**Project Aims**

This 2-year project, funded under the JISC’s Virtual Research Environments programme, is using the requirements defined by the EPSRC Integrative Biology project to design and build a large-scale virtual research environment for integrative biology. Based on uPortal, this online collaboration environment will act as a central point of focus for the community and provide a visual gateway to the core IB middleware. The project is also looking to address areas not within the original remit of IB.

**Key Areas...**

Following an extensive analysis of IB research processes, the project has identified a number of key needs and is addressing them through a combination of bespoke tool development and technology evaluation.

**In silico experiment repository**

This repository, which will be made available through the VRE portal, aims to provide an environment where heart modelling experiments can be conducted almost entirely through a visual interface without the need to develop complex scripts or use a command line.

The twin ambitions for this tool are to (A) reduce the difficulties scientists have reproducing the results from these experiments, and (B) enable biologists to carry out these simulations without needing a high level of technical expertise.

**Digital Paper Evaluation**

Paper is a key element of any scientist’s daily research life. In the field of Integrative Biology for example, mathematical biologists use paper to formulate new mathematical models of biological function. Computational biologists, who implement and use these models to perform in silico experiments use paper laboratory notebooks to plan and record their research.

The IBVRE project is trialling digital paper with a number of researchers across the consortium to assess its applicability and identify the requirements for integration of such digital paper notes into the VRE.

**Other developments**

- Evaluation of Vannotea, a video analysis and annotation package, as a collaborative visualisation tool.
- Development of a notification tool for biological papers.

For more information visit:

http://www.vre.ox.ac.uk/ibvre/

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