

Aspectos éticos de la publicación científica

Snejanka Penkova

Biblioteca de Administración de Empresas/ Sistema de Bibliotecas

Purisima Centeno

Centro de Información y Tecnología (CITEC)/ Facultad de Ciencias Naturales

Organizadores:

Centro Coordinador Latindex (Puerto Rico), Centro de Excelencia Académica (CEA), UPR Río Piedras, Vicepresidencia de Asuntos Académicos, Universidad de Puerto Rico





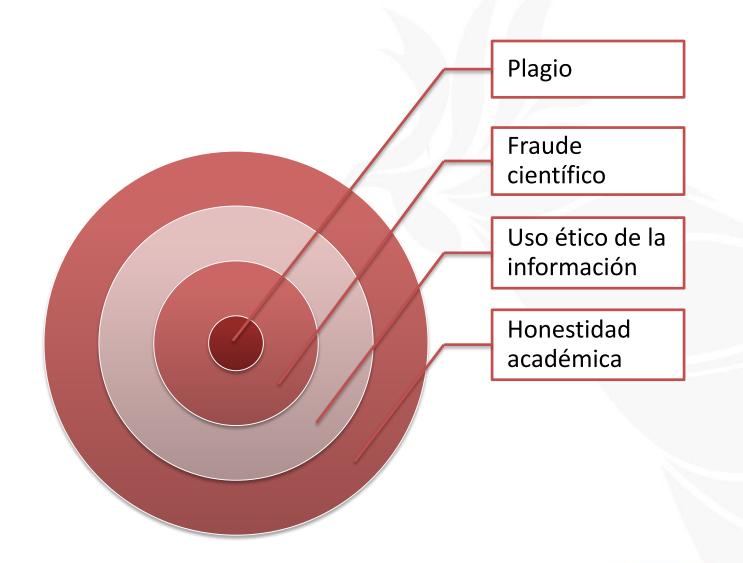




Temas a tratar

- Los conceptos de ética e integridad académica, ética en la diseminación de la investigación
- Los organismos y documentos institucionales relevantes
- Instancias y disposiciones internacionales y de organizaciones profesionales
- Los participantes en los proceso de publicación
- Las responsabilidades de los autores, editores, evaluadores, sponsors
- Buenas y malas practicas en la publicación científica
- Ejemplos y casos importantes





¿Por qué es importante hablar sobre el tema?

https://www.youtube.com/watch?v=Hsb9LUmKL3w https://www.youtube.com/watch?v=tltsmn7najc

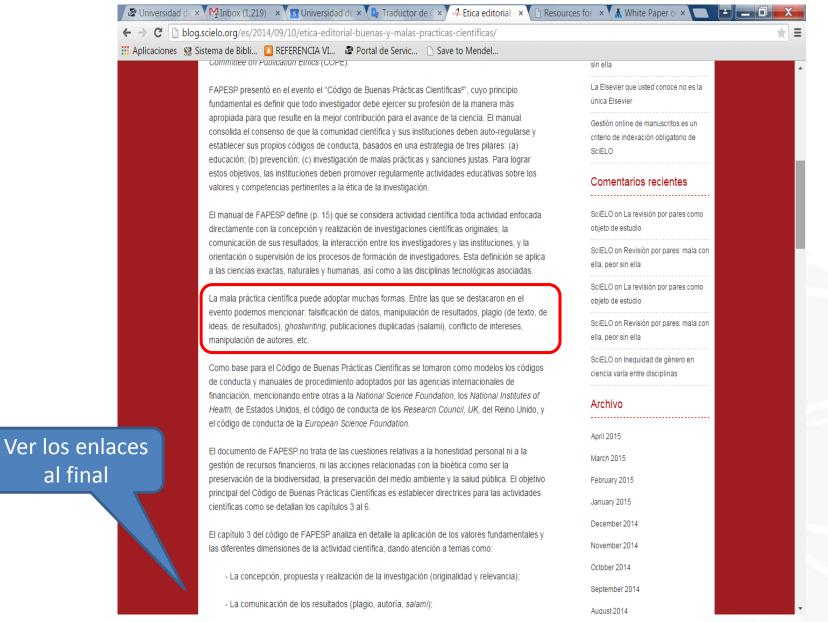
"La publicación científica es la practica más extendida para compartir los resultados de la investigación."

(Delgado López-Cózar, E., 2001)

Sin embrago, una publicación en una revista científica puede no asegurar que lo difundido proceda de investigaciones solventes, autores responsables, evaluadores competentes y editores imparciales... La existencia de un código ético manifiesta la concienciación, asegura la prevención del fraude científico y orienta sobre el procedimiento en casos de mala praxis."

