Dr Trevor Lane is a publishing and education consultant based in Hong Kong. From 1997 to 2005, he was the managing editor of several medical journals in Asia and the senior editor of two social science journals in the United States. From 2005 to 2015, he headed a knowledge exchange unit at the University of Hong Kong, where he taught research communication and publishing ethics to postgraduate students and helped staff publish and publicise their research. He was elected to COPE Council in 2016.
Publication Ethics & Authorship Dispute

Agenda

• Introduction to COPE
• Authorship issues
• Possible solutions
• Q & A session
Introduction to COPE
ABOUT COPE

• Non-profit established in 1997; operated, managed, and governed by small group of paid employees with volunteers on Trustee Board and Council

• >12,000 members are primarily editors and owners/publishers of scholarly journals of all disciplines; includes editorial and publishing support services, universities & research institutes: https://publicationethics.org/membership/universities-research-institutes

• COPE brings together all those involved in scholarly research and its publication to strengthen the network of support, education, and debate in publication ethics: Creating a culture of publication integrity together
COPE CORE PRACTICES

Policies and core practices required to reach the highest standards in publication ethics:

- Allegations of misconduct
- Authorship and contributorship
- Complaints and appeals
- Conflicts of interest/Competing interests
- Data and reproducibility
- Ethical oversight
- Intellectual property
- Journal management
- Peer review processes
- Post-publication discussions and corrections
COPE CORE PRACTICES

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- Conflicts of interest/Competing interests
- Data and reproducibility
- Post-publication discussions and corrections

Clear policies (that allow for transparency around who contributed to the work and in what capacity) should be in place for requirements for authorship and contributorship, as well as processes for managing potential disputes.
ETHICAL ISSUES IN SCHOLARLY PUBLISHING

...& Questionable research / publication practices:
• inappropriate / insufficient sampling
• inappropriate / biased analysis (P-hacking, confounder bias)
• biased / selective reporting
• not correcting errors
• citation manipulation (inaccurate / fake citations, citation stacking, citation cartels, coercive/coerced citation)
• reviewer misconduct (delay, +/- bias, stealing data, plagiarism, breach of confidentiality)
• fake review & reviewer identity fraud

• authorship misattribution (& fraud), eg, ghost authors, forged / fake authors
• knowingly publishing in predatory journals
• unauthorised data use / reporting / sharing
• unregistered clinical trials, no ethics board approval / waiver etc...

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2829174/ (CC BY)
Of 134 authorship cases up to 2019:
- questionable changes to author list after submission (27%)
- ghost, guest, or gift authors (19%)
- submission without knowledge of one or more authors (19%)
- disputed author order (7%)
- forged paperwork (7%)

- often involves other problems (duplication, salami slicing, IP theft, conflicts of interest)
COPE FORUM CASES

- **Case 15-17, Case 06-13, & Case 11-24** deal with institutionalised gift authorship for senior researchers.

- **Case 07-04**, with **Case Discussion on gift authorship**, is about an institute board member and department head who was publishing a total of 50 to 100 articles per year, suggestive of routine gift authorship.

- **Case 18-07**, with **Case Discussion on multi-institution investigations**, shows need for cooperation and communication among multiple institutions concerned in an authorship dispute.
COPE RESOURCES

Examples for authorship and contributorship

Flowcharts
• Changes in authorship
• How to recognise potential authorship problems

Guidelines
• How to handle authorship disputes: a guide for new researchers

Discussion document: Authorship

COPE Forum Cases:
https://publicationethics.org/guidance/Case?classification=2772

Seminars
• WCRI 2019: Responsible authorship
• COPE 2021 Seminar: Ethical authorship vs fraudulent authorship

Some slides in this presentation are based on that seminar, CC BY-NC-ND
https://publicationethics.org/resources/flowcharts/how-recognise-potential-authorship-problems
Author disputes (addition/removal/order change) need resolution by individuals/institutions.
Authorship issues
AUTHORSHIP MATTERS

