Stem Cell Network | Réseau de Cellules Souches
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Insights from the Network

Writing it Right: Insights from the SCN-Project MaVen Workshop Series

By Meghan Wright

This spring, Stem Cell Network (SCN) and Project MaVen teamed up to deliver a four-part virtual training series on written scientific communication called “Write it Right: Advancing your Approaches to Scientific Communication”. As the Project Manager for Project MaVen, I had the pleasure of co-organizing the series with Alex Kozlov, Program Coordinator, Research & Training at SCN. We designed the series to offer both practical training and space for critical reflection – with two interactive workshops focused on critical skills paired with two expert panel discussions that explored timely issues in scientific writing.

We kicked the series off with a timely and widely relevant session on best practices, necessary precautions, and future directions for using generative AI in scientific writing. This was an appropriate starting point given that the topic resurfaced in discussions in the sessions that followed.

This opening panel session featured: Dr. Vina Goghari, Professor and Vice-Dean of Research and Program Innovation at the University of Toronto’s School of Graduate Studies; Micheal Obakhavbaye, a Ph.D. student in Educational Technology and Learning Design at Simon Fraser University; and Dr. Dan Stuckey, Senior Publishing Ethics Expert at Elsevier. Noteworthy discussion points included:

- **Be transparent about using AI in your writing process.** If you use AI in your writing process, you must disclose it and check with your supervisor or thesis committee beforehand.
- **AI tools can make scientific writing more accessible.** AI can lower language barriers for non-native English speakers, increasing inclusivity in scientific writing.
- **Educate students to navigate AI.** Students are using generative AI tools already. Universities can teach students to use AI ethically and critically, while helping ensure trainees preserve their own voice.

(I’ve linked resources on the use of generative AI in scientific writing at the end of this blog post.)

Dr. Vina Goghari

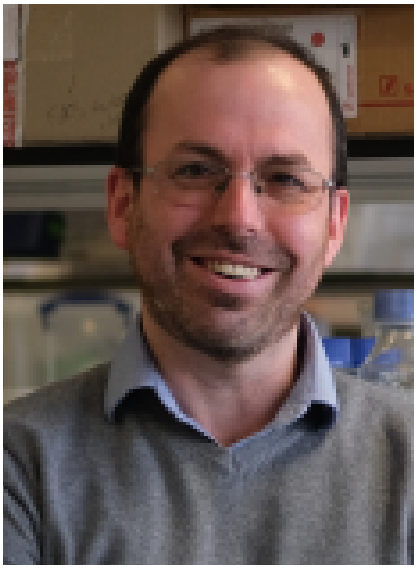
Micheal Obakhavbaye

Dr. Dan Stuckey

In our workshop "The "how", "why" and "why you" of writing a review paper", Dr. Janet Rossant, Editor-in-Chief of the journal Stem Cell Reports, emphasized that while AI tools can quickly synthesize summaries of existing literature, a deep, critical reading of the literature remains an essential part of trainee development as subject matter experts and intellectual contributors to their field. She anticipates that AI may impact the literature review landscape. Reviews may become shorter and focus on an author's own interpretation and insight. Key takeaways from Dr. Rossant's workshop included:

- **Start with clear purpose and relevance.** Know why you're writing the review, and choose a timely, relevant topic that fits the journal.
- **Plan, structure, and tell a story:** Build a logical, engaging narrative around a core message, not just a list of facts.
- **Avoid submitting a completed, unsolicited review to a journal.** Instead, reach out to journal editors with your idea and outline.
- **Engage with your network.** Involve co-authors, seek external input, and build relationships with editors to understand what each journal is looking for.

Another essential form of writing in academic science is the drafting of Standard Operating Procedures (SOPs), though this skill is often underappreciated. In her workshop "Creating clarity: Crafting standard operating procedures that simplify and succeed", Dr. Janet Rotherberg, Senior Director, Process and Analytical Development at CCRM, provided an overview of the purpose, structure, and utility of SOPs. This workshop emphasized that writing clear, consistent SOPs is not only crucial in industrial GMP environments but also has the potential to add tremendous value in academic environments. Participants reflected on how SOPs can help reduce errors, save time and material, and improve overall research reproducibility.



Dr. David Kent

Dr. Danielle Spice

Dr. Betty Zou

Continuing the theme of creating clarity, the session "Communicating science clearly: How to write for non-expert audiences" shifted the focus from internal research environments to public engagement, emphasizing the value of writing beyond the lab and beyond the field. This panel session featured insights from: Dr. David Kent, Professor at the University of York (UK) and columnist and blogger; Dr. Danielle Spice, Lead Scientist at Apiary Therapeutics and creator of the @ScienceWithSpice Instagram page; and Dr. Betty Zou, Senior Communications Officer at the University of Toronto's Temerty Faculty of Medicine. The panelists shared that they write for general audiences to help build a better-informed society, combat misinformation, and improve the academic experience of early-career researchers.

And though they write across different platforms and for different audiences, all three panelists offered the same strategic advice: **Write the right message, for the right audience, at the right time.** What experiences or perspectives can you share that align with your writing objectives? Who reads the publication or platform you're writing for, and what is your audience needing to hear in this moment?

From AI to SOPs, to communicating science to non-experts and experts alike, this series emphasized the importance of critical thinking, ethical responsibility, and audience awareness when undertaking scientific communication. Keeping these practices in mind will help us all write it right!

We want to hear from you: What topics related to scientific communication would you like to see covered in future workshops or panels? Email TrainingSCN@stemcellnetwork.ca.

Resources on Generative AI in Scientific Writing*:

- White paper - Generative AI in Scholarly Communications: Ethical and Practical Guidelines for the Use of Generative AI in the Publication Process
- Authorship and AI tools | COPE: Committee on Publication Ethics
- Elsevier's Generative AI Policies for Journals
- University of Toronto School of Graduate Studies: Guidance on the Appropriate Use of Generative Artificial Intelligence in Graduate Theses
- Government of Canada: Guidance on the Use of Artificial Intelligence in the Development and Review of Research Grant Proposals
- Government of Canada: Generative AI in you Daily Work

**These resources were submitted to the Stem Cell Network by the speakers in this session. These are resources that represent a starting point that participants can consult when considering the use of generative AI in their own scientific writing.*