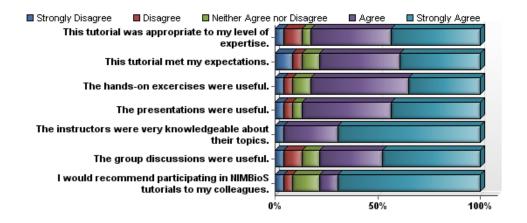
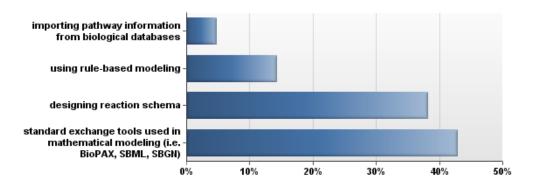
## 1. Please check the appropriate box to indicate your level of agreement with the following statements about this tutorial:

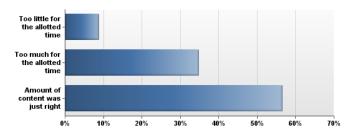
Enter your note here.



# 2. As a result of participating in this tutorial, I have a better understanding of:



### 3. How do you feel about the amount of content offered during the tutorial?



### 4. What topics would you have liked to have covered in this tutorial if given more time?

#### Text Response

Further demonstartion or exercises on the use of Virtual Cell to match models with real data.

The spatil modelings

Little math and computational explanation about what behind Vcell and standard databases.

I would have liked to know more about converting biological models to mathematical models (and vice versa) in VCell. There was a little discussion about that at the tail end of the tutorial. I also would have loved to learn about the numerical methods tat underly these computational tools (though I think I am the only one who feels that way, and, admittedly, the focus of the tutorial was not on these topics).

From the title, I expected some mathematics, some modelling and/or some cell biology. Instead the workshop focussed entirely on how to use Visual Cell. The tool is nice and the interface is excellent, but if you don't know how to construct a network, orthe differences among different kinds of kinetics, you would be SOL. Given that the real goal was to learn how to use the software, it would have been better to present it in smaller bites, with several shorter hands-on sessions instead of gettiing a fill day of lectures and then a two hour session to try to put all that into practice. The exercises were good, but difficult to do since hard to remember several hours later where to click to do what. A tutorial, with more explicit step by step instructios, at lest for the first exercises, would have been useful.

SIMULATING STOCHASTIC DEFERENTIAL EQUATION MODEL

Cell designer and PANTHER hand on training

more mathematics. The tutorial seemed to be only on software, not on mathematical concepts

More exercise with the program, more experience with modeling

More time spent on the tutorial of Cell Designer

More details on the establishment of PATHER and the algorithms behind to mine the existed database

l woudl allocate more time to hand-s on tutorials. While VCell demos were useful I got a feeling that there was not enought time to explore all the features of VCell.

Other tools like COPASi

1- Designing reaction schema 2- Some detailed examples on 'importing data information from biological databases" 3- More details about exchange tools in mathematical modeling such as BioPax, SBGN and SBML

Parameter estimation

More hands on session, with better guidelines.

More time for practice

In my opinion, the contents were excellent. I would have liked to have more time for hands on sessions, specially modeling with vcell.

I would have liked more hands-on exercises to learn the programs and spent more time on pathways

more discussion on the decision making that must be done when developing a model and the capabilities and limitations of various modeling approaches

More mthematics componet like involvement of graph theory and discrete mathematics. More discussion/show case of the education part.

## 5. What do you feel was the most useful aspect of the tutorial?

#### Text Response

Learning virtual cell to setup molecular reaction networks and even simple demonstrations of diffusion.

The hands-on and the demos of capabilities of the softwares

The hands-on experience on Vcell.

The discussions I had with various people I met at the tutorial were amazing -- I learned so much just through interacting with so many people from different fields. I also really liked the tools, blog, and website that the presenters prepared. It was all great!

Group discussions and education related matters

#### LEARNING OF VIRTUAL CELL AND HOW TO USE IT ESPECIALLY ON THE HANDS ON ASPECT

Hand on training with Vcell, along with kinetics scheme and FRAP.

meeting other participants

The hands-on experience

VCell is a great tool and its definitely a good to learn about it

The guided use of PANTHER

Discussions, hands-on tutorials, VCell demos and introductory lectures

the use of the Vcell software

Be aware of the availability of a variety of modeling packages such as VCell, CellDesigner, etc, and their applications for specific studies. Know which software I need to use for my modeling study.

Hands-on experience of VCell

It is good for developing model

Meeting experts in this area, learning about a new software

All the examples and presentations were useful. For me, learning to use vcell was really useful. The third day of the tutorial, about models in education was interesting too.

Hands -on exercises

the presentations on rule-based modeling and the standard exchange tools being utilized

The combination of people from various disciplines.

### 6. What would you change about the tutorial?

#### Text Response

I would consider carefully prerecording some of the lectures and making them available online ahead of and during the workshop in order to free up a little more time in class of working exercises in small groups.

#### Nothing

Expand the hand-on experience on Vcell to a small research project or the beginning of modeling of the participants project.

I would have liked more time to apply the new knowledge myself and work with peers on learning the software. The presentations were generally excellent; however, at some point, it is very important to open the computer and try the tools out and follow alng. The ratio of presentations to hands-on was skewed towards presentations, I felt.

see previous answers

#### NOTHING

Organizers has planned it very well and its succesful and I dont feel it should change its parameter. Though the number od days should increase to have a better understanding over the matter.

make it more about the process of modeling, instead of on software used in modeling.

