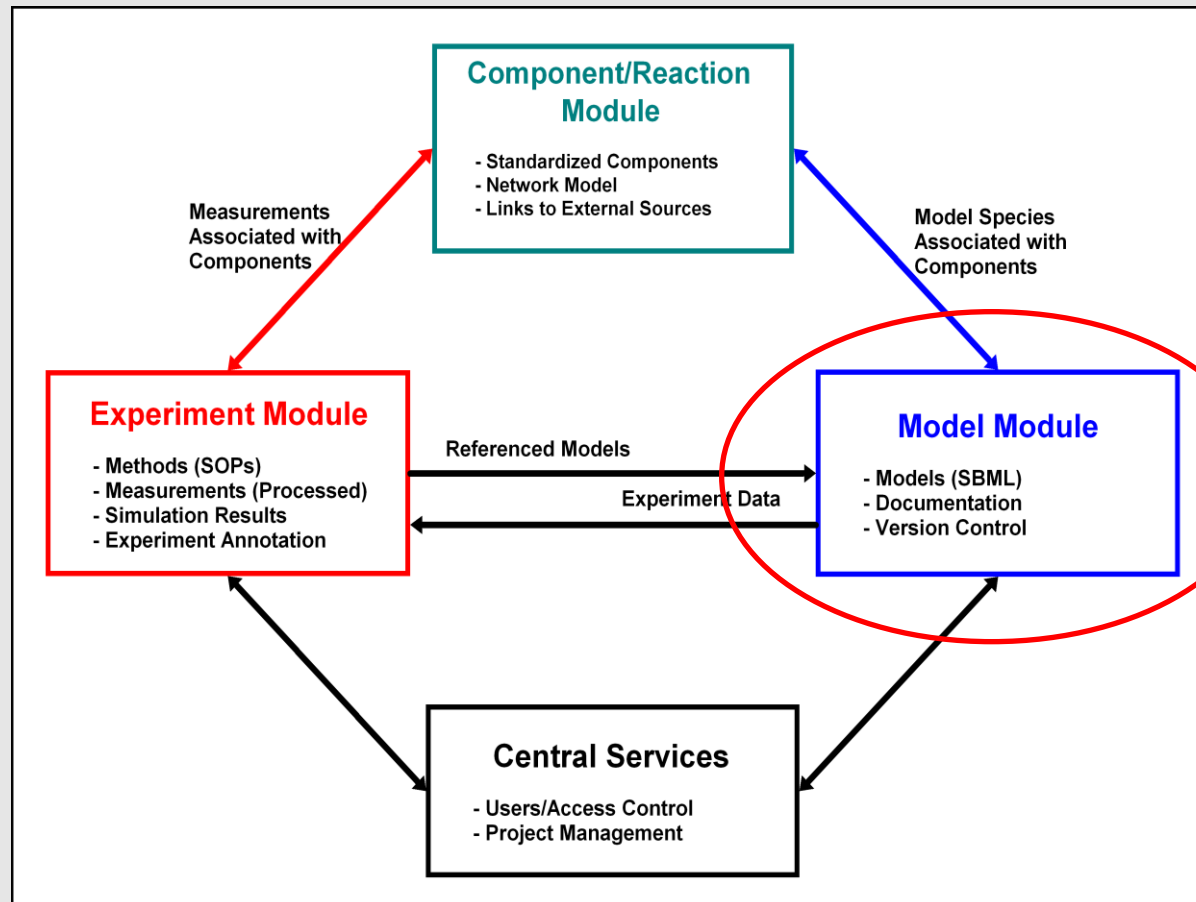




alpha release available at

<http://wwwdev.ebi.ac.uk/biomodels-alpha>

The Data in Systems Biology



History

A local biomodels was needed (e.g. at DKFZ)
in 2010: we tried to use the former biomodels code
But code was hard to extend or even to install
User restricted access: no way

JUMMP project was created

Early 2011

Common project between DKFZ and EBI

Opensource project

Approach

Approach: Refactoring

Actual Biomodels is still working properly
Just the Code base requires modern software
design

Requirements:

- Refactoring all old functionality
- User management
- Providing new enhancements
- Proper User interface

