



First International Workshop on Portals for Life Sciences

September 14 – 15, 2009

e-Science Institute, Edinburgh, UK

Online Proceedings

IWPLS'09 focuses on research contributions for portals and tools in the field of life sciences. It brings together scientists from the fields of life science, bioinformatics and computer science. Its aim is to become the international platform to exchange experience, formulate ideas, and catch up on technological advances in molecular and systems biology in the context of portals.

All papers published in these proceedings were accepted through a peer-reviewing process. Each paper had a 30-minute presentation and each accepted abstract had a "lightning talk" of 10 minutes.

We would like to thank the authors for their contributions and our Program Committee for the effort put into reviewing. Nine papers were selected out of the excellent submissions. We owe much gratitude to the local organisers, for without their hard work the workshop would not have been such a success.

We acknowledge both the e-Science Institute in Edinburgh and the Scottish Bioinformatics Forum for their financial contributions.

September 2009

Sandra Gesing, University of Tübingen, Germany

Jano van Hemert, National e-Science Centre, University of Edinburgh, UK

Preface

Programme

Keynotes

Peter Brezany Workflow Management for e-Science Analytics
Peter Kacsuk P-GRADE Portal Family for e-Scientists

Talks

Ibrahim Elsayed Towards Realization of Scientific Dataspaces for the Breath Gas
Analysis Research Community
Eduardo Gutierrez G-FLUXO: A workflow portal specialized in Computational
BioChemistry
Jos Koetsier Rapid Development of Computational Science Portals
Jens Krüger Potential of Mean Force of Ion Permeation through $\alpha 7$
nAChR Ion Channel
Evert Lammerts Life Sciences & The Dutch Grid: An Analysis from a Grid
Supporter's perspective
Giuseppe La Rocca On the Performance of Large Scale Bayesian Phylogenetic
Analyses with Grid Portals and Robot Certificates
Maurizio Melato Building Science Gateways with EnginFrame: a Life Science
example
Luciano Milanese Sys-Bio Gateway: a framework of bioinformatics database
resources oriented to systems biology
Richard Sinnott Security-oriented Portals for the Life Sciences

Lightning Talks

Stuart Aitken On the Design of BioSphere: A Grid Portal for Collaborative
Ontology Creation
Archie Campbell Generation Scotland Data Access Portal
Peter Horvatovich Data Analysis Framework for High Throughput Analysis of
Proteomics LC-MS Data
Gregory Madey VectorBase: Biological Cyberinfrastructure for Research on
Invertebrate Vectors of Human Pathogens
Darren Oakley The New Sanger Mouse Resources Portal: a testbed for
collaborative data integration
Andre Ribeiro GROMACS Package within EELA-2
Morris Swertz MOLGENIS: Generating Extensible Data Portals for Life
Science Communities
Morris Swertz Applying the e-Laboratory Concept to Galaxy, a Portal for
Genomics Researchers
Timothy Wright Garki Online: E-Science Cyberinfrastructure for Research Data
on Malaria Transmission

Preface

Organisation

Workshop Chair

Sandra Gesing, University of Tübingen, Germany

Workshop Co-Chair

Jano van Hemert, National e-Science Centre, University of Edinburgh, UK

Program Committee

Viktor Achter, University of Cologne, Germany

Stuart Aitken, University of Edinburgh, UK

Roberto Barbera, University of Catania and INFN, Italy

Maurice Bouwhuis, NBIC, Amsterdam, Netherlands

Antti Hyvärinen, Helsinki University of Technology, Finland

Ivan Janciak, University of Vienna, Austria

Phil Jones, EMBL EBI, Cambridge, UK

Joohyun Kim, Louisiana State University, Baton Rouge, US

Tamas Kiss, University of Westminster, UK

Jos Koetsier, National e-Science Centre, University of Edinburgh, UK

Oliver Kohlbacher, University of Tübingen, Germany

Miklos Kozlovsky, MTA SZTAKI, Budapest, Hungary

Tomasz Kuczynski, Poznan Supercomputing and Networking Center, Poland

Peter Kunszt, SystemsX.ch, Zürich, Switzerland

Luciano Milanese, Institute of Biomedical Technologies, Milan, Italy

Steffen Müller, University of Lübeck, Germany

Jarek Nabrzyski, Center for Research Computing, University of Notre Dame, US

Lars Packschies, University of Cologne, Germany

Bengt Persson, Linköping University, Sweden

Richard Sinnott, National e-Science Centre, Glasgow, UK

Gergely Sipos, MTA SZTAKI, Budapest, Hungary

Chen Wang, CSIRO ICT Centre, Australia

Eric Yen, Academia Sinica Grid Computing Center, Taipei, Taiwan

Invited Speakers

Peter Brezany, University of Vienna, Austria

Peter Kacsuk, MTA SZTAKI, Budapest, Hungary