

#### Topics that our workshops can address are:

- · Scientific writing and publishing then and now
- Taking research from bench to paper
- Creating an outline and preparing to write
- Essentials of scientific writing and grammar
- Elements of writing style for non-native English speakers
- Constructing sentences and paragraphs
- Anatomy of an abstract and writing attention-grabbing titles
- · Writing an enticing, yet complete introduction
- Methods giving a reproducible account of your working approach
- · How to present data in figures, graphs and tables
- Presenting and discussing your results clarity, conciseness and coherence
- The purpose of conclusions and outlooks
- Accurate reference lists and citations
- Editing, revising and finalising your paper
- · Authorship and an author's responsibilities
- Plagiarism and misconduct in science
- Choosing a journal for publication
- Submitting your paper
- Writing a review article
- The editorial processes, communicating with editors and referees and peer-review
- · Journal Decisions: after the peer review
- Inside Nature Publishing Group

## These are described in more detail on the following pages.

# Scientific writing and publishing – then and now

A brief history of research journals and the style and content of research papers over the last 200 years. This is a good introduction to the workshop and digs up some surprising and interesting facts.



## Taking research from bench to paper

A scientific paper is born long before the researcher starts writing. It is an arduous process that begins at the idea - stage. We examine several Nature papers selected by the editors themselves and discuss the reasons they were accepted and what made them stand out from the crowd. This session focuses on how to have a broad overview of your research and a clear idea of the main message of your paper.

## Creating an outline and preparing to write

Once the main message of the paper is in place, the writing can begin. This lecture discusses strategies to prepare for the writing process and how to break this often overwhelming process down into manageable chunks. We discuss how to keep the main ideas in mind throughout and decide what data should and what should not be included.

# Essentials of scientific writing and grammar

In this lecture, we discuss common grammatical issues that editors encounter and deconstruct sentences and paragraphs from published articles to demonstrate how to avoid them. We look at how to use the ABC's of writing and show how to build concise and powerful sentences. This is ideal for non - native English speakers and can be extended if necessary.

## Elements of writing style

This session takes an expansive view of the writing and shows how to improve overall readability. These are general writing rules and guidelines for using professional language by looking at effective sentence building and flow and effective paragraph structures to support the flow of arguments.

# Anatomy of an abstract and writing attention-grabbing titles

Abstracts are pivotal. They serve as the 'hook' to get the reader to read on. It is important that abstracts are self - contained, clear and attractive as they are the first thing readers see. We provide advice and informative examples on how good abstracts should be structured. We advise on how to craft a brief, yet descriptive and attention -



grabbing title, with plenty of good and bad examples.

## Writing an enticing, yet complete introduction

Starting a paper, the Introduction should be clear, concise and coherent to entice the reader to read on. It should be complete, provide an accurate overview of relevant literature and substantiating all claims when they are made. We provide examples on how to strike a good balance and show examples of successful and not-so-successful introductory sections.

## Methods – giving a reproducible account of the research methodology

Probably the most tedious section of a paper to write, it is one of the most pivotal pieces of information that scientists need to access — without reproducibility, the advancement of science falters. We provide an in – depth lecture on what top – ranked international journals require to consider papers for publication.

## How to present data in figures, graphs and tables

These are the heart of a research paper. If produced correctly, they should tell a story. We present a comprehensive list of do's and don'ts to maximize the impact of the graphics and minimize the risk for negative feedback during the peer - review process.

## Presenting and discussing your results – clarity, conciseness and coherence

The discussion can be a difficult section to write. We advise on the correct rhetoric and terminology to use in arguments and discussing results and efficient means of presenting, and describing results. We discuss the ways in which these are tied in with the main hypothesis of the paper.

## The purpose of conclusions and outlooks

We address and provide ways to rectify the common mistake of repeating the main message of the paper throughout the text.

#### **Accurate reference lists and citations**

A brief discussion on how to format references, correct citation practices, when and how to include acknowledgments. We provide a useful guide to best practices and where to



find further information.

#### Plagiarism and misconduct in science

A session detailing what constitutes plagiarism and the standards that researchers and editors should adhere to. We examine case studies of misconduct and a group discussion is encouraged for participants to share their experiences and ask questions.

#### Editing, revising and finalising your paper

The process of editing the manuscript draft, how to format to an international journal's standards, using feedback and knowing when to stop.

#### Authorship and author's responsibilities

Determining the authorship of a manuscript and what the contributing criteria are for an author to be included. We conclude with the Nature policies on authorship and the responsibilities of the corresponding author.

## Choosing a journal for publication

We discuss the various considerations when choosing which peer - reviewed journal to submit to and which to prioritise. We discuss impact factors and indexing, and how they work.

## **Submitting your paper**

We give tips and techniques on how to write efficient cover letters, showing good and bad examples of cover letters and templates to use. We talk through the submission procedures and guidelines with tips to make this go as smoothly as possible.

# The editorial processes, communicating with editors and referees and peer-review

Drawing from experience at Nature and the Nature - branded journals, we provide an in - depth description of the editorial processes at international journals and how these can differ. We cover the mechanisms of peer - review, how referees are selected for their



pivotal role in the process and importantly how to respond to the referees' comments professionally and constructively.

# Journal Decisions: after the peer review

This covers the role of editors and referees in the vetting process and general guidelines to follow after a paper is accepted, as well as how to deal with rejection. This includes information on how to appeal a rejection.

# **Inside Nature Publishing Group**

An overview of the world's most reputable science publishing house, what it takes to get published in Nature and its sister journals and a Q&A session for participants.



## **Proposed Schedule of Workshop**

# **Nature Masterclass**

# 2-day, interactive training session

# **General Agenda**

- •6 practical exercises, 2 using participant's own work
- •Two Q&A sessions, two group discussions
- Two trainers
- •Handout folder for each attendee
- •Content aimed toward post-doctoral researchers, faculty staff <u>with previous experience of publishing</u>
- •Heavy focus on the editorial process and submitting the manuscript to a journal Each course component is flexible and we can expand or remove it depending on the needs of the audience.

#### DAY 1

10:00 Welcome notes and introductions

10:30 Taking research from bench to paper

11:00 Creating an outline and preparing to write

11:30 Coffee break

11:45 How to present data in figures, graphs and tables

12:00 Anatomy of an abstract and writing attention-grabbing Titles

Practical exercise

13:00 Lunch break

14:00 Elements of writing style

14:45 Writing an enticing, yet complete introduction

Practical exercise

15:45 Methods - giving a reproducible account of your working approach.

16:00 Coffee break

16:15 Presenting and discussing results

Practical exercise



# 17:15 Q&A and day round-off

DAY	2
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09:00 Welcome, recap and outline of the day

09:15 Group exercise (homework)

10:30 The purpose of conclusions and outlooks

Practical exercise

11:30 Coffee break

11:45 Authorship and authors' responsibilities

Practical exercise

12:45 Lunch

13:30 Accurate reference lists and citations

14:00 Editing, revising and finalizing your paper

14:30 Choosing a journal for publication

Practical exercise

14:45 Writing a review article

15:30 Submitting your paper

16:00 Coffee break

16:15 The editorial process and peer-review

16:30 Journal decisions

17:00 Plagiarism and other ethical issues

Group discussion

Feedback forms

18:00 Q&A and closing