- Record of attribution
- Moral and legal rights
- Responsibility for (your/all) content
- Accountability in investigations
- Shapes academic career
  - Expertise & track record (ORCiD)
  - Collaborations, networks
  - Funding, awards, promotion
- Institutional reputation

https://orcid.org/
OLD & NEW ISSUES

• **Publish or perish**, author credit, competition for resources

• Disguising content
  - Industry research
  - Pseudoscience
  - Spoofs, stings
  - Identity fraud

• More multicenter, ‘collaborative’ work – but people fall out, get ill, are away, leave

• Greater variety of outputs (preprints, data, code, software)

• Diversity & inclusion in research

• Involvement of public, patients, stakeholders

• Publishing traditions
  - Discipline / journal / institution practices
  - New disciplines
  - Interdisciplinary, multidisciplinary journals

• Privacy & confidentiality
  - Anonymous / pseudonymous protection
  - Privacy around legal name changes
WHOSE BYLINE IS IT ANYWAY?

Journal Name, July 2022 (Vol 7)

Journal article title
A Author, B Author, C Author, D Author, E Author, F Author

Corresponding author?
(Administrative task before/after publication)

Lead author/writer? Guarantor? Corresponding author?

Amount of work? Value of contribution? Equal contribution?
Alphabetical order? Reverse alphabetical order?
Random order?
Explain in footnote

Senior author? Group head? Guarantor? Corresponding author?

“Author-A et al (2022) reported that…”
Combined Measurement of the Higgs Boson Mass in pp Collisions at √s = 7 and 8 TeV with the ATLAS and CMS Experiments

G. Aad et al.*

(ATLAS Collaboration)

(CMS Collaboration)

(Received 25 March 2015; published 14 May 2015)

A measurement of the Higgs boson mass is presented based on the combined data samples of the ATLAS and CMS experiments at the CERN LHC in the H → γγ and H → ZZ → 4ℓ decay channels. The results are obtained from a simultaneous fit to the reconstructed invariant mass peaks in the two channels and for the two experiments. The measured masses from the individual channels and the two experiments are found to be consistent among themselves. The combined measured mass of the Higgs boson is

m_H = 125.09 ± 0.21 (stat) ± 0.11 (syst) GeV.

DOI: 10.1103/PhysRevLett.114.191803

PACS numbers: 14.80.Bn, 13.85.Qk

CC BY: G. Aad et al. (ATLAS Collaboration, CMS Collaboration)
International Committee of Medical Journal Editors (ICMJE)
(www.icmje.org)
1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
2) Drafting the work or revising it critically for important intellectual content; AND
3) Final approval of the version to be published; AND
4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

“PNAS”, McNutt et al, 2018
(https://doi.org/10.1073/pnas.1715374115)
1) Each author is expected to have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work; OR have drafted the work or substantively revised it;
2) AND to have approved the submitted version (and any substantially modified version that involves the author’s contribution to the study);
3) AND to have agreed both to be personally accountable for the author’s own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.
DEFINITIONS OF NON-AUTHORSHIP?

**ICMJE (www.icmje.org)**
Contributors who meet fewer than all 4 of the above criteria for authorship should not be listed as authors, but they should be acknowledged. Examples of activities that alone (without other contributions) do not qualify a contributor for authorship are acquisition of funding; general supervision of a research group or general administrative support; and writing assistance, technical editing, language editing, and proofreading…
…obtain written permission to be acknowledged from all acknowledged individuals.

**“PNAS”, McNutt et al, 2018 (https://doi.org/10.1073/pnas.1715374115)**
…To discourage ghost authorship, CAs [corresponding authors] must reveal as appropriate whether the manuscript benefited from the use of editorial services that, if unacknowledged, might constitute an undisclosed conflict of interest. Examples include use of an editor from an organization that may have a vested interest in slanting the results or reliance on a technical writer at a level that would warrant authorship credit.
UNDERLYING PROBLEMS?

• **Practical:**
  o Differences in authorship definitions & criteria, weighting, thresholds
  o Who did what & quality/quantity, record keeping, proof, relative importance?
  o What happens when authors leave institutions during drafting / submission?

