

# Responsible Cardinals of Research



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RCR Newsletter

A NEWSLETTER FOR STUDENTS

## AUTHORSHIP



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Authorship is critical in shaping your research career but can also be a source of controversy and confusion. In this edition, we will clarify some of these issues, especially those related to the allocation of credit, while also highlighting your responsibility as an author in the research environment.

## Who Should Receive Credit?

While there is no universal consensus for authorship criteria in collaborative projects, it is generally agreed upon that authorship should be assigned to any person making a significant intellectual contribution to the publication.

The NIH offers guidance on assigning authorship or acknowledgment:

### General Guidelines for Authorship Contributions<sup>1</sup>

| Contributions                      | Authorship? (yes, no)             | Comments  |
|------------------------------------|-----------------------------------|---|
| Design & interpretation of results | original idea, planning & input   | Yes, unless highly original & unique  |
|                                    | other intellectual contribution   | Yes, but assuming active involvement  |
| Supervisory role                   | supervision of the project        | Yes, but assuming active involvement  |
|                                    | training, education               | No  |
|                                    | mentoring of 1st author           | No, unless substantive contribution made to study   |
| Administrative & technical support | resources: \$                     | Acknowledgements yes, authorship no   |
|                                    | resources: animals, reagents      | No if already published; yes if novel   |
|                                    | resources: patients               | Maybe, depending on circumstances   |
| Data acquisition                   | original experimental work        | Yes   |
|                                    | technical experimental work       | No if routine; yes if novel methods added, or specific role, e.g., statistics, imaging etc. |
|                                    | data analysis (assays)            | Yes, unless only very basic   |
|                                    | data analysis (statistics)        | Yes, unless only very basic (t-tests e.g.)  |
| Writing & other                    | drafting of manuscript            | Warrants first authorship   |
|                                    | reading/ commenting on manuscript | Substantial feedback can be acknowledged  |
|                                    | none                              | Includes honorary authorship for lab chiefs, celebrities etc.                               |

## Authorship Practices to Avoid<sup>2</sup>

**Gift Authorship:** Occurs when an author is credited for research but does not fulfill authorship criteria

**Honorary Authorship:** Involves including individuals as authors primarily due to their senior positions in the institution where the research took place and their involvement in securing funding rather than active contributions to the research

**Duplicate Publications:** When an author incorporates significant portions of their previously published work without giving proper references

**Prestige Authorship:** Assigning authorship as a gesture of appreciation or respect for an individual based on the belief that the esteemed standing of the honored person can boost the chances of publication, credibility, or the overall status of the work, even if their intellectual contribution is not substantial

**Ghost Authorship:** Describes professional writers who receive monetary compensation for scientific work attributed to another author

## In this Issue:

- Assigning Credit
- Unethical Authorship Practices
- Authorship Agreements
- Authorship and Research Misconduct
- Plagiarism
- Preventing Plagiarism
- The Driving forces behind plagiarism and research misconduct



**Pro Tip:** Prevent authorship disputes before they happen by creating an authorship agreement prior to beginning your collaborative work. To access BSU's authorship agreement form, [click here](#)



### Not-So-Fun Fact:

Plagiarism is the most common form of research misconduct<sup>3</sup>

According to the National Institutes of Health, 83.6% of research misconduct cases that yielded a guilty verdict over an 8-year period were due to plagiarism.<sup>4</sup>



### Plagiarizing Constitutes Research Misconduct

The U.S. Department of Health and Human Services defines research misconduct as "fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or as reporting results" (42 C.F.R. Sec. 93.103).<sup>5</sup>

## Defining Plagiarism

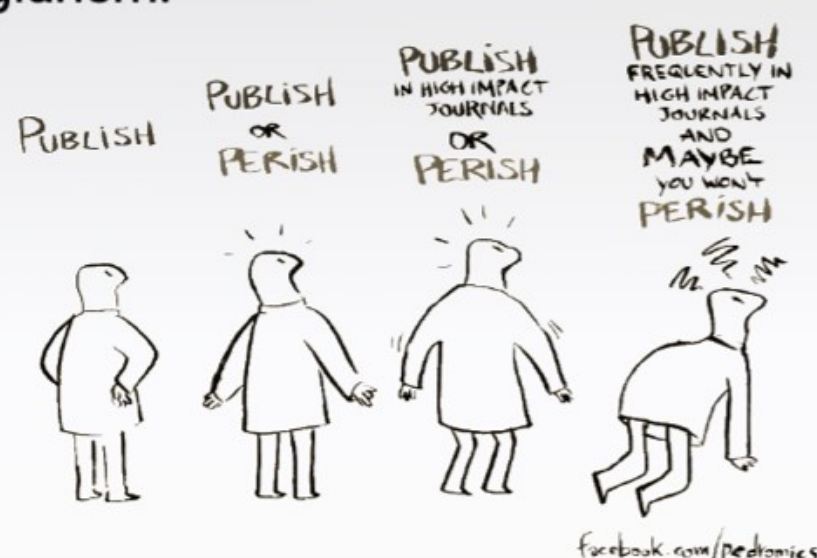
Plagiarism is defined by federal policy as "the appropriation of another person's ideas, processes, results, or words without giving appropriate credit".<sup>6</sup> Any act of neglecting or improperly citing of the original source can be considered plagiarism. Examples include:

- **Direct Plagiarism:** Taking another person's work and passing it off as your own without making any changes
- **Paraphrasing:** Changing the words of a source's information without giving credit
- **Mosaic Plagiarism:** Taking bits and pieces of someone else's ideas (or multiple people's ideas), combining them with your own words, and passing the idea off as your own



## What Does the Research Say?

In 2022, the National Science Foundation published a report which analyzed 134 research misconduct investigations where 137 researchers were found guilty of plagiarism.<sup>7</sup>



## Publish or Perish

Refers to the pressure faced by those in academia to continually publish research in order to maintain an academic reputation, secure funding, or be promoted to tenure. This pressure contributes to plagiarism in several ways:<sup>8</sup>

### Time Pressure:

Researchers may have limited time to conduct and publish their research due to requirements set by funding sources or their institution's promotion and tenure publication requirements. This pressure to publish more quickly can lead to cutting corners or engaging in unethical conduct like plagiarism.