(Tur-Viñes, V., Fonseca-Mora, M.C. & Gutiérrez-San-Miguel,



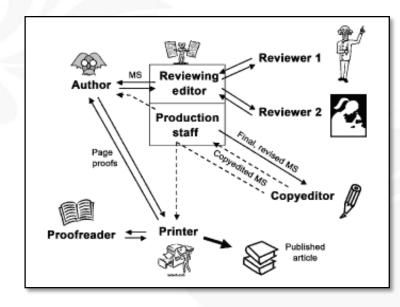


http://blog.scielo.org/es/2014/09/10/etica-editorial-buenas-y-malas-practicas-cientificas/



Los participantes en el proceso de publicación

- Los autores
- Los editores
- Los pares evaluadores (árbitros)
- Los sponsors
- Los publicadores
- Los lectores



https://www.nii.ac.jp/sparc/en/publications/newslet ter/7/img/7_toku2_ph1.gif



Ética de la investigación científica

Ética de la publicación de sus resultados



Integridad de la investigación

"Según el National Research Council of the National Academies, la integridad en la investigación puede definirse como una serie de buenas prácticas que incluyen:

- Honestidad intelectual para proponer, ejecutar y presentar los resultados de una investigación.
- Detallar con precisión las contribuciones de los autores a las propuestas de investigación y/o sus resultados.
- Ser justo en la revisión de artículos científicos (proceso de revisión por pares o peer review).
- Favorecer la integración entre las distintas comunidades científicas y el intercambio de recursos.



Integridad de la investigación...

- Transparencia en los conflictos de interés.
- Protección de las personas que intervienen en las investigaciones.
- En la investigación animal, proporcionar el cuidado adecuado de los animales con los que se lleva a cabo los estudios.
- El cumplimiento de las responsabilidades mutuas entre los investigadores y los participantes de una investigación."

(Avanzas, P., Bayes-Genis, A., Pérez de Isla, L., Sanchis, J. & Heras, M., 2011)



Ética en la publicación científica en la UPR y en el Recinto de Río Piedras

- Organismos responsables
- Disposiciones y documentos institucionales
 Política Institucional sobre Derechos de Autor: Certificación 93-140

http://graduados.uprrp.edu/images/pdf/Cert 093 140 1993 94 CES.pdf

Política Institucional sobre Patentes, Invenciones y su Comercialización (2003)

http://graduados.uprrp.edu/images/pdf/Cert 132 2002 03 JS.pdf



Los organismos y documentos internaciones relacionados

 International Ethical Principles for Scholarly Publication

http://www.stmassoc.org/2013 05 21 STM Ethical Principles for Sch olarly Publication.pdf

- Committee on Publication Ethics (COPE)
- Council of Science Editors (CSE)
- International Committee of Medical Journal Editors (ICMJE)
- World Association of Medical Editors (WAME)
- Comité de Ética del Consejo Superior de Investigaciones Científicas (CSIC), etc.

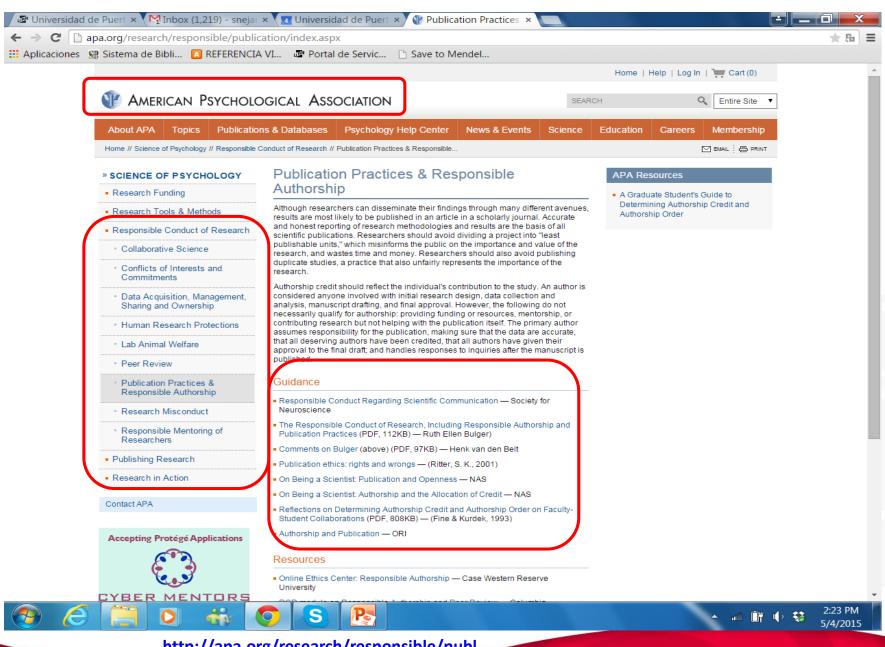


Las buenas prácticas en la publicación académica

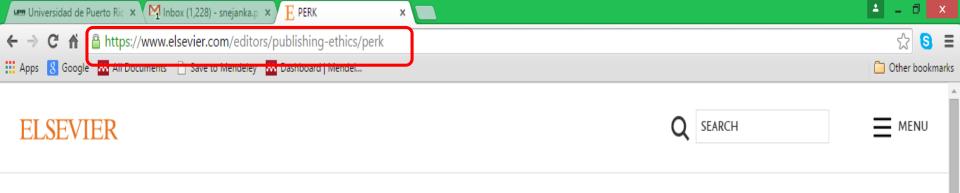
- Council of Science Editors (CSE)
 (http://www.councilscienceeditors.org/)
- Committee on Publication Ethics (CORE) Code of Conduct Guidelines (http://publicationethics.org/resources/code-conduct)
- Directory of Open Access Journal Principles of Transparency and Best Practice in Scholarly Publishing (https://doaj.org/bestpractice)
- Resources for Research Ethics Education (http://research-ethics.net/topics/publication/)
- ICMJE (http://www.icmje.org/)
- National Institute for Health (NIH)
 (https://oir.nih.gov/sites/default/files/uploads/sourcebook/docume
 nts/ethical conduct/guidelines-conduct research-6 11 07.pdf)
- Publishing Ethics Resource Kit (PERK) de Elsevier

https://www.elsevier.com/editors/publishing-ethics/perk









Editors > Publishing Ethics > PERK

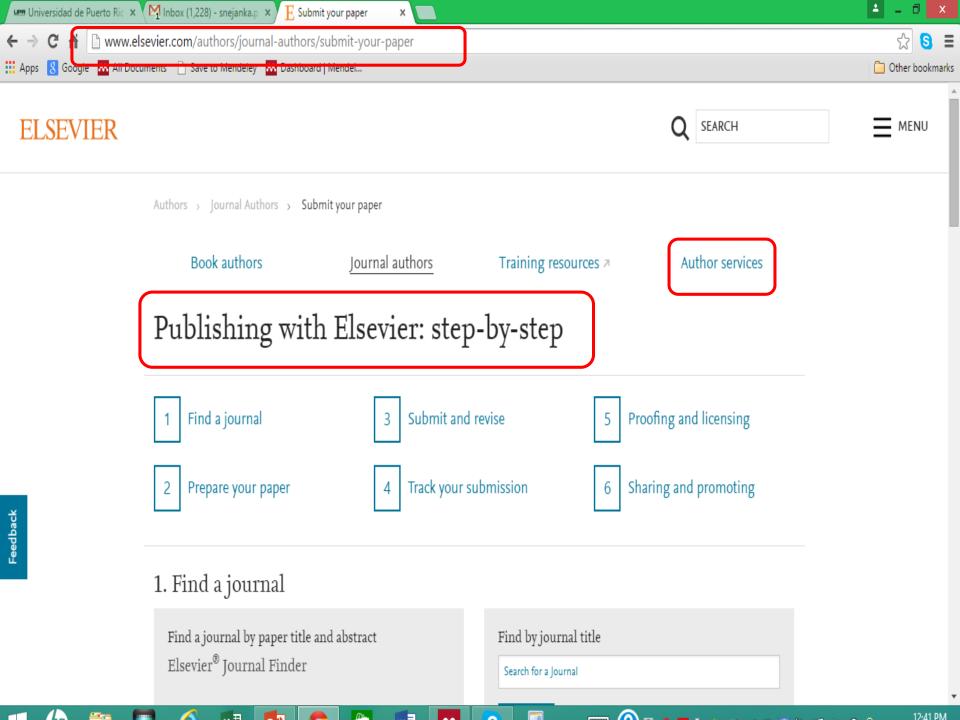
Publishing Ethics Resource Kit (PERK)

The Publishing Ethics Resource Kit (PERK) is an online resource to support journal editors in handling publishing ethics issues. It is a single point of access for information and guidelines on publishing ethics. PERK provides flowcharts to guide editors through processes required to deal with different forms of publishing ethics abuse. Furthermore, it includes form letters to adapt and use for various situations, PERK Q&A information and much more. For more information on this resource kit and how it works, please see Why PERK? and How PERK works.

- More resources for editors are available from COPE / (Committee on Publication Ethics), including an eLearning program on how to handle and prevent misconduct.
- Read more about Elsevier & COPE.
- On the Elsevier Publishing Campus in the Ethics in Research & Publication section young researchers are offered advice on how to avoid misconduct and recommended reading about research and publication ethics. The program is a collaboration of an independent panel of experts in research and publishing ethics and Elsevier.
- Read more about Elsevier's policies on: Article withdrawal, sharing articles, patient consent and research data.

