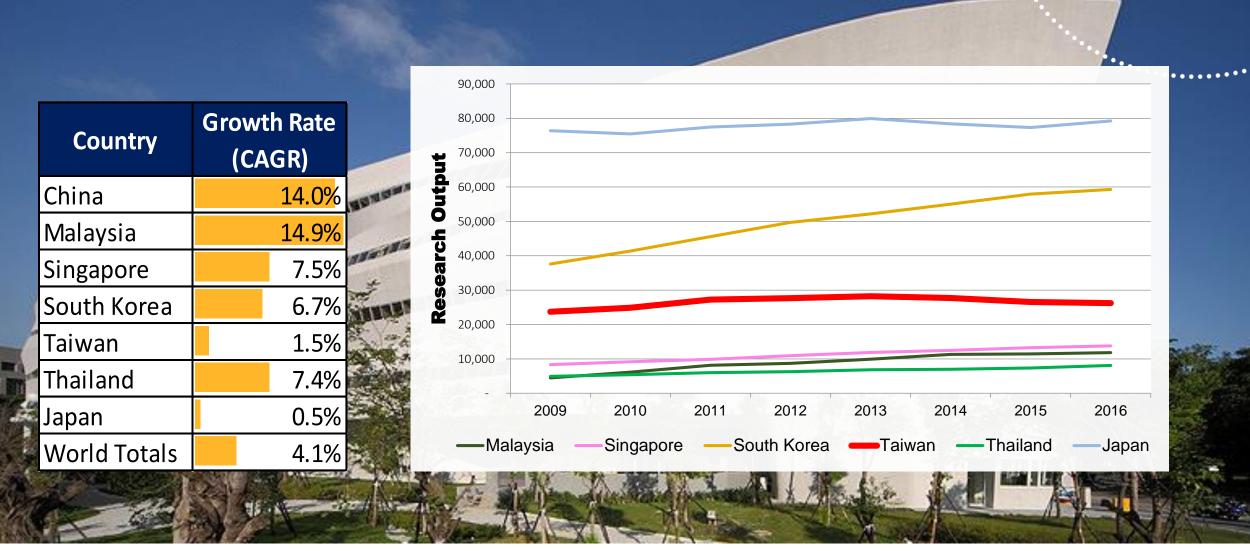**Wiley Researcher Academy**

Yelena Parada
Associate Director, International Development

Taipei, November 2017

Agenda

- Priorities for research development in Taiwan

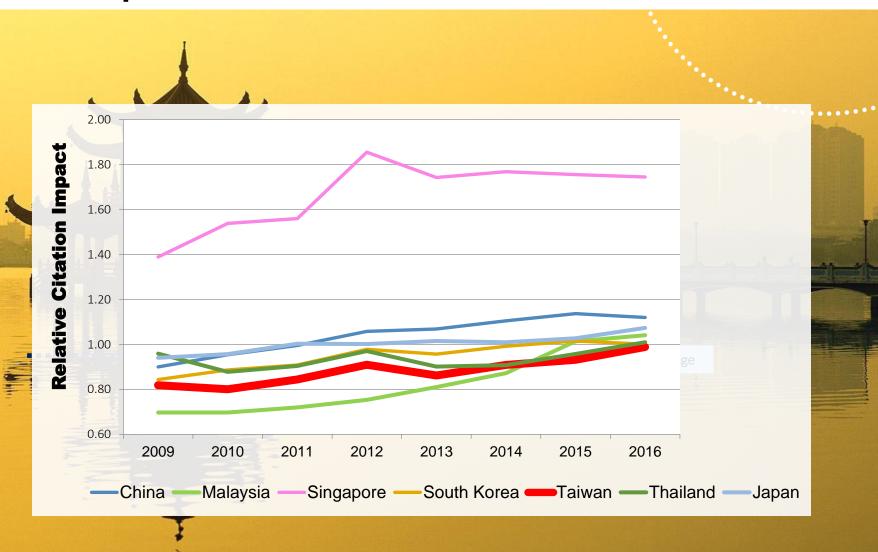- Aims and scope of WRA

- Demo

- Discussion and Q&As

Published Research Outputs, 2009-2016

Country	Growth Rate (CAGR)
China	14.0%
Malaysia	14.9%
Singapore	7.5%
South Korea	6.7%
Taiwan	1.5%
Thailand	7.4%
Japan	0.5%
World Totals	4.1%

Source: Web of Science

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Relative Citation Impact, 2009-2016

