

# Meeting Minutes 20 December 2002

## Issues and Goals for the Coming Year

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### 1 Issues

- Currently, the availability of software that allows one to do anything useful with CellML is limited and *limiting*. Matt and Michael are here to help.
- Heaps of models are currently available on the cellml.org website, but it is difficult to find the one you want.
- Metadata: specification is almost complete. Is there any metadata information that we're missing?
- Ontologies: need to be worked out. What's the best way to incorporate them into CellML so that they are most useful? How do we ensure that they are extensible, i.e. anyone can add to an existing ontology or create their own? What limits need to be placed on the creation and use of ontologies? What specific information needs to be defined in an ontology so as to be most useful to software developers? How about modellers?

### 2 Plans for the coming year

- Solidify the Metadata Specification.
- Set up a searchable database of CellML models.
- Begin the CellML 2.0 Specification: incorporate Ontologies and typing mechanisms.
- Complete documentation of the CellML API and implementations of the API.
- Create useful tools for CellML including authoring tools.

### 3 Introduction to Ontologies as Used in CellML

An ontology is essentially a dictionary of terms. By defining an ontology, terms are related to one another to allow a processor the ability to infer. We expect ontologies to be a powerful typing mechanism in CellML. Several uses could be made of ontologies, including assigning graph or glyph information to a component, providing the capabilities of stronger validation of models, and associating a model to other existing models. For instance, a component representing the "L-type calcium channel" could be referred to with an ontology as a type of "channel". The ontology's "channel" class has an associated gif image that software can retrieve to show the user. It also tells the software that the channel is physically located in

the "membrane", so to type another component as "membrane", the CellML model should not contain any information that contradicts this known relationship (for example the "L-type calcium channel" component should not "contain" the component typed as "membrane"). Furthermore, the ontology can allude to other CellML models or templates that might be useful to a modeller.

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E-mail questions, criticism, submissions or info to [info@cellml.org](mailto:info@cellml.org)  
Input document last modified : Mon Feb 02 15:25:02 NZDT 2004