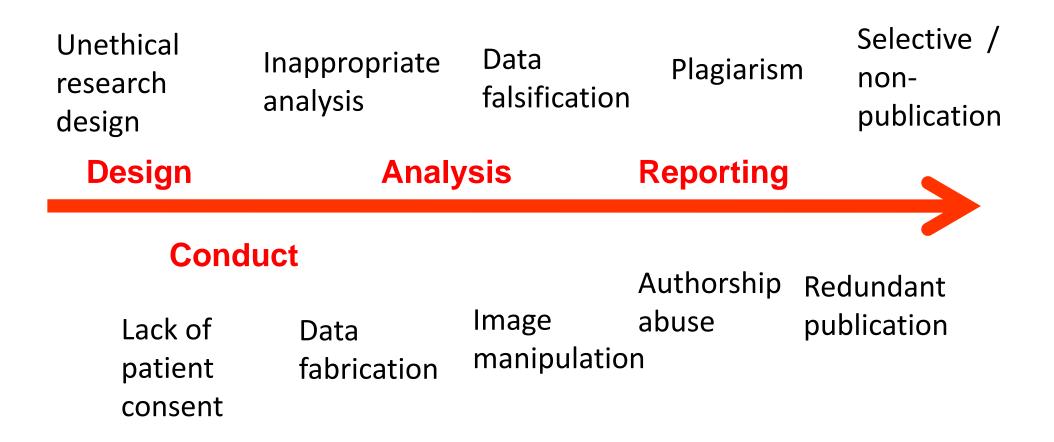
Journal editor's perspective: how to deal with a changing publication system

Prof. Ana Marušić, MD, PhD

Department of Research in Biomedicine and Health University of Split School of Medicine Split, Croatia Coeditor in Chief, Journal of Global Health



### **Research and publication ethics are a spectrum**



### **Good conduct and misconduct are a spectrum**

Technical problems	Under- powered studies	Salami science <b>Poor</b>	Poor referencing Image	Plagiarism Falsification
Honest error	studies	reporting	manipulation	Fraud
Weak methods	Inappropr analysis	iate	Data trimming	Fabrication
	Missing data			

### **Ethical responsibility of editors and journals?**

### To ensure the integrity of the published record.

"Most of the allegations and findings center upon publication issues, because scientific publication documents the actions of the researcher."

> Claxton LD. Scientific authorship. *Mutat Res 2001*

If journals and their editors are placed well to detect scientific misconduct, they are also well placed to prevent misconduct and promote responsible conduct of research.

### **Responsible conduct of research – editor's role**

## 2.7 Publication and Dissemination

- Responsibility of authors for content
- Authorship
- Openness
- Acknowledging others
- Declaring interests
- Correcting published record
- Publishing negative results
- Same criteria for all publications

2.8 Reviewing, Evaluating and Editing

- Resposible refereeing, reviewing and evaluation
- Transparent and justifiable review and evaluation
- Managing conflicts of interest
- Maintaining confidentiality
- Respecting rights of authors and applicants



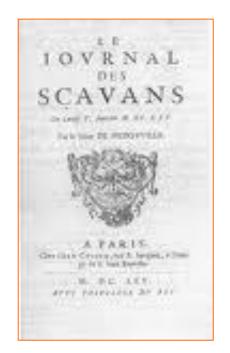
The European Code of Conduct for Research Integrity REVISED EDITION

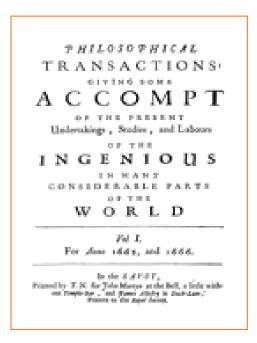


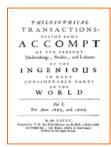
### **1665: The past**

Journal des Scavans

Philosophical Transactions of the Royal Society of London







### **1665: The past**

## TRANSACTIONS:

#### The Method Observed in Transfusing the Bloud out of One Animal into Another

Phil. Trans. 1665-1666 1, 353-358, published 1 January 1665

The Method observed in Transfusing the Bloud out of one Animal into another.

