



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI BIOSCIENZE



DOTTORATO IN BIOLOGIA MOLECOLARE E CELLULARE

**How to write a molecular and cellular biology paper
“Effective scientific writing”**

**Dr. John Chandler
University of Koln, Germany**

Thursday, October 13, 2022

09:00 – 17:00

Friday, October 14, 2022

09:00 – 17:00



Workshop concept: to raise awareness of all the component aspects involved in effective scientific paper writing in the natural sciences, especially tailored to the non-native English speaker. The two-day workshop focuses on the structure and style of a canonical scientific research paper as a model, including the stylistic and linguistic aspects of the different component sections.

The workshop is intended to be interactive and for students to be as proactive as possible in their participation and actively encouraged to discuss and raise questions. The small group size is ideal for intensive group participation and to learn from each other.

A major focus of the workshop consists of an individualised approach and uses material supplied by the participants, e.g., an abstract or short piece of scientific writing from part of a thesis or from the draft of a manuscript. These texts will be shared among the group for illustrative purposes and worked on as a group, thus representing a personalised and highly interactive approach. Group editing allows participants to relate what they have learnt on other parts of the workshop to their own writing activities and raises new aspects for discussion. The intention is for students to effectively learn from each other and to improve future writing ability. The ability to critically evaluate others' writing is applicable to scientific literature in general and is a wider implication of the workshop.

Topics covered:

- The conventions and linguistic characteristics of academic scientific writing as a formal genre
- Microelements of writing, including prepositions and punctuation
- Optimum verb use (passive vs. active; formal register; tenses)
- Nouns, adjectives and adverbs
- Plagiarism and how to avoid it.
- Conventions for the use of abbreviations and units
- Writing concisely and eliminating redundancy
- Hedging and boosting strategies
- Macroelements of writing: sentence/paragraph structure, transitioning vocabulary, flow, style, syntax.

The concept is to begin by thinking about the microelements of academic writing, such as prepositions, verbs, nouns, adjectives and adverbs, and to progress to considering more macroelements of writing, including style, structure, flow and logical argument building. By the end of the workshop, the aim is to raise awareness and to have provided a structure that encompasses as many aspects as possible with respect to writing science texts effectively. Additional general aims are to enhance writing confidence and to show that good writing is enjoyable and achievable!

The workshop consists of discussions, short seminar-style instruction, many group activities in terms of hands-on exercises in the language elements mentioned above. The workshop topics are summarised in a ca. 80-page handbook as a resource for future reference. The group also participates in the constructive improvement of texts the students bring with them.