

STEP and VPH-FET

In 2007, the **STEP** project delivered to the European Commission the document **Seeding the EuroPhysiome, a Roadmap to the Virtual Physiological Human**, which helped to define the future course of the Virtual Physiological Human programme, which continues to be funded under Framework 7.

In a similar way, the **VPH-FET** project aims to deliver a roadmap for the advancement of “blue skies” technology relevant to the VPH.

A key feature of **STEP** was the conference **Towards the Virtual Physiological Human** which took place in Brussels in November 2006. This was a pivotal event in the development of VPH, and if you were at that conference, you will surely want to be at **Technologies for the Future of the Virtual Physiological Human**, which is being organised by the same team.

The conference will be preceded by Internet-based discussions, open to all, in which the major issues will be identified so that the discussions at the conference can proceed swiftly. To get the most out of **Technologies for the Future of the Virtual Physiological Human**, we strongly suggest that you get involved in these discussions and help to mould the future of the VPH.

As in **STEP**, the philosophy of the **VPH-FET** project is to be as inclusive as possible, and participation of all interested parties is encouraged, subject to the physical limits of the conference accommodation. The conference will provide an opportunity for the community at large to join fully in the discussions and to influence the form of technology uptake in which VPH should be engaged.

Further details of the conference are provided overleaf.

We encourage anyone who wishes to attend the conference or to participate in the Internet-based debates to join our mailing list. Details of how to join in the discussions, how to register for the conference and other relevant information will then be provided for you at the appropriate times.

Technologies for the Future of the Virtual Physiological Human

Location

The conference will be held at
the Brunei Gallery of the
School of African & Oriental Studies,
London WC1H 0XG

27 June 2011

No registration fee
Numbers limited
Please register early

For further information, or to be added to our mailing list, please contact:
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Preliminary Announcement

Technologies for the Future of the Virtual Physiological Human

Monday
27 June 2011
London, UK

A conference organised
by the **VPH-FET** project and
supported by the
European Commission

Technologies for the Future of the Virtual Physiological Human

Organised by the **VPH-fET** project and supported by the European Commission

27 June 2011
London, UK

Purpose

The conference is a “one-off” event to assist with the strategic long-term development of the Virtual Physiological Human (VPH).

It aims to identify the future and emerging technologies that are most relevant to VPH and to start to prescribe a framework by which they can be developed further to assist with the acceleration of VPH development in the coming years.

Scope

Although the application area is biomedical, the conference will not focus only on biomedical technologies – in fact, quite the reverse.

It is likely that rapid advances in the VPH will come about only by incorporating developments from other areas such as computer science and mathematics, so it is predicted that the conference content will be eclectic and thought provoking.

VPH

The Virtual Physiological Human (VPH) is a framework of methods and technologies that, once established, will make it possible to investigate the human body as a whole, integrating knowledge generated across sub-systems, across temporal and dimensional scales, and across disciplines – what we call Integrative Research in biomedicine.

The aim would be to avoid the pitfalls associated with subdividing biological systems in particular ways – by dimensional scales (body, organ, tissue, cells, molecules), scientific discipline (biology, physiology, biophysics, biochemistry, molecular biology, bioengineering) or anatomical sub-system (cardiovascular, musculoskeletal, gastrointestinal, etc.) – that have previously been introduced in order to reduce the complexity of the issues being investigated to a scale capable of being addressed within the contemporary technological and scientific environment.

Detailed Programme

The programme will be developed dynamically, based on the themes that emerge from Internet-based discussions that will take place during the early months of 2011. Thus, full details of the conference programme will not be available until shortly before it starts.

It is assumed that there will be a mixture of plenary and parallel sessions and that the precise timetable will be fairly fluid to allow for particularly “hot” topics emerging during the discussions.

We expect a dynamic and memorable event, far removed from a conventional conference.

Further Details

To be kept fully informed about the start of the Internet-based discussion, how you can participate in it and monitor its progress, and the opening of conference registration, please join the **VPH-fET** mailing list (see overleaf).

The VPH-fET Project

VPH-fET: Future & Emerging Technologies for the Virtual Physiological Human

September 2010 – August 2011

Project Co-ordinator: Gordon Clapworthy

Scientific Co-ordinator: Marco Viceconti

While the VPH continues to advance rapidly by applying integrative research in its investigations of human physiology, one can anticipate that some of the technological demands of the VPH vision are so radical (and thus so risky) that no aspect of FP7 will be designed to address them. Some of these technological research questions, if answered, could have a dramatic impact, potentially even beyond the limits of the VPH domain, because of the enabling nature of some of the concepts involved.

Such problems are ideally suited to investigation within the Future and Emerging Technologies programme of the European Commission.

VPH-fET will require a large number of key stakeholders to positively and constructively interact within a process that will develop a new research roadmap on the key future and enlarging technologies within the context of integrative research and the Virtual Physiological Human. This roadmap will try to identify these technologies and indicate how they should be developed in order to address the foreseeable, but hitherto unsupported, demands of future VPH research.

The journey to the roadmap should be open and wide ranging, encouraging a “push the envelope” attitude that favours “out of the box” thinking. Contributions from a broad spectrum of opinion and from a wide background of technologies will be key to the success of **VPH-fET**.

VPH-fET is funded by the European Commission under the Future & Emerging Technologies Programme.