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, it promotes good scientific writing habits such as conciseness and clarity. The course material is mostly provided by the participants: they bring **a published or draft paper (6 to 12 pages)** to the course and learn how to evaluate and improve it. The book is given to each participant. It includes a DVD with a unique Java application (SWAN, Scientific Writing Assistant) to help assess the quality of writing at a structural level.

Career Opportunities

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

Target Participants

Graduates & postgraduates who recently joined a Research Institute. 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). Researchers whose native language is not English but whose English writing skills are average.

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.

Module 1: The *Why* and the *How* of elements of the standard scientific paper structure: title, abstract, introduction, body (headings, subheadings, 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.

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

Mode of Assessment

Participants bring their writing sample (**not a review-type paper**). At the end of the course, this sample is significantly improved.



Duration

Three days

Minimum Entry Requirements

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

Class Size

From 20 to 36 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 ten 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 two Singapore universities (NUS, SMU), medical research Institutes (NCCS, NUSH), in France and in Finland.

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