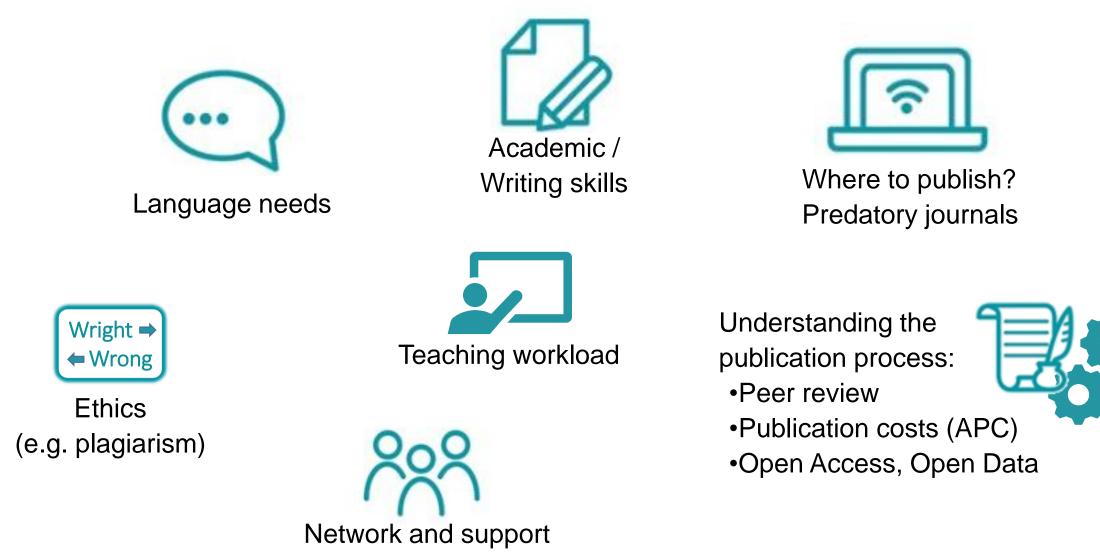Relative Citation Impact – The average cites per article in each year, weighted by the world average.

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Wiley – Article Acceptance Rates, 2016

	Rejected	Accept %	Reject %
China	52,739	20	80
Japan	10,159	38	62
Taiwan	**5,394**	**21**	**79**
South Korea	5,225	23	77
Malaysia	2,573	14	86
Singapore	1,439	33	67
Thailand	1,393	18	82

	Accept %
Australia	48
Canada	47
Germany	49
Netherlands	48
New Zealand	42
United Kingdom	50

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Key challenges for researchers

Language needs

Academic / Writing skills

Where to publish? Predatory journals

Wright ➡ ⬅ Wrong

Ethics (e.g. plagiarism)

Teaching workload

Understanding the publication process:
- Peer review
- Publication costs (APC)
- Open Access, Open Data

Network and support opportunities

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Current supply of author training

- Strong demand for workshops from publishers, universities

- Free online materials from publishers and others

- High-quality but constraints

  - limited coverage
  - no instructional design
  - non scalable
  - difficult to measure learning and impact

Social

Mentoring

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Comprehensive, self-paced, scalable, online learning programme to support continued growth in the quantity and quality of scientific articles published by the national research community.

PhD   Senior Research Fellow   Reader/PI   Professor

Qualities of a successful scientific researcher

Research and publication: the essential link

Financing the research project

Selecting an appropriate journal

Best practices in writing scientific articles

Key components of a scientific article

Manuscript submission

Peer review

Open access to scientific literature

Managing research data

Ethical questions in writing scientific papers

The roles of the publisher and journal editors

Post-publication activities and driving visibility

Becoming a peer reviewer

Contributors

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EiC, *Small*

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EiC, *Journal of Polymer Science: Polymer Physics*

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Dr Eric Prager

EiC, *Journal of Neuroscience Research*

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Publishing, Research Data and Scholarly Communications specialist

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EiC, *International Journal of Quantum Chemistry*

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Deputy Director, EMBO

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EMBO Lab Management Training

Dr Peter Hambleton

Trustee, Society of Chemical Industry & Executive Editor, JCTB

Prof Dr Michaela Wänke

Psychology & Social Psychology, University of Mannheim

Prof Bernhard Plattner

Professor of Computer Engineering, ETH Zürich

Prof Peter Diggle

Distinguished Professor of statistics, Lancaster University

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Robust instructional design

- Industry-leader

- Excellent usage (90%) and completion rates (80%)

- Over 7.5m distance learners since 2000

CROSSKNOWLEDGE
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WELCOME TO
THE WILEY RESEARCHER ACADEMY

Get started with all the resources you need t̶
make you successful in publishing in high qu̶
journals. The Wiley Researcher Academy equ̶
you to meet all the challenges you will face b̶
during and after writing your research article.

Start Learning Today

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**WELCOME TO
THE WILEY RESEARCHER ACADEMY**

Get started with all the resources you need to make you successful in publishing in high quality journals. The Wiley Researcher Academy equips you to meet all the challenges you will face before, during and after writing your research article.