Dood more about the guidence on necesible "constione"

2-45 DM



Asuntos éticos que se consideran en la publicación científica

- Autoría y colaboración
- Originalidad de la investigación
- Plagio
- Conflicto de intereses
- Confidencialidad
- Información privilegiada
- Transparencia
- Decisiones para publicación
- Rapidez
- Objetividad
- Independencia de los editores, etc.









Council of Science Editors (CSE) White Paper on Publication Ethics

http://www.councilscienceeditors.org/resourcelibrary/editorial-policies/white-paper-onpublication-ethics/



Responsabilidades de los autores

- ¿Quién se considera autor?
- ¿Cuáles son sus responsabilidades?
- Malas prácticas en la autoría
- Crosscheck

http://www.crossref.org/crosscheck/index.html



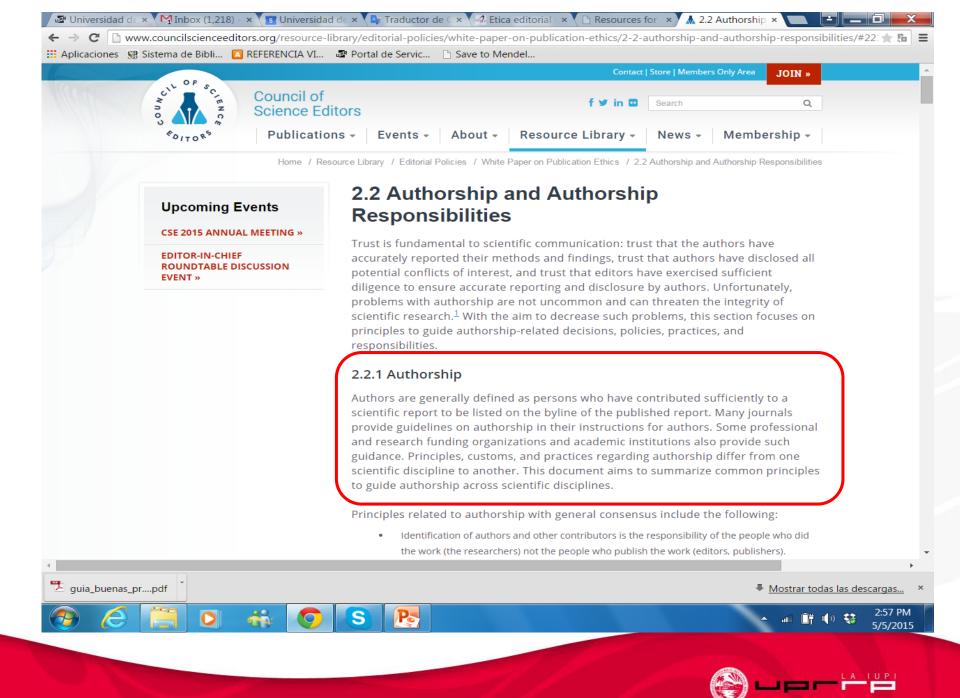


Table 3.

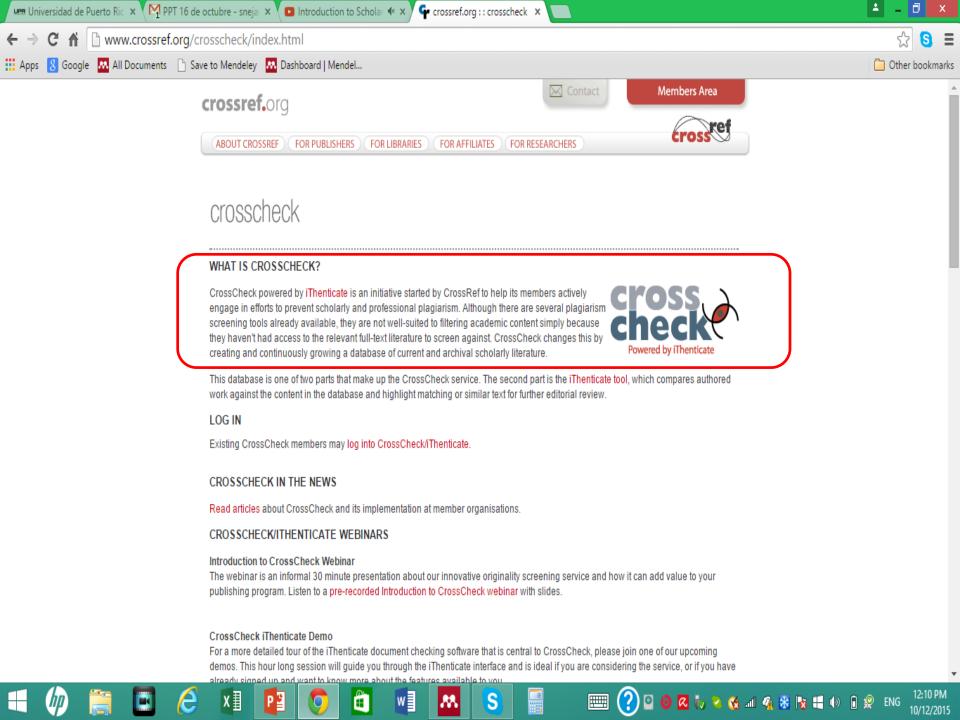
PMC full text: Am J Physiol Cell Physiol. 2008 Sep; 295(3): C567-C575.