• **Institutional traditions**
  o No / unclear IP, data, thesis management policies (eg, student name not on paper)
  o Power relations; students / juniors versus supervisors, lab / dept head (eg, supervisor name added to paper)

• **Credit & appraisal systems**
  o Institutions’ publication rules for hiring, promotions, awards, graduation
  o Institutions’ promotion of JIF, authorship position/type, metrics, quantity>quality, no checks
  o Funder assessments / government assessments / world rankings using JIF or cites
Gene Expression Patterns during Light and Dark Infection of Prochlorococcus by Cyanophage

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email (LRT); email (SWC)
UNETHICAL OR FRAUDULENT AUTHORSHIP?

- **Gift authorship**, e.g., for funding, technical service, data/materials, supervision, artwork
- **Guest authorship** (name dropping of key opinion leaders, +/- permission)
- **Coerced/coercive authorship**
- **Ghost authorship** (missing from byline)
- **Questionable authorship practices**, e.g., reciprocating gift/guest authorship, paying, bartering, relinquishing authorship (demoting author to acknowledgements, =ghost author)

Based on pixabay.com images (CC 0)
UNETHICAL OR FRAUDULENT AUTHORSHIP?

- Fake / false authorship
- Forged co-authorship
- Publication not authorised
- Plagiarism

Based on pixabay.com images (CC 0)
UNETHICAL OR FRAUDULENT AUTHORSHIP?

- Using a paper mill to write fake paper
- Using a paper broker to add your / other’s name
- Knowingly publishing in predatory journal

https://publicationethics.org/resources/research/paper-mills-research

https://publicationethics.org/resources/discussion-documents/predatory-publishing

Based on pixabay.com images (CC 0)
UNETHICAL OR FRAUDULENT CONTRIBUTORSHIP?

- Guest contributorship
- Fake / false contributorship
- Coerced/coercive contributorship
- Ghost contributorship
- Questionable contributorship practices, eg, reciprocating guests, paying, bartering
- Forged contributorship
- Contribution not authorised

Could be ghost author if contribution was substantial

Ghost writer
Ghost editor
Ghost proofreader
Ghost translator
EXTENT & NATURE OF PROBLEM

• 21% of articles in 6 medical journals in 2008 had undeserved +/- ghost authors (https://www.bmj.com/content/343/bmj.d6128)

• 41% of first-authors of Cochrane reviews, 2016-2018, reported gift authorship (https://doi.org/10.1016/j.jclinepi.2020.08.004)

• 35.5% of respondents reported adding an undeserving author (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0187394)
MISBEHAVIOUR OR MISCONDUCT?

- Misrepresentation, impersonation, grant fraud; usually involves plagiarism

- Unjustified authorship is considered research misconduct in South Korea
  (Nature News 12 Nov 2019: More South Korean academics caught naming kids as co-authors, 
  https://www.nature.com/articles/d41586-019-03371-0)

- “Legal remedies for medical ghostwriting: Imposing fraud liability on guest authors of ghostwritten articles”
  (https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001070)
EXTENT & NATURE OF PROBLEM

Bad apples | Bad barrels | Bad tree | Deep-rooted systemic problem | Orchard problem
Network, community, environment
Underlying culture & ecosystem

Based on pixabay.com images (CC 0)
Possible solutions
PUBLISH & NOURISH

“Publish or perish”

“Publish and perish”

Publish and flourish

• No one reads paper
  • Publication might prevent patenting
• Disinformation, unethical practice
  • Predatory journals

www.ThinkCheckSubmit.org

• Open Access
  • Research networks, conferences, debate
• Citations, reputation

• Accountability, trust, corrections
  • Knowledge exchange & research mobilisation
  • Open Research, data sharing
  • Societal impact: Sustainable development goals

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CONTRIBUTOR ROLES TAXONOMY (CRediT)

https://www.niso.org/publications/z39104-2022-credit

National Information Standards Organization

The Contributor Roles Taxonomy’s 14 roles and best practices represent a simple but comprehensive system that enables the range and nature of contributions to scholarly published output to be captured in a transparent, consistent, and structured format.

- Conceptualization
- Data curation
- Formal analysis
- Funding acquisition
- Investigation
- Methodology
- Project administration

- Resources
- Software
- Supervision
- Validation
- Visualization
- Writing – original draft
- Writing – review & editing
CREDITS?

