CRediT Taxonomy of Contributor Roles: Early implementation at Cell Press

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CRediT: Background

THE AUTHOR LIST: GIVING CREDIT WHERE CREDIT IS DUE

The first author
Senior grad student on the project. Made the figures.

The third author
First year student who actually did the experiments, performed the analysis and wrote the whole paper. Thinks being third author is "fair".

The second-to-last author
Ambitious assistant professor or post-doc who instigated the paper.

Michaels, C., Lee, E. F., Sap, P. S., Nichols, S. T., Oliveira, L., Smith, B. S.

The second author
Grad student in the lab that has nothing to do with this project, but was included because he/she hung around the group meetings (usually for the food).

The middle authors
Author names nobody really reads. Reserved for undergrads and technical staff.

The last author
The head honcho. Hasn't even read the paper but, hey, he got the funding, and his famous name will get the paper accepted.

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CRediT: Background

The traditional author list…

Characterization of Large Structural Genetic Mosaicism in Human Autosomes

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(Author list continued on next page)

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CRediT: Background

2012: Initial workshop at Harvard

2013: Taxonomy piloted on recently published papers from multiple publishers, including Elsevier

2014: Project CRediT working group finalizes the 14 terms & descriptions

2015: Published to the CASRAI dictionary

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CRediT: 14 Roles

Conceptualization

Data curation

Formal analysis

Funding acquisition

Investigation

Methodology

Project administration

Resources

Software

Supervision

Validation

Visualization

Writing – original draft

Writing – review & editing

CRediT: Implementation

May 2015: began encouraging the use of CRediT

> **Author Contributions**
>
> For primary research papers, we ask you to include a dedicated Author Contributions section preceding the Acknowledgments to give information about individual author contributions to the work. Please keep this section as concise as possible and use initials to indicate author identity. All of the authors listed on the paper should be mentioned in this section at least once. We are happy for you to use a traditional format such as "A.B. and C.D. conducted the experiments, E.F. designed the experiments and wrote the paper…" but would also encourage you to use the CRediT taxonomy instead.

"We are happy for you to use a traditional format … but would also encourage you to use [the CRediT taxonomy](#) instead."

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CRediT: Implementation

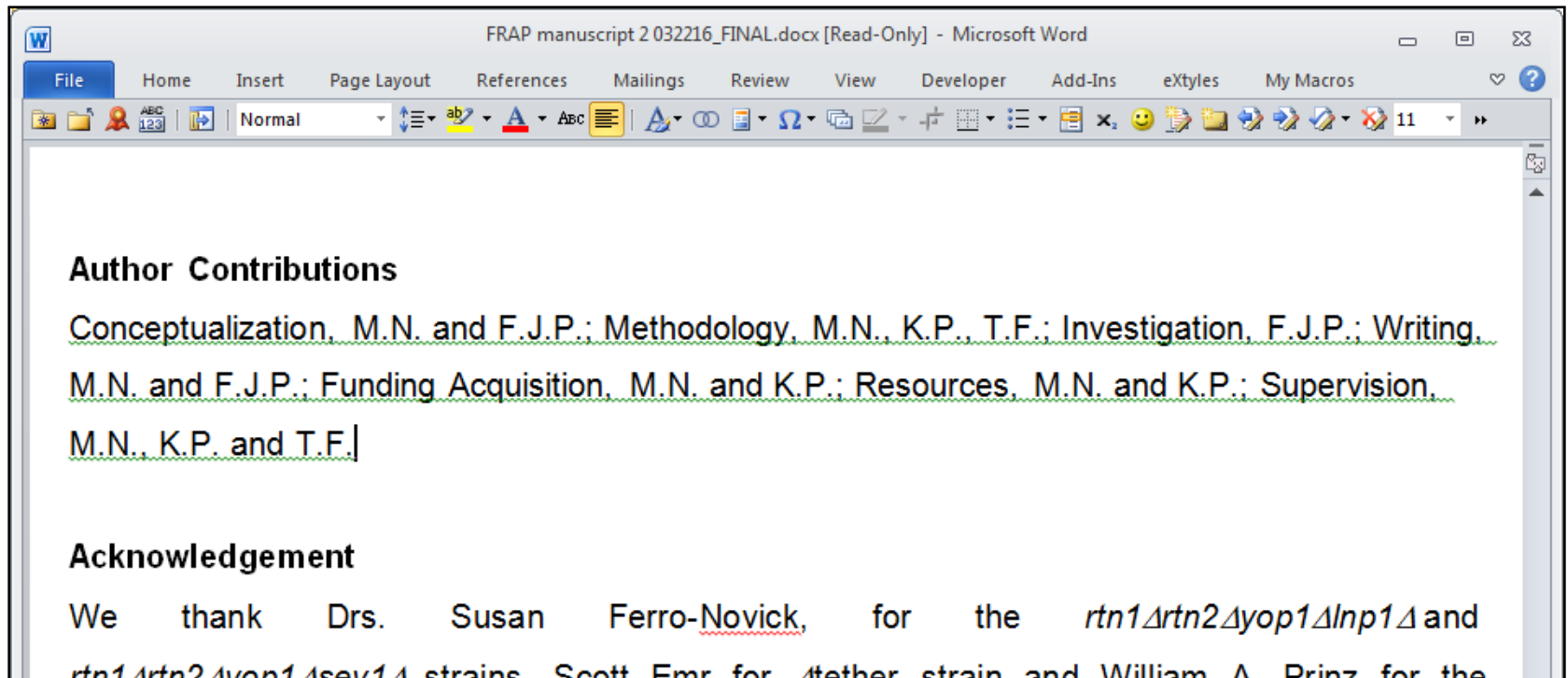Recommendation: communicated via Author Guidelines and revision-stage letters

