

BioPAX Work Group
March 10, 2004 Conference Call Minutes

Participants: Gary Bader, Michael Cary, Peter Karp, Joanne Luciano, Natalia Maltsev, Elizabeth Marland

Overview:

1. Roadmap
 - a. Don't need so many converters
 - b. Send GKB files to John Pick for OWL conversion
2. New members
 - a. Sponsors: send role proposals to pax list
3. Recently resolved issues
 - a. Inverse slots, INTERACTION-TYPE slot, X-REFs, chemical modifications during transport, temporal ordering, data disagreement
4. Unresolved issues
 - a. Location and transport
 - i. Gary and Mike will do a write-up, send it to pax list
 - b. New naming scheme for levels? Discuss later
 - c. Suzanne's misc. issues – please review email thread
 - d. Pathway naming – review Selkov's system
5. Next steps
 - a. Resolve above issues
 - b. Translate data from EcoCyc → BioPAX → WIT
 - c. Finish spec doc
6. Grants
 - a. DOE renewal – too late, need to reapply
 - b. Other grants – Imran, Joanne investigating
 - i. NSF grant → database grant
7. External meetings
 - a. ISMB 04: Need to check deadlines, set up BOF
 - b. Recomb: Liz will distribute fliers on BioPAX
 - c. CMSB: Joanne will keep us informed
 - d. PSI: April 17th – 21st, Gary is going
8. Next F2F meeting
 - i. Natalia will send out potential dates
 - ii. May need to fund travel ourselves

Summary:

Roadmap

Mike shifted the target dates for data converters back 15 days. Peter's group has already started converting EcoCyc into BioPAX format. Instead of trying to create a large number of converters, we decided to focus on converting a set of data from EcoCyc to BioPAX, then from BioPAX to WIT. This should provide an effective demonstration of

the usefulness of BioPAX; any additional converters would be a bonus, but they will not be a high priority.

Peter said that Randy Gobbel has left SRI, and as a result the GKB→OWL converter would not be included in the next release of PathwayTools. If we need OWL translations, we should email the ocelot file (from GKB) to John Pick (email: pick at ai.sri.com); he will try to perform the conversion in a day or so.

New members

We decided that clearly defined roles should be defined for individuals who wish to join the BioPAX core group. Ideally, new members should agree to perform some specific task (i.e. a deliverable), but their role need not be limited to this. Joanne and Peter will contact Jeremy Zucker and Teri Klein, respectively, to discuss their possible roles; they will then relay this information to the pax list.

Resolved Issues

The following issues had been resolved since the last meeting:

- Inverse slots – will not be part of the ontology, but we will specify in documentation that if a user wishes to use the BioPAX ontology for a knowledgebase, then certain inverse slots should be added to improve efficiency.
- Interaction slot – will not be part of Level 1, but may be added in the future.
- XREFs – some comments need to be modified, but they are fine otherwise.
- Chemical modification during transport – we will deal with this in another level (note: there is a chance the transport class may not be included in Level 1, in which case this issue is moot).
- Temporal order – comment changed to indicate pathway ordering will be temporal.
- Data disagreement – we will deal with this in a future level.

Unresolved Issues

A remaining unresolved issue is how we represent location. Since the transport class depends on this, its structure is also unresolved. Rather than discuss this issue during the call, Gary and Mike will raise the issue on the pax (or biopax-discuss) email list by sending out an issue summary and requesting feedback.

Imran sent an email prior to the call, recommending we switch our naming scheme from “Level x, version y.z” to a simpler form: “Version x.y” (odd versions: development; even versions: production). Gary said both SBML and PSI use the level scheme. We agreed to discuss this later, when Imran was present.

Mike mentioned that Suzanne raised a few issues in a recent email; they arose while she was converting EcoCyc to BioPAX (there were four issues: representing modified proteins; the control-type slot didn't make sense for the control subclasses; the reversibility slot seems superfluous; can't represent hierarchical pathways). There was insufficient time to discuss these issues during the call, but Mike encouraged everyone to read the email thread and reply to it if you had any comments.

Natalia asked what nomenclature system we would use to describe pathways. She said that it is not enough to use the substrates and products, since there are alternative versions of many pathways. Mike said that this issue (pathway nomenclature) was also raised by Erik Brauner (during a meeting last year). While we do allow names and synonyms for pathways, this is not an ideal solution. Natalia suggested using Selkov's pathway nomenclature system; she agreed to send a description of it to the pax list.

Next Steps

We identified the following items as present priorities:

- Translate data from EcoCyc into BioPAX
- Incorporate BioPAX data into WIT
- Finish the specification document

Grants

John Houghton said it was too late to file for an automatic extension, but we could file for a new grant. Joanne said we need to think about how much money we wish to ask for. Mike will look into how the previous grant was administered (i.e. who received the information about the report requirements, renewal procedure, etc.). Gary asked for a description of the grant John Houghton suggested we apply for; Joanne said she would get more information from him about it.

Joanne and Imran have started looking into a grant from NSF; Joanne is also looking into some NIH possibilities; she will keep us informed on her progress.

External Meetings

- ISMB-04 – we will organize a BOF meeting for BioPAX. Joanne, Mike, and Gary are definitely going. Natalia said it was likely she and/or someone from her group would go. Imran said there was a 50% chance he would go; Peter said he probably wouldn't. Gary and Mike will investigate the logistics of setting up the BOF meeting.
- Recomb – Elizabeth is attending (March 27 – 31, San Diego). It is too late for posters, but she agreed to distribute fliers (to be drafted by Gary and Mike) on BioPAX.
- CMSB – In Paris, in May. Vincent Schachter is one of the organizers. Joanne will advise us of the details via the pax list.
- PSI – Gary plans to attend the next PSI meeting (April 17 – 21).

Upcoming Meetings

Natalia said she would be happy to host the next BioPAX meeting in Chicago (likely at University of Chicago instead of at Argonne, due to strict security regulations there). Gary pointed out that there was insufficient funding in the DOE grant to pay for the trip, so attendees would need to fund their own travel. Mike and Gary said they needed Chris's permission before committing to attending. Natalia said she would send a list of possible dates for the meeting to the pax list.