prbb intervals
Continuing Professional Development Programme
Space for Reflective Learning

PRBB Intervals Course Proposal

1. ***Course Title:*** Introduction to effective biomedical writing

2. ***Proposed date(s):*** 2, 4, 9, 11, 16 & 23 February 2027

3. ***Course language:*** English

4. ***Course Leader(s) and very brief summary of relevant qualifications and experience (no more than 2 lines for each trainer):***
   Valerie Matarese is an authors' editor and trainer of scientific writing with ~25 years' experience supporting biomedical researchers in Italy and beyond. She studied biochemistry–molecular biology in the United States and has published original research both in biomedical science and on writing for publication.

5. ***General description of the course (relevance and context for the PRBB)***
   Publication of a research article is an integral part of the research process. Just as high-quality research depends on valid protocols and disciplinary standards, so too does the effective writing of research papers.

6. ***Course Aim***
   This course sets the foundation for writing and publishing research articles in the biomedical sciences. It gives an overview of biomedical research journals, IMRaD article structure, and readers' expectations of the text, and it presents broad strategies for writing the articles and accompanying cover letters and for revising after peer review. The course aims to demystify these processes, by illustrating the range of techniques and strategies that skilled writers use.

7. ***Learning objectives (what new skills, knowledge &/or attitudes will participants go away from the course with?)***
   During the course, participants will:

   - Become familiar with the characteristics and qualities of research journals in the biomedical sciences
   - Learn how to separate content into the main sections of an IMRaD article and ensure cohesion among the sections
   - Understand the difference between writer-based and reader-friendly writing, and appreciate the need to address readers' expectations
   - Learn basic strategies for planning, drafting and revising a research article and revising again after peer review
   - Review topics of English grammar for research articles: grammatical voice of verbs, verb tenses in different IMRaD sections, use of modal verbs, and common sentence structures
   - Learn how to structure sentences, paragraphs and sections for optimal readability and a forward flow of information
   - Develop and apply a technique for writing a paragraph to describe a table or figure

- Acquire basic skills of good citation practice
- Get feedback on a writing assignment submitted before the end of the course

8. ***Training methods:*** Synchronous distance education, alternating between short lectures and in-class online exercises.

9. ***Target group in PRBB (Senior scientists, postdocs, predocs, management/admin staff, all residents)***
PhD students

10. ***Number of participants (maximum)***
16

11. ***Total course hours (Please specify: a) direct training with instructor present b) required self-study.***
Note: only the direct training hours will be included in the post-course certificate.
Total: 14 hours
Class time: 12 hours (six sessions of 2 hours each)
Self-study: ~2 hours. There will be some tasks to do in preparation for the course and between sessions.

12. ***Distribution of course (hours/days):*** Six 2-hour sessions over 4 weeks.

13. ***Course programme (outline of topics to be covered)***

<u>Day 1. The biomedical research literature</u>

- Introduction to research publishing
- Characteristics and qualities of biomedical research journals
- IMRaD structure – a guide to reading and writing

<u>Day 2. Writing strategies</u>

- Pre-writing – planning the structure and scope of a research article
- Resources for writing (reporting guidelines, instructions to authors, nomenclatures)
- The writing process
- Verb tenses in different IMRaD sections

<u>Day 3. Optimal sentences, paragraphs and sections</u>

- Preferred sentence structures for scientific texts
- Paragraphs – the basic building block of text
- Efficient use of sections (sub-IMRaD) and how to write section headings

<u>Day 4. Good citation practice</u>

- Reasons for citation in research articles
- Placement of citations in text, and writing text to accompany citations
- Quotation with citations
- Implications of poor citation practice

Day 5. Writing about tables and figures & Advanced verb usage for making accurate claims

- Learn a method for writing a paragraph that highlights key features of a table or figure, to facilitate readers' interaction with the display
- Apply the method in class for a sample table and figure
- Learn to write effective figure legends and table titles
- Writing claims in simple sentences
- Writing claims in complex sentences

Day 6. Submission and peer review

- Revision before submission
- Cover letters
- Peer review: types and outcomes
- Revision after peer review
- Rebuttal letters and point-by-point responses

14. Pre-course preparation and and self-study expected between sessions (what preparation should participants do before the course and/or in between sessions – reading, online study, prepare ideas etc?)

There will be homework assignments between sessions (approx 2h) and participants should ensure they will have time to do these.

15. Material participants need to bring (laptops, etc…)

One or two open-access research articles of interest

16. Relevant background reading/ audiovisual/websites or other materials

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