

### Job Description – Postdoctoral Computational Biologist

<b>Department</b>	Signalling
<b>Grade</b>	BI 6
<b>Salary range</b>	£30,751 - £34,166
<b>Length of appointment</b>	Two years in the first instance
<b>Location</b>	Babraham Institute
<b>Working Hours</b>	37 hours per week

### Job Profile Summary

We are seeking a Postdoctoral Research Scientist in computational modelling to strengthen the BioModels team. The incumbent will join the group of Dr. Nicolas Le Novère at the Babraham Institute, as part of a collaboration with the EMBL-European Bioinformatics Institute.

The ideal candidate will be able to manage to encode, annotate, and simulate computational models of biological interest, submitted to BioModels or coming from the literature. The post holder will develop guidelines for curation, terminologies for annotation and help with the documentation and training material. Particular focus will be put on modular and multi-scale models.

Several types of mathematical modelling techniques and software tool will be used. Relevant experience with computational models of signalling pathways, metabolic or gene networks is required to be successful in this position.

The successful candidate will have a PhD in a scientific or technological field, and prior knowledge of computational systems biology. Experience with the main approaches used to model biochemical pathways, including dynamical and logical modelling, and familiarity with the main tools in the field, such as MatLab or R and COPASI, CellDesigner or equivalent are essential. In addition, the candidate must be an experienced Linux user.

Funding for this position is available for three years in the first instance.

### Key areas of Responsibility

- Encoding, annotating and simulating computational models of biological interest
- Developing guidelines for curation, terminologies for annotation
- Assisting with documentation and training material
- Knowledge of several types of mathematical modelling techniques and software tools

**For recent relevant publications see:**

- Le Novère N. Quantitative and logic modelling of gene and molecular networks. *Nat Rev Genet* (2015) 16: 146–158
- Juty N *et al.* BioModels Database: Content, Features, Functionality, and Use. *CPT: Pharmacomet & Syst Pharmacol* (2015) 2(4): 55-68
- Chelliah V *et al.* BioModels: ten year anniversary. *Nucleic Acids Res* (2015) 43 (D1): D542-D548

## Person Specification

Criteria	Essential	Highly Desirable	Desirable	Shortlisting (please indicate the specific criterion that can be shortlisted)
<b>Education &amp; Qualifications</b>				
PhD in Science or Technology	✘			✘
<b>Relevant Experience</b>				
Advanced knowledge in modelling and simulation	✘			✘
Good knowledge of Biology	✘			✘
Experience of systems biology modelling	✘			✘
Building mathematical models based on prior knowledge	✘			✘
Good knowledge of intracellular signalling			✘	
Good knowledge of gene regulations			✘	
Developing standard format, nomenclature or guidelines			✘	
<b>Knowledge &amp; Skills</b>				
Able to comprehend and communicate in the English language to a level appropriate for the position	✘			X
Excellent interpersonal skills with the ability to communicate with staff at all levels	✘			
Ability to work independently and as part of a team	✘			
Excellent organisational skills, with good time management	✘			
<b>Personal Attributes &amp; Characteristics</b>				
Ability to make independent decisions and solve routine problems	✘			
Self-motivated and adaptable to change	✘			
<b>Additional Requirements</b>				
Experience with COPASI or equivalent modelling tool	✘			✘
Good knowledge of Unix/Linux	✘			✘

Good knowledge of productivity tools (eg: documentation generation (LaTeX), graphical suites. Etc)	☒			
Good scientific writing skills	☒			☒
Good presentation skills			☒	
Knowledge of XML technologies (XML, XSD, XSLT etc)			☒	
Good knowledge of biological databases (EBI, NCBI etc)			☒	

The Babraham Institute

Postdoctoral Computational Biologist (BM-NLN-LTC)

INFORMATION ON TERMS & BENEFITS

The following is for information only and is not contractual statement of terms and conditions.

Holiday Entitlement	25 days per annum
Bank Holidays	Applicable to England and Wales
Christmas Closure days	3 days
Pension Scheme	Babraham Institute is able to offer membership of a Group Personal Pension Scheme.  We will provide you with details of this scheme once you commence work. Membership of the scheme is not compulsory but it is designated as Babraham Institute's Stakeholder exempt plan. The Institute does not make contributions to other personal pension schemes.
Restaurant Facilities	The Refectory serves hot meals and snacks and the Forum provides a selection of snacks and hot and cold beverages for coffee and tea breaks.
Onsite Accommodation	The Institute has a number of hostels, flats and houses which can be rented. (There is currently a waiting list for all types of accommodation.)
Social	Sports & Social Club
Nursery	Nursery and Holidays Playscheme on site. (Availability of places is dependent on demand.)

Car Parking

There is free car parking in the Institute Car Park.

The Institute is committed to the implementation of a commuting strategy to try and reduce the growth in numbers of cars used to travel to work

**Any offer of employment will be subject to security screening and may be subject to health screening. Any offer may also be subject to a general medical**