

## MICCAI 2025 Area Chair Orientation

March 6, 2025:

**Program Chairs:** James Gee, University of Pennsylvania

Daniel Alexander, University College London

Juan Eugenio Iglesias Gonzalez, MGH Martinos Center

Jaesung Hong, DGIST

Carole Sudre, University College London

Archana Venkataraman, Boston University

**Submission Platform Manager:** Kitty Wong, The MICCAI Society

# Thanks for Your Service for MICCAI 2025!

## Goals

- Orientation of process, timelines, and expectations
- Collection of feedback
- Q&A

#### MICCAI 2025 STATISTICS

- 5245 intent to submit, 3669 full paper submissions (about 28% increase vs 2876 on 2024)
- Papers were screened for anonymity, page length, template issues.
  ~150 will be desk rejected
- **188** ACs

• ~2585 reviewers

## Key Responsibilities for Area Chairs

#### • Primary AC for ~20-25 papers:

- Check paper formatting, suggest reviewers, shepherd review process, monitor review quality, complete meta-reviews & make initial recommendations
- **NEW THIS YEAR:** Initial decisions are not automated!! ACs will make them.
- NEW THIS YEAR: Justifications are only required for REJECT RECOMMENDATIONS

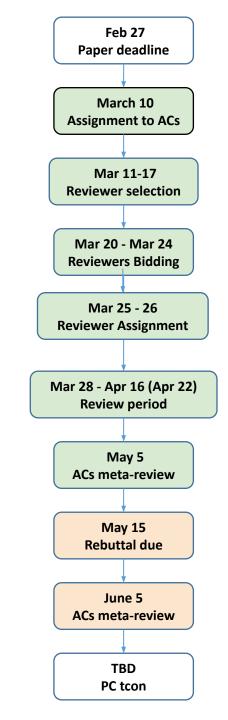
#### Secondary AC for an additional ~15 papers

- Encourage reviewers to participate in discussions & finalize their decision after rebuttal
- Make final recommendations
- NEW THIS YEAR: Justifications are only required for REJECT RECOMMENDATIONS
- Recommend Oral papers and award candidates
- Identify papers suitable for sessions on clinical translation and Pan-Asia challenges
- Rate the quality of each review

#### **Process Overview**

Phase I: Primary AC on all papers (~20-25 papers per AC)

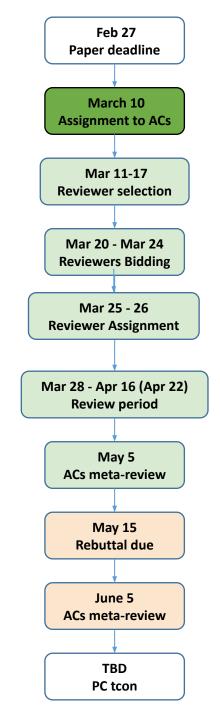
Phase II: Secondary AC on rebuttal papers (~15 papers per AC)



## Primary AC Assignments

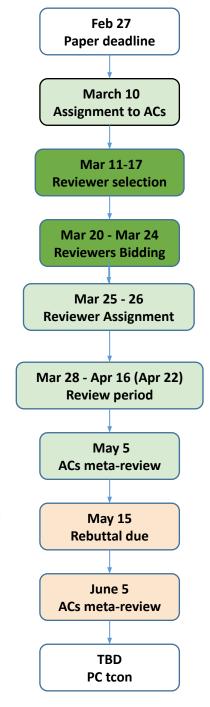
- Receive primary assignments on March 10
  - Based on TPMS match score, subject areas (keywords), & conflicts of interest
- Screen paper for the following issues & notify PCs
  - Anonymization
  - Overlength
  - Formatting
  - Overlapping submissions
  - NEW THIS YEAR: Only multimedia files and unpublished manuscripts are allowed as supplementary materials

