



1st Kavli Symposium on the Future of Science Journalism

The Hyatt Lodge, Oak Brook, Illinois, USA, 17th-19th February 2014

Summary Report



Published April 10, 2014

Preface

The 1st Kavli Symposium on the Future of Science Journalism brought together an international group of leading science journalists and specialists to explore the future of science journalism.

Organizing committee

Mariette DiChristina
Editor-in-Chief
Scientific American

Robert Lee Hotz
Science Editor
Wall Street Journal

Dan Fagin
Director, Science, Health and Environmental
Reporting Program, New York University

Rosie Mestel
Chief News Editor
Nature

Jean-Marc Fleury
Senior Advisor
World Federation of Science Journalists

Ivan Oransky
Global Editorial Director
MedPage Today

Pallab Ghosh
Science Correspondent
BBC

Ginger Pinholster
Director, Office of Public Programs
American Association for the Advancement of Science

Phil Hilts
Director, Knight Science Journalism Program
Massachusetts Institute of Technology

Volker Stollorz
Science Journalist
Frankfurter Allgemeine Sonntagszeitung

Advisor

James Cohen
Director of Communications & Public Outreach
The Kavli Foundation

Participants

Fifty journalists and experts from 16 countries, who work for newspapers (14), web media (11), magazines and journals (6), television networks (3), and radio (1), attended the symposium. Their names can be found in Appendix A and biographies in Appendix E.

Report Authors

David M. Secko¹ and Jean-Marc Fleury^{2,*}

¹ Department of Journalism, Concordia University, Montréal

² Bell Globemedia Chair in Science Journalism, Université Laval, Québec City

* Corresponding author: Jean-Marc Fleury, phone: +1 819 771 7578; email: jmfleury@wfsj.org

Acknowledgment

We would like to thank the organizing committee for their time and effort in making the symposium a success. In addition to The Kavli Foundation, the symposium received generous support from the International Development Research Centre of Canada.

Summary Report

What is the future of science journalism?

On February 17th-19th, 2014, 50 journalists and experts from 16 countries assembled to openly take ownership of this question and to begin to study, articulate and pursue a vision for the future of science journalism.

This brief report summarises the recommendations that emerged from the free exchange of new thinking, ideas and possible collaborations that occurred during the event. The full detailed report from the *1st Kavli Symposium on the Future of Science Journalism* can found at:

<http://www.kavlifoundation.org/symposium-future-science-journalism>

WHAT WAS DISCUSSED?

The recommendations were generated from the discussion of three themes: (1) defining science journalism; (2) international collaboration in science journalism; and (3) supporting science journalism¹.

HOW WAS DISCUSSED?

The participants were broken into four working groups during the event for intensive discussion of each theme. The goal of the symposium was to move forward a selection of issues important to science journalism. This task was largely completed in breakout sessions, which asked participants to:

- Clarify the key issues for each breakout topic, as well as the areas of agreement/disagreement;
- Consider how these key issues might be addressed by the participants, the profession (associations and the Federation), and its supporters; and
- Consider and propose recommendations for moving forward.

¹ Supporting Science Journalism was divided into two sub-themes: Business models (Theme 3a) and new tools (Theme 3b).

KEY MESSAGES AND RECOMMENDATIONS

Theme 1: Defining science journalism

Theme Leader: Pallab Ghosh

Contributing Team: Clive Cookson, Dan Fagin, Jean-Marc Fleury, Joost van Kasteren, Keun-Tae Park, Penny Park, Ginger Pinholster, Ron Winslow, Osama Abu el Rub, Dan Kahan

Rapporteur: David Secko

Recommendation A: Skills and core values

The working group from Theme 1 recommends creating a collaborative working document that states the core values and skill competencies of science journalists and explicates what the group means when it says *this is good science journalism*.

This document would seek to support a future generation of journalists in having clarity in their mission and to reflect the future prospects for the profession. It would seek to expand the use of these values and competencies in diverse environments and with a wide set of generalists and communicators. Once drafted, the document would be opened to wider discussion. It may inform the production of a future skills handbook.

Draft inclusions in this document are:

1. Core Values
 - a. Challenge and verify
 - b. Transparency
 - c. Context
 - d. Use of evidence
 - e. Integrity
 - f. Engagement
2. Core competencies
 - a. Science literacy and numeracy
 - b. Use and evaluation of experts and expertise
 - c. Use of evidence and scientific augmentation
 - d. Clear, entertaining presentation of scientific information
 - e. Understand and pursue science and society connections
 - f. Combining science storytelling/backgrounds with use of new digital and social media tools

To accomplish this recommendation, a small team could be established to produce the skills handbook as suggested; focusing on the production of a handbook would give a practical goal to the enterprise and focus the energy.