Start Learning Today

1 QUALITIES OF A SUCCESSFUL SCIENTIFIC RESEARCHER

2 RESEARCH AND PUBLICATION: THE ESSENTIAL LINK

5 BEST PRACTICES IN WRITING SCIENTIFIC ARTICLES
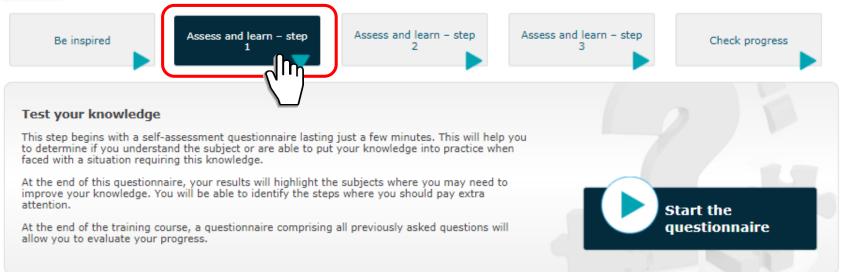
What will I learn?

This Learning Path will enable you to understand international standards and conventions in scientific writing. Upon completion of the Learning Path you will be equipped with techniques to facilitate the writing process. You will understand how to write for search engine optimization and become aware of information sources and services that can assist with article formatting and completion.

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| Be inspired | Assess and learn – step 1 | Assess and learn – step 2 | Assess and learn – step 3 | Check progress |

Test your knowledge

This step begins with a self-assessment questionnaire lasting just a few minutes. This will help you to determine if you understand the subject or are able to put your knowledge into practice when faced with a situation requiring this knowledge.

At the end of this questionnaire, your results will highlight the subjects where you may need to improve your knowledge. You will be able to identify the steps where you should pay extra attention.

At the end of the training course, a questionnaire comprising all previously asked questions will allow you to evaluate your progress.

▶ **Start the questionnaire**

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WRITING THE ARTICLE THAT THE JOURNAL EDITOR WANTS TO PUBLISH

For the editor, a "good story" refers to:

- ○ A piece of creative scientific writing.
- ○ A purely historical account of how you reached the present conclusions.
- ○ The introduction section of your article, and the history of the field.
- ◉ The combination of solid, interesting research, presented as a narrative.
- ○ A speculation that goes into intriguing areas of future prospects.

A justifiable reason for rejection of a paper before peer review is:

- ◉ The references are incorrectly formatted.
- ○ The English is not good enough.
- ○ The authors have not decided whether to purchase Open Access.
- ○ One of the figures is pending copyright permission.
- ○ The title of the paper is not optimized for search engines.

2/8 OBJECTIVITY, COURTESY AND MODESTY

Objectivity in science means:

- ◉ Choosing an object of study without being influenced.
- ○ Only focusing on one research topic at a time.
- ○ Not allowing a personal bias to influence your interpretations.
- ○ Treating all areas of science as equally valid.
- ○ Not allowing yourself to be distracted by an alternative hypothesis.

3/8 FORMAL LANGUAGE AND CONSISTENT USE OF VOCABULARY

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EXPLANATORY NOTE

63/100	**Explanatory Note** The questionnaire assesses your need to complete particular learning resources. • less than 70% of right answers, start with this learning resource (indicated by a ⓘ) • between 70 and 100% of right answers, strengthen your knowledge (optional)

Writing the article that the journal editor wants to publish	100%
Writing sequence	0%
Write to be understood with minimum effort	100%
Use of tenses, structuring phrases and syntax	50%
The discussion in the context of the larger paper	100%
Objectivity, courtesy and modesty	100%
Formal language and consistent use of vocabulary	50%
Economic writing and limitation to what is relevant	0%

To complete this step at 100%:
4 learning resource(s) ⓘ to do

View the questionnaire results

Type	Learning product	Duration	Progress	Score	Launch
To start with					
❗ Interactive learning resource	Formal language and consistent use of vocabulary	10 min.	0 %	-	▶
❗ Interactive learning resource	Economic writing and limitation to what is relevant	10 min.	0 %	-	▶
❗ Interactive learning resource	Use of tenses, structuring phrases and syntax	35 min.	0 %	-	▶
❗ Interactive learning resource	Writing sequence	20 min.	0 %	-	▶
To strengthen					
Interactive learning resource	Writing the article that the journal editor wants to publish	15 min.	0 %	-	▶
Interactive learning resource	Objectivity, courtesy and modesty	15 min.	0 %	-	▶
Interactive learning resource	Write to be understood with minimum effort	20 min.	0 %	-	▶
Interactive learning resource	The discussion in the context of the larger paper	15 min.	0 %	-	▶
Interactive learning resource	Writing iteratively	10 min.	0 %	-	▶
Interactive learning resource	Spelling and style	10 min.	0 %	-	▶

