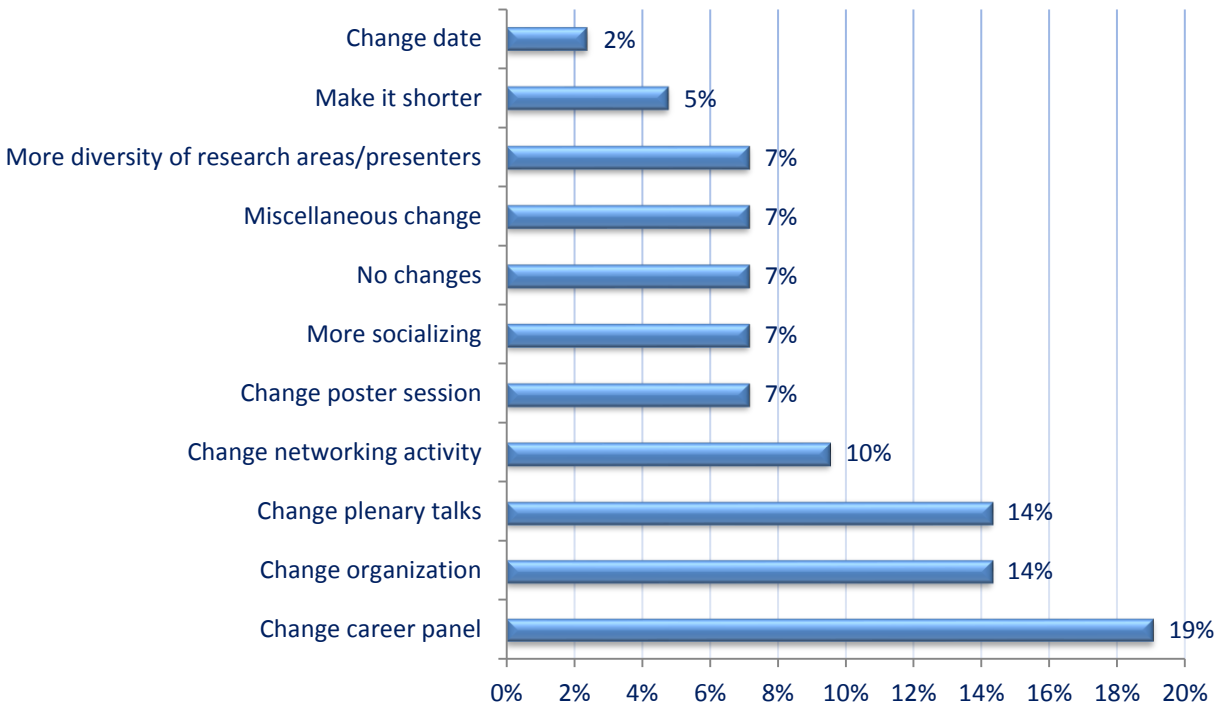
More strongly considering government work like the CDC.

The discussion panel was very good about this, although their knowledge on career opportunities in the field were limited.

Too soon to say!

Suggestions for Future Conferences

Figure 10. Respondent suggestions for future conferences, by category (n = 42)



What would you change about the conference? (n=42)

Approve more Ecology related projects for the conference, networking based on interests/career aspirations

Encourage the panelist to speak more from their undergraduate experience instead of over the students head (advance corporate background).

End the conference earlier.

Friday to Saturday night

Give the posters equal coverage. Not a huge deal but my poster was in a side corridor where all of the posts got far less attention than the ones in the main area.

Having the featured speaker on two different days.

I don't think I would change much but maybe have a 8 min in between presentations. The schedule was kept right on time which is a very good thing.

I don't think that the networking activity was necessary. I appreciated the time to speak with other participants, which I think should remain, but the Sets game seemed targeted toward a younger audience.

I think if the conference could end earlier on Sunday and perhaps start around 11am or noon on Saturday, the traveling aspect would be easier.

I thought the conference was great. One thing I would not change is the date of the conference.

I wish there were more opportunities for younger faculty to network with my senior faculty.

I would have more mingling time. I really liked the set game. It allowed me to have time to talk to others about their schools, and programs.

I would have more talks on Saturday instead on Sunday when everyone's interest and excitement is much higher.

I would improve the quality and quantity of the representatives at the graduate showcase.

I would invite older researchers and perhaps PhD students

I would not change anything.

I would remove the "networking" activity and perhaps schedule some downtime into the itinerary so that students can meet on their own.

I'd go back to the Friday/Saturday format rather than Saturday/Sunday.

If possible schedule the conference 1-2 weeks earlier in the year to avoid occurring so closely to Thanksgiving.

In the program, it would be helpful to list the schools and names of attendees. (Perhaps this was done, and I just did not find it).

Increase the scope of the conference. Reach out more to other parts of the country.