We link to a one-page overview (at

http://www.cell.com/pb/assets/raw/shared/guidelines/CRediT-Taxonomy.pdf)

Note: initially, both the Author Contributions section and the use of CRediT were optional; as of 2016, the section is mandatory but the taxonomy remains optional.

CRediT: Implementation

Authors provide the Author Contributions section – with or without CRediT – in the final Word manuscript submitted prior to acceptance.

CRediT: Cell Press Example
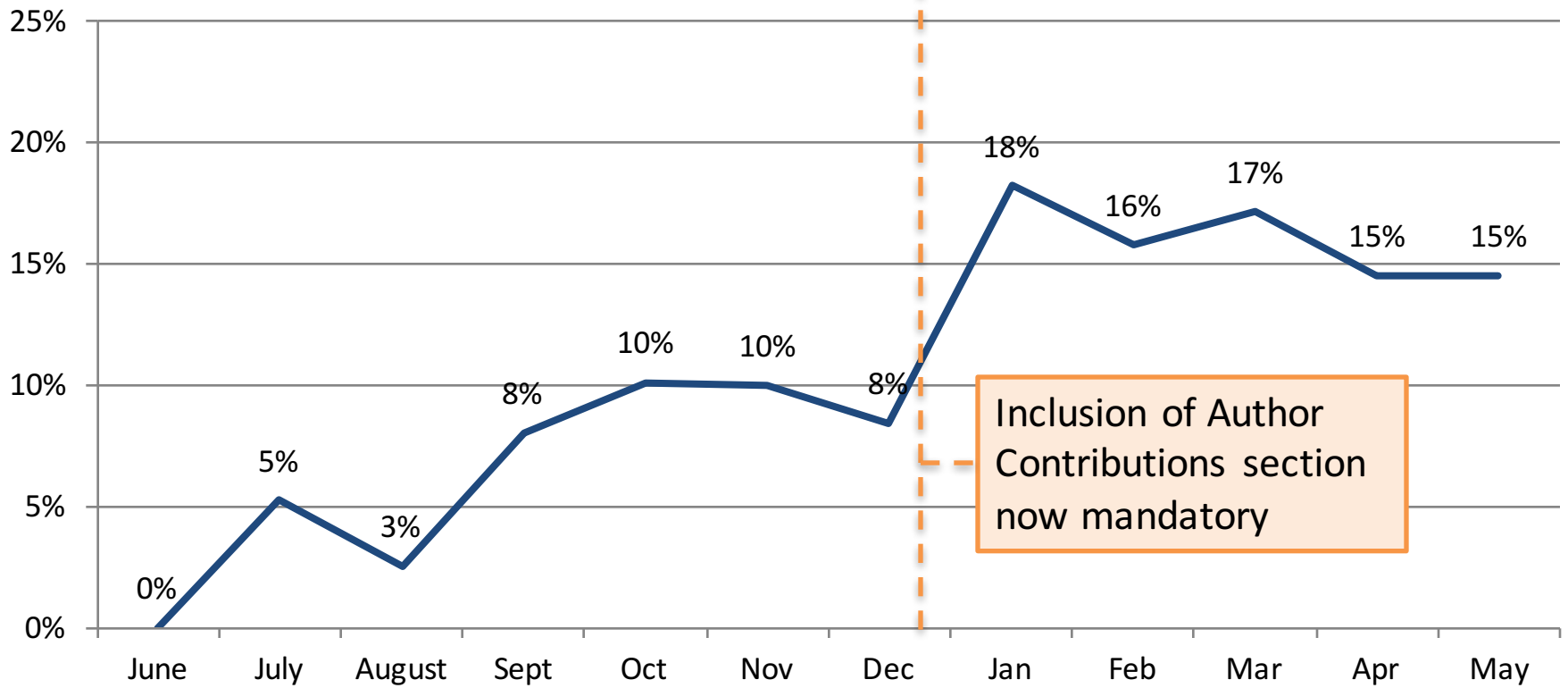
AUTHOR CONTRIBUTIONS