doi: 10.1152/ajpcell.00208.2008

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Requirements and responsibilities of coauthors

Author Category	Contribution and Responsibility to the Work and Publication
First author	Fulfills ICMJE authorship criteria.
	Performs bulk of the experimental work.
Senior author	Fulfills ICMJE authorship criteria.
	Typically the last person on an authorship list.
	Directs, oversees, and guarantees the authenticity of the work.
	$Takes \ responsibility \ for \ the \ scientific \ accuracy, \ valid \ methodology, \ analysis, \ and \ conclusions \ of \ all \ work \ described \ in \ the \ paper.$
	Able to explain all of the results described in the paper.
Corresponding author	Fulfills ICMJE authorship criteria.
	Typically assumed by the first or senior author.
	Communicates with editors and readers.
	Provides specific information on the contributions of all coauthors to the paper.
	Ensures that all authors are aware of and approve the submission of the manuscript, its content, authorship, and order of authorship
Middle/contributing author	Fulfills ICMJE authorship criteria.
	Contributions do not rise to those of first or senior author.
	Order of middle/contributing authors should reflect their relative contributions to the paper.



Según V. Tur-Viñes, M.C. Fonseca- Mora y B. Gutiérrez-San-Miguel (2012) la responsabilidad moral y ética de los autores implica:

- Consistencia y fiabilidad en la investigación
- Honestidad
- Originalidad
- Transparencia con las fuentes de financiación de la investigación
- Responsabilidad; y además se puede agregar
- Acceso y retención a los datos (raw data)



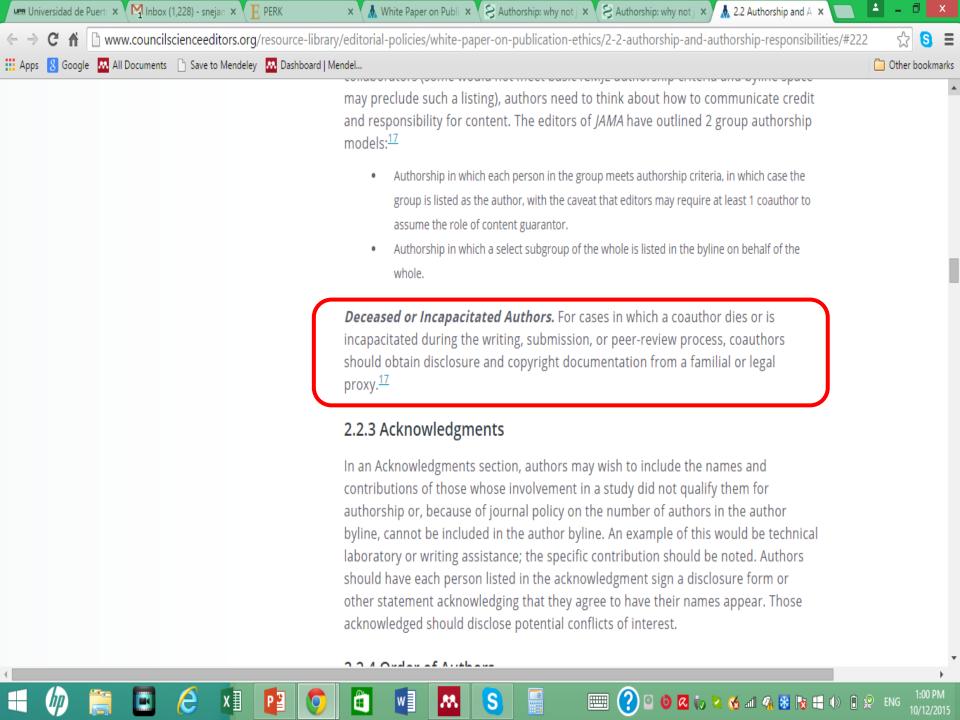
Conducta no ética de los autores

- Autoría no merecida o abusos con la autoría:
- autoría coercitiva
- autoría honoraria, invitada o regalada ("honorary, guest or gift authorship") ejemplos: "Darsee affair", Robert Slusky, "Korean stem scandal" Dr. Gerald Schatten (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2544445/)
- autoría anónima y autoría grupal, autor fallecido o incapacitado

http://www.councilscienceeditors.org/resourcelibrary/editorial-policies/white-paper-on-publicationethics/2-2-authorship-and-authorship-responsibilities/#222

Publicación múltiple, redundante o concurrente







AMERICAN JOURNAL OF PHYSIOLOGY **Cell Physiology** PUBLISHED ARTICLE ARCHIVES SUBSCRIPTIONS SUBMISSIONS CONTACT US

PMC full text: Am J Physiol Cell Physiol. 2008 Sep; 295(3): C567-C575.

doi: 10.1152/ajpcell.00208.2008

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Table 1.