\*Authors are also allowed to put their MICCAI submission on ArXiv



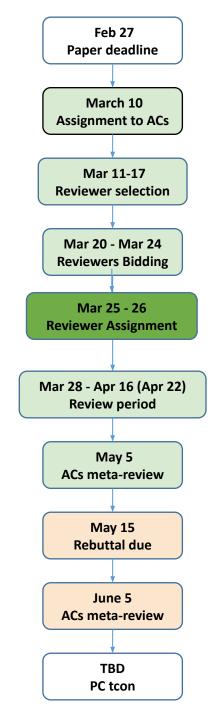
## Reviewer Suggestions

- Suggest 10-15 reviewers for each paper in ranked order, considering
  - TPMS (↓) \*important, this is NOT the only factor
  - **Reviewer profile** (expertise, publications, etc)
  - Subject areas ( 1),
    - **NEW THIS YEAR:** Primary subject area is "MIC" or "CAI". Secondary subject area should include a body part (e.g., brain, heart) and modality (e.g., MRI)
  - Reviewer load
    - Avoid reviewers already with >20 suggestions
  - Paper difficulty
    - Suggest more reviewers for difficult papers
  - Do not only suggest reviewers in your personal network!!
- Detailed instructions will be sent later.
- Final reviewer assignment considers a combination of automatic TPMS, keyword matching, AC suggestions, and reviewer bidding
- ACs will be asked to step in and review if we cannot match the paper!



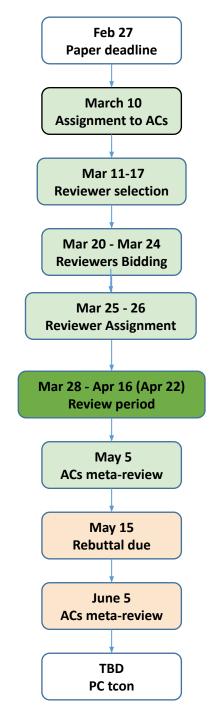
## Assignment to reviewers

- March 25
  - Automated paper assignment to reviewers
  - General quality checking by Kitty
- March 26
  - ACs check for issues in reviewer assignment and reassignment (e.g., COIs, reviewers from the same institute)
- March 28
  - Paper release to reviewers.
  - NEW THIS YEAR: ACs handle all reviewer reassignment requests. To be handled within 24h of request
  - When assigning a paper to a new reviewer, must email new reviewer to ensure they are willing to take on an additional paper.
  - DO NOT add a reviewer to a paper without asking.
  - DO NOT abuse this by adding additional reviewers to your batch!!!



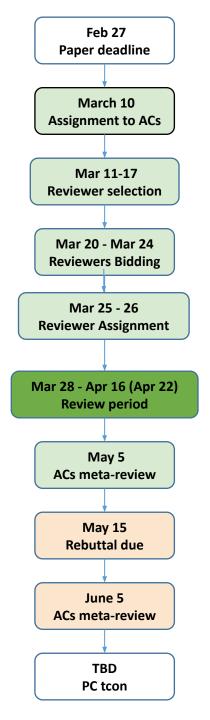
#### **Review Period**

- Review Period (Officially March 28 April 16)
  - Shepherd review process
  - Monitor review quality as they come in.
  - Communicate with the reviewers if review quality is low (email through CMT)
- Deadlines
  - Official review deadline: Wednesday, April 16
  - Unofficial internal deadline: Tuesday, April 22
  - Emergency review period: April 23 May 1
  - Reminders of deadline will be sent centrally by Kitty



## Monitor Review Quality

- Reviews of accepted papers will be made public.
- Communicate with reviewers to improve review quality when...
  - The review is short and uninformative
  - There is no justification of the score
  - The review has only positive comments but recommends reject
  - The review has only negative comments but recommends accept
  - The reviewer states that the work is not novel without providing evidence (eg citations to prior work)
  - The reviewer asks to cite their own paper(s) without good reason
  - The language is inappropriate
- Rate review quality
  - Exceeded expectations / Met expectations / Failed to meet expectations Important to assess ACs and reviewer applications next year
- Reviewers should not ask for more experiments in the rebuttal!



## Application vs. Methodological Studies

- See MICCAI 2025 submission guidelines
- Methodological studies
  - Demonstrate clear innovations and contributions over the state of the art methodologies.
  - Evaluation and performance assessment is potentially limited to proof of concepts or small-size validation studies.

#### Application studies

- Demonstrate clear clinical value of existing techniques, or adoption of state-of-the-art methods to a new problem or context, with appropriate and rigorous evaluation design
- Do not necessarily need to involve fundamental methodological innovations
- Examine how authors and reviewers have considered, argued, and justified paper contributions according to its categories.

