

# Order of Authorship in Medical Education: Faculty Attitudes and Practices

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# Introduction

- Collaboration = Questions of authorship order
- Authorship and author order proxy for:
  - Research team leadership
  - Collaboration
  - Scholarly productivity
  - Seniority
  - Competence
  - Expertise



- Promotion
- Tenure
- Salary
- Resources
- Hiring

# The Current Situation

- We come from various disciplines
- Authorship practices by disciplines and seem inconsistent
- No guidelines exist for medical education researchers regarding authorship order
- The Question: How do medical education approach authorship decisions?

# Study Purpose

- Describe considerations commonly applied to author order decisions
- Describe considerations that should be applied to author order decisions
- Describe faculty opinions about how author order decisions are reached
- Discover the extent to which faculty encounter questionable practices related to authorship

# Methods

- Web-based survey: anonymous
- Initial e-mail and three follow-up reminders
- Bounced email addresses removed
- IRB Approval at Michigan State University

# Questionnaire

1. Current Practices and Suggested Practices
2. Attitudes About Authorship Order
3. Personal Experiences in Past Two Years
4. Demographic Information

# Sample

- DR-ED Listserv Subscriptions (N=2572)
  - All non-US based email addresses: 175
  - 10% random sample of US addresses: 216

# Response Rate

- 391 initial sample
- 54 undeliverable e-mails
- 337 valid e-mail addresses
- 141 opened the questionnaire
- 109 completed the questionnaire

$$\frac{109}{337} = 32.3\%$$

# Respondents

- Gender: 51% Women
- Experience: Mean=19 years (SD=11.13)
- Academic rank: 16% Assistant professor  
33% Associate Professor  
31% Professor

# Respondents

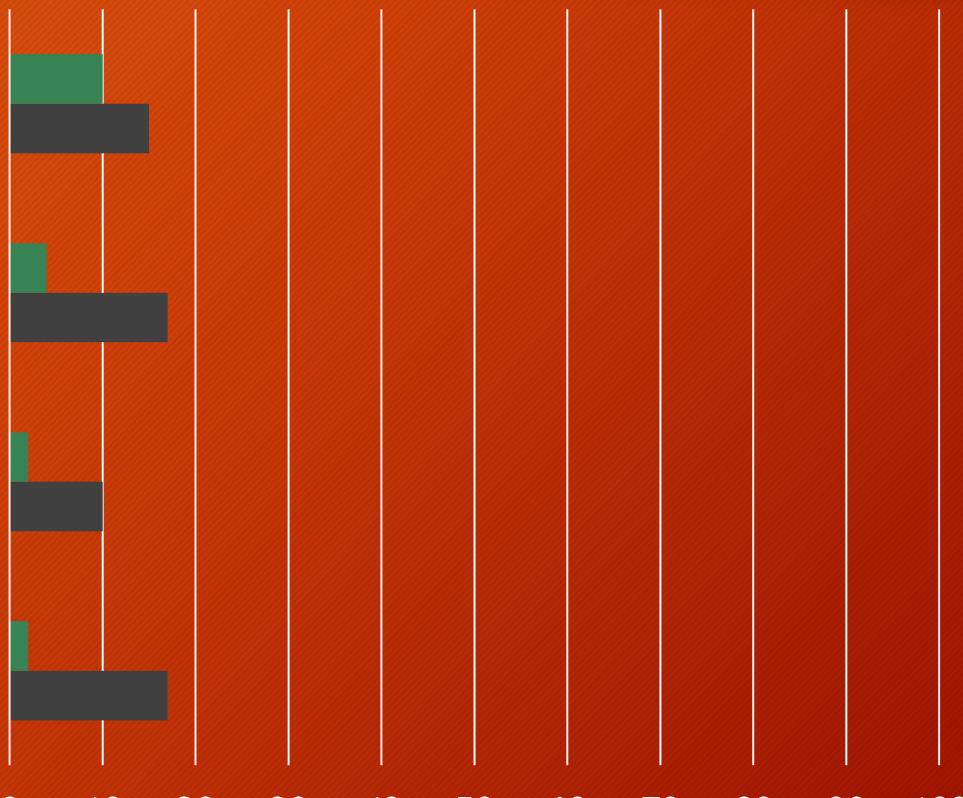
- Highest degree: 57% PhD  
44% MD/DO  
44% Masters
- Degree Field: 38% Clinical Sciences  
24% Social Sciences  
11% Basic Sciences  
3% Humanities  
25% Other