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Writing sequence
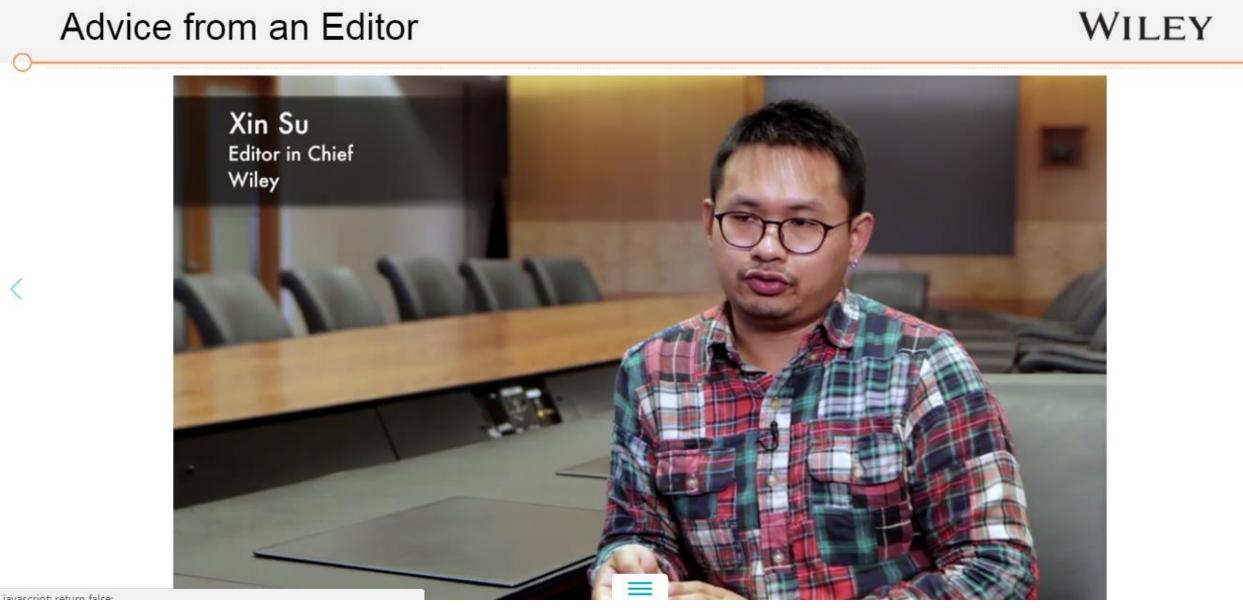
Let's get started! >

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Bibliography

- The bibliography should be **fair, representative and useful.**
- Only include references to **peer-reviewed literature** in your formal bibliography.
- Many journals apply numerical **limits on references.**
- Many areas of the background to your research should be **summarized** by reference to good, recent reviews.
- **More recent developments** must be included as direct references to the primary research articles.
- If you find that you will inevitably miss certain references that others might consider worthy of citing, make a note to this effect in your **acknowledgment section.**
- Use **a reference manager** to mark the positions in your body text for citations.
- Cite **all relevant work** that you reference or on which you build in the current research.
- Certain **peripheral topics** can also be subsumed via reference to one or more good and recent reviews.
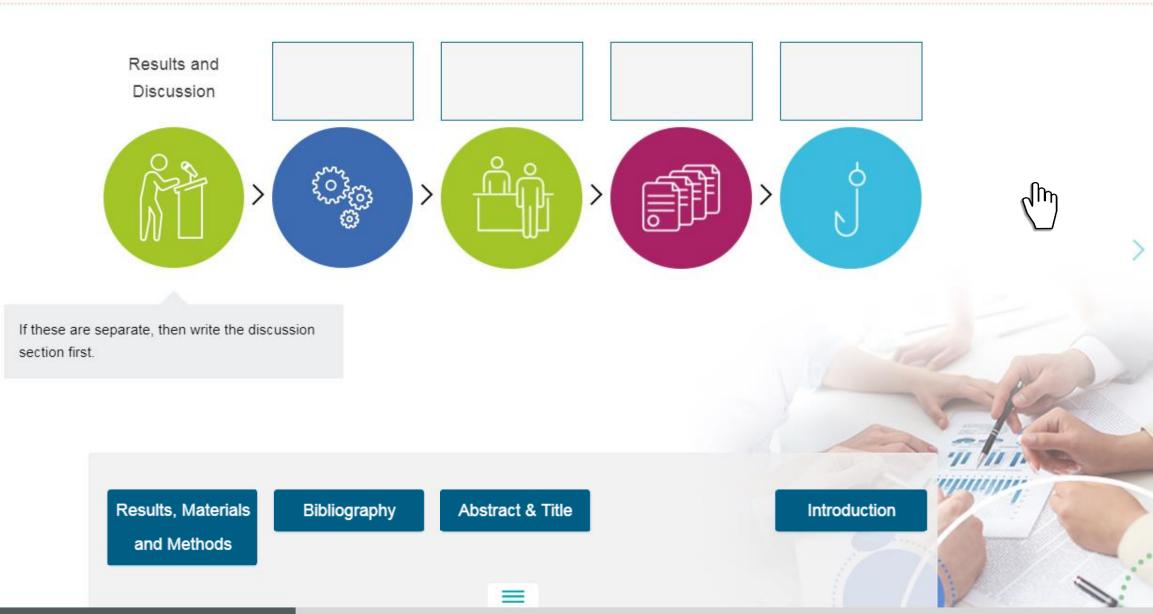
Continue ⌄

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Advice from an Editor

Do you remember our suggested writing order?