T His Method was promifed in the last of these Papers. It was first practised by Doctor Lower in Oxford, and by him communicated to the Honourable Robert Boyle, who imparted it to the Royal Society, as follows; First, Take up the Carotidal Artery of the Dog or other Animal, whose Bloud is to be transfused into another of the A a a fame

### **Today: Enhanced publication**

Digital publications where a narrative part is connected to additional material: datasets, other publications, images, tables, workflows, devices.

Usually has a unique (permanent) identifier

### **Enhanced publication**



#### Cognitive Psychology

Volume 60, Issue 4, June 2010, Pages 291-318

#### Cognitive systems struggling for word order

#### Alan Langus <sup>a</sup>, Marina Nespor <sup>bc</sup>\*

\* Corresponding author. Address: University of Milano-Bicocca, Piazza dell'Ateneo Nuovo 1, 20126 Milan, Italy. Fax: +39 0 615.

International School of Advanced Studies-SISSA, Via Beirut 2-4, 34014 Trieste, Italy

University of Milano-Bicocca, Piazza dell'Ateneo Nuovo 1, 20126 Milan, Italy

Interdisciplinary Center B. Segre, Accademia dei Lincei, Italy

#### Research highlights

- Gesture production and comprehension show a preference for a single, possibly non-native and syntactic word order.
- · Improvised gestural communication does not rely on the computational system of grammar (sy
- Speech comprehension experiment demonstrates specific word order preferences in the computational system of grammar (syntax).
- The preferences for conflicting word orders in communication and language illustrate a struggle between individual cognitive systems trying to impose their preferred structure on human langu
- The results suggest that human language is the product of evolutionary tinkering.

#### Sidebar content:

#### Article information

#### Cognitive Psychology 🗄

Volume 60, Issue 4 ⊡, **June 2010, Pages 291-318** doi:10.1016/j.cogpsych.2010.01.004 ⊡ Copyright © 2010 Elsevier Ltd All rights reserved.

#### Article history

Accepted 2010-1-26;

#### Keywords

Communication; Grammar; Grammatical diversity; Evolution; Improvised gestural communication; Syntax; Cognitive systems; Human faculty of language;

#### Article extras

Interactive charts:

- Figure 1, Figure 2

#### Interactive maps:

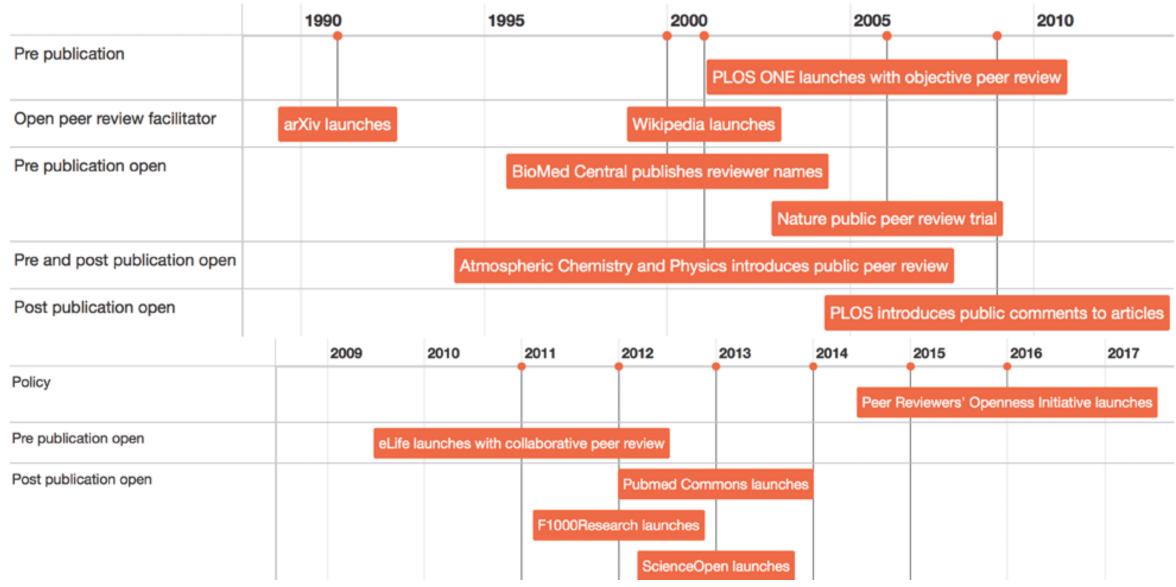
– Map

This article contains the following additional content and features:

- Author information (2)
- Related articles (5)
- Figures (6)
- Experimental flowcharts (4)
- Stimuli examples (8)
- Presentation
- Appendix
- References (67)
- Footnotes (3)
- Highlight links

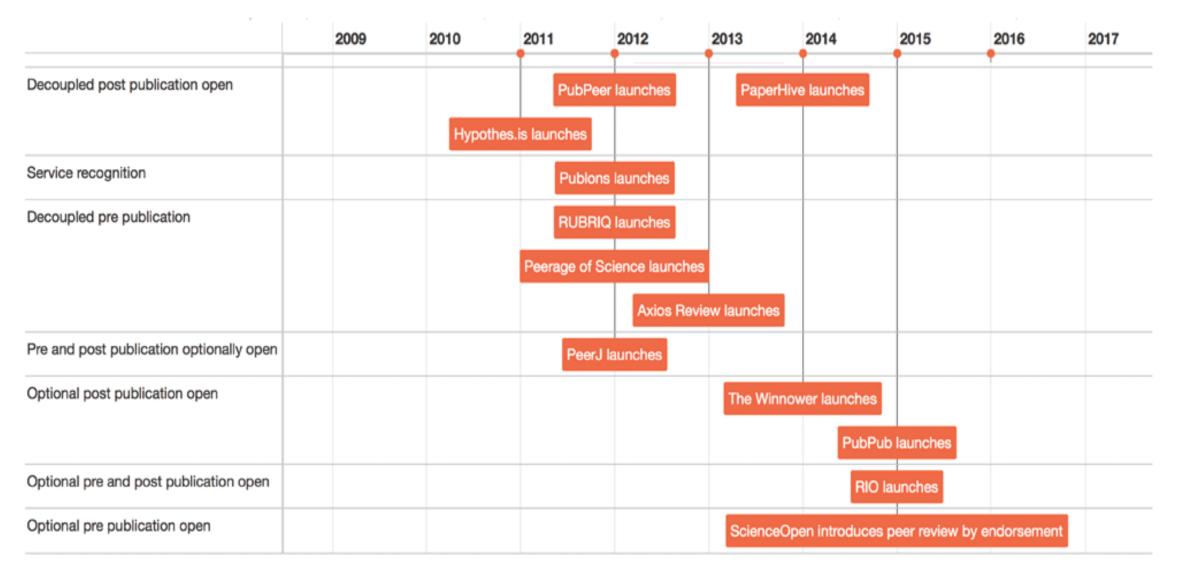
(a) Italians (SVO)

## **Development of peer review**



Tennant JP, Dugan JM, Graziotin D et al. A multi-disciplinary perspective on emergent and future innovations in peer review [version 2]. F1000Research 2017, 6:1151 (doi: 10.12688/f1000research.12037.2)

## **Development of peer review**



Tennant JP, Dugan JM, Graziotin D et al. A multi-disciplinary perspective on emergent and future innovations in peer review [version 2]. F1000Research 2017, 6:1151 (doi: 10.12688/f1000research.12037.2)



### **Editorial ethics standards**

- Implementing international editorial standards
- Peer review process
- Correcting the published record
- Authorship
- Competing interest
- Financial support

- Ethics of research on humans and animals
- Ethics committee approvals
- Trial registration
- Privacy protection
- Image manipulation
- Competing interests of editors in their own journals

# SWOT analysis of editorial role in responsible publishing





# STRENGTHS of editors in promoting good research and publishing

- Authority in the scientific community
- Editorial independence
- Expertise in research
- Responsibility for the integrity of published records
- Power to formulate and implement editorial policies

## **OPPORTUNITIES for editors in promoting responsible publishing practices**

- Editors well positioned to detect scientific misconduct
- •Availability of new technologies for detecting misconduct
- Editorial policies developed by editorial organizations
- Policies developed by national ethics/integrity bodies
- •Greater transparency of publications on the web
- •Greater transparency of literature corrections on the web

# WEAKNESSES of editors in promoting responsible research publishing

- No mandate for legal actions
- Few means of action: expression of concern and retraction
- Reluctance to get involved in delicate issues
- Possible damage to journal's reputation
- Lack of education and staff to implement adequate procedures

# THREATS to editors promoting responsible research publishing

- Lack of legal regulation and culture of research integrity in the scientific community
- No training available
- Lack of support from stakeholders in scientific publishing (publishers, associations, scientists, academic and scientific community)
- Pressures on editors and journal (publishers, financial conflict of interest)
- Corruption of the scientific community and governments

# THREATS to editors promoting responsible research

### Can medical journals lead or must they follow?

Richard Smith



MJA • Volume 183 Number 11/12 • 5/19 December 2005

"An editor needs, and must have, enemies; he can't do without them. Woe be unto the journalist of whom all men say good things."