Initial two talks ran a little long, and could have been spaced out more during the conference.

Introduce an event in the faculty mixer session, maybe something like the SET game. And it will be nice if it were not so early in the morning.

it would be nice to have more people coming from west coast, but this is probably difficult to change at your end

It would have been great to have more graduate faculty for the students to talk with about graduate opportunities in math bio.

Location of the posters.

Maybe one week earlier, as it was awfully close to exam time.

More breaks between talks. It gets difficult after some time to stay alert.

More professional lectures

More space around posters. It would get very congested.

More talks and panel discussions by speakers.

More talks to choose from

More time to mingle.

Not on thanksgiving weekend

Nothing, really. For the most part, I thought the conference was good.

Nothing; it was thoughtfully planned and executed.

Spread out the two main speakers, have one on each day.

Start earlier on Saturday and end a little earlier on Sunday.

The 45 minute window for students to check out graduate programs seemed a bit short for the universities that participated and my impression was that the students might have liked a bit more time as well.

The conference met all the expectations.

The timing is problematic. I most liked the Friday noon to Saturday afternoon schedule. This did mean students missed Friday classes, but this year we arrived back very early Monday morning and they missed Monday classes... It's nice to have part of a working weekday to see UT colleagues and introduce students to them before the conference.

Would there be any way to get feedback on presentations?

Additional Comments

Please provide any additional comments about your overall experience with the conference: (n=16)

Although SET was a reasonable way to facilitate networking, it felt superficial, and I feel that I got more from the graduate school session. Unfortunately, the introductory activity is most useful towards the beginning of the conference, and the graduate session tends to be better after students have had a chance to see some of the professors' projects. I don't know if there would be a way to combine the two...

Excellent all round.

Great conference, look forward to participating next year.

I am a faculty member and I attended the conference with the hopes to recruit graduate students to do research in applied math and math biology program that offers Ph.D.'s. I found

that many of the students who attended were juniors (not applying this year) or were only interested in master's programs. I'm not sure how useful it was for me. I would suggest next year inviting more seniors and perhaps more institutions trying to recruit. This is of course a personal preference...this was not the main goal of the conference. I think overall it was very useful for the undergrads who attended, but perhaps not so much for me.

I enjoyed my time there, made connections with others in STEM and the conference overall was a success.

I have no other comment; I was very satisfied with the conference.

I really enjoyed having two poster sessions so I could see all of the posters when I wasn't presenting. I also enjoyed the SET game; it helped with meeting new people.

It was a great conference and has been my favorite conference that I have attended. I look forward to coming back next year.

It was a great experience and I am thankful I had the opportunity to be part of it.

It was a great experience.

It was great, I really enjoyed it and I believe everyone else learned a lot, too.

It was great!

It was the same week I had all my midterms.

Thank you to NIMBioS, Lou Gross and Suzanne Lenhart, Kelly Sturner and UT-Knoxville for hosting a wonderful conference. I look forward to participating again in future conferences and to visiting NIMBioS again. I will strongly recommend this meeting to all my colleagues! Thank you again!

Thanks for putting on such a great conference!

This conference exceeded my expectation.

Appendix: URC Survey

Undergraduate Research Conference at the Interface Between Biology and Mathematics Evaluation Survey

Thank you for taking a moment to complete this survey. Your responses will be used to improve the conferences 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.

Are you an undergraduate student?

Yes

No

How did you hear about this conference?

Please check the appropriate box to indicate your level of agreement with the following statements about this conference:

(Strongly agree, Agree, Neutral, Disagree, Strongly disagree, Not applicable)

I feel the conference was very productive.

The conference met my expectations.

The presentations were useful.

The panel discussions were useful.

I would recommend participating in NIMBioS conferences to my students and/or colleagues.

Please check the appropriate box to indicate your level of agreement with the following statements. As a result of participating in this conference, I am more knowledgeable about:

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

undergraduate research going on at the interface of biology and math.

how to present scientific research.

career opportunities at the interface of mathematics and biology.

Do you feel that participating in the conference helped you make connections with others within the interdisciplinary field of math and biology?

Yes

No

Comments:

Do you feel the conference was successful in achieving its goal of creating a forum through which undergraduates can present research and make new connections at the interface of math and biology?

Yes

No

Comments:

(Undergrads only) Do you feel that the exchange of ideas that took place during the conference will influence your career plans?

Yes

No

Possibly

Please explain impact on career plans:

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

What would you change about the conference?

Please indicate your level of satisfaction with the conference accommodations:

(Very satisfied, Satisfied, Neutral, Dissatisfied, Very dissatisfied, Not applicable)

Comfort of the facility in which the conference took place

Resources of the facility in which the conference took place

Quality of meals

Quality of drinks and snacks provided

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

Please provide any additional comments about your overall experience with the conference