• Policies, procedures, guidelines for recording all contributions clearly

• But… journals usually ask for only authors’ contributions

• Authorship criteria for institution / discipline / journal may differ

• Needs cross-checking in appraisals
AUTHORSHIP?

International Committee of Medical Journal Editors (www.icmje.org)

1) **Substantial contributions** to the **conception** or **design** of the work; or the **acquisition**, **analysis**, or **interpretation of data** for the work; **AND**

2) **Drafting** the work or **revising** it critically for important intellectual content; **AND**

3) Final approval of the version to be published; **AND**

4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

**CRediTs**

- **Conceptualization**: RESEARCHERS 1,2,3
- **Data curation**: RESEARCHER 2
- **Formal Analysis**: RESEARCHER 1, ANOTHER 2
- **Funding acquisition**: ANOTHER 1, ANOTHER 2
- **Investigation**: RESEARCHERS 2,3
- **Methodology**: ANOTHER 2
- **Project administration**: RESEARCHER 1
- **Resources**: RESEARCHERS 1,3
- **Software**: ANOTHER 2
- **Supervision**: RESEARCHER 3
- **Validation**: RESEARCHERS 1,2,3
- **Visualization**: ANOTHER 3
- **Writing – original draft**: RESEARCHER 1
- **Writing – review & editing**: RESEARCHERS 1,2,3, ANOTHER 3

No animals were harmed during this production. CRedit items based on credit.niso.org

Only these are authors
AUTHORSHIP?

“PNAS”, McNutt et al, 2018 (https://doi.org/10.1073/pnas.1715374115)

1) Each author is expected to have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work; OR have drafted the work or substantively revised it;

2) AND to have approved the submitted version (and any substantially modified version that involves the author’s contribution to the study);

3) AND to have agreed both to be personally accountable for the author’s own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.

CRediTs

- Conceptualization: Researchers 1, 2, 3
- Data curation: Researcher 2
- Formal Analysis: Researchers 1, AN OTHER 2
- Funding acquisition: A N OTHER 1, AN OTHER 2
- Investigation: Researchers 2, 3
- Methodology: A N OTHER 2
- Project administration: Researcher 1
- Resources: Researchers 1, 3
- Software: A N OTHER 2
- Supervision: Researchers 2, 3
- Validation: Researchers 1, 2, 3
- Visualization: A N OTHER 3
- Writing – original draft: Researcher 1
- Writing – review & editing: Researchers 1, 2, 3, AN OTHER 3

No animals were harmed during this production. CRediT items based on credit.niso.org

More qualify as authors
AUTHORSHIP?

“Neurology” journals
(American Academy of Neurology; https://www.neurology.org/authorship-and-disclosures)

*Neurology* defines an author as a person who has made a substantive intellectual contribution to the submitted manuscript. A substantive contribution includes one or more of the following:

- **Design** or **conceptualization** of the study
  - OR major role in the **acquisition of data**
  - OR **analysis** or **interpretation of the data**
  - OR **drafting** or **revising** the manuscript for intellectual content

- All those qualifying for authorship must give final approval of the version to be published and take responsibility for the conduct of the research.

Professional writers employed by pharmaceutical companies or other academic, governmental, or commercial entities who have drafted or revised the intellectual content of the paper must be included as authors.

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**CRediTs**

- Conceptualization: RESEARCHERS1,2,3
- Data curation: RESEARCHER 2
- Formal Analysis: RESEARCHER2, ANOTHER 2
- Funding acquisition: A N OTHER 1, ANOTHER 2
- Investigation: RESEARCHERS 2,3
- Methodology: A N OTHER 2
- Project administration: RESEARCHER 1
- Resources: RESEARCHERS1,3
- Software: A N OTHER 2
- Supervision: RESEARCHER 3
- Validation: RESEARCHERS1,2,3
- Visualization: A N OTHER 3
- Writing – original draft: RESEARCHER1
- Writing – review & editing: RESEARCHERS1,2,3, AN OTHER 3, EDITOR

No animals were harmed during this production.