# We Agree That We Should...



# We Agree That We Should Not...

Last author has final responsibility for integrity of scholarship



Gift authorship out of obligation is acceptable

MDs and PhDs always listed before other contributors

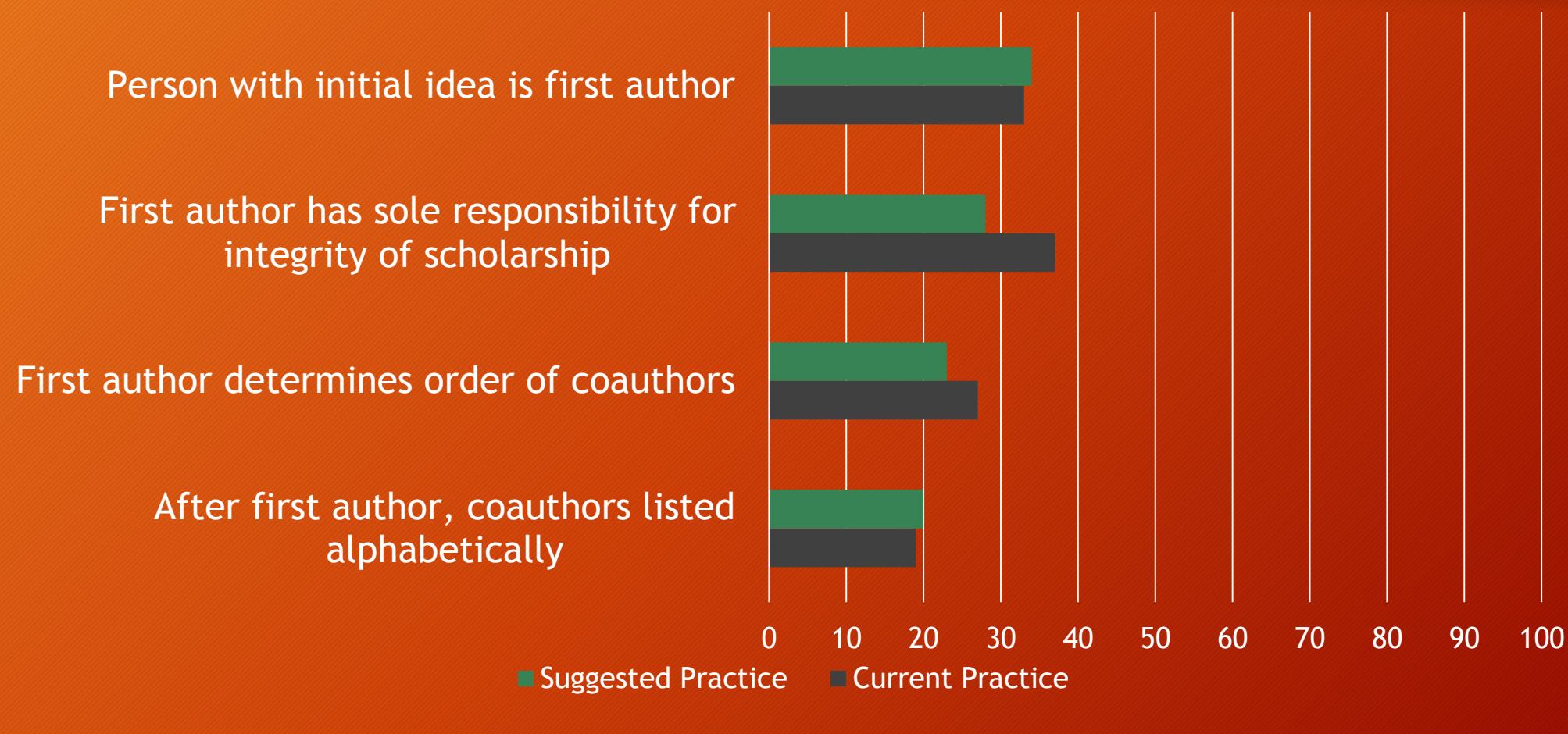
Assoc dean or dept chair always included as an author

