

# nature masterclasses

[Writing a Research Paper: 2nd Edition](#) course is for researchers in the natural sciences looking to write effective research papers. It will introduce you to:

- Strategies to apply narrative tools when writing research papers
- Detailed examples for explaining concepts, taken from real papers where possible
- Step-by-step strategies and how to apply them to your research paper

**NEW!** [Writing and Publishing a Review Paper: 2nd Edition](#) course is for researchers in the natural sciences looking to build or refine their review writing skills. What you'll learn:

- Build the foundations of a strong review paper
- Select, evaluate and synthesise primary literature efficiently
- Apply scientific writing principles to construct an engaging and informative review paper
- Identify and create effective display items
- Navigate the submission process

[Publishing a Research Paper](#) course for researchers in the natural sciences who are new to publishing or wish to refresh their skills. It will enable you to:

- Select the most appropriate journal for publication and submit your paper
- Navigate the editorial process, including how to write cover letters, the peer review process, as well as the different editorial decisions and how to appeal them
- Include ethical considerations and avoid potential pitfalls

[Building a strong online researcher profile](#) course researchers in the natural sciences who would like to boost their online visibility and advance their career. What you'll learn:

- Understand the importance of having a strong online researcher profile
- Be familiar with the requirements of professionals who may look at your profile
- Strategically choose the right platforms for your researcher profile
- Generate great bios with the right keywords for your expertise
- Boost the visibility of your work and experience

[Creating Successful Research Posters](#) course for researchers in the natural sciences who would like to learn how to create and present an effective research poster. It will enable you to:

- Set communication goals for your poster presentations
- Identify your audience and select your key message and supporting material
- Select the visual elements and supporting text for your poster
- Design a poster that will communicate your key message effectively

[Research Integrity: Publication Ethics](#) course for researchers in the natural sciences who want to improve their understanding of how to publish research ethically and with integrity. You will learn:

- How to select reputable journals and locate editorial policies and ethical guidance
- Maintain data integrity and availability and ensure image integrity

- Make relevant declarations about research and publication, including conflicts of interests
- Navigate revisions and address post-publication issues appropriately
- Avoid common disputes around authorship and permissions

**Effective Science Communication** course for researchers who are looking to apply strategies to help in communicating their research in an accessible and persuasive manner to a non-scientific audience. It will enable you to:

- Compare different audience requirements to help tailor your communications
- Select a relevant communication channel for your specific needs
- Communicate compelling research stories
- Communicate to a non-scientific audience in an accessible and persuasive way
- Tips and techniques for writing, public talks and presentations, social media and media interviews

**Focus on Peer Review** course was developed for researchers in the natural sciences who are new to peer review or wish to refresh their skills. What you will learn:

- The importance and responsibilities of peer reviewers
- How to prepare a peer review report
- Ethics and innovations in peer review

**Experiments: From Idea to Design** for researchers in the natural sciences who want to develop their experimental design skills. It will enable you to:

- Understand the benefits of honing your experimental design skills before embarking on full-scale experiments
- Develop research motivations, identify assumptions and formulate hypothesis
- Select the precise methods, tools, techniques and protocols you need to answer your research question
- Refine and make use of your experimental design

**Persuasive Grant Writing** for researchers in the natural sciences who want to use narrative tools to improve the quality of their grant applications to make them more informative and persuasive. It will enable you to:

- Understand how narrative tools can improve the quality of your grant applications
- Align your grant proposal with the requirements and objectives of your chosen funder
- Apply narrative tools when writing their grant proposal to make it more informative, persuasive and engaging

**Finding Funding Opportunities** for researchers in the natural sciences who want to find funding opportunities, or mentor others through the process. It will enable you to:

- Understand the benefits of searching for and prioritising the best-fitting funding opportunities
- Analyse your funding requirements while considering your personal and professional circumstances
- Develop strategies to find and keep track of suitable funding opportunities
- Shortlist different funding opportunities
- Prioritise and select those opportunities that best fit your needs

[Managing Research Data to Unlock its Full Potential](#) course was developed for researchers in the natural sciences who want to develop their data management skills or mentor others through the process. It will enable you to:

- Understand the benefits of managing research data effectively
- Create and maintain a data management plan
- Apply best practices to organise, store, archive and check the quality of your data
- Evaluate the different options for sharing research data

[Data Analysis: Planning and Preparing](#) for researchers in the natural sciences who want to develop their data analysis skills or mentor others through the process. You will learn:

- The importance of planning and preparing for data analysis
- The key terms and processes relating to data analysis
- The principles of creating and updating a data analysis plan

[Data Analysis: Conducting and Troubleshooting](#) for researchers in the natural sciences who want to develop their data analysis skills or mentor others through the process. It will enable you to:

- Understand the importance of conducting effective data analysis
- Identify the best tools for exploring various datasets
- Identify the range of analytic methods available and understand which is most suited to your data
- Learn strategies for obtaining feedback, troubleshooting and expressing the limitations of your analysis

[Interpreting Scientific Results](#) for researchers in the natural sciences who want to interpret their scientific findings with more confidence, or mentor others through the process. You will learn to:

- Recognise and avoid the most common pitfalls when interpreting results
- Understand the steps you can take if your results are unexpected
- Address your research aims, contextualise your findings
- Communicate your findings with a focus on your key message

[Narrative Tools for Researchers](#) course was developed for researchers in the natural sciences who want to enhance their communication to their peers by using narrative tools to tell their research story. It will enable you to:

- Understand the benefits of using narrative tools to communicate your research more effectively to scientific peers and stakeholders
- Create and combine narrative elements to build a compelling scientific story
- Refine your research story depending on the audience and format for your communication

[Advancing Your Scientific Presentations](#) for researchers in the natural sciences who want to improve the quality of their peer-to-peer scientific presentations with both virtual and face- to face audiences. It will enable you to:

- Identify techniques that can help to overcome the challenges that researchers commonly experience when delivering oral presentations
- Build compelling research stories to use as the foundation for your presentations
- Create professional slide decks that effectively communicate research findings to your audience
- Apply strategies to help you deliver your presentation effectively on the day, in both virtual and face-to-face environments

[Getting an Academic Research Position](#) for researchers in the natural sciences looking to take their next career step, either as a new postdoc or in a new faculty role. It will enable you to:

- Understand how to find potential career opportunities that align with your personal attributes, desires, and goals
- Apply for positions in a way that will highlight your strongest attributes and most relevant qualities
- Present yourself authentically and effectively during all stages of the interview process
- Assess whether a job you are offered is suitable and choose between competing job offers

[Networking for Researchers](#) for scientific researchers wanting to gain confidence by improving their networking skills, or mentor others through the networking process. It will enable you to:

- Understand the theory behind and the importance of networking
- Research and prepare key resources to help you build an effective network
- Approach and connect with potential contacts
- Nurture your networking contacts and leverage them to advance your research and career

[Introduction to Collaboration](#) course was developed for researchers in the natural sciences who wish to participate in collaborative projects. It will enable you to:

- Understand why collaborative research is becoming more prevalent
- Discover the pros and cons of collaborating
- Learn how collaborative projects can help advance your research and career
- Explore the specifics of collaborating with industry

[Participating in a Collaboration](#) course was designed for researchers in the natural sciences who wish to participate in collaborative projects. It will enable you to:

- Adopt the key collaborative skills such as dividing tasks, managing your time, and communicating efficiently
- Plan to maximise the skills, ideas and contacts you'll gain from collaborating
- Overcome possible roadblocks when participating in collaborative projects

[Leading in a Collaboration](#) course for researchers in the natural sciences who wish to lead collaborative projects. It will enable you to:

- Identify and approach potential collaborators with the right skills and expertise
- Set up collaboration agreements, codes of conduct, and project management plans
- Keep collaborators motivated, monitor progress, and address delays
- Manage challenges including conflict between collaborators, stress, ethical misconduct, administering shared funds and resources, and going over-budget
- Maximise the outputs, value and impact of your collaboration

