

Core Skills For Scientists

The Craft of Scientific Writing

Course Synopsis

This course is based on the book *Scientific Writing 2.0: a Reader and Writer's guide*. It helps identify and articulate the differences between efficient and deficient scientific writing. Through many in-class exercises, and the use of an open-source assessment tools, it identifies the role, content, and writing style of influential parts of a paper that contribute to the reviewer/editor's first impression: title, abstract, introduction, methodology, visuals & Results, structure, conclusions and references. The course promotes clarity, conciseness, and organization in writing. It also covers publication ethics, publication process, and interaction with the editor (cover letter)

Career Opportunities

Good scientific writing skills open up many opportunities to the researcher: publications, conference attendance. They also lead to better patents, better research partnerships and better funded research. Clarity in scientific writing bears witness to the quality of a researcher; it influences career promotion.

Target Participants

Graduates, postgraduates, doctoral students, and researchers who wish to improve their scientific writing skills (seasoned researchers have indicated how much they have benefited from this course, even after writing more than 20 papers).

Course structure

Introduction: Write to be read - a reader and reviewer perspective. How to avoid the writing pitfalls that make the memory-bound, attention-bound, and knowledge-bound reader stumble. Readability factors and the scientific writing style. An introduction to editor and reviewer needs.

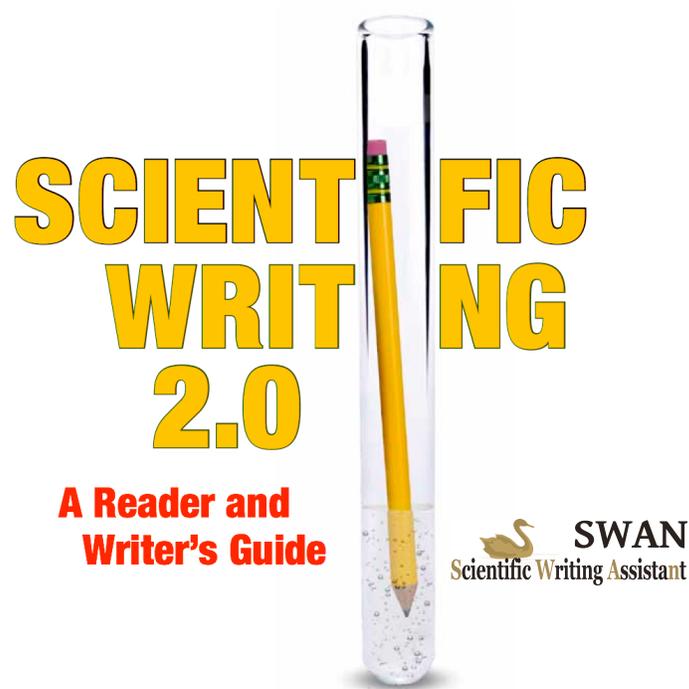
Module 1: The *Why* and the *How* of elements of the standard scientific paper structure: title, abstract, introduction, methodology, structure (headings, subheadings), results (tables and graphs), conclusion, and references.

Module 2: Elementary principles of composition: reaching clarity, conciseness, organisation, precision and fluidity in writing to convincingly support the scientific contribution and be accepted for publication. Impact of writing for the editor, besides the reader.

Module 3: Identification of writing problems: a walkthrough process to detect fluidity problems at sentence and paragraph level.

Mode of Assessment

The participants bring to the course a published paper they have written, or read and are familiar with. No review, no short letter. The paper should have informative headings & subheadings. Participants will rewrite parts of that paper.



Duration

Two and a half days, but also in 2 and 3 day format

Minimum Entry Requirements

Student, Graduate, Postgraduate, Researcher with correct English (this is not a grammar class)

Class Size

From 15 to 35 participants

Your Trainer

Jean-Luc Lebrun has managed research programs while working at Apple Computer in its Advanced Technology Research group for over ten years. He subsequently invested his energy in the commercialisation of research. For the past twelve years, he has been conducting the scientific writing course at the following A*Star research Institutes: BII, BSF, BTI, CMM, DSI, GIS, I2R, IBN, ICES, IHPC, IMCB, IME, IMRE, NMC, SBIC, SIMTECH, and SSCC. He also teaches in Singapore universities (NUS, SMU) and research Institutes (NCCS, NUSH, NEA), as well as in universities, research centers, and E.E.C organisations in France, Poland, Austria, Italy and Finland.

*Agency for Science, Technology And Research