CRediT Contributor Roles Taxonomy 저자 역할 구분 및 표시 기준

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 - Initial development history
- 14 Contributor Roles/Responsibilities
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CRediT: Contributor Roles Taxonomy

CRediT: What is it?

- A controlled vocabulary (taxonomy) of contributor roles
- To describe the typical "contributions" to scholarly published output (for biomedical and science more broadly)
- Open standards
- http://casrai.org/CRediT

저자 역할 구분 및 표시 기준 제시

- Who are eligible to be authors?
- Am I eligible as an author?

- Attribution
- Credit
- Accountability

CRediT: What is it for?

- Transparency and accessibility of research contributions
- Publishers require contribution disclosures upon article submission (structured or free-text form)
- Funders are developing more scientifically rigorous ways to track the outputs and impact of their research investments.

CRediT: initial development history

- May 2012
 - Wellcome Trust, Harvard University, MIT,
 Digital Science
 - Initially with a group of mainly biomedical journal editors and members of the ICMJE
 - Facilitated by CASRAI and NISO

• 2014

 Project CRediT working group finalizes the 14 terms & descriptions (Taxanomy)

• 2015

- Published to the CASRAI dictionary
- Endorsed by major publishers
- Encouraged authors to use CRediT when they submit papers, instead of traditional (free format) author role and responsibility statements

- 2016 and beyond
 - CRediT is being incorporated into Open Badges
 - E-submission systems include CRediT
 Aries Editorial Manager 13.0
 - ORCID is building CRediT into its registry
 - JATS is looking to integrate CRediT

1. Conceptualization

Ideas; formulation or evolution of overarching research goals and aims.

2. Data curation

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 re-use.

3. Formal analysis

Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data.

4. Funding acquisition

Acquisition of the financial support for the project leading to this publication.

5. Investigation

Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.

6. Methodology

Development or design of methodology; creation of models.

7. Project administration

Management and coordination responsibility for the research activity planning and execution.

8. Resources

Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.

9. Software

Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.

10. Supervision

Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.

11. Validation

Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.

12. Visualization

Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.

13. Writing – original draft

Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).

14. Writing – review & editing

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.

Open-Contributorship-Badges





























T1 - Conceptualization

Ideas; formulation or evolution of overarching research goals and aims.



Open-Contributorship-Badges . Badge designs by BioMed Central Design team (CC-BY 4.0) https://github.com/akenall/Open-Contributorship-Badges/blob/master/Badge%20Files.md#t2---methodology

CRediT: Use Cases/Implementations



optimal HLA-C*03:04-restricted epitopes. (C) The wild-type peptide RALGPGATL stabilized HLA-C*03:04 expression on 721.221-ICP47-C*03:04 cells significantly better than the variant epitope RALGPAATL at non-saturating concentrations of 1 μ m (G [mean 4.24 \pm 0.46 SD] to A [mean 2.72 \pm 0.81 SD), p = 0.006) and 0.1 μ M (G [mean 2.26 \pm 0.39 SD] to A [mean 1.29 \pm 0.19 SD], p = 0.008) as measured by paired, two-tailed t-test. HLA-C*03:04 surface expression was determined flow cytometrically by staining with the anti-pan-HLA antibody W6/32 (n = 3). (TIF)

S1 Text. Details of the computational modeling. (PDF)

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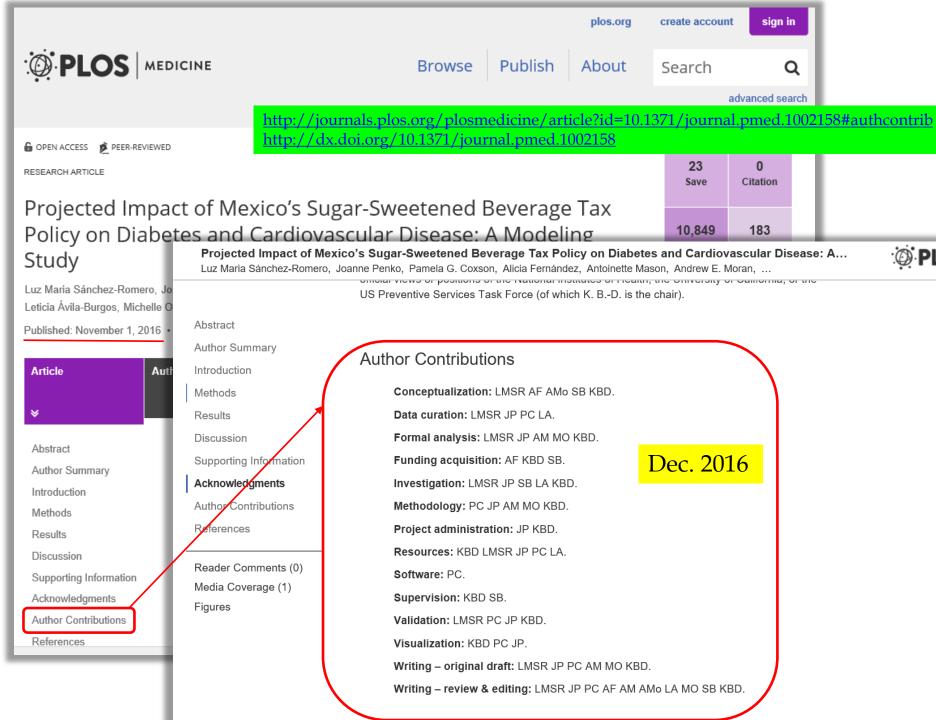
Dec. 2015

