

International Workshop on  
**Semantic Web Applications and Tools for Life Sciences (SWAT4LS)**

28th November 2008, Edinburgh, UK

<http://www.swat4ls.org/>

**Call for Papers**

**New submission deadline: 13 October 2008!**

A selection of papers will be published in a BMC Bioinformatics supplement devoted to the workshop

**Overview**

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The workshop is organized in sessions and open discussions. Invited speakers will present state-of-the-art, provocative lectures on the workshop's main topic, while a number of submissions will be accepted as oral presentations and posters on all workshop's topics.

**Workshop Description**

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Semantic Web technologies, tools and applications are starting to emerge in Life Sciences. In recent years, systems have been introduced and an increasing interest among researchers is arising. This workshop will provide a venue to present and discuss benefits and limits of the adoption of these technologies and tools in biomedical informatics and computational biology.

It will showcase experiences, information resources, tools development and applications. It will bring together researchers, both developers and users, from the various fields of Biology, Bioinformatics and Computer Science, to discuss goals, current limits and some real use cases for Semantic Web technologies in Life Sciences.

**Keynote Speakers**

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- + Semantic web technology in translational cancer research,  
Michael Krauthammer, Department of Pathology, Yale University School of Medicine, USA
  
- + Using Ontologies to bring Web Services on to the Semantic Web  
Mark Wilkinson, Dept. of Medical Genetics, University of British Columbia, Canada

**Workshop Venue and Format**

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The workshop will take place in Edinburgh, Scotland, on 28 November 2008, and is hosted by the e-Science Institute of the UK's National e-Science Centre (NeSC).

SWAT4LS will be a one-day workshop and will consist of two invited talks, regular paper and poster presentations. The workshop will conclude with a panel discussion on the strength and weaknesses of the Semantic Web for the Life Sciences.

**Deadlines**

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\* **Submission deadline (both papers and posters): 13 October 2008 (New deadline!)**

- \* Notification of acceptance: 20 October 2008
- \* Camera-ready submission: 3 November 2008

## Topics of Interest

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Topics of interest include, but are not limited to:

- \* Standards, Technologies, Tools for the Semantic Web
  - o Semantic Web standards (RDF, OWL, ...)
  - o RDF/OWL, SKOS, .... and their applicability to bioinformatics
  - o RDF Schemas and Query systems
  - o Biomedical Ontologies and related tools
  - o Formal approaches to large biomedical controlled terminologies and vocabularies
- \* Systems for a Semantic Web for Bioinformatics
  - o Bio-ontologies, RDF stores, Semantic Web Services
  - o RDF repositories and query systems for life sciences
  - o Semantically aware biomedical Web Services
  - o Semantic Biological Data Integration Systems
- \* Existing and perspective applications of the Semantic Web for Bioinformatics
  - o Semantic browsers, Semantic collaborative research
  - o Case studies, use cases, and scenarios
  - o Semantic Web applications in life sciences

## Type of contributions and instructions

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The following possible original contributions are sought:

- \* Oral communications (regular papers)
- \* Posters
- \* Software demos

All contributions must be in English and must be submitted through the EasyChair review system at: <http://www.easychair.org/conferences/?conf=swat4ls>.

Please upload all submissions as PDF files in LNCS format (see <http://www.springer.de/comp/lncs/authors.html> ).

To ensure high quality, submitted papers will be carefully peer-reviewed by at least three members of the Scientific Committee.

- \* Submissions for Oral communications should be between 10 and 15 pages.
- \* Posters submissions should be between 4 and 8 pages.
- \* Software demo proposals should also be between 4 and 8 pages.

All accepted oral communications and posters will be published with the CEUR-WS.org Workshop Proceedings service (see <http://ceur-ws.org/>).

Furthermore, a selection of papers will be published in a special issue of the **BMC Bioinformatics** journal devoted to the SWAT4LS workshop.

To this end, a special Call will be launched shortly after the workshop, for extended and revised versions of contributions submitted to the workshop and accepted either as oral communication or poster.

For any information, refer to [info@swat4ls.org](mailto:info@swat4ls.org) .

## Workshop Chairs

- + Albert Burger, School of Mathematical and Computer Sciences, Heriot-Watt University, and Human Genetics Unit, Medical Research Council, Edinburgh, United Kingdom
- + Adrian Paschke, Biotechnology Centre, TU Dresden, Dresden, Germany
- + Paolo Romano, Bioinformatics, National Cancer Research Institute, Genova, Italy
- + Andrea Splendiani, Medical Informatics Department, University of Rennes 1, Rennes, France

## Programme Committee

- + Giulio Armano, University of Cagliari, Italy
- + Christopher Baker, Institute for Infocomm Research (I2R), Singapore
- + Pedro Barahona, New University of Lisboa, Portugal
- + Liliana Barrio-Alvers, Transinsight GmbH, Germany
- + Virendra C. Bhavsar, University of New Brunswick, Canada
- + Olivier Bodenreider, National Library of Medicine, Bethesda, USA
- + Matt-Mouley Bouamrane, University of Manchester, United Kingdom
- + Werner Ceusters, University at Buffalo, USA
- + Kei Cheung, Yale Center for Medical Informatics, USA
- + Marie-Dominique Devignes, LORIA, Vandoeuvre les Nancy, France
- + Michel Dumontier, Carleton University, Canada
- + C. Maria Keet, Free University of Bozen-Bolzano, Italy
- + Graham Kemp, Chalmers University of Technology, Sweden
- + Jacob Tilman Koehler, University of Tromsø, Norway
- + Ludwig Krippahl, New University of Lisboa, Portugal
- + Patrick Lambrix, Linköping University, Sweden
- + Phillip Lord, University of Newcastle, United Kingdom
- + M. Scott Marshall, University of Amsterdam, The Netherlands
- + Lyndon Nixon, STI International, Austria
- + Stephan Philippi, University of Koblenz-Landau, Germany
- + Alan Ruttenberg, Science Commons, USA
- + Matthias Samwald, DERI, Galway, Ireland, and Semantic Web Company, Austria
- + Nigam Shah, Center for Biomedical Informatics Research, USA
- + Michael Schröder, TU Dresden, Germany
- + Robert Stevens, University of Manchester, United Kingdom
- + Luca Toldo, Merck Serono, Germany
- + Tetsuro Toyoda, RIKEN, Japan
- + Jano van Hemert, University of Edinburgh, United Kingdom

## In Co-operation with:

- National Cancer Research Institute, Genova, Italy
- Biotechnology Centre, TU Dresden, Dresden, Germany
- School of Mathematical and Computer Sciences, Heriot-Watt University, Edinburgh, United Kingdom
- Université de Rennes 1, Rennes, France
- e-Science Institute, Edinburgh, Scotland, United Kingdom
- SeaLife Project, European Commission Information Society and Media
- Laboratory for Interdisciplinary Technologies in Bioinformatics (LITBIO), Italy