

4 November 2010

## STM Innovations Seminar Flows in Flux: how publishing technologies change the researcher's life

Friday 3rd December 2010 Hilton London Kensington Hotel, 179-99 Holland Park Avenue, London, UK

#### Comments from the 2009 Innovations seminar

'Impressed with the crowd and quality of content'

'Very timely'

'Best seminar I have been to in 2009 – thought provoking'

#### Why you should register

New gadgets, new tools, new apps have inserted themselves into the lives of researchers strongly affecting their workflow. Can the iPhone replace the stethoscope? Will video be a better way to understand experiments than the traditional research paper? Will researchers remotely create shared research in each other's labs? Can journal articles become the semantic springboard to a multitude of research databases around the web? Do publishing technologies make the sharing of knowledge between researchers easier, faster, better?

Scholarly publishers are developing and working with new tools and technologies - delivering richer content and making better use of the content. These developments also add new and creative means for improved discoverability.

This year's Innovations seminar will take you on a journey into this new world of research productivity tools. Come and listen to researchers who are in the thick of it and see what other publishers are building and launching in this space. And start thinking how you can adopt these technologies to your business.

#### **Final Programme**

8:30	Registration & Continental Breakfast
9:30	Morning Keynote: Newspapers and the Power of an Open Platform Matt McAlister, head of the developer network at The Guardian News and Media Matt McAlister, who joined The Guardian in 2008 from Yahoo, has always been a strong advocate for open strategies, API's and platforms. At The Guardian, he says, Openness is part of the organisation's DNA. Earlier this year, The Guardian took a big step in launching its Open Platform. The direct engagement that the Open Platform created with its own audience, partners and users creates new success and innovation. In this opening keynote, McAlister will give a picture of what's been happening behind the scenes to get to this point. The story includes how development accelerated greatly through Hack days, Internet Events and an Activate Summit. And how the new business model with a new technology infrastructure has further sparked new ambitions for the newspaper.  Moderator: Howard Ratner, CTO Nature Publishing Group
10:30	Break
11:00	Innovations of the researcher's workflow: How my life changes Moderator: David Martinsen, ACS Publications, Senior Scientist Web Strategy and Innovation Hear the researchers' inside views on how new publishing technologies change the way they work, how they do their research and how this impacts their publishing patterns and routines.

### Addressing the Discontinuity Between doing Research and Disseminating Research

**Professor Philip E. Bourne**, Pharmacology UCSD, and Editor-in-Chief of PloS Computational Biology

In a previous era the discontinuity between doing research and publishing it was understandable. Ideas and hypotheses were written in laboratory note books, results of experiments would be manual readings also written in note books and manuscripts would be typed and hardcopy submitted for publication. In an era were we have a digital continuum across the scientific process, it is surprising how little has changed. We, as scientists, are largely to blame. As providers and consumers of science we have not pushed publishers to better disseminate our science so that it can be more widely and more easily comprehended. We are hung up on the rewards of the traditional process, when we should be doing more to change it. Open access opened the door slightly, interactive PDFs and semantic tagging are examples of further steps, but data, methods and the knowledge derived from those data and methods typically remain disparate, and little use is made of modern digital technologies such as rich media [1] to address these shortcomings and I will follow up with at least how we and other scientists are trying to move the ball forward.

[1] P. E. Bourne 2010 What Do I Want from the Publisher of the Future? PloS Comp Biol 6(5): e1000787

#### Enriching scientific citations to facilitate knowledge discovery

**Dr. David M. Shotton**, Image BioInformatics Research Group, Department of Zoology, University of Oxford

The act of citation of others' preceding work is a central social process in the practice of science, formalized in the reference lists that typically conclude journal articles. The advent of on-line publishing made references linkable, although some references in on-line papers may still lack direct hyperlinks to the cited articles. However, such references refer blandly to each cited article as a whole, with no indication as to the citation's rhetorical purpose.

Shotton will demonstrate how semantic enhancements to the on-line article permit the nature or character of the citation to be typed, and the local and global number of citations that each cited article receives to be recorded as machine-readable metadata, as a proxy measure of its importance t the academic community.