Author Contributions

Conceived and designed the experiments: AH CJC WGB NvT AC JC RZ MA. Performed the experiments: AH CJC WGB SK JC. Analyzed the data: JC CJC CK AH CT WGB SK MA AC. Contributed reagents/materials/analysis tools: JS MC PH CK TP DE BW GA. Wrote the first draft of the manuscript: AH MA. Contributed to the writing of the manuscript: AH CJC CT JC MA. Agree with the manuscript's results and conclusions: AH CT CJC WGB JC NvT JM MJ SK AC CK JS DE GA BW PG MC PH TP RZ TN MA. Enrolled patients: JM MJ CT PG TN. All authors have read, and confirm that they meet, ICMJE criteria for authorship.

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Clinicopathologic Impacts of Poorly Differentiated Cluster-Based Grading System in Colorectal Carcinoma

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DISCLOSURE

All authors declare no conflicts of interest.

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Conceived and designed the experiments: JW Kim. Performed the experiments: JW Kim, MK Shin. Analyzed the data: JW Kim. Contributed materials: BC Kim. Wrote the first draft of the manuscript: JW Kim. Wrote the paper: JW Kim. ICMJE criteria for authorship read and met: JW Kim, MK Shin, BC Kim. Agree with manuscript results and conclusion: JW Kim, MK Shin, BC Kim. Enrolled patients: JW Kim, BC Kim.

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Genotype and Phenotype Analysis in Pediatric Patients with Cystinuria

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Genotype and Phenotype Analysis in Pediatric Patients with

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AA genotypes. A big limitation of this study was the small number of subjects. Therefore, a large nationwide multicenter study is recommended.