Recommendation B: SMCs

While there was not universal agreement on the relationship between SMCs and science journalists, the working group from Theme 1 recommends that further discussion of the issue is warranted.

Considerations for this discussion include:

- Should an external review of SMCs be done?
- Can SMCs help spread the value and competencies we find important?
- Can SMC structures be standardized?
- Should science journalists run all SMCs? To what effect and to support what?
- How can constructive criticisms be discussed and acted upon?

The WFSJ could hold a follow-up meeting to assess whether an independent review of SMC activities would be helpful in addressing concerns and opportunities. Any follow-up meeting or online discussion (e.g. on Basecamp) should aim at setting terms of reference for an external review of SMCs (and proposals for new SMCs), discuss proposals for funding this activity and ensure any review looks at all aspects of the relationship between SMCs and science journalists. This project could be a joint activity of one or several academics with the WFSJ.

Recommendation C: Selling science journalism

The working group from Theme 1 recommends the development of a proactive marketing campaign to support the future of science journalism and the outputs of this meeting. Recommendation A and B will not succeed without ideas on how to sell science journalism, which should be prioritized in the next round of work. This campaign may focus on senior editors. The organizers of the 2015 World Conference of Science Journalists could make a concerted effort to invite editors to the June 2015 World Conference in Seoul; members of the working group could develop a proposal for an editors' session at the Seoul Conference.

Theme 2: International Collaboration in Science Journalism

Theme Leader: Ivan Oransky

Contributing Team: Erik Vance, Chul Yoon Kim, Mar Cabra, Violet Otindo, Damien Chalaud, Mariko Takahashi, Eunsung Kim, Phil Hilts, Rosie Mestel

Rapporteur: Dominique Brunet-Vaudrin

Recommendation D: Pilot grant and fellowship program

The working group from Theme 2 recommends the creation of a pilot grant and fellowship program to facilitate international collaboration between science journalists.

This program could involve two components:

- a) Fellowship exchange program: This component would focus on the exchange of journalists between newsrooms by partnering news organizations together. Journalists in the program could spend one month in another newsroom and report for their home publication thereby creating a mini-bureau. Such a program would need to be sensitive to unequal partnerships and that some one month projects may fail.
- b) Travel exchange program: While some travel programs exist, this program would specifically support the travel of journalists between existing science, health and technology conferences and workshops in another country or local region. The program would help journalists travel to other regions to learn about them and report on them, with the goal of building the participating journalist's an improved network of international connections.

The success of the program would be measured by tracking the number of exchanges and number of stories fellowship recipients produce based on their travel. The program could be piloted in the medium term (1-2 years) and initially seek funding from non-governmental organizations (NGOs) and the International Center for Journalists (ICFJ).

Recommendation E: Services

The working group from Theme 2 recommends the creation of three services to help organize international collaboration between science journalists:

- a) A resource list of international journalists, fellowships, legal information and online courses that can support new collaborations. This resource could take the form of a wiki and seek funding from journalism societies, the National Association of Science Writers (NASW) or universities for its initial creation.
- b) A peer-to-peer network (e.g. forum or listserv) to facilitate mentoring. This resource would require little to no funding, but could support new relationships aimed at learning from international colleagues.
- c) Local meetings that would put people together and stimulate an international exploration of a single topic. These meetings could be done simultaneously (same day) around the world.

The success of these services would be measured by usage, the level of engagement, documentation of the relationships created, and user feedback. These services could be piloted in the short to medium term (3 months to 1 year). The peer-to-peer network could be created with little funding to test interest and develop initial collaborations, followed by seeking funding for local meetings and to build resource lists.

Recommendation F: Training handbook on reporting on international science stories

The working group from Theme 2 recommends the creation of a training handbook to improve the skills of journalists in reporting on international science stories. This training handbook should include curated online resources that cover topics such as how to work with open data, how to fundraise for story production and how to collaborate across borders. The success of the handbook would be measured by its usage and ability to help journalists create better stories.

The training handbook could be created in short to medium term (1 year) by initially seeking funding from organization such as UNESCO, the World Bank, European Union, various foundations and open data advocates.

Theme 3a Report: Supporting Science Journalism, Business Models

Theme Leader: Robert Lee Hotz

Contributing Team: Julia Belluz, Daniel Berger, Mariette DiChristina, Phil Hiltz, Brandon Joo, Manuel Lino, Esther Nakkazi, David Sassoon, Bobbie Johnson

Rapporteur: Chelsey Coombs

Recommendation G: Report on best practices in business models

The working group from Theme 3a urges the WFSJ to create a collaborative working document (white paper) on best practices in business models that focuses on two aspects:

- a. Cases studies and best practices from past experiences that worked (e.g. Matter, InsideClimateNews, Retraction News); and
- b. Case studies and lessons learned from past experiences that did not work.

