Editing the Discussion—Checklist for Editors

1. Are all the elements of a discussion section present?
(possible answers include yes, no, somewhat, N/A, or whatever else you feel like writing)
- Answer to question asked in the introduction
- Validation of the answer via reminder of supporting evidence
- Discussion of the answer/finding in the context of published literature
    - If results confirm former observations, are novel contributions emphasized?
    - If results contradict former observations, are discrepancies resolved (or at least mentioned)?
- Discussion of inconsistencies or surprises in own findings and speculation as to their impact.
- Discussion of the possible limitations or benefits of own interpretation or approach.
- Affirmation of key conclusions.
- Speculation about applications or implications of findings.

2. Is there extraneous information? Could some information be simplified, eliminated or moved to other sections?
- Too much background (repeats the Introduction, or just needs to be shortened)
- Too much speculation

3. Structure/outline *(most pertinent to a mature discussion)*
- Does discussion start with an answer to the main question/hypothesis stated in introduction and end with implications/applications?
- Is discussion broken up into separate sections (or themes)? If so:
    - Are or should sections be labeled with specific headings?
    - Or do sections start with clear topic sentences?
- Do sections (or discussion as a whole) go from current findings→published findings (preferred over "published findings→current findings", which can lead to excessive background or to redundancy with introduction)
- Does the outline of the discussion (or section) reflect a progression from:
    - solid conclusions→unanswered questions→speculations
    - conclusions directly relevant to the original question/hypothesis→more peripheral conclusions
- Do the implications/applications (at least some of them) mirror the "big picture problem" stated in the introduction?

4. Arguments, emphasis, signals:
- Arguments:
    - Is the **question being debated clearly stated**? (often in the topic sentence, as in: "Whether our findings in mice apply to humans remains unclear. On the one hand… On the other hand…")
    - Are competing or similar ideas identified with clear signals: "On the one hand… On the other hand..." "By contrast,…" "Consistent with this hypothesis…"
    - Is there a **concluding sentence**, for instance an attempt to resolve the debate, or a statement of the authors' favored interpretation?
- Are surprising findings, novel contributions, key conclusions properly emphasized?
    - For instance with signals: "This finding is surprising because…" "Our approach is novel in several ways…" "For all these reasons, we favor a model whereby …"
    - Or in topic or concluding sentences.

5. Overall evaluation
- what is well done:
- what needs work: