CRediT | Recognising author contributions to publications

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Search: University of Glasgow
Research culture: Promoting how research is done

“A positive research culture is one in which colleagues are recognised and valued for their varied contributions to a research activity, in which colleagues support each other to succeed, and in which there is support to produce work that meets the highest standards of academic rigour.”
INSPIRING PEOPLE
CHANGING THE WORLD

University Strategy 2015–2020
Authorship contributions

Aim: To recognise and record the distinct roles that each collaborator makes to an output

Why?
> To improve research practice
   Avoid disputes, allegations, credit-hogging

> To improve research quality
   With credit comes accountability; with transparency comes quality

> To support careers
   Especially useful for multi-author papers, for ECRs

> To future-proof scholarly communications
Authorship doesn’t always reflect contribution ...
CRediT (Contributor Roles Taxonomy) is high-level taxonomy, including 14 roles, that can be used to represent the roles typically played by contributors to scientific scholarly output. The roles describe each contributor's specific contribution to the scholarly output.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptualization</td>
<td>Ideas; formulation or evolution of overarching research goals and aims.</td>
</tr>
<tr>
<td>Methodology</td>
<td>Development or design of methodology; creation of models.</td>
</tr>
<tr>
<td>Software</td>
<td>Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.</td>
</tr>
<tr>
<td>Validation</td>
<td>Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.</td>
</tr>
<tr>
<td>Formal Analysis</td>
<td>Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data.</td>
</tr>
<tr>
<td>Investigation</td>
<td>Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.</td>
</tr>
<tr>
<td>Resources</td>
<td>Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.</td>
</tr>
<tr>
<td>Data Curation</td>
<td>Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later reuse.</td>
</tr>
<tr>
<td>Writing – Original Draft</td>
<td>Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).</td>
</tr>
<tr>
<td>Writing – Review &amp; Editing</td>
<td>Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages.</td>
</tr>
<tr>
<td>Visualization</td>
<td>Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.</td>
</tr>
<tr>
<td>Supervision</td>
<td>Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.</td>
</tr>
<tr>
<td>Project Administration</td>
<td>Management and coordination responsibility for the research activity planning and execution.</td>
</tr>
<tr>
<td>Funding Acquisition</td>
<td>Acquisition of the financial support for the project leading to this publication.</td>
</tr>
</tbody>
</table>
CRediT implemented by growing number of outlets

Publishers
American Association of Petroleum Geologists
BMJ
British Psychological Society
Cell Press
Dartmouth Journal Services
De Gruyter Open
Duke University Press
eLife
Elsevier
Evidence Based Communications
F1000 Research
Geological Society of London
Health & Medical Publishing Group
International Centre of Insect Physiology and Ecology
The Journal of Bone & Joint Surgery
KAMJE Press
Lippincott Williams & Wilkins
MA Healthcare
MIT Press
Oman Medical Specialty Board
Oxford University Press
Public Library of Science (Plas)
SAE International
SLACK Incorporated
Springer
Springer Publishing Company
Wiley VCH
Wolters Kluwer

Institutions
University of Glasgow

Integrators
Allen Press/ Peer Track
Aries Systems/ Editorial Manager
Clarivate Analytics/ ScholarOne
Coko Foundation/ PubSweet
River Valley/ ReView

Publishing Outlets
Gates Open Research
HRB Open Research
Wellcome Open Research

The CASRAI (Consortia Advancing Standards in Research Administration Information) document may be helpful in articulating contributions:
http://dictionary.casrai.org/Contributor_Roles

Authors should express in a clear manner the contributions to the publication itself wherever this is permitted. The following (Research Administration Information) document may be helpful in articulating contributions:

Strategic recruitment schemes

- Output details
- Importance & Contribution

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Document your commitment to open research, as appropriate to your discipline (open data, open access, open code, open educational resources and practices that support replication).

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www.gla.ac.uk/research/ikas/ikafellowships/leadershipfellowships/#/howtoapply
More miles on the clock: Neighbourhood stressors are associated with telomere length in a longitudinal study

Anne Ellaway, Ruth Dundas, Tony Robertson, Paul G. Shiels

Published: March 28, 2019  •  https://doi.org/10.1371/journal.pone.0214380
A Glasgow paper...with roles

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Another Glasgow paper

Wellcome’s Open Research platform
Adding Roles on Wellcome’s Open Research Platform

Original Draft: Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).
Adding Roles on Glasgow’s Outputs Repository, Enlighten

1. When the publisher implements CRediT

<table>
<thead>
<tr>
<th>#</th>
<th>Family Name</th>
<th>Given Name / Initials</th>
<th>GUID</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brancucci</td>
<td>Nicolas M.B.</td>
<td>nb133a</td>
<td>Conceptualization</td>
</tr>
<tr>
<td>2</td>
<td>Brancucci</td>
<td>Nicolas M.B.</td>
<td>nb133a</td>
<td>Formal analysis</td>
</tr>
<tr>
<td>3</td>
<td>Brancucci</td>
<td>Nicolas M.B.</td>
<td>nb133a</td>
<td>Writing – original draft</td>
</tr>
<tr>
<td>4</td>
<td>Brancucci</td>
<td>Nicolas M.B.</td>
<td>nb133a</td>
<td>Writing – review and edit</td>
</tr>
<tr>
<td>5</td>
<td>De Niz</td>
<td>Mariana</td>
<td>mid4m</td>
<td>Formal analysis</td>
</tr>
<tr>
<td>6</td>
<td>De Niz</td>
<td>Mariana</td>
<td>mid4m</td>
<td>Investigation</td>
</tr>
<tr>
<td>7</td>
<td>De Niz</td>
<td>Mariana</td>
<td>mid4m</td>
<td>Methodology</td>
</tr>
</tbody>
</table>

https://eprints.gla.ac.uk/182540
Adding Roles on Glasgow’s Outputs Repository, Enlighten

2. When the publisher does not implement CRediT
Approach to implementation at UofG

• Lead Glasgow author responsible for capturing agreed roles of Glasgow authors
• Must choose from the CRediT options
• Allow ALL co-authors to review and confirm the roles
• Ensure information is provided to publisher
• If publisher does not request roles, include them in the narrative if possible
• If publisher does not include in paper, submit to research-enlighten@glasgow.ac.uk to have roles recorded on repository
What next for CRediT?

• Update definitions so that applicable to all disciplines e.g. who curated an exhibition

• Look at other output types

• Some organisations have added an extra bit of metadata – lead, share, assist in the role. Other roles e.g. technicians, data creators.

• Community manager (a possibility?)

• In discussion with Crossref and DataCite
What next for us?

- Repositories might receive the data automatically from publishers
- Work with researchers, publishers, suppliers, and others to address requirements
- Feedback to CASRAI on usage and maintenance of roles taxonomy
- Can this help with Research Excellence Framework author contribution statement?
“b. Co-authorship. Details of an individual’s contribution to a co-authored output may be requested, to verify their substantial research contribution. We expect HEIs to be able to identify the most appropriate evidence to verify the author’s contribution. Where this cannot be verified the output will be graded as ‘unclassified’. […]”

For outputs returned in submissions that are within Main Panels A and B, where the author contribution has been included in the output acknowledgements, this will take precedence over the statement on co-authored outputs.”
Find out more about CRedit

• Update article in *Learned Publishing* (2019)  
  https://doi.org/10.1002/leap.1210

• Visit the website: https://casrai.org/credit

• Ask a colleague from an adopter organisation

• Join the interest group by contacting CASRAI: info@casrai.org
Name/Affiliation | Roles
--- | ---
Valerie McCutcheon, University of Glasgow | Conceptualisation, resources, visualisation, writing – original draft
Tanita Casci, University of Glasgow | Resources, visualisation, writing – reviewing and editing
Liz Allen, f1000 | Resources, visualisation
Simon Kerridge, University of Kent | Resources, visualisation
Alison McGonagle, Co-chair of CRediT Program Committee | Resources, visualisation
David Baker, eVision | Resources, visualisation
The CASRAI UK Steering Group and Community | Resources, validation