Current biomodels

www.ebi.ac.uk/biomodels

BioModels Database - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

BioModels Database x SZ Universität Freiburg - Wie die Ex-Elite... x SZ Universität Freiburg - Vielleicht gibt e... x JUMMP - Just a model management ... x +

www.ebi.ac.uk/biomodels-main/

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BioModels Database - A Database of Annotated Published Models

BioModels Database is a repository of peer-reviewed, published, computational models. These mathematical models are primarily from the field of systems biology, but more generally are those of biological interest. This resource allows biologists to store, search and retrieve published mathematical models. In addition, models in the database can be used to generate sub-models, can be simulated online, and can be converted between different representational formats. This resource also features programmatic access via Web Services.

All unmodified models in the database are available freely for use and distribution, to all users. This resource is developed and maintained by the BioModels.net initiative. More information about BioModels Database can be found in the [Frequently Asked Questions](#).

Advanced Search

Search Go to model

Models published in the literature

- Browse curated models
- Browse curated models using GO
- Browse curated models using Taxonomy
- Browse non-curated models

Path2Models (new)

Submit a model

Model of the month

August, 2012

Resistance to targeted cancer therapies such as trastuzumab is a frequent clinical problem in oncology. In this model, Faratian et al. (2009) has developed a kinetic model to investigate the role of PTEN as a potential biomarker for trastuzumab resistance in Ovarian cancer.

[Please read more...](#)

```
graph TD
    PTEN -- inhibits --> PIP3
    PIP3 -- activates --> V32
    V32 -- activates --> PI
    PI -- activates --> V34
    V34 -- inhibits --> PTEN
    V33 -- inhibits --> PTEN_PIP3[PTEN-PIP3]
```

News

11th August 2012 **Twenty-third Release of BioModels Database!**

With this release, several new models have been published and numerous have been updated. Moreover new services are now available (for example related to the access to models from the Path2Models project) while others have been improved (such as the model browsing feature based on a tree of Gene Ontology terms or the BioPAX export). Please read the [release notes](#) for more information.

[Download models archives](#)

Search
ModeSubmit
Mode

Login

About Jumps

Search & Find

Welcome to JUMMP

This is a test version of JUMMP (Just a Model management Platform), a software infrastructure for collaborative development and management of computational models.

It currently contains a set of models coming from release 22 of [BioModels Database](#). Please do not link to this instance, as the software infrastructure is continuously being improved and the content does not reflect the up-to-date models being distributed by BioModels Database.

News

No News published yet

[MORE](#)

Latest SBML News

SBML TEST SUITE UPDATED

(14 Aug.'12) Changes include new test cases, some tag updates and case corrections, and an updated online interface.

[MORE](#)

Search
ModeSubmit
Mode

Login

About JummP

Search & Find

Search:

Model ID	Name	Publication ID
1	Edelstein1996 EPSP AChEvent	A kinetic mechanism for nicotinic acetylcholine receptors based on multiple allosteric transitions.
2	Edelstein1996 EPSP AChSpecies	A kinetic mechanism for nicotinic acetylcholine receptors based on multiple allosteric transitions.
3	Goldbeter1991 MinMitOscil	A minimal cascade model for the mitotic oscillator involving cyclin and cdc2 kinase.
4	Goldbeter1991 MinMitOscil ExplInact	A minimal cascade model for the mitotic oscillator involving cyclin and cdc2 kinase.
5	Tyson1991 CellCycle 6var	Modeling the cell division cycle: cdc2 and cyclin interactions.
6	Tyson1991 CellCycle 2var	Modeling the cell division cycle: cdc2 and cyclin interactions.
		Modeling the control of DNA replication in fission

Last Accessed Models

The following list shows your last accessed models.

