

# CellML – What's Next?

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# CellML 1.0 Spec

- Will be finalised as soon as I'm confident it's been thoroughly reviewed by editors, database people, software people and XML people

# CellML Metadata

- The spec needs to be re-written to be self-consistent in terms of structure and content
- We would like feedback on our BQS serialization proposal from the original authors, and might submit it as a W3C Note
- We would like review of and feedback on our proposal in general

# CellML 1.0 Examples

- Add more complex models marked up using CellML 1.0 to the website with documentation

# CellML 1.0 Tools

- I want to make some CellML processing tools available including:
  - CellML 1.0 document validator
  - CellML 1.0 -> SBML 1.0 converter
- Physiome or Auckland will make CellML-capable simulation software available

# Towards CellML 2.0

- Component and model re-use
  - syntax that allows a CellML component to be re-used at different places within the same model with different parameter values
  - syntax that allows CellML models to be combined into larger models

# Towards CellML 2.0

- Ontologies
  - Allows model authors to define constraints on how elements of different types can interact
  - Determine if existing XML-based ontology standards or data models fit our needs
  - Add syntax to CellML for embedding ontology definitions in CellML documents
  - Add syntax to CellML for associating CellML elements with parts of an ontology definition

# Towards CellML 2.0

- Define syntax for embedding scripts in CellML
- Define syntax for embedding spatially varying parameters in CellML models, perhaps using FieldML
- Define syntax for using cellular models within tissue and organ models. cf. SBML's array proposal