Arrange the sections accordingly.

Results and Discussion

If these are separate, then write the discussion section first.

| Results, Materials and Methods | Bibliography | Abstract & Title | Introduction |

What are the most frequently used tenses in a scientific article?

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Click on each tense to see details of their use.

Present tense (eg, is)

Imperfect past tense (simple past) (eg, was)

Perfect tense (present perfect)(eg, has been)

	I/We-related use, i.e. the authors of *this* paper	*Others*-related use, i.e. other researchers	*It*-related use, i.e. objects/substance non-human animals, or phrases in passive mood
Present e.g. *is*	▶ To describe results of very high certainty/replicative redundancy and cases of "always-true"; but can be qualified with modal verbs (see later in section) to give grades of certainty. e.g. expression of an experimentally supported claim in abstract or introduction: "Here we show that..." When used in the "We" form, it always refers to findings presented for the first time in the current manuscript.	▶ To describe a finding or conclusion that is part of a progressing field and is relatively current/new, e.g. "McTavish and Carter show that..."; or a belief held by other researchers, e.g. "Takahashi et al. interpret this as evidence of nuclear re-programming upon mechanical stress."; or a methodology/approach that another team consistently uses, and which is being contrasted with a different one, or otherwise highlighted, e.g. "Price et al. use bovine serum albumin to reduce non-specific binding.";	▶ To describe an accepted fact that is currently beyond doubt, and/or always true, regardless of conditions (within reason), e.g. "Plate tectonics continues to shape the Earth's surface." or "Fluoridation of tap water statistically reduces the incidence of tooth decay." Note also: the present continuous can be used in some cases, e.g. "The Earth' continents are still moving because of plate tectonics." ▶ In passive mood: to describe a *generic* action or process, e.g. "To achieve good electrical insulation, a layer of silicone rubber is injected between..."; or current situation or on-going condition e.g. "The surface of Mars is bombarded by around 200 meteorites per year."

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Be aware of the distinction between "which" and "that"
...

...and how to use them correctly – in relative clauses.

"Which" should be preceded by a comma, and in this context it makes the entity, or entities, to which it refers exclusive.

- "The moon, **which** orbits the Earth..." (Earth has only one moon)
- "The population of the Earth, **which** currently numbers ca. 7.4 billion people..." (we are talking about the entire set)

Compare with:

- "The moon of Saturn **that** I saw last night with my telescope..." (Saturn has 62 confirmed moons, and we are talking about just one of them)
- "The population of the Earth **that** is infected with malaria is..." (this is a sub-set of the entire possible population)

Great! Let's move on to syntax and semantics. >

Are you aware of the distinction between which and that?

Choose the right answer(s) and click on 'Submit.'

○ The Pacific Ocean, that is situated between the Americas and Asia/Australasia…

○ The Pacific Ocean, that is situated between the Americas and Asia/Australasia…

○ The Pacific Ocean which is situated between the Americas and Asia/Australasia…

○ The Pacific Ocean that is situated between the Americas and Asia/Australasia…

○ The Pacific Ocean, which is situated between the Americas and Asia/Australasia…

Sorry, that is incorrect. Only option 4 is correct. Option 1 is not acceptable usage, and is not a possible formulation. Option 2 implies (by omitting the comma before "which") that there is more than one Pacific Ocean. Option 3 would be the standard scientific way of conveying the concept that we are talking about one of several Pacific Oceans here, which, obviously isn't the case!

✕

✓

LET'S EXPLORE THIS MORE. >

≡

Can punctuation influence the meaning of a sentence?

Match each meaning to the corresponding example.

A panda walks into a restaurant, eats, shoots and leaves.

☑ This means that after eating (something) the panda fires a gun and leaves the restaurant.

A panda walks into a restaurant, eats shoots, and leaves.

☑ This one means that after eating (bamboo) shoots, the panda gets up and walks out of the restaurant. No shooting!

A panda walks into a restaurant, eats shoots and leaves.

This means that the panda eat some shoots (possibly bamboo) and some leaves (also possibly bamboo). What happens next is not specified.

Tips on presenting your data

Identify the best practices for your data presentation.

The information should be grouped logically and clearly.

A figure doesn't need to represent all the data – that would often make it visually impossible to digest; rather it should emphasize one or more key results that support your larger thesis.