- Becker2010 EpoR CoreModel
Submitter: Martin Gräßlin
[GO TO MODEL...](#)
- Edelstein1996 EPSP AChEvent
Submitter: Martin Gräßlin
[GO TO MODEL...](#)

This is a tree view of the models in this Database based on [GENE ONTOLOGY](#).
[LINK](#)

Becker2010_EpoR_CoreModel Close

ID:	271	Version:	1	Format:	SBML
Biomodels-ID:		Status:	UNPUBLISHED	Original Model:	
Name:	Becker2010_EpoR_CoreMod	Creation Date:	2012-08-10 11:32:16.0	Change Comment:	

Authors: Verena Becker, Marcel Schilling, Julie Bachmann, Ute Baumann, Andreas Raue, Thomas Maiwald, Jens Timmer, Ursula Klingmüller Download

Publication **Annotations** **Notes** **Model**

Annotations

- occurs in
 - [Taxonomy Murinae](#)
 - [Brenda Tissue Ontology hematopoietic cell line](#)
- is version of [Gene Ontology erythropoietin receptor activity](#)
- is part of
 - [KEGG Pathway ko04640](#)
 - [KEGG Pathway ko04630](#)

[Here are some | links](#)

Here is the | Impressum

VentricularActionPotential
repopulation of the human ventricular
action potential.

Becker2010_EpoR_CoreModel

Close



ID:	271	Version:	1	Format:	SBML
Biomodels-ID:		Status:	UNPUBLISHED	Original Model:	
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Authors: Verena Becker, Marcel Schilling, Julie Bachmann, Ute Baumann, Andreas Raue, Thomas Maiwald, Jens Timmer, Ursula Klingmüller

Download



Publication

Annotations

Notes

Model

Math

Entities

Parameters

Global Parameters (10)

kt	Value: 0,033 (Unit: per_minute) Constant
Bmax	Value: 516 (Unit: pM) Constant
kon	Value: 0 (Unit: per_minute_per_pM) Constant
koff	Value: 0,017 (Unit: per_minute) Constant
ke	Value: 0,075 (Unit: per_minute) Constant
kex	Value: 0,01 (Unit: per_minute) Constant
kdi	Value: 0,003 (Unit: per_minute) Constant



Next steps

More functionality in UI

- Version control (backend from Rostock group)

- Advanced search (backend from Rostock group)

- Reaction graph, format conversions (SBFC)

- Submission of a new (or already existing) model

- Curation part (mainly for EBI)

....

Path2Models in JUMMP

- Challenge

Provision of JUMMP for DKFZ

- Loading locale models (not yet published)

- Starting with Lungsys consortium

Schedule

Making JUMMP available for download (war)

Next month

Providing survey

Getting your feedback

Probably in autumn

Going productive

Next Harmony

DKFZ/Bioquant:
Jürgen Eils
Martin Gräßlin,
Jochen Schramm

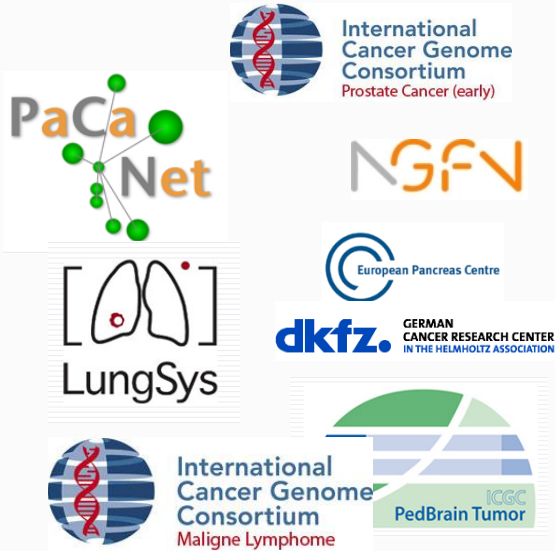
EBI:

Nicolas le Novere
Camille Laibe
Mihai Glont

University of
Rostock:
Ron Henkel
Robert Hälke

<https://bitbucket.org/jummp/jummp/>

NGS Partners



- European Pancreas Center
- NCT
- DKFZ
- NGFN (Pancreas Net, Engine and Brain Tumor Net)
- ICGC Pedbrain, Prostate and Maligne Lymphoma
- DEEP (IHEC)
- DKTK
- HIPO

Imaging Partners



- Viroquant
- Bioquant
- Biochemistry Center Heidelberg
- NGFN ENGINE
- Medsys and cancersys
- EU Mitocheck

SB Partners



- EBI
- SBCancer
- Forsys
- Bioquant
- Medsys and Cancersys
- eBio
- SYSMO