Am J Physiol Cell Physiol

Types and descriptions of authorship abuse

Type of Authorship	
Abuse	Description
Coercion authorship	Use of intimidation tactics to gain authorship. Arguably a serious form of scientific misconduct (see Ref. 29).
Honorary, guest, or gift authorship	Authorship awarded out of respect or friendship, in an attempt to curry favor and/or to give a paper a greater sense of legitimacy.
Mutual support authorship	Agreement by two or more investigators to place their names on each other's papers to give the appearance of higher productivity.
Duplication authorship	Publication of the same work in multiple journals.
Ghost authorship	Papers written by individuals who are not included as authors or acknowledged.
Denial of authorship	Publication of work carried out by others without providing them credit for their work with authorship or formal acknowledgment. A form of plagiarism and therefore scientific misconduct.

PMC full text: Am J Physiol Cell Physiol. 2008 Sep; 295(3): C567-C575.

doi: 10.1152/ajpcell.00208.2008

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Table 4.

Recommendations for minimizing and resolving authorship disputes

- 1. All research institutions, journals, and scientific societies should have in place formal authorship policies. The threshold for authorship on a scientific paper should be a direct and significant intellectual contribution to the study. All authors should have contributed to the writing of the manuscript. At a minimum, each author should have written at least the portion of the manuscript in which his/her contribution is discussed and should be able to take public responsibility for that contribution.
- 2. All research institutions should have in place a well-recognized mechanism for addressing authorship disputes that cannot be resolved by the authors themselves. Authorship dispute resolution committees should comprise both senior and junior investigators and should be free from all real and perceived conflicts of interest.
- 3. Research institutions should never be allowed to be decision making bodies in authorship disputes. The role of the institution is to provide a fresh set of eyes on the problem and to assist the individuals involved in the dispute to arrive at an ethical and professional solution.
- 4. Authorship dispute resolution committees should have the authority to recommend that disciplinary action be pursued if clear evidence of abusive authorship practices is uncovered. At a minimum, individuals who abuse authorship should be required to satisfactorily complete a bioethics course. "Coercion authorship" and "denial of authorship" (see <u>Table 1</u>) should be treated as scientific misconduct and be referred to appropriate institutional bodies for further investigation and disciplinary action.
- 5. All letters of submission accompanying manuscripts should include an authorship verification statement that is signed by each coauthor and that describes his/her specific contributions.
- 6. The specific roles of all coauthors should be included in the published article. Deliberate falsification of the description of coauthor contributions should be viewed as scientific misconduct.
- 7. Every effort should be made to avoid authorship problems from the outset. Authorships should be negotiated and defined in writing at the beginning of an investigation. Frequent communication between all coauthors should occur while investigations are ongoing. Authorship should be discussed regularly and redefined in writing if necessary.

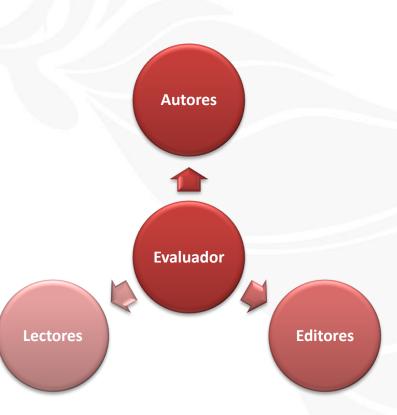
ol Cell Physiol ——



Responsabilidades de los evaluadores

- Carácter voluntario
- Especialización y competencia
- Objetividad
- Imparcialidad e integridad
- Crítica constructiva
- Confidencialidad
- Declaración de conflicto de intereses
- Rapidez

(V. Tur-Viñes, M.C. Fonseca- Mora y B. Gutiérrez-San-Miguel, 2012)





Responsabilidades de los editores

- Libertad editorial
- Confidencialidad
- Actuación en casos de conflicto de intereses
- Coordinación del trabajo del comité editorial
- Gestión editorial y cuidado de los historiales académicos
- Preservación de los derechos (copyright)

(V. Tur-Viñes, M.C. Fonseca- Mora y B. Gutiérrez-San-Miguel, 2012)



Conducta no ética

- Conflicto de interés
- Citación coercitiva

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673599/

http://admin-

apps.webofknowledge.com/JC R/static html/notices/notices. htm

Informe APEI. (2013).

http://www.apei.es/wpcontent/uploads/2013/11/InformeAPEI-Publicacionescientificas.pdf

5.2. Ética de los editores

El problema de los editores es encontrar artículos innovadores e interesantes, para publicar. A medida que la revista sea más conocida y esté indizada en las grandes bases de datos la facilidad de recibir buenos artículos aumenta, hasta el punto de que el problema puede llegar a ser cómo seleccionar y desechar el exceso, los menos buenos.