■ Suggested Practice

■ Current Practice

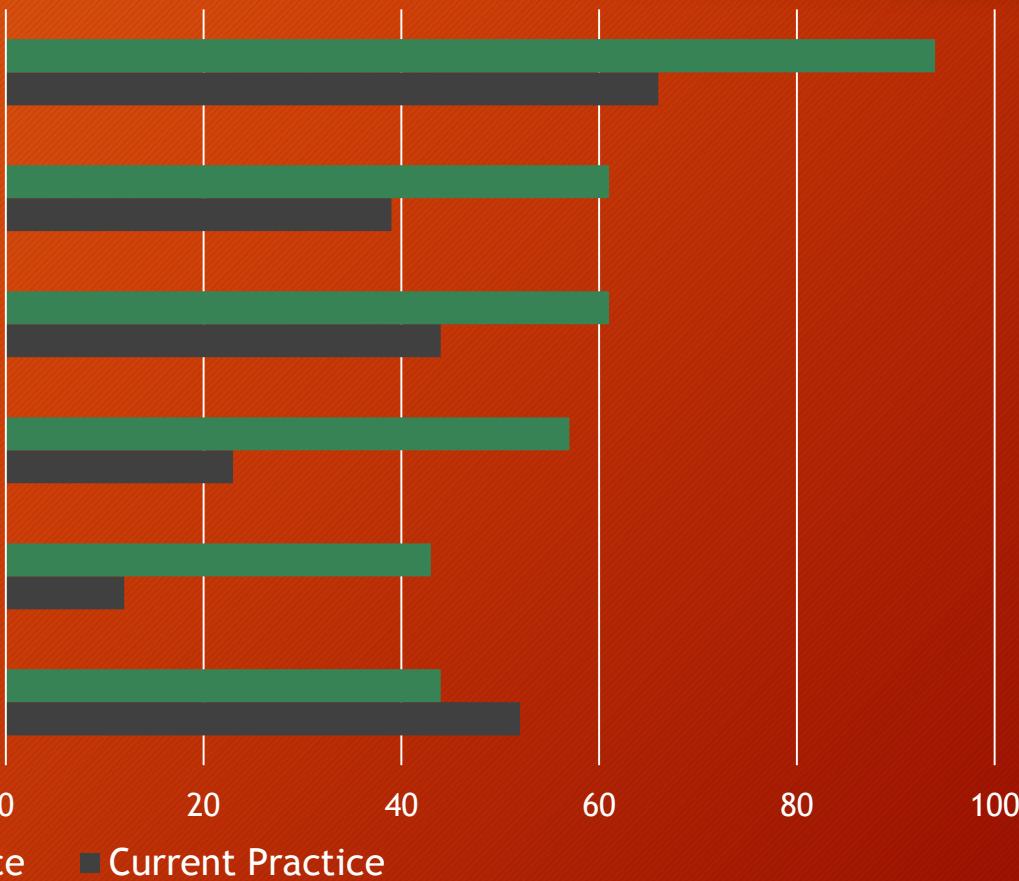
Bars indicate  
Often or Always

# We Agree That We Should Not...



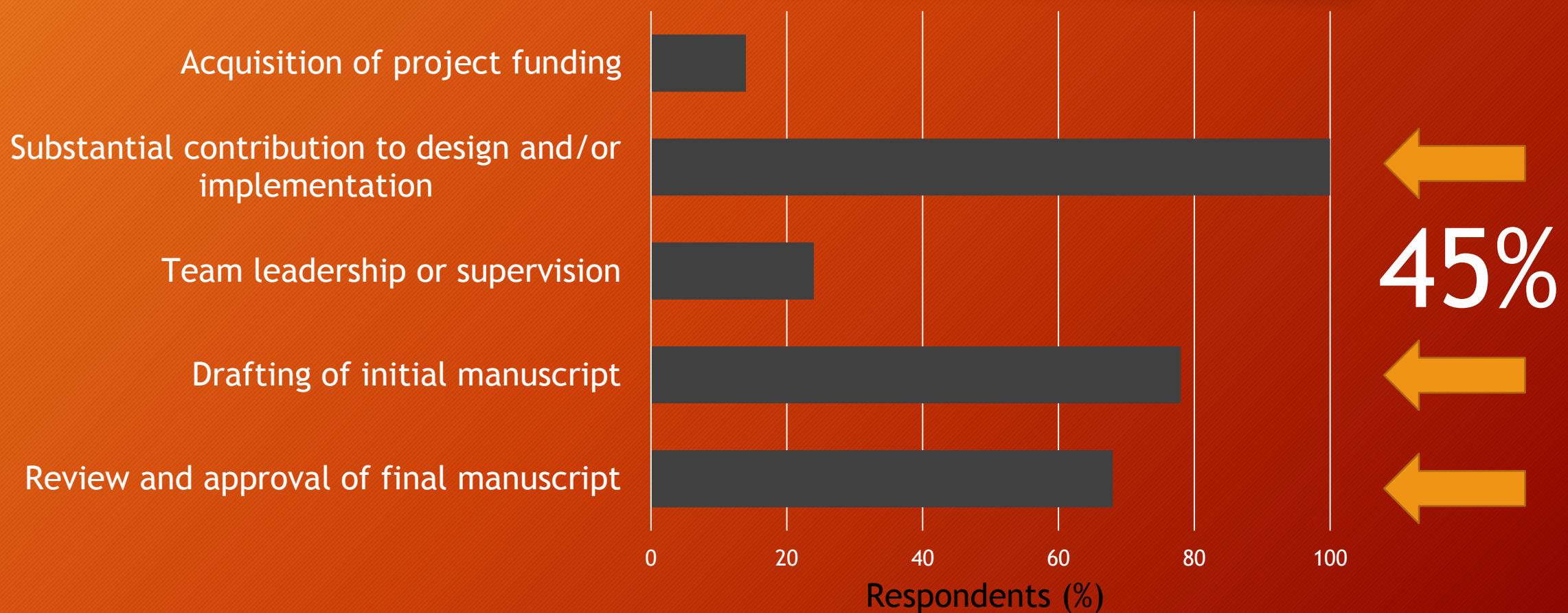
# Where We Disagree...

- Authors agree about author order in advance and revisit if needed
- Authorship to study group, with appendix of specific contributions
- For team papers, first author role rotates among team members
- Multiple authors with equal contributions can be identified as co-first authors
- Instead of author order, movie credits model should be used
- Team leader should be listed as last author