### **Editorial policies**



**CSE's White Paper on Promoting Integrity in Scientific Journal Publications** 



EASE Science Editors' Handbook – Ethical issues ICMIE MEDICAL JOURNAL ED





**ICMJE** Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals

WAME Policy Statement on the Responsibilities of Medical Editors

**COPE** Code of Conduct, Ethics Flowcharts, Guidelines on Article Retraction



### **International Committee of Medical Journal Editors**

Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly work in Medical Journals

- Roles & Responsibilities
  - Defining the Role of Authors and Contributors
  - Author Responsibilities—Conflicts of Interest
  - Responsibilities in the Submission and Peer-Review Process
  - Journal Owners and Editorial Freedom
  - Protection of Research Participants

### **International Committee of Medical Journal Editors**

Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly work in Medical Journals

Publishing & Editorial Issues

- Corrections, Retractions, Republications and Version Control
- Scientific Misconduct, Expressions of Concern, and Retraction
- Copyright
- Overlapping Publications
- Correspondence

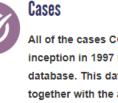
- Fees
- Supplements, Theme Issues, and Special Series
- Sponsorship or Partnership
- Electronic Publishing
- Advertising
- Journals and the Media
- Clinical Trials

### **Committee on Publication Ethics**

#### Core practices

Core practices are the policies and practices journals and publishers need, to reach the highest standards in publication ethics, including cases, guidance and events, to support journals and publishers

#### **View Core Practices**



All of the cases COPE has discussed since its inception in 1997 have been entered into a searchable database. This database now contains over 500 cases together with the advice given by COPE.

#### View Cases



#### Guidelines

Access COPE's official guidance, including the Retraction Guidelines.

#### **View Guidelines**



#### International standards for editors and authors

Position statements setting out international standards for responsible research publication for editors and authors.



Ø

#### Flowcharts

Flowcharts are designed to help editors follow COPE's Code of Conduct and implement its advice when faced with cases of suspected misconduct.

#### **View Flowcharts**

#### **Discussion Documents**

Discussion documents aim to stimulate discussion and debate within the academic publishing community. Comments on the documents will be used to inform future guidelines and policies.





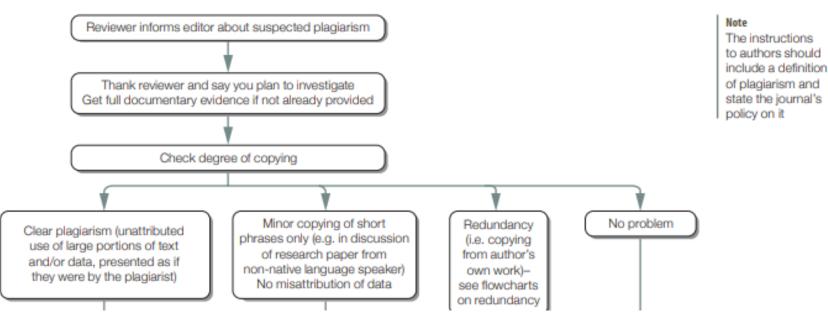
### **COPE Flowcharts**



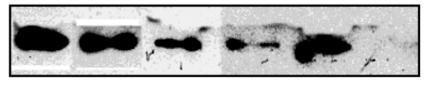


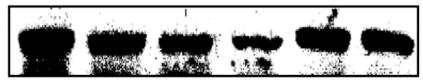
### What to do if you suspect plagiarism