Complicated figures will impress the reader. Do not omit any data, even if it's supplementary!

Over to you

78%

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5 BEST PRACTICES IN WRITING SCIENTIFIC ARTICLES

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| Be inspired ► | Assess and learn – step 1 ► | Assess and learn – step 2 ► | Assess and learn – step 3 ► | Check progress ▼ |

What do you remember?

This final questionnaire will ask you the self-assessment questions you incorrectly answered. It will display your progress in a before / after graph.

You can go over the questionnaire as often as you wish in order to obtain the maximal score.

► **Start the questionnaire**

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WRITING THE ARTICLE THAT THE JOURNAL EDITOR WANTS TO PUBLISH

For the editor, a "good story" refers to:

A piece of creative scientific writing.

A purely historical account of how you reached the present conclusions.

The introduction section of your article, and the history of the field.

✔ **The combination of solid, interesting research, presented as a narrative.**

A speculation that goes into intriguing areas of future prospects.

A justifiable reason for rejection of a paper before peer review is:

The references are incorrectly formatted.

✔ **The English is not good enough.**

The authors have not decided whether to purchase Open Access.

One of the figures is pending copyright permission.

The title of the paper is not optimized for search engines.

Which of the following is true with regard to images submitted with your manuscript?

○ The format of the file doesn't matter, because typesetters can deal with anything these days.

○ Graphics should always be submitted as pixel files, so that they can be re-sized easily without loss of resolution.

○ Regardless of the computer and screen, another viewer will usually see your images the same as you do.

◉ If you electronically draw an image with lines and other elements, it will only stay sharp upon re-sizing if you submit it as a vector graphic.

○ A resolution of 200 dpi is usually sufficient for submission of pixel-based files.

Previous   Correction

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POST-LEARNING ASSESSMENT RESULTS

Best practices in writing scientific articles

Final Exam

This is the end of our Learning Path, "Best practices in writing scientific articles." The results will form part of your course record.

Let's get started! >

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Part 1 – Multiple Choice

Continue >

WBA screenshots.pptx - PowerPoint

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Text extracted from an introduction section:

Via a negative regression analysis we show here that the populations being studied have likely declined consistently since the middle of the 19th century, but that decline has slowed somewhat over recent decades. That abiotic factors play a role in the general population decline has been known for a long time, and, for example, industrialization leading to contamination of ground water was identified as a major contributor. Other factors such as noise pollution from nearby factories were also found to be correlated with seasonal population declines. Building on the observation that industrial innovations in this sector have, since the 1980s, led to significant reductions in noise pollution, we wished to find out whether annual populations counts demonstrated a slowing of the decline that would be consistent with the proportional reduction in noise pollution.

How would you address the main failing?

○ Shorten the sentences – especially the last – to make the text more digestible.

○ Give numerical measures for the effects described.

✓ *That is correct. Well done!*

CONTINUE ＞

Part 2 – Manuscript Review

Continue >

3%

WBA screenshots.pptx - PowerPoint

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Click on the research area that most closely represents your work.

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Life Sciences

Physical Sciences

Social Sciences and Humanities

Medical and Clinical Disciplines

Geography Disciplines

PDF Adobe

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javascript: return false:

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Adding Cranberry Extracts to Rat Livers To Investigate Mitochondrial Damage

Authors:

N.A. Docteur[1], A. L. Chemy[2], B.I. O'Hazard, H. Two-oh[1], N. Zyme[1*] and M. U. Tation[1]

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ABSTRACT

Treatment of rats with cranberry flavonoids (7 mg/kg) during chronic carbon tetrachloride-induced intoxication led to prevention of mitochondrial damage, including fragmentation, rupture and local loss of the outer mitochondrial membrane. In radical-generating systems, cranberry flavonoids effectively scavenged nitric oxide (IC_{50} = 4.4 ± 0.4 µg/ml), superoxide anion radicals (IC_{50} = 2.8 ± 0.3 µg/ml) and hydroxyl radicals (IC_{50}=53±4µg/ml). The IC_{50} for reduction of 1,1-diphenyl-2-picrylhydrazyl radicals (DPPH) was 2.2 ± 0.3 µg/ml. Flavonoids prevented to some extent lipid peroxidation in liposomal membranes and glutathione oxidation in erythrocytes treated with UV irradiation or organic hydroperoxides as well as decreased the rigidity of the outer leaflet of the liposomal membranes. The hepatoprotective potential of cranberry flavonoids could be due to specific prevention of rat liver mitochondrial damage. The mitochondria-addressed effects of flavonoids might be related both to radical-scavenging properties and modulation of various mitochondrial events.
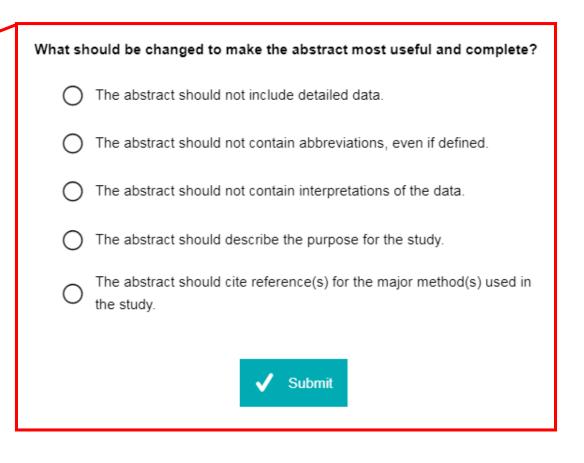
keywords