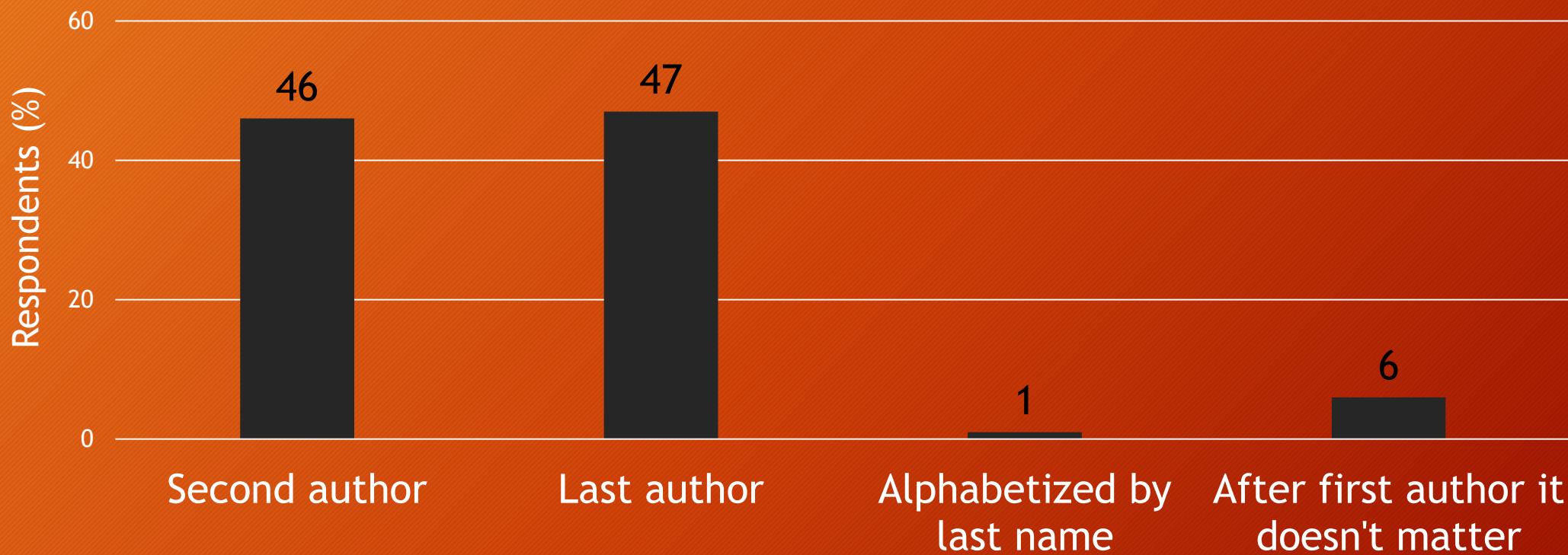


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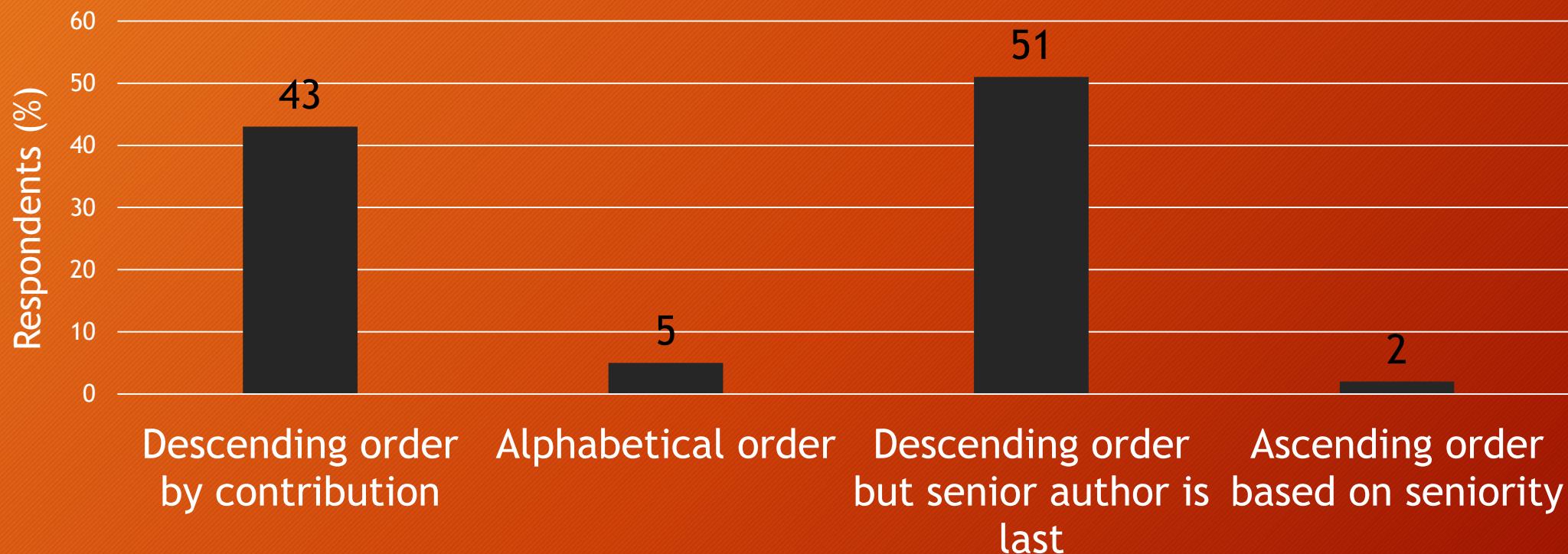
# International Committee of Medical Journal Editors (ICMJE) Criteria