(a) Suspected plagiarism in a submitted manuscript

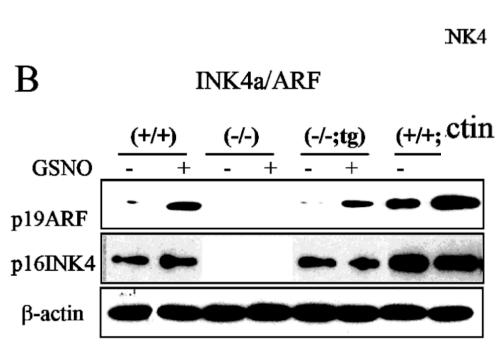


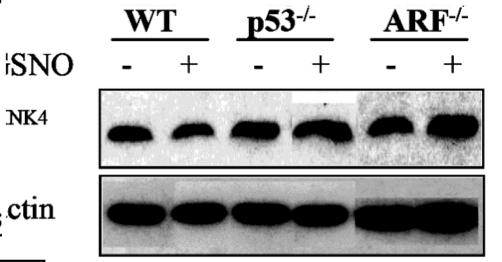






# Dealing with image manipulation

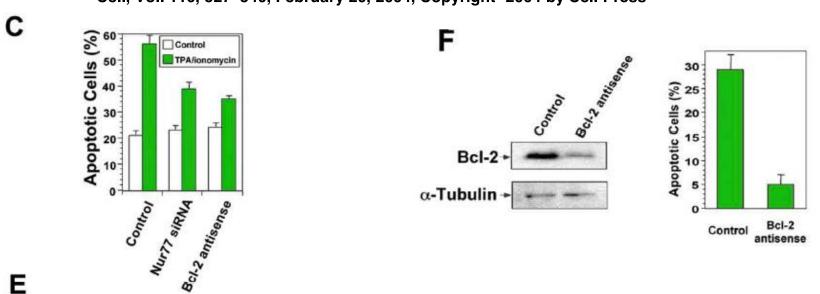




Responsible journals check their images before publication

Thanks to Mike Rossner and David Vaux

### **Integrity of the publication**



Cell, Vol. 116, 527-540, February 20, 2004, Copyright •2004 by Cell Press

Figure 6. Nur77 Mitochondrial Targeting in Human PBLs and Apoptotic Effects of Nur77 and Bcl-2 Mutants

(A) Mitochondrial targeting of Nur77 in PBLs. GFP-Nur77 (1  $\mu$ g) and pDsRed2-Mito (1  $\mu$ g) were transfected into freshly isolated human PBLs. The cells were then treated with TPA (10 ng/ml) and ionomycin (0.5  $\mu$ M) for 30 min after 10 hr of transfection. GFP-Nur77 and mitochondria (pDsRed2-Mito) were visualized using confocal microscopy. Approximately 20% of the cells showed the pattern presented. (B) Endogenous Nur77 accumulates in the PBL HM fraction. PBLs were treated with TPA and ionomycin as in (A) for the indicated times and HM fractions were isolated. Total cell lysates and HM fractions were subjected to immunoblotting as described in Figure 4B. (C) Nur77 and Bcl-2 are required for apoptosis in PBLs. PBLs were transfected with control GFP siRNA, Nur77 siRNA, or Bcl-2 antisense oligonucleotides (2  $\mu$ g). After 40 hr, cells were treated with TPA and ionomycin for 7 hr and apoptotic cells (Annexin-V positive) were determined by flow cytometry. Bars represent average ± means from two experiments.

(F) Bcl-2 is required for Nur77/ $\Delta$ DBD-induced apoptosis. GFP-Nur77/ $\Delta$ DBD (1  $\mu$ g) was cotransfected into PBLs with control oligonucleotides or Bcl-2 antisense oligonucleotides (2  $\mu$ g). After 48 hr, apoptotic cells were determined as described for (E). Bars represent average ± means from two measurements.

#### Thanks to David Vaux, International Council for Science

### What is corrected/retracted and republished article?

ICMJE INTERNATIONAL COMMITTEE of MEDICAL JOURNAL EDITORS

"<u>Retraction with republication</u> (also referred to as "replacement") can be considered in cases where honest error leads to a major change in the direction or significance of the results, interpretations, and conclusions. ...

retraction with republication of the changed paper, with an explanation, allows full correction of the scientific literature. ...it is helpful to show the extent of the changes in supplementary

material or in an appendix, for complete transparency."

### **Indexing changes to a an article**



Fact Sheet: Errata, Retractions, and Other Linked Citations in PubMed

Errata – "... errors that originate in the publication process and those that result from errors of scientific logic or methodology ..."

**Expression of Concern** – "... about the integrity of a published article ... typically written by an editor using that phrase in the item title ..."

<u>Author Responses to Comments</u> - "... a published letter that NLM considers a comment will be immediately followed by a response written by the author(s) of the original article ..."