CRediT items based on credit.niso.org
DISPUTE RESOLUTION

• **Journal** action
  - Refer to authors/institution (& **halt review / publication**)
  - If published:
    - Expression of Concern while unresolved
    - Correction if content still reliable (after all parties agree & sign)
    - Retraction if legal/ethical issue (& refer misconduct to institutions)

• **Group** discussion / negotiation → revised authorship list

• **(Multi)-Institutional** investigation
  - Mediation (group resolution), Arbitration (3rd party resolution, eg, Authorship dispute board)
  - Escalation if misconduct → disciplinary action
  - Inform journal of outcome → revised authorship list

[publicationethics.org]
DISPUTE PREVENTION

1. Research appraisal systems:
   - quality > quantity, peer review
   - limits on # publications & no JIF in CV
   - ‘narrative’ CV
   - evaluate contributions, ‘stewardship’

2. Institutions (eg, central & faculty/discipline):
   - policies/agreements/forms on authorship / contributorship roles, IP (copyright, patents) & training to predict & prevent problems
   - record all roles (eg, CRediT system); try scoring charts
   - keep Tracked copies, notebooks
   - dispute resolution procedures, RIO / advisor

3. Journals:
   - clear authorship & contributorship (acknowledgement) guidelines & criteria
   - record & publish author contributions; explain order; equal authors allowed?
   - author transparency, Col, © transfer forms
   - correspond with all authors
   - management guidelines on allegations & authorship dispute, including publication/process management
   - open peer review vs anonymised review
   - post-publication review/discussion & amendments
INTERNATIONAL GUIDELINES & INITIATIVES

**RePAIR Guidelines** (Responsibilities of Publishers, Agencies, Institutions, and Researchers in Protecting the Integrity of the Research Record)

**CLUE Guidelines** (Cooperation & Liaison between Universities & Editors)

**COPE Guidelines:** Cooperation between research institutions and journals on research integrity cases

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San Francisco Declaration on Research Assessment

https://sfdora.org/

- recognizes the need to improve the ways in which researchers and the outputs of scholarly research are evaluated.
INTERNATIONAL GUIDELINES & INITIATIVES

**THE HONG KONG PRINCIPLES FOR ASSESSING RESEARCHERS**

Hong Kong Principles for Assessing Researchers
https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000737
https://wcrif.org/guidance/hong-kong-principles

Leiden Manifesto for Research Metrics
http://www.leidenmanifesto.org/

Singapore Statement on Research Integrity
https://wcrif.org/statement

Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations
https://wcrif.org/montreal-statement/file
Discuss, agree, record before each project/paper

- Document contributions
- Follow publication authorship criteria
- Discuss throughout project/paper
- Review & approve final paper

AUTHORSHIP PRACTICES TO AVOID CONFLICTS

Every field of study experiences conflicts with determining authorship on published papers

Implementing the following suggestions may help avoid potential authorship disputes:

**BE PREPARED**
Establish written authorship agreements with all members of the lab and other collaborators before preparing a manuscript or before starting a project.

**DOCUMENT CONTRIBUTIONS**
Authors should list their substantial contributions to the design of the study; the acquisition, analysis, or interpretation of data, and the contribution to the writing of the final paper.

**BE CONSISTENT**
Have clearly written expectations for authorship on publications and follow them.

**COMMUNICATE OFTEN**
As the project progresses, the authorship agreement may need to be revisited.

**APPROVE THE MANUSCRIPT**
All authors should review manuscripts and approve the final version.

**documento**
Authors who assisted with a manuscript but did not provide substantial contributions can be given acknowledgement.

WRITE ETHICALLY

FROM START TO FINISH

CREATE PRIMARY LITERATURE
Secondary sources might have interpreted the work. Have a thorough understanding of your sources

EVALUATE 

Avoid selective reporting
Report unbiased information by acknowledging conflicting evidence and alternative interpretations

CITE YOUR SOURCES
Use your own words and sentence structure

MAINTAIN THE INTENDED MEANING OF THE SOURCE
Or quote verbatim text

PUBLISH

Gift authorship is unethical
Only include those who have made substantial contributions to a project
Avoid ghost authorship
Give proper authorship or acknowledgment to those who have contributed to a paper

Learn more about ethical writing: ori.hhs.gov/ethical_writing
Any questions?
THANK YOU

Dr Trevor Lane,
COPE Council; Chair, Education Subcommittee
Email: trevorlane@publicationethics.org