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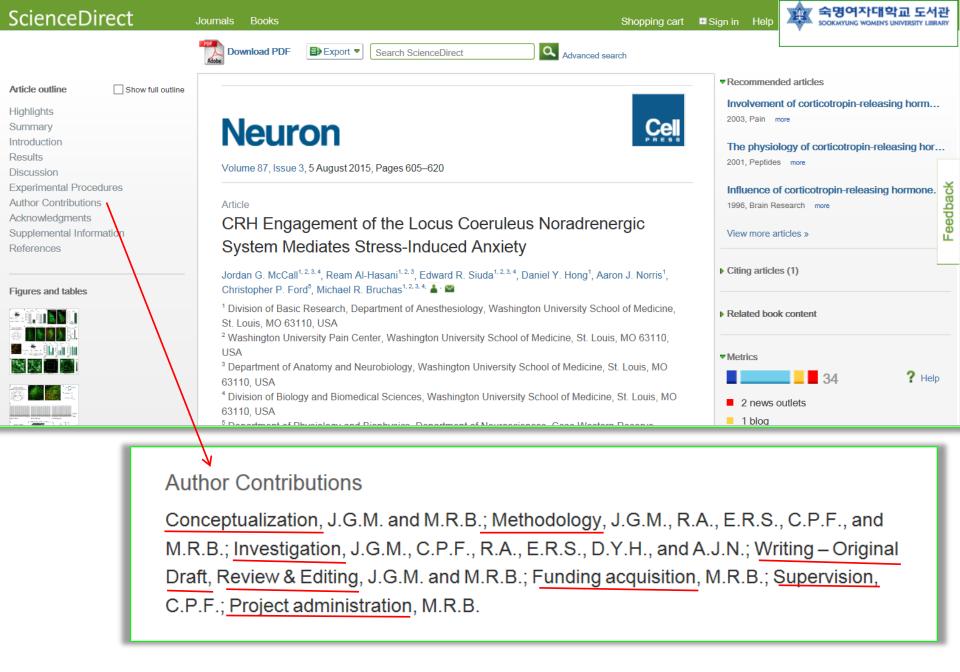
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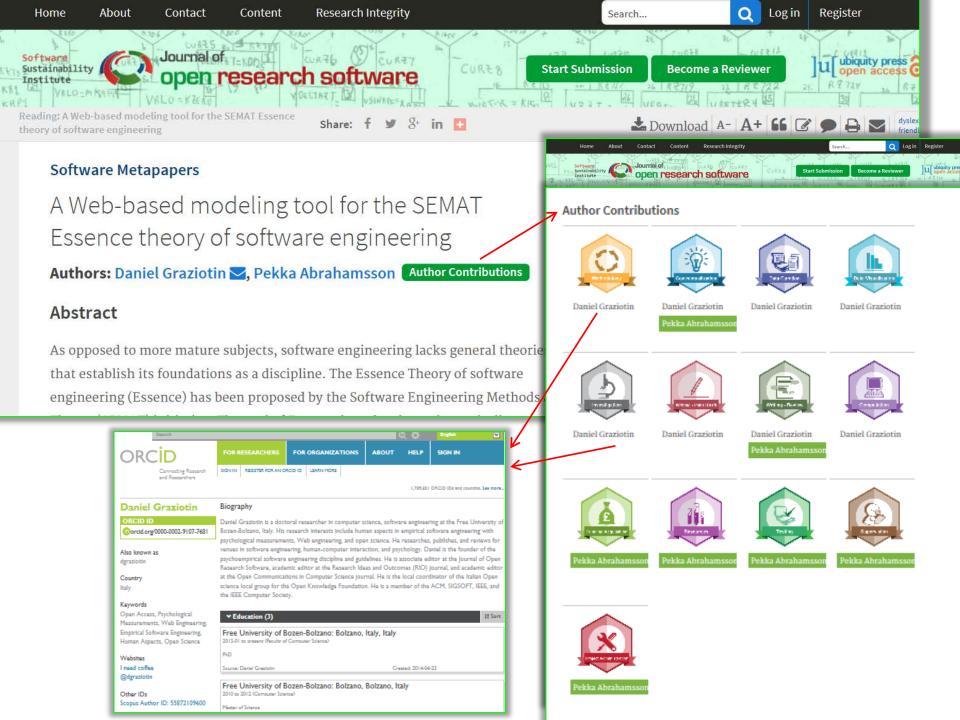
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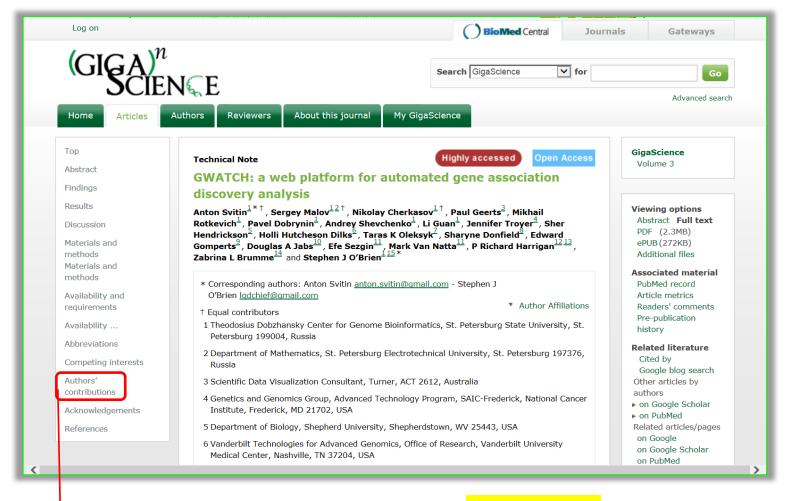
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CROSSREF







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ASV, SM, NC, PG, MR, PD, ASh, TKO and SJO <u>developed</u> GWATCH. LG, JT, SH, HHD, ES and SJO <u>performed the original GWAS studies</u>. SD, EG, DAJ, MVN, RH and ZLB <u>contributed new</u> epidemiological data from their AIDS cohorts. ASV, SM, NC and SJO <u>wrote the manuscript</u>. All authors read and approved the final manuscript.



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GWATCH: a web platform for automated gene association discovery analysis

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Abstract

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Implementation of CRediT into e-submission system

- Aries Editorial Manager 13.0
 - The ability to attribute one or more 'Contributor Roles' to each Author of a submission
 - The ability to identify the degree to which a particular contributor was involved "Lead", "Supporting", "Equal"
 - The ability to configure the collection of Contributor Roles per Article Type
 "Optional" or "Required"

CRediT Markup Example

```
JATS v1.1d3 Contributor tagging: as-is

<contrib contrib-type="author">

<contrib-id contrib-id-type="orcid" authenticated="true">http://orcid.org/0000-0001-0001-0001</contrib-id>

<name>

<surname>Jang</surname>

<given-names>Young Shil</given-names>

</name>

<xref ref-type="aff" rid="A1">1</xref>
</contrib>
```

Benefits and Expectations

Benefits

- CRediT을 사용하는 것이
 - 기존 방식(Free format author contribution statements)보다
 - Easy to use
 - Clear (Concise & Precise)
 - Standardization
 - Useful
 - Visual (Open badges)

Expectations

- Facilitate authorship/contributorship disclosure processes and policies
- Identify good practices for tracking contributions to the components of scholarly published output
- Minimize authorship disputes
- Enable appropriate recognition for the different contributions in multi-authored works across all aspects of the research being reported (including data curation, statistical analysis, etc.)

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Thank you!

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