mitochondria; liver; cranberry flavonoids; melatonin; radical scavenging activity
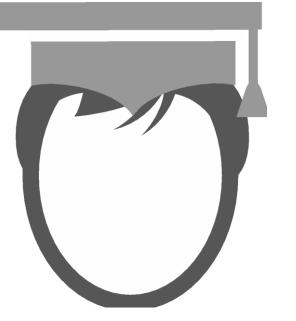
list of abbreviations

b.w., body weight; CuOOH, cumol hydroperoxide; DCFH-DA, 2,7-dichlorodihydrofluoresceine diacetate; DCF, 2,7-dichlorofluorescein; DMPO, 5,5-dimethyl-1-pyrroline N-oxide; DPH, 1,6-diphenyl-1,3,5-hexatriene; DPPH, 1,1'-diphenyl-2-picrylhydrazyl radical; i.g., intragastrically; NBT, nitroblue tetrazolium; PBS, phosphate buffer saline; RONS, reactive oxygen and nitrogen species; s.c., subcutaneous injection; TCA, trichloroacetic acid; TMA-DPH, 1-(4-trimethylammoniumphenyl)-6-phenyl-1,3,5-hexatriene; t-BHP, tert-butyl hydroperoxide

INTRODUCTION

Flavonoids are a group of polyphenolic compounds, which have a diphenylpropane (C_6–C_3–C_6) skeleton. Flavonoids are synthesized by higher plants but not in animals and possess various biological and pharmacological activities. They exhibit anti-cancer, anti-allergic, antivirus and other properties and represent a promising therapeutic approach for prevention and treatment of many diseases.[1-6] One of the main discussed mechanisms for biological effects of phytochemicals is antioxidative and radical-scavenging activities. Flavonoids may exert their antioxidative effects as
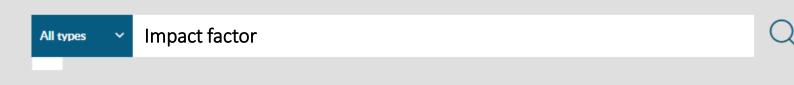

What should be changed to make the abstract most useful and complete?

- ○ The abstract should not include detailed data.

- ○ The abstract should not contain abbreviations, even if defined.

- ○ The abstract should not contain interpretations of the data.

- ○ The abstract should describe the purpose for the study.

- ○ The abstract should cite reference(s) for the major method(s) used in the study.

✔ Submit

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All types ▾   Impact factor   🔍

Resources

The impact factor

Interactive learning resource • 25 ...
English
★★★★★

When you have completed this module you will be able to: • Define the simplified formula used to ...

Other methods for comparing journals within a g...

Interactive learning resource • 15 ...
English

When you have completed this module you will be able to: • List four differences between Impact F...

Why publish in high impact journals

Interactive learning resource • 15 ...
English

When you have completed this module you will be able to: • Explain why impact factor is not the a...

COMPLETED

Be inspired – Selecting an appropriate journal

Video • 2 minutes
English
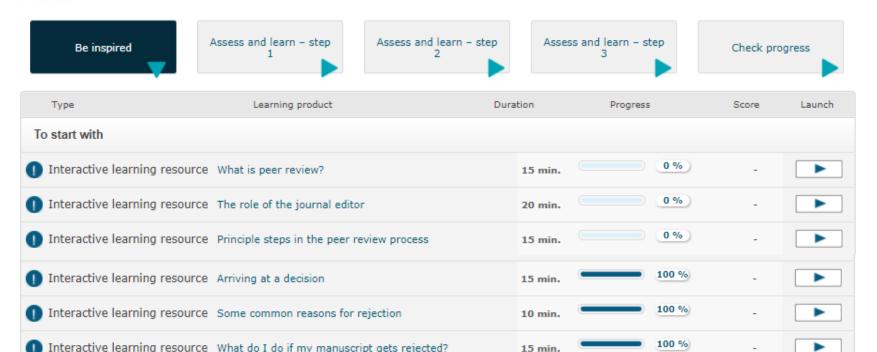
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PEER REVIEW

What will I learn?
This Learning Path will enable you to understand the purpose and process of peer review and allow you to develop skills in handling the process professionally and successfully. Upon completion of the Learning Path you will be in a position to understand the different types of peer review and will know how to identify what the reviewer is looking for, respond appropriately to feedback and understand the common causes of manuscript rejection.