When authorship order is based on contribution,  
after first author the next best place is...

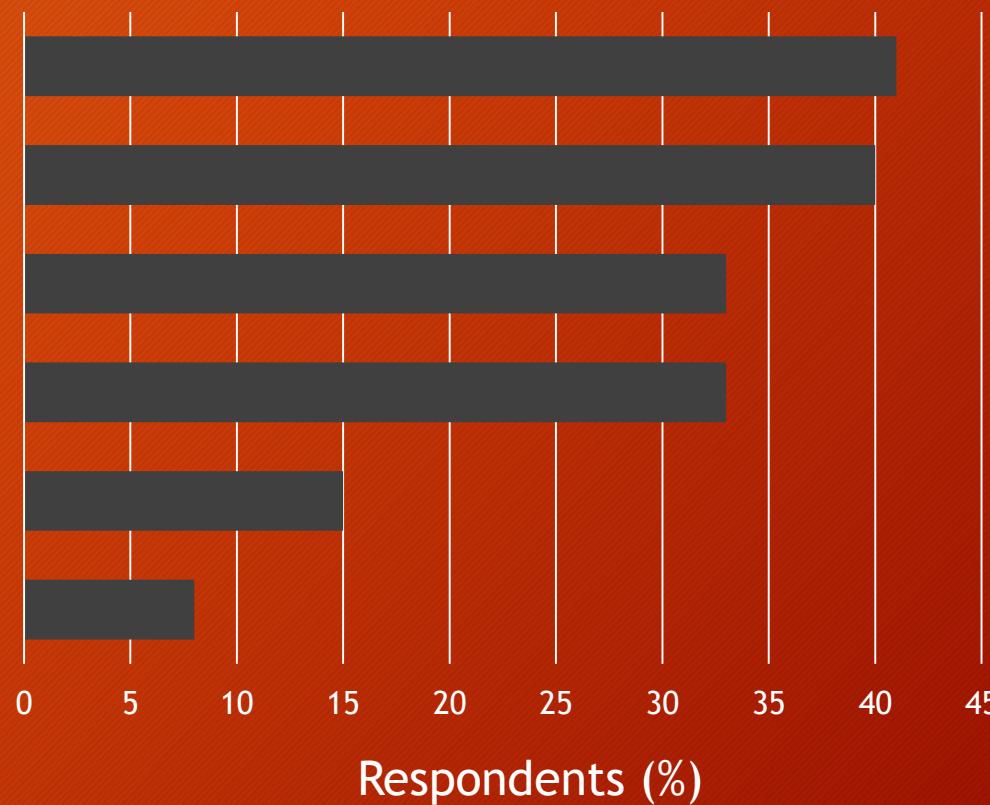


When authorship order is based on relative contribution, after first author the best approach is...



# In the past two years...

- I have been an author when others who did not merit it
- I declined authorship when I did not merit it
- I was not an author when I felt I should have been
- I have been pressured about author order
- I granted authorship to someone who didn't merit it
- I was granted authorship when I didn't merit it



# Conclusions

- Factors other than scholarly contribution often play a role in how authorship order is determined
- There is a gap between what might be considered ideal practice and what is current practice
- Some dimensions of this discussion remain unresolved
- Some starting points evident to develop best practices in determining what merits authorship and order of authors

The End



*“That's all Folks!”*