Si la revista consigue ser indizada por *Scopus* (de *Elsevier*) o los *Science citation index* (*WoS* de *Thomson Reuters*), dispondrá de su SJR (*Scimago journal rank*) o su IF (*Impact factor*), y su preocupación pasará a ser cómo aumentar esos índices de calidad para destacar frente a las otras revistas de la misma temática. Ahí podemos encontrar una de las argucias de algunos editores: intentar añadir citas a artículos publicados en la revista, a las bibliografías de los artículos en vías de publicación. Las autocitas (citas a trabajos publicados en la propia revista en la terminología de la bibliometría) computan en el cálculo del IF (aunque no del SJR). Sin embargo estas prácticas pueden tener un alto coste para la revista ya que *Thomson Reuters* ha adoptado la política de expulsar de los *Journal Citation Reports* todas aquellas revistas con tasas de autocitación elevadas y engordadas artificialmente. Por ejemplo en los JCR de 2011 se han expulsado 50 revistas por este tipo de razones.

http://admin-apps.webofknowledge.com/JCR/static_html/notices/notices.htm

Parece que *Thomson Reuters* tolera niveles de autocitación más altos en revistas en idioma no-inglés y áreas con pocas revistas, como puede ser por ejemplo *Communication + Cultural studies + Information science & library science + Sociology* (que suman sólo 320 revistas) –comparado con el conjunto de las de medicina que con todas sus especialidades alcanzan las 3.330-.







Los sponsors

Almost 75% of U.S. <u>clinical trials</u> in medicine are paid for by private companies.³ And, of course, some researchers today still fund small-scale studies out of their own pockets. Most of us can't afford to do cyclotron research as a private hobby, but birdwatchers, scuba divers, rockhounds, and others can do real research on a limited budget.



A section of the magnet alignment for the Large Hadron Collider (LHC) particle accelerator. Construction of the LHC cost billions of dollars. By contrast, studying birds in the field can cost just pennies.

An imperfect world

In a perfect world, money wouldn't matter — all scientific studies (regardless of funding source) would be completely <u>objective</u>. But of course, in the real world, funding may introduce biases — for example, when the backer has a stake in the study's outcome. A pharmaceutical company paying for a study of a new depression medication, for example, might influence the study's design or interpretation in ways that subtly favor the drug that they'd like to market. There is <u>evidence</u> that some biases like this do occur. Drug research sponsored by the pharmaceutical industry is more likely to end up favoring the drug under consideration than studies sponsored by government grants or charitable organizations. Similarly, nutrition research sponsored by the food industry is more likely to end up favoring the food under consideration than independently funded research.

 Find out more about the tobacco industry's manipulation of scientific research on the Public Health Reports website.

So what should we make of all this? Should we ignore any research funded by companies or special interest groups? Certainly not. These groups provide invaluable funding for scientific research. Furthermore, science has many safeguards in place to catch instances of bias that affect research outcomes. Ultimately, misleading results will be corrected as science proceeds; however, this process takes time. Meanwhile, it pays to scrutinize studies funded by industry or special interest groups with extra care. So don't, for example, brush off a study of cell phone safety just because it was funded by a cell phone manufacturer — but do ask some careful questions about the research before jumping on the bandwagon. Are the results consistent with other independently funded studies? Does the study seem fairly designed? What do other scientists have to say about this research? A little scrutiny can go a long way towards identifying bias associated with funding source.



http://undsci.berkeley.edu/article/0 0 0/who_pave



COPE Code of Conduct

Editors have a duty to act if they suspect misconduct. This duty extends to both published and unpublished papers.

Editors should not simply reject papers that raise concerns about possible misconduct. They are ethically obliged to pursue alleged cases.

Editors should first seek a response from those accused. If they are not satisfied with the response, they should ask the relevant employers or some appropriate body (perhaps a regulatory body) to investigate.

Editors should follow the COPE flowcharts where applicable (link to flowcharts).

Editors should make all reasonable efforts to ensure that a proper investigation is conducted; if this does not happen, Editors should make all reasonable attempts to persist in obtaining a resolution to the problem. This is an onerous but important duty.

Ensuring the integrity of the academic record

Whenever it is recognised that a significant inaccuracy, misleading statement or distorted report has been published, it must be corrected promptly and with due prominence.