More time dedicated to hands-on experience

I would spend more time on hands on work and little less on lectures

No

More time for hands-on exercises. I would also try to eiother allocate more time to more difficult topics, such as rule-based modeling or limit the scope of this topic. While I don't think that the tutorial program was overloaded I got a feeling that rule-ased modeling was a bit too complex to cover in a short tutorial like this one

more hands on examples

Consider more detailed examples that require the use of software such as BioNetGen and CellDesigner.

n/a

Tutorial materials need be to better prepared, especially when software has changed.

lte ok

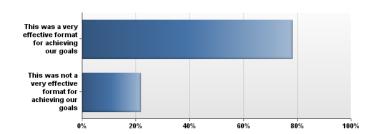
May be, i would divide it into three or four parts: cell modeling, education and rulebased models. Just to have more time, because one day per topic is too little.

Less lecture and more time to play with the software - create models for different scenarios in different programs.

I felt that the hands-on sessions could have been more effective if for example, everyone tried to build a semi-complex biological model over the course of the tutorial and used the time to figure out the reactions, code it and try some simulations as eiher a large or several smaller groups. As it was, I felt it a bit too freeform.

Working on sample problems

### 7. How do you feel about the format of the tutorial?



### 8. The tutorial format would have been more effective if:

#### Text Response

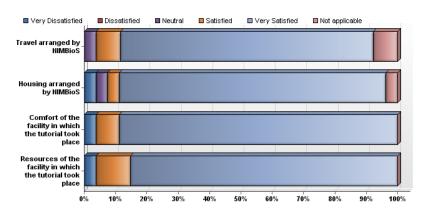
it were a more homogeneous group with a more clear sense of direction.

we would have had more time to practice...

lectures were shorter and more time was spent walking people through some of the steps of creating simple and complicated models.

it was more specialized. I felt the breadth of topics covered was too much for such a short course.

### 9. Please indicate your level of satisfaction with the tutorial accommodations:



### 10. Comments about accommodations:

#### Text Response

l enjoyed everything about the accommodations! Also, Jennifer Thomas and others at NIMBioS were very helpful in making the travel arrangements and made me feel very welcome.

Accommodation at fourpoints was great and really enjoyable. But I have not got the ooportunity to charge my eletronic goods due to international power pin adapter change. I hope there should be adequate power pins to provide international visitors

lenjoyed the learning experience and the accommodations provided

Because I am from UTK and I didn't live in the hotel room, I have little comments on that. But the NIMBios facility is great.

NIMBioS is doing an outstanding job. I also attend meetings in Lorentz Center in Leiden, Netherlands and I must say that both of NIMBioS and Lorentz center are doing great service to scientific community. The opportunities to engage in scientific discussins, and the organization are trully world-class.

No comments. It was great.

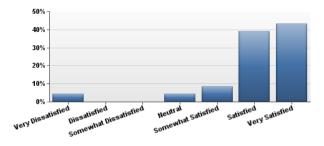
great location. nice room.

very good

The hotel has some maintenance to do in its rooms. The walls were scuffed in my room before I arrived.

Everything was excellent.

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



### 12. Please indicate any suggestions you have for facilitating communication among participants during the tutorial:

#### Text Response

Give opportunities for participants to talk about their own research/teaching challenges.

More collaborative learning would have been good -- toward the end of the tutorial, a few fellow students and I worked our way through the exercises prepared by the presenters and those were extremely helpful.

Wordpress Blog site was very appropriate for communication.

To be honest I did not have a time to use word-press. I am not a big fan of wikis/blogs/facebooks etc... However, compared to older system that NIMBioS wordpress seems to do a better job.

Continued support group using some online mechanism like Skype

generating smaller working groups to work on a common project over the course of the tutorial

#### 13. Please use this space for any additional comments:

#### Text Response

Was perfect and useful

More opportunities for chaning views.

I really had an amazing time at this tutorial, and I was thrilled to be a part of it. Thank you to everyone who put this together!

The staffs at NimBios did an excellent job organizing the tutorial, providing support throughout the tutorial. I have participated in various tutorials in the past. This is by far one of the best.

Wish for great success for NIMBIOS tutorials. Hope to meet all Nimbios staffs in other meetings in near future. Thank you all for providing such a wonderful ambience in knoxville and helping me till date to have a safe and successful trip to Tennessee. Thaks due to provide and to make a bonding friendship with several participants round the world. Thank you.

I feel like those 2.5 day tutorials are somewhat too short. I would say 3-4 days would be better but I understand that there might be an cost issue to cover this additional day.

Provide elaborate examples using different software tools and databases such as Copasi, Mcell, CellDesigner, etc.

Overall I enjoyed being part and organizing the tutorial. You are doing an amazing and important job. Good Luck! I think that we astablished a lot of connections between participants, organizers and NIMBioS. Some minor technical issues were: There were issues with maintaining comfortable temperature in the room. Construction was causing distraction from time to time. There was no recording available on the second day.

This workshop is very useful

The facility is great. The team did a great job taking care of essential needs. We decided to have a poster session, having them in a separate room from the lobby/food area was awkward, but practical. It might have been nice to have additional interaction with the staff, but interviews were going on at the same time of our tutorial. I assume we may have seen folks more otherwise. Excellent working conditions and makes sense to have groups come and work at NIMBioS

I hope to participate in future workshops or tutorials. Thanks!

I felt the tutorial was informative though I think there was too much material to cover in the timeframe. In addition, I think the target audience may be too broad and more specialized tutorials may be more helpful.