### Fear of Failure:

The consequences for not publishing can be career-limiting for those seeking tenure and promotion. This fear could drive academics to engage in unethical practices including plagiarism.

### Quantity Over Quality:

In academia, some institutions put a greater emphasis on the number of publications produced by a researcher rather than the quality of the publications. Researchers might be inclined to plagiarize if it means producing more papers to meet institution.

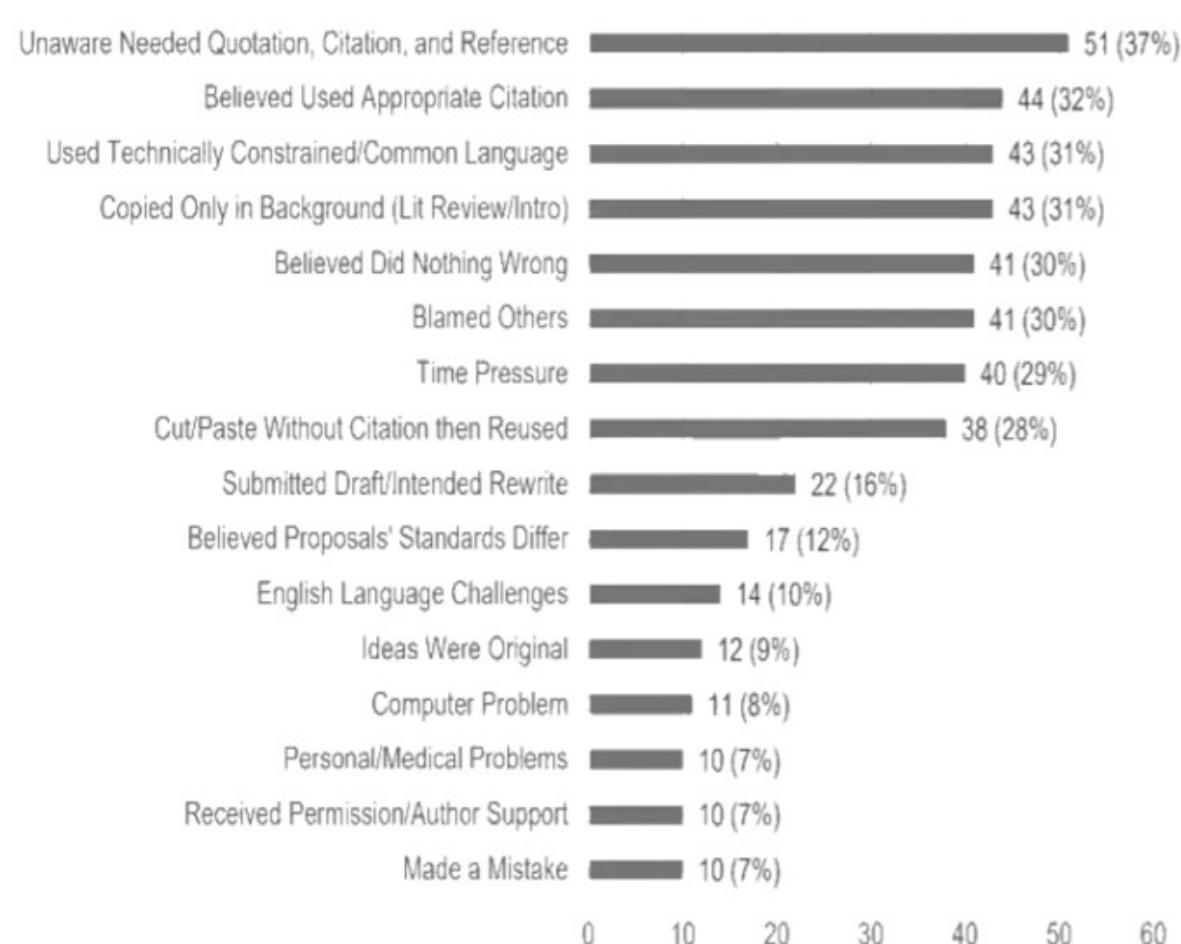
### Lack of Oversight:

In the rush to publish, oversight and the review process may be lax. This could lead to plagiarism going undetected if proper oversight measures are not put in place or utilized.

### Competition:

The world of academic research is competitive. With researchers competing for prestige and funding some may resort to plagiarism to bolster their publication records.

## Researchers' Reasons for Plagiarism





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3. Mohammed, R. A., Shaaban, O. M., Mahran, D. G., Attellawy, H. N., Makhlof, A., & Albasri, A. (2015). Plagiarism in medical scientific research. *Journal of Taibah University Medical Sciences*, 10(1), 6-11.
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5. Definition of Research Misconduct: 42 C.F.R. Part 93, Section 93.103.
6. Definition of Plagiarism: 42 C.F.R. Part 93, Section 93.109.
7. Observations from NSF plagiarism investigations and strategies to prevent plagiarism. National Science Foundation. (2022, March 4). <https://oig.nsf.gov/reports/other/observations-nsf-plagiarism-investigations-and-strategies-prevent-plagiarism>
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