If, after an appropriate investigation, an item proves to be fraudulent, it should be retracted. The retraction should be clearly identifiable to readers and indexing systems.

Relations with journal owners and publishers.

The relationship of Editors to publishers and owners is often complex but should in each case be based firmly on the principle of Editorial independence. Notwithstanding the economic and political realities of their journals, Editors should make decisions on which articles to publish based on quality and suitability for readers rather than for immediate financial or political gain.

Commercial considerations

Editors should have declared policies on advertising in relation to the content of the journal and on processes for publishing supplements.

Misleading advertisements must be refused, and Editors must be willing to publish criticisms, according to the same criteria used for material in the rest of the journal.

Reprints should be published as they appear in the journal unless a correction is to be added.

Conflict of interest

Editors should have systems for managing their own conflicts of interest as well as those of their staff, authors, reviewers and Editorial board members.

WWW.PUBLICATIONETHICS.ORG

COPE committee on publication ethics

http://publicationethics.org/files/2008%20Code%20of%20Conduct.pd



2.4.2 Proper Sponsor Conduct and Ethical Practices

Proper sponsor conduct and ethical practices include, but are not limited to:

- Not unduly influencing authors regarding the selection or interpretation of results and/or the formulation of conclusions
- Using publications (manuscripts, abstracts, posters) to communicate scientific data and observations, and balanced scientific interpretation and discussion thereof
- Not engaging in or supporting guest and ghost authorship
- Disclosing all financial and nonfinancial relationships that may possibly influence professional judgment of a manuscript or other scientific presentation
- Allowing the authors to decide where to submit a manuscript
- Not pressuring reviewers to favorably assess manuscripts supporting a sponsor's product or device
- Providing all data or materials to the authors and investigators in a timely manner as requested or disclose if the sponsor decides not to make all data available to the authors and investigators
- Registering clinical trials as demanded by law

2.4.3 Concluding Remarks

Sponsor misconduct or engagement in unethical practices may be grounds for a journal correction or retraction if such actions are deemed appropriate by the

CSE

http://www.councilscienceeditors.org/resource-library/editorial-policies/white-paper-on-publication-ethics/2-4-sponsor-roles-and responsibilities/

Ejemplos

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC149770 0/pdf/15842123.pdf

https://www.youtube.com/watch?v=ShJTcllTna0



Recomendaciones a los editores

- Incluya una página llamada Ética en la publicación
- Presente aquellos aspectos que la junta editorial considera indispensables
- Resalte:
 - Que la publicación total o parcial de trabajos es plagio lo cual es ilegal y conlleva multa
 - La fabricación de datos es fraude
 - La alteración de datos es deshonesta
 - La publicación debe ser original e inédita



Responsabilidad del editor

• Declárela:

- Una revisión confidencial, experta y crítica de los trabajos por parte de los evaluadores
- La revisión de trabajos en su calidad científica por parte de los evaluadores de la revista
- El anonimato de los evaluadores así como su compromiso de no divulgar lo evaluado
- Mencione que si la evaluación la hacen dos evaluadores es posible la consulta a un tercero en caso de opiniones contrarias



Autoría en publicaciones

Orientar sobre

- Quien adquiere fondos no es autor de una publicación
- Quien supervisa una investigación tampoco es autor
- Quien participa en la recolección de datos, su procesamiento o tomando muestras tampoco
- Debe orientar a los autores a consignar esas participaciones en la sección de agradecimientos
- Debe mencionar que no es ético invitar investigadores para aumentar la posibilidad de publicación
- Se debe evitar consignar a personas como autores porque son los jefes



Posturas

- Respecto a conflictos de interés que pudieran afectar las decisiones sobre un artículo (opinión o interés financiero)
- Ante posibles publicaciones duplicadas
- Publicación de correcciones o retractaciones



Enlaces de interés

http://revistas.csic.es/public/guia buenas practicas CSIC.pdf

http://www.apei.es/wp-content/uploads/2013/11/InformeAPEI-Publicacionescientificas.pdf

https://www.youtube.com/watch?v=gkjCpmdz3bA

https://www.youtube.com/watch?v=RBRdQc9zKqo

https://www.youtube.com/watch?v=QxpH9wBt0fM

https://www.youtube.com/watch?v=U5Vl3ORH5ME

https://www.youtube.com/watch?v=4ng-fUHgfTU



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- International Ethical Principles for Scholarly Publication. (n.d.). Retrieved from http://www.stm
 - $assoc. org/2013_05_21_STM_Ethical_Principles_for_Scholarly_Publication.pdf$
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 - http://doi.org/10.3145/epi.2012.sep.07



Correos de contacto:

snejanka.penkova@upr.edu puracenteno@gmail.com