This report could involve a small group examining business models used in the last 3-5 years from multiple countries.

Recommendation H: Field guide for science publishers/entrepreneurs

The working group from Theme 3a suggests building on recommendation A to support the creation of a field guide for science publishers/entrepreneurs. This field guide would focus on business tools and how-to advice to help science publishing start-ups

Recommendation I: Start-up incubator

The working group from Theme 3a recommends a follow-up discussion on how to create a science publishing start-up incubator. The incubator would have a low barrier to entry and let people try out their ideas.

Recommendation J: Online resources

The working group from Theme 3a recommends the creation of online resources on business tools for publishing science journalism. These resources could include a match.com inspired site to link funders to start-ups and the creation of a network of consultants (marketing, financial, tax, IT, HR, legal) that can be accessed for advice and new collaborations

Theme 3b Report: Supporting Science Journalism, New Tools

Theme Leader: Volker Stollorz

Contributing Team: Geoffrey Carr, Makoto Mitsui, Alex S. Pentland, Nicky Phillips, Debbie Ponchner, Megda Sachdev, Ivan Semeniuk, Yunanto Utomo, Mohammed Yahia

Rapporteur: Volker Stollorz and Andrew Freeberg

Recommendation K: Creating a data mining group

The working group from Theme 3b recommends creating a data mining group to write up a proposal and try to interest computational scientists in helping to create data mining tools, such as an *intelligent story finder* and a *tracking tool to detect rising stars in science*.

First tasks for this group could include: (a) exploring a defined set of search criteria for science journalists to apply; (b) planning a boot camp with interested computational scientists on computational data mining for science journalism; (c) trying to interest a software company foundation or university already doing search analytics (e.g. Thomson Reuters); and (d) igniting a collaborative pilot project on tracking tools for science and science journalists.

Recommendation L: Science journalist journey tracker

The working group from Theme 3b recommends developing a science journalist journey tracker.

This development should first involve assembling a group to deliver a feasible project plan, interact with computational scientists and get funding to develop a proof of concept of a browser-based tracking tool which uses “grounded social web” traffic. This topic could be folded into the computational data mining boot camp from Recommendation K.

The creation of the tool could involve partnerships with Knight Media Lab/MIT Media Lab, National Science Foundation, Simmons-Foundation, Volkswagenstiftung, and Klaus Tschira

Stiftung. The pitch for funding is the desire to better understand the process of science journalism, so that science journalists can do a better job by learning from each other with anonymous learning tools that running in parallel with their daily job. This recommendation could lead to a new methodology to investigate our craft.

Recommendation M: Initiating collaborative tasks

The working group from Theme 3b recommends initiating the following collaborative tasks to support recommendations K and L:

- a. Collecting best practice tools for interactive storytelling, asking companies like Palantier to collaborate on this task.
- b. The WFSJ helping to build a core team to develop a collaborative network that will start with a first project suitable for network building.

Examining best practise examples of citizen science to learn how can we work together to develop a framework tool that fits the need of science journalism for crowdsourcing data.

NEXT STEPS: FINAL REFLECTIONS FROM THE WFSJ

The profession of journalism in general, is facing major challenges and obstacles. Today's media and communication playing field is vast, and it is continually evolving: consumption, news cycle, business models, intellectual property, audience segmentation, new tools, new means of production and dissemination. As a journalistic community we are operating in a far less tangible environment than a few years ago. News has gone from a device that shows up on your doorstep to a website or a mobile device. It opens up a whole new universe of ways of understanding and listening your readers, viewers and listeners.

The Kavli Symposium enabled us to identify some of the cyclical, technological and long-term challenges faced by science journalists around the world. We witnessed national differences in how audiences use news and how the “consumer” is increasingly transforming the wider communications environment through the rise of crowdsourcing, aggregators and search engines.

There is still time for the business of science journalism to reinvent itself provided we are willing to learn from different developments around the world. We need to work on a number of avenues, particularly identify elements of the digital world that are transforming the business of scientific journalism, including changes in audience, aggregation, distribution, customer experience and cost structure. We need to look at some of the new initiatives and tools. Highlight some of the successes and failures in the sector and map out possible areas of development. We



1st Kavli Symposium on the Future of Science Journalism
The Hyatt Lodge, Oak Brook, Illinois, USA, 17th-19th February 2014

must consider how technology and tools can help journalists overcome some of the standard reporting barriers, help counter the geographical obstacles and resource constraints.

