

# Welcome to the Proceedings of the 6th International Workshop on Semantic Web Applications and Tools for Life Sciences (SWAT4LS 2013)

## Preface

It is our great pleasure to welcome you to the 6<sup>th</sup> International Workshop on Semantic Web Applications and Tools for Life Sciences (SWAT4LS 2013). SWAT4LS is an international workshop to meet and to present high-quality research results and relevant demos, applications and tutorials from all fields of Semantic Web technologies in Life Sciences.

The objectives of the SWAT4LS workshop are to provide a forum dedicated to the dissemination of original research, the discussion of practical insights, and the reporting on relevant experience relating to the adoption of Web based information systems and Semantic technologies in biomedical informatics and computational biology. The workshop also aims at providing a forum to exchange ideas, for example, through poster papers and demo papers.

SWAT4LS 2013 was organized at Royal Society of Edinburgh, December 9-12<sup>th</sup>, 2013, Edinburgh, UK.

The call for papers solicited research contributions in eHealth, biomedical and clinical informatics, systems biology, computational biology, drug discovery, bioinformatics and biocomputing. The call for contributions attracted 47 submissions from around the globe. The technical program shows a carefully selected presentation of research and development in 13 full papers, 1 short paper, 6 demos and 11 posters. These were complemented by 5 tutorials and 3 keynote talks provided by:

### Keynotes

- David A. Kerr, Director, Watson for Healthcare, IBM Corporation  
**IBM Watson: Improving care for complex diseases**
- Kerstin Forsberg, Astra Zeneca, Sweden  
**"Pushing back" — standards and standard organizations in a Semantic Web enabled world**
- Frank Van Harmelen, VU University, Amsterdam  
**SWAT4CC: Semantic Web Applications and Tools for Clinical Care**

### Tutorials

- Alasdair J G Gray and Andrea Splendiani  
**The (Hitch-)hackers Guide to the Semantic Web**
- James Malone, Simon Jupp, Marco Brandizi, Sarala Wimalaratne  
**RDF linked data and identifiers.org at the European Bioinformatics Institute**
- Charlie Mead and Eric Prud'hommeaux

**Applying Semantic Web Technologies in Clinical Care and Clinical Research: A SWOT (Strength, Weaknesses, Opportunities, and Threats) Perspective**

- Pedro Lopes  
**The COEUS Platform**
- Trish Whetzel  
**The Neuroscience Information Framework (NIF)**

To place emphasis on the practical use of Semantic Web technologies in Life Sciences, SWAT4LS included a two day Hackathon.

The SWAT4LS 2013 organizers wish to thank the excellent program committee for their hard work in reviewing the submitted papers. Their criticism and very useful comments and suggestions were instrumental to achieve a high quality of publication. We also thank the workshop authors for submitting good papers, responding to the reviewers' comments, and abiding by our proceedings production schedule. We further wish to thank the keynote speakers to contribute their interesting talks. We are very grateful to our sponsors the National Centre for Biomedical Ontology, the University of Edinburgh Informatics, the Scottish Informatics & Computer Science Alliance, BioMed Central, Journal of Biomedical Semantics, ACM Bioinformatics, and W3C.

Edinburgh UK, Dec. 2013,

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