**Duplicate Publications** – "When NLM identifies an article that duplicates another article without acknowledgement, the citations for both articles are assigned the Publication Type of Duplicate Publication [PT]." **Updated Articles** – "… article that updates a previous article must … state that it is an updated version … or must appear in a journal that routinely publishes such updates as its primary content."

**Patients Summaries** – "The summaries are intended for patients or the lay public to explain in non-technical terms the scientific or medical findings reported in the full article."

**<u>Republished (Reprinted) articles</u> – "… republish (i.e., reprint) a significant article that was recently published in another journal.</u>"** 

### How is a retracted article indexed in PubMed?

H U.S. National Library of Medicine

<u>Retractions</u>– "NLM does not differentiate between articles that are retracted because of honest error and those that are retracted because of scientific misconduct or plagiarism." Retraction of Publication [PT] – retraction notice Retracted Publication [PT] – retracted article

### JAMA – PubMed

JAMA Intern Med. 2016 Nov 1;176(11);1726-1727\_doi: 10.1001/jamainternmed.2016.5831.

Notice of Retraction and Veterans With Ischemic Schopfer DW <sup>1</sup> , Takemoto S <sup>2</sup> , Allsup K Author information	RETRACTED ARTICLE
	JAMA Intern Med. 2014 Oct;174(10):1687-9. doi: 10.1001/jamainternmed.2014.3441. Cardiac rehabilitation use among veterans with ischemic heart disease.
FA 🎽 🔀	Schopfer DW <sup>1</sup> , Takemoto S <sup>1</sup> , Allsup K <sup>2</sup> , Helfrich CD <sup>3</sup> , Ho PM <sup>4</sup> , Forman DE <sup>5</sup> , Whooley MA <sup>6</sup> .
Publication type Publication type Retraction of Publication	Retraction in Notice of Retraction and Replacement. Schopfer DW, et al. Cardiac Rehabilitation Use Among Veterans With Ischemic Heart Disease. JAMA Intern Med. 2014;174(10):1687-1689. [JAMA Intern Med. 2016] PMID: 25133868 DOI: 10.1001/jamaintemmed.2014.3441 [Indexed for MEDLINE]
	Publication types, MeSH terms Publication types Research Support, U.S. Sov't, Non-P.H.S. Retracted Publication

### JAMA – journal's page

Th	is article has been retracted an	d replaced   View Notice	
This Issue Views 1,960   Cita	tions <b>3</b>   Altmetric <b>18</b>		
🔁 Download PDF	( ) ( ) More $\bigtriangledown$	(G) Cite This	© Permissions
Research Letter			FREE
October 2014			
Cardiac Rehabilit Ischemic Heart D		ong Veterans	With
David W. Schopfer, MD, MAS <sup>1</sup> ; Steven Tak	emoto, PhD <sup>1</sup> ; Kelly Allsup, BS <sup>2</sup> ; <u>et a</u>	<u>l</u>	

### JAMA – journal's page



### **Challenges for retracted and republished articles**

- Journals are not consistent in presenting article changes
- Linking services do not deliver clear updates
- Indexing databases have discrepancies in differentiating and tagging these articles.

Marasović T, Utrobičić A, Marušić A. Transparency of retracting and replacing articles. Lancet. 2018 (doi: 10.1016/S0140-6736(18)30487-2).

### **Challenges for preprints**

Preprint (NLM definition):

"Preprints are complete and public drafts of scientific documents, not yet certified by peer review. These documents ensure that the findings of the research community are widely disseminated, priorities of discoveries are established and they invite feedback and discussion to help improve the work."

Pub Med.gov	preprint[Publication Type] × Advanced Create alert Create RSS
	Save Email Send to Sorted by: Best match Disp
my ncbi filters 🗳	2,587 results
RESULTS BY YEAR	<ul> <li>Impact of comorbidities on COVID-19 outcome.</li> <li>Khedr EM, Daef E, Mohamed-Hussein A, Mostafa EF, Zein M, Hassany SM, Galal H, Hassan SA</li> <li>Cite Zarzour AA, Hetta HF, Hassan HM, Amin MT, Hashem MK.</li> <li>medRxiv. 2020 Nov 30:2020.11.28.20240267. doi: 10.1101/2020.11.28.20240267. Preprint.</li> <li>Share PMID: 34013292 Free PMC article.</li> </ul>
2020 2021 TEXT AVAILABILITY	<ul> <li>Recombination patterns in coronaviruses.</li> <li>Müller NF, Kistler KE, Bedford T.</li> <li>bioRxiv. 2021 Apr 28:2021.04.28.441806. doi: 10.1101/2021.04.28.441806. Preprint.</li> </ul>

# Challenges for preprints

This article is a preprint
 Preprints have not been peer reviewed.
 Learn more about preprints in the <u>NIH Preprint Pilot</u>.