Additionally, Shotton will describe methods for relating the context of a particular citation to specific content within the cited article. Finally, I will describe how this citation information, central to the academic enterprise, can be published as Linked Open Data, benefiting publishers by increasing exposure of published papers to potential readers, and assisting scholars in knowledge discovery by facilitating the construction and interrogation of semantic citation networks. I will conclude by discussing the importance of reciprocal citation links between journal articles and the research datasets that underpin them, and the credit that can accrue to researches when they publish datasets as citable information objects identified by DataCite DOIs.

#### The gatekeeper is dead: Long live the gatekeeper!

Dr. Cameron Neylon, Senior Scientist at STFC Didcot, UK

An important traditional role of the scholarly literature has been a s a filter, selecting those submissions to the permanent scholarly record that are worthy of the cost of printing and distribution, and worthy of the attention of researchers checking the latest issues in the library. At its centre lies the editor, academic or professional, who makes a choice about how limited resources will be allocated. This made sense when the bottleneck was printing and distributing. In a web-world where the cost of making something available is low, it makes sense to publish everything, just in case, but how we will manage the information overload?

Neylon, who is an advocate of open approaches to research, will argue that this only seems a paradox from the print media world: that in fact publishing *more* makes filtering and discovery *easier*. Tools and approaches are available to enable improved automated filtering and discovery, for example by social filtering and hugely improved web search. It places control in the hands of the user. The role of the publisher changes from that of gatekeeper to one of facilitating discovery. To support this, publishers and researchers will need to consider how to provide access to much more of the raw material of the research process and critically how to enable the effective and efficient annotation and markup that will support new discovery platforms.

12:15 Future Lab Flash I

> A fast sequence of ultra short peak presentations about new innovations from STM members

**Moderator: Jonathan Clark** 

Nature on iPad and iPhone, Euan Adie, NPG SciVal – productivity measurements, Lisa Colledge, Elsevier Springer Materials, Thomas Mager, Springer ChemSpider, Richard Kidd, Royal Society of Chemistry

New Developments on ScholarOne, Keith Collier, Thomson Reuters

12:45 Lunch

#### Afternoon Keynote: Matthew D. Richtel, 2010 Pulitzer Prize winner, The New York **Times: Your Brain on Computers** Keynote sponsored by the IEEE

What does heavy use of technology do to our brains? Matt Richtel who has been with the New York Times since 2000, has recently dedicated many of his articles and other writing to exactly this topic. He highlights a new research stream pointing at the unanticipated side effects of electronic devices; when people keep their brains busy with digital input, they are forfeiting downtime that could allow them to better learn and remember information, or come up with new ideas. Early research indicates that the effects can be as significant as eating too much meat or consuming too much alcohol.

In 2010, Matt Richtel won the Pulitzer Prize for National Reporting for "Driven to Distraction," a series of articles on the troubling collision of 20th and 21st century technologies—driving and multitasking. The series generated the biggest impact of anything The Times published in 2009. The term "distracted driving" became so familiar that Webster's New World chose it as its 2009 "Word of the Year."

In his more recent articles, Mr Richtel focuses on the way digital devices deprive the brain from necessary downtime.

#### Moderator: Gerry Grenier, IEEE, Staff Director Publishing Technologies

14:45 Break

#### Future Lab Flash II

#### A fast sequence of ultra short peak presentations about new innovations from STM members

Utopia Documents - Adam Marshall, Portland Press CrossMark - Ed Pentz, CrossRef Internationalization of interfaces - Richard Wynne, Aries Systems New Pathways to Research - Jonathan Morgan, ACS

#### And UP goes Research Productivity: new publishing tools

Moderator: Eefke Smit, STM Director of Standards and Technology

For companies like Elsevier and Thomson Reuters, launching tools that improve researchers' productivity, is core of their publishing strategy; two directors of the companies explain their approach. Across the STM industry, in a new initiative that spans wider than just publishing companies, ORCID is launching a new facility that should make all our lives easier: a universal identifier for researchers and contributors.

#### Elsevier's SciVerse platform, a new publishing ecosystem: It's Applications Rafael Sidi, Vice President Product Management for Science Direct

During the last decade, computing developments in information discovery have had a significant impact on the research breakthroughs that enhance our society. In the course of thousands of interviews with researchers, developers and industry influencers, Elsevier uncovered trends that are shaping research globally - workflow efficiencies, funding pressures, government policies and global competition. Elsevier also looked at key trends defining the future of web – openness and interoperability, personalization, and collaboration and trusted views, and the opportunity to create an ecosystem that empowers the scientific community to innovate, create and discover applications that leverage scientific literature to improved search and discovery processes.

15:00

13:45

15:30

This session explores this new ecosystem that enables developers, researchers and research institutions to develop applications that leverage public domain and licensed content. Sidi will talk about a platform that enables collaboration with the scientific community- researchers and developers- on solutions that target specific researcher interests and workflows. He will explain how publishers can offer their content through APIs and how publishers and platform providers can present developers with application building tools. This ecosystem will create a channel where developers can collaborate with researchers in developing new applications and will set a new paradigm in the way research information is discovered, used, shared and re-used to accelerate science.

#### New and emerging technologies for reference software

**Jason E. Rollins**, Director of Product Development, Thomson Reuters Scientific and Healthcare

Over the past several decades, bibliographic management tools have emerged as de facto standards among the academic software toolkit. EndNote, Refworks and many others are used by researchers across the academic spectrum. But, do these tools help make things more productive and, if so, how? The session will attempt to address this and other related issues by presenting an overview of the role of bibliographic/reference management software in the scientific researcher workflow. The current landscape will be explored including case studies of leading tools and highlights of new and emerging technologies.

#### ORCID, a universal ID for authors and contributors

Howard Ratner, CTO, Nature Publishing Group

A unique researcher identifier is required to create a clear and unambiguous scholarly record. This will greatly facilitate the scientific discovery process, and will improve the efficiency of funding and collaboration. This identifier should transcend institutions, disciplines, and national boundaries, and should be trustworthy and persistent over time. The Open Researcher & Contributor ID (ORCID) initiative was started exactly one year ago here in London to fulfill this promise. In September 2010, ORCID Inc. was incorporated as a non-profit organization. ORCID aims to solve the author/contributor name ambiguity problem in scholarly communications by creating a central registry of unique identifiers for individual researchers and an open and transparent linking mechanism between ORCID and other current author ID schemes. Howard Ratner, CTO of Nature Publishing Group and Chair of the Board of Directors of ORCID will talk about the significant progress that the ORCID initiative has made in the last 12 months, and the challenges that lie ahead.

16:45 END

The Innovations Programme Committee:

- Gerry Grenier IEEE
- David Martinsen ACS
- Howard Ratner Nature Publishing Group
- Eefke Smit STM

#### **REGISTRATION FORM**

# STM Innovations Seminar Flows in Flux: how publishing technologies change the researcher's life Friday 3<sup>rd</sup> December 2010

Hilton London Kensington Hotel, 179-99 Holland Park Avenue, London, UK

#### For quick registration, register online

http://www.stm-assoc.org/event\_register.php?event\_id=58

Name				
Business Title				
Company/Institution -				
Street Address				
City	Postal Code	Country		
Phone	Fax	E-mail		
Registration Fee				
Members: <del>•</del>	£475 .			
Non-Members:	€675			
<u>Payment</u>				
Enclosed is a che	ck, a bank draft or a postal ord	er for €	_	
(Please make payable to the	e International Association of S	TM Publishers)		
Please charge my	credit card for €			
Visa	MasterCard	d America	n Express *	
Card No.	Expiration date			
CVC (3 digits code from bac	k of your credit card)			
Name of Cardholder	Si	gnature		

\*Please note that due to higher AMEX credit card charges we will have to charge you an additional 4%.

Payment must be received in full at the time of registration. Cancellations must be made in writing up to 30 days before the seminar for a 50% refund. No phone cancellations or refunds will be accepted or made after that deadline. Substitutions may be made at any time.