Overview

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WP5: The WP5 team will pursue the following activities to support networking and dissemination within the VPH esearch community:

- interconnecting all VPH Initiative projects through a dedicated VPH-I section of this website
- syndication of VPH-I related news
- publishing of a VPH Newsletter (bi-annual), including a VPH-I section
- organisation of VPH events bringing together VPH-I project stakeholders with the wider research community
- organisation of VPH-focused issues in world class journals to support the publication of interdisciplinary, integrative research

Coordinator: UCL

The activities of WP5 are in-keeping with the innovative approach the VPH NoE will adopt towards enabling VPH research efforts both within and beyond the European research community. Through WP5, the "impact" of VPH NoE initiatives relating to VPH Exemplars, the VPH ToolKit, and interdisciplinary training will be maximised. In addition an emphasis will be placed on the development of clear and consistent lines of communication and information dissemination within and beyond the VPH NoE itself - crucial to the ongoing success of the VPH initiative as a whole.

UCL and ULB lead the activities of WP5 and together provide a wealth of expertise and experience in this area. The main dissemination activities on which this work package focus are :

- maintenance of the VPH NoE public web site,
- elaboration of initial dissemination material (presentations, flyer, poster)
- organisation of VPH NoE events
- creation and animation of the external Advisory Boards (scientific, clinical and industrial)
- creation and governance of the network's Editorial Board

- publication of the scientific print media, including VPH special issues
- identification of the VPH NoE Working Groups
- Production of the VPH Roadmap

Dissemination

The WP5 team are involved in the creation of documents for dissemination. This includes logos, flyers, leaflets, a bi-annual newsletter, slides for public use and a VPH video. Please click on the following links to access these documents.

- VPH Logo
- VPH Flyer
- VPH Leaflet
- VPH Newsletter
- VPH Video
- VPH Public Slideset
- VPH-I Public Slideset

Other dissemination material focussing on specific aspects of the VPH NoE and VPH-I are available here .

Many VPH NoE members attend VPH related conferences and events throughout the year. The VPH NoE has also organised several events since the beginning of the project in the clinical, industrial and research sectors since the beginning of the project. The following list some of the major events which have taken place:

Conferences and Satellite Symposiums

VPH Concertation Meeting - ICT BIO 2008 - October 2008

Building of the VPH Community Satellite Symposium to the IUPS Conference 2009 - July 2009

VPH-Initiative Day 200

Strategic Consensus Meetings

Strategic Consensus Meeting - September 2010

Strategic consensus Meeting - September 2011

Industry Events

Virtual Physiological Human Industry Event - February 2009

2nd VPH Industry Meeting - September 2010

Collaborative Conversations on Data Modeling and Interoperability (Industry Event) - March 2011

Clinical Events

VPH International Conference Series

VPH2010 - Sept-Oct 2010

VPH2012 - September 2012

The **"Building of the VPH Community"** Satellite Symposium to the IUPS 2009 took place at Ritsumeikan University in Kusatsu (Shiga) on 26th July 2009. The meeting was organised by the VPH NoE, financially supported by the British Embassy in Japan, and hosted by Professor Akinori Noma and his team.

More than 45 scientists from Japan, New Zealand, US, Russia, Great Britain and the Czech Republic gathered to discuss the future of the Physiome research, challenges of community building, opportunities of worldwide collaboration, and facilitation of access to data and models.

After an introductory lecture by Dr. Denis Noble, titled "Past, Present and Prospects of the Physiome Project", the morning sessions were dedicated to national programmes and directions of Physiome research and development in Japan, America, Australia, New Zealand, and Europe.

In the afternoon, speakers focused on specific challenges of data and model sharing, standardisation and markup languages, heterogeneous data integration, and privacy implications, concluding in a plenary debate about advantages and disadvantages of public access to data and models.

The agenda and the individual presentations are detailed below:

Session 1: The Physiome Project as an International Community Effort

- Introduction to the Ritsumeikan Biosimulation Research Centre by Akinori Noma – presentation
- The IUPS Physiome Project: Past, Present and Prospects by Denis Noble - Presentation
- Biocomputation in Japan: national programme and direction – Presentation
- Biocomputation in the US: national programme and direction by Andrew McCulloch – Presentation
- Biocomputation in NZ and Australia: national programme and direction by Randall Britten – presentation
- Biocomputation in Europe: national programme and direction by Peter Kohl – Presentation

Session 2: Specific Implementation Issues & Challenges

- Modelling for Healthcare Applications: Privacy Implications by Rod Smallwood – presentation
- Heterogeneous Data Integration by Diego Ardigo – Presentation
- Modelling for Diagnostics Application by .... – presentation
- Standardisation and markup languages: potential and limitations by Michael Hucka – Presentation
- Data- and Model- sharing: Technical Limitations by David Nickerson – Presentation

Session 3: Public Access to Data and Models: Pro&Con

- Public Access to data and models is impractical and counterproductive by James Bassingthwaighte – Presentation
- Public Access to data and models: scientific necessity and moral obligation by Marco Viceconti – Presentation

Round Table: make-or-break issues for the International Physiome Project and Discussion of joint statement regarding model ad data access

James Bassingtwaighte opened the discussion with a proposal that the published models

should be complete and reproducible at the time of the publication and the main debate was evolving around the implementation of this idea.

The questions posed included the following:

What is the definition of a model?

Simplified representation of reality. This can take many forms, and suitability depends on the task for which a model is used. Generally - 'as complex as necessary yet as simple as possible' seems a good rule of thumb guide.

What does a model validation mean?

A framework for validation should be developed.

How can models be published? Is it possible to reproduce the model even if all the information is provided?

Complex models are difficult to describe. In particular multi-scale models cannot be reproducible, because they are too big or require special infrastructure.

Is there a need for public key encryption to allow tracking of model use?

The possibility of plagiarism should be reduced by mechanisms of protection. This could be a

model of private encryption, where the author provides the public key to people. The counter-argument was that the entertainment industry is using digital DRM, but it is always possible to overcome and encryption infrastructure will make it more costly.

How can the academic reward system be improved to acknowledge model sharing and interdisciplinary research?

Few institutes are truely interdisciplinary. The interdisciplinary of publications should be supported. But how?

Is the personal reward system able to acknowledge interdisciplinarity? Should there be a two tier publication system: Journals and online where the models could be shared?

Most journals have no firm policy that articles have to be on web and models reproducible.

Is it necessary to get the journal editors and publishers on board?

Some felt that the requirements of the publishers are changing and they are planning to introduce new measures. It would be beneficial if they defined the content of the articles. Engineering and Mathematical Journals describe models, however Biology and Physiology Journals often do not.

Could the reviewers and funding agencies request open access to models?

The potential downside is that the researchers might be required to spend a lot of time updating websites.

Are standards restrictive?

Institutions have different standards. They are using these measures for judging scholarship. Peter Hunter proposed that the Physiome Community should define the steps on the way to the reproducibility and implement them one by one. He presented a statement drafted previous to the meeting by various attendees. This suggested that concrete, coordinated action is vital to ensure the progress, accessibility and public perception of reliability of research, to provide a computational framework for understanding human and other eukaryotic physiology (the Physiome) and proposed three concrete actions. Although the participants agreed in principle, the statement will need to be discussed further.

Details of 'Building the VPH Community Satellite' are available here .

VPH NoE Repository

Please note that WP5 related documents and a private WP5 workspace is now available in the VPH NoE repository. To go to the VPH repository please click here.