The World Federation of Science Journalists (WFSJ) proposes to accompany and coordinate some of the project ideas that have been identified and documented in this report. We will look at developing new tools that, amongst other things, enable science journalists and bloggers to obtain and verify information, draw on citizen networks, and crunch big data sets. The WFSJ will want to spearhead an international project that promotes individual engagement with science and the public life of the community, and/or coordinate the production of investigative multimedia stories that incite the science journalist community to connect with citizens. With member associations in some 40 countries on all continents, the Federation will also be keen to gather and share information on innovative business models that can support science journalists. The WFSJ will continue to be at the leading edge of the reflection on how the overall profession is evolving and redefining itself.

To develop and engage in some of these new activities, the WFSJ will be looking for your proactive input. We will also be seeking your help to bolster our networking and fundraising efforts.

WORKING GROUPS

Theme 1: Defining Science Journalism

Theme Leader: Pallab Ghosh, Science Correspondent, BBC

Speakers: Dan M. Kahan, Yale Law School and Osama Abu El Rub, Al Jazeera.net

Theme Discussants:

- Clive Cookson, The Financial Times
- Dan Fagin, New York University
- Jean-Marc Fleury, Université Laval (Québec)
- Joost van Kasteren, Science Journalist, The Netherlands
- Keun-Tae Park, Science Journalist, Chosun Biz, Korea
- Penny Park, Science Media Centre of Canada
- Ginger Pinholster, Director of Public Programs, AAAS
- Ron Winslow, Wall Street Journal

Rapporteur: David Secko, Associate Professor, Concordia University, Montréal

Theme 2: International Collaboration in Science Journalism

Theme Leader: Ivan Oransky – MedPage Today

Speaker: Mar Cabra, International Consortium of Investigative Journalists, Spain

Theme Discussants:

- Damien Chalaud, World Federation of Science Journalists
- Chul Joong Kim, President, World Federation of Science Journalist
- Eunsung Kim, Organizing Committee, 2015 World Conference of Science Journalists, Seoul
- Rosie Mestel, Nature
- Violet Otindo, Citizen TV, Nairobi, Kenya
- Jae-Eok Shim, Seoul Shinmun, Korea
- Mariko Takahashi, Senior Staff Writer, Asahi Shimbun, Tokyo, Japan
- Erik Vance, freelance science journalists, Mexico

Rapporteur: Dominique Brunet-Vaudrin, Student in Science Journalism, Université Laval

Theme 3a: Supporting Science Journalism: Business Models

Theme Leader: Robert Lee Hotz – The Wall Street Journal

Speakers: David Sassoon, InsideClimate News and Bobbie Johnson, Matter/Medium

Theme Discussants:

- Julia Belluz, MIT Knight Science Journalism Fellow



1st Kavli Symposium on the Future of Science Journalism
The Hyatt Lodge, Oak Brook, Illinois, USA, 17th-19th February 2014

- Daniel Berger, Science, Washington
- Mariette DiChristina, Editor-in-Chief, Scientific American
- Phil Hiltz, Director, Knight Fellowships Program, MIT
- Brandon Joo, Secretariat of 2015 World Conference of Science Journalists, Seoul
- Thomas Lin, Editor, Qanta Magazine
- Manuel Lino, El Economista newspaper, Mexico
- Esther Nakkazi, science journalist, Kampala, Uganda

Rapporteur: Chelsey Coombs, Journalism Student, University of Illinois at Urbana-Champaign

Theme 3b: Supporting Science Journalism: New Tools

Theme Leader: Volker 'Watch the Step' Stollorz

Speaker: Alex 'Sandy' Pentland, Director, Human Dynamics Laboratory, MIT Media Lab

Theme Discussants:

- Geoffrey Carr, Science Editor, The Economist
- Keon-Hyung Park, Science Journalist, Chosun Biz, Korea
- Nicky Phillips, Science Editor for The Sydney Morning Herald, Australia
- Debbie Ponchner, Managing Editor, La Nación, Costa Rica
- Meghna Sachdev, Social media strategist, Science magazine, Washington
- Ivan Semeniuk, Science Editor, The Globe and Mail, Toronto, Canada
- Yunanto Utomo, Science Online Editor, Kompas, Jakarta, Indonesia
- Mohammed Yahia, Editor, Nature Middle East, Cairo, Egypt

Rapporteur: Mitsui Makoto, The Yomiuri Shimbun, Tokyo, Japan, and Andy Freeburg, Communications Officer, SLAC National Accelerator Laboratory

Observers:

- Genny Biggs, Communications Officer, Gordon & Betty Moore Foundation
- Kathryn Brown, Head Communications, Howard Hughes Medical Institute
- Jim Cohen, Director of Communications, Kavli Foundation
- Judith Gan, Director, National Science Foundation, Office Legislative & Public Affairs
- Angela Prokopiak, Director Communications, International Development Research Centre
- James Simons, Chair, Simons Foundation
- Marilyn Simons, President, Simons Foundation
- Patricia Weisenfeld, Vice President, Special Initiatives, Simons Foundation