> bioRxiv. 2020 Jul 10;2020.07.10.197079. doi: 10.1101/2020.07.10.197079. Preprint

## Comprehensive in-vivo secondary structure of the SARS-CoV-2 genome reveals novel regulatory motifs and mechanisms

Nicholas C Huston<sup>1</sup>, Han Wan<sup>2</sup>, Rafael de Cesaris Araujo Tavares<sup>3</sup>, Craig Wilen<sup>45</sup>, Anna Marie Pyle<sup>236</sup>

Affiliations + expand PMID: 32676598 PMCID: PMC7359520 DOI: 10.1101/2020.07.10.197079 Free PMC article

#### Update in

Comprehensive in vivo secondary structure of the SARS-CoV-2 genome reveals novel regulatory motifs and mechanisms. Huston NC, Wan H, Strine MS, de Cesaris Araujo Tavares R, Wilen CB, Pyle AM. Mol Cell. 2021 Feb 4;81(3):584-598.e5. doi: 10.1016/j.molcel.2020.12.041. Epub 2021 Jan 1. PMID: 33444546 Free PMC article.

### **Challenges for preprints**

> Mol Cell. 2021 Feb 4;81(3):584-598.e5. doi: 10.1016/j.molcel.2020.12.041. Epub 2021 Jan 1.

### Comprehensive in vivo secondary structure of the SARS-CoV-2 genome reveals novel regulatory motifs and mechanisms

Nicholas C Huston<sup>1</sup>, Han Wan<sup>2</sup>, Madison S Strine<sup>3</sup>, Rafael de Cesaris Araujo Tavares<sup>4</sup>, Craig B Wilen<sup>3</sup>, Anna Marie Pyle<sup>5</sup>

Affiliations + expand PMID: 33444546 PMCID: PMC7775661 DOI: 10.1016/j.molcel.2020.12.041 Free PMC article

#### Abstract

Severe-acute-respiratory-syndrome-related coronavirus 2 (SARS-C virus that causes coronavirus disease 2019 (COVID-19). The genom viral RNAs in its vast potential to form RNA structures, vet as much

#### Update of

Comprehensive in-vivo secondary structure of the SARS-CoV-2 genome reveals novel regulatory motifs and mechanisms. Huston NC, Wan H, de Cesaris Araujo Tavares R, Wilen C, Pyle AM. bioRxiv. 2020 Jul 10:2020.07.10.197079. doi: 10.1101/2020.07.10.197079. Preprint. PMID: 32676598 Free PMC article. Updated.

### Last but not least: Predatory journals

### **Definition** (WIKI):

 Predatory open access publishing is an exploitative openaccess publishing business model that involves charging publication fees to authors without providing the editorial and publishing services associated with legitimate journals (open access or not).

## **Pseudo-journals**

### **Predatory journals**

- Intention to deceive
- Misuse of Gold OA
- Conflict of interest (more paper more income)
- Manipulative spamming
- Targeting young researchers and those from smaller academic communities
- Mimicking legitimate publishers
- Fake metrics









#### CALL FOR PAPERS

**January ISSUE** 

Submissions due January 27, 2014 Notification of Acceptance January 29, 2014 Publishing Date January 31, 2014

The "International Journal of Science and Advanced Technology (IJSAT)" is an open access peer-reviewed

### **Predatory journals**

### Highjacking legitimate journals



Hija	cked journals
Year	Number of
	hijacked
	journals
2015	30
2016	101



### Legitimate journal

ABOUT JÖKULL FOR AUTHORS CONTACT

ARCHIVE WARNING

### **Predatory journals**



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Home Think Check Submit About Arabic FAQ



Sharing research results with the world is key to the progress of your discipline and career. But with so many publications, how can you be sure you can trust a particular journal? Follow this check list to make sure you choose trusted journals for your research.

### **Instead of a conclusion: Quality assurance in editing**