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Type	Learning product	Duration	Progress	Score	Launch
To start with					
Interactive learning resource	What is peer review?	15 min.	0 %	-	▶
Interactive learning resource	The role of the journal editor	20 min.	0 %	-	▶
Interactive learning resource	Principle steps in the peer review process	15 min.	0 %	-	▶
Interactive learning resource	Arriving at a decision	15 min.	100 %	-	▶
Interactive learning resource	Some common reasons for rejection	10 min.	100 %	-	▶
Interactive learning resource	What do I do if my manuscript gets rejected?	15 min.	100 %	-	▶

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Effective measurement and reporting

- Dashboards and configurable reports

- Monitor usage, completion and learning benefits by institution, level of study, subject group, etc.

- Insight into researchers' strengths and weaknesses

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Configuration of dashboards and reports

Dr Lee

Names
Surnames
Gender
Email

ORCID ID
Scopus Author ID

Personal summary: *Explain who you are, your work, your research projects, your skills, the skills you are seeking to improve….*

Personal web page
Twitter
LinkedIn

Academic level
Academic post

Main institutional affiliation

Number of journal articles published
Number of conference papers published
Number of conference abstracts published
Number of book chapters published

Data collection to align with national researcher information system
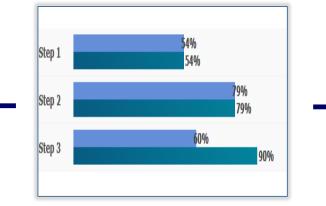
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Measuring efficacy

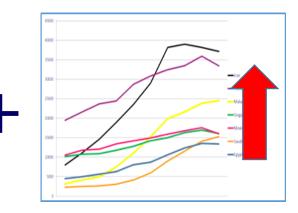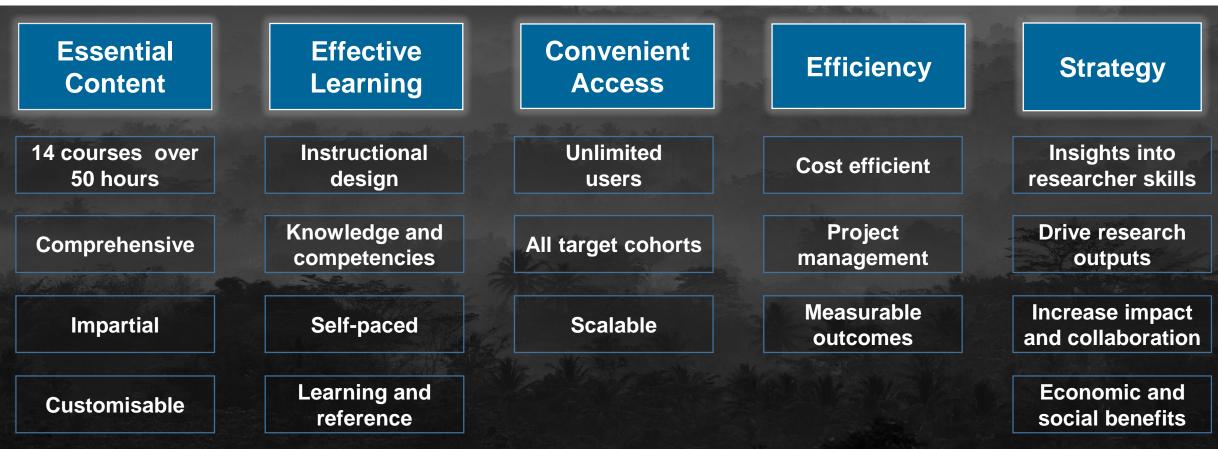| Participation	Demonstrated improvement	Learner confidence levels	Increase in scientific outputs

Usage and completion rates

+

Pre- and post-training assessment

+

Measurement of post-training confidence in completing publishing tasks

+

Longer term, increase in the number of articles accepted by international journals

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Programme Value Proposition

Essential Content	Effective Learning	Convenient Access	Efficiency	Strategy
14 courses over 50 hours	Instructional design	Unlimited users	Cost efficient	Insights into researcher skills
Comprehensive	Knowledge and competencies	All target cohorts	Project management	Drive research outputs
Impartial	Self-paced	Scalable	Measurable outcomes	Increase impact and collaboration
Customisable	Learning and reference			Economic and social benefits

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"Getting educated and trained in the skills one needs in order to publish research results, hypotheses, and models has never been more important, in particular for young scientists, but also for the more established among us: *Wiley* has taken an important initiative in developing an on-line platform that provides that education and assesses participants' progress. There is no doubt it will help scientists increase the impact of their studies."

Professor Aaron Ciechanover
Nobel Prize, Chemistry 2004

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