Conceptualization, M.S.L., P.P., G.G., N.J.H., P.S., D.A.W., E.S., K.R.C., A. Koren, and J.K.; Methodology, M.S.L., P.P., N.J.H., and P.S.; Software, N.J.H. and M.S.L.; Formal Analysis, N.J.H., M.S.L., and P.P.; Investigation, N.J.H., P.P., and M.S.L.; Resources, M.S.L., G.G., A. Koren, and D.A.W.; Data Curation, E.R., N.J.H., P.P., M.S.L., and A. Koren; Writing – Original Draft, N.J.H., M.S.L., A. Koren, P.P., and G.G.; Writing – Review & Editing, N.J.H., M.S.L., A. Koren, P.P., G.G., D.A.W., P.C.H., E.S., K.R.C., E.R., J.M.H., P.S., Y.E.M., A. Kamburov, and L.Z.B.; Visualization, N.J.H. and M.S.L.; Supervision, G.G., M.S.L., P.P., A. Koren, D.A.W., and P.C.H.

The section is copyedited, but no tags are applied to the roles or the authors in the article XML.

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CRediT: Cell Press Uptake

CRediT in Cell Press Papers:
June 2015 - May 2016

Inclusion of Author Contributions section now mandatory

CRediT: Author Feedback

Fall 2015

Surveyed the first 100 papers that used CRediT

38 respondents highlighted 3 key benefits:

Ease of use | Clarity | Standardization

CRediT: Author Feedback

The first time you used CRediT, did you find it easy or difficult to apply the taxonomy?
87% "very" or **"moderately" easy**

How useful did you find CRediT in accurately reflecting the contributions of <u>all</u> authors?
76% "extremely" or **"very" useful**

Would you use the taxonomy in future papers?
43% "definitely " | **56% "probably"**

CRediT: Author Feedback

What is the likelihood that CRediT will be recognized by the appointment, promotion, or tenure system of review at your institution?
36% "very" or "extremely" likely

CRediT: Author Feedback

Q1 How did you learn about the CRediT taxonomy?

Answered: 38   Skipped: 0

Communications from Cell Pr...

From a blog, website, or...

From a colleague

A presentation at a conference

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CRediT: Next Steps CP/Elsevier

- Share our early learnings with others

- Incorporate CRediT roles into Elsevier DTD

- Conduct two surveys:

  – recent researchers who have used CRediT

  – researchers who have chosen not to use CRediT

CRediT: Next Steps Beyond

- Aries: Editorial Manager 13.0 will include the taxonomy roles

- Mozilla is incorporating the taxonomy roles into its Open Badges

- ORCID is building CRediT into its registry

CRediT: Next Steps Beyond

- JATS looking to integrate CRediT

- PLOS and American Chemical Society are implementing the taxonomy

CRediT: Resources

- **CASRAI:** **http://casrai.org/credit**

- **Cell Press CrossTalk blog:**
  - **http://crosstalk.cell.com/blog/authors-reflect-on-the-credit-taxonomy**
  - **http://www.cell.com/crosstalk/giving-authors-the-credit-they-deserve**

- **April 2015: Brand et al., Learned Publishing:** **http://informatics.mit.edu/publications/beyond-authorship-attribution-contribution-collaboration-and-credit**

- **April 2014: Allen et al., Nature:** **http://www.nature.com/news/publishing-credit-where-credit-is-due-1.15033**

- **Cell Press docs:** **https://reedelsevier-my.sharepoint.com/personal/harpg_science_regn_net/Documents/Shared%20with%20Everyone/CRediT-taxonomy**

Thank You!

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