## CAI vs. MIC Papers

- **Significance/Innovation** of CAI works can include:
  - Novel clinical applications
  - Demonstration of clinical feasibility even on a single subject/animal/phantom
  - Novel MIC approach to solving a CAI need
  - Proposal of a cost-effective approach
- Experimental evaluations of CAI works are typically much more challenging (than MIC studies) in
  - Clinical evaluation on patients
  - Achieving a large sample size
  - Comparison with existing systems
- Clinical papers -
  - Translation of methodology with impact on clinical workflow and evaluation
  - Novel insights into clinical challenges

## What to do if you encountered a "problematic" paper

#### During the reviewer suggestion phase

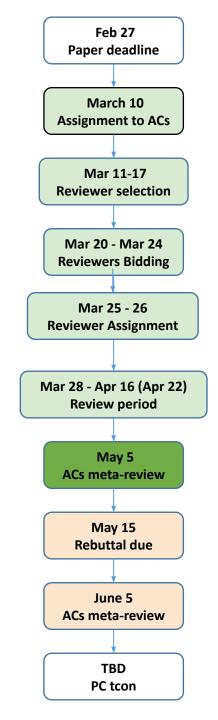
• Flag the issue (format, supplementary material) to Kitty (<a href="mailto:submissions@miccai.org">submissions@miccai.org</a>) but continue to suggest reviewers to the paper

#### During the review period

- The reviewer suspects the author submitted work that was already published (double submission/self-plagiarism)
  - Instruct the reviewer to continue to review the paper. The reviewer can give a low score citing the lack of contribution w.r.t the already published paper.
  - Reviewer should include their suspicion in the "confidential comments to PCs and ACs" field on the review form.
  - If the AC agrees with the reviewer's finding, flag this to the program chair for an investigation.
- Formatting issues (white space, wrapped around figures) and potential breaches of anonymity
  - Instruct reviewers to continue to review the paper based on the scientific content of the paper
  - Flag the issue to PCs if the AC deem the issue to be severe

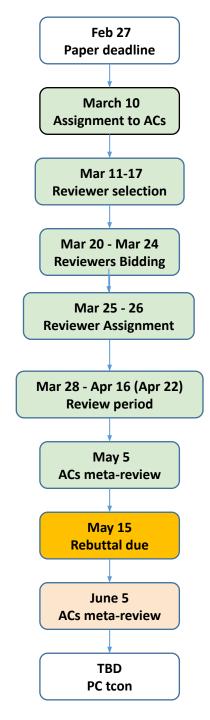
#### **AC Initial Meta-Reviews**

- ACs will make an initial decisions for each paper
  - Early accept, early reject & invite for rebuttal
- PC will provide detailed guidelines and target statistics
  - Historical: ~15% accept, ~50% reject, ~35% rebuttal
- Base your decisions on the reviews (including quality) and your domain knowledge. Do NOT simply take the average reviewer scores!
- You may factor in reproducibility into the decision, as appropriate.
- You will be asked to complete a meta-review form for each paper:
  - **NEW FOR THIS YEAR:** Justifications are only required for **REJECT RECOMMENDATIONS** (please be detailed, especially if your recommendation deviates from the reviewers)
  - For accept recommendations, you will be asked to indicate whether a paper is suitable for special recognition (oral presentation, award, etc.) and justify why you recommend a paper.



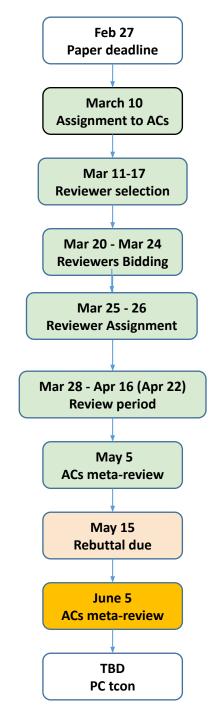
## Secondary AC Assignments

- Each rebuttal paper will be assigned 2 secondary ACs
- Each AC will receive ~15 secondary paper assignments
- NEW THIS YEAR: after rebuttals are in
  - Reviewers will be asked to revise their reviews and make a decision (Accept vs Reject) (by May 26)
  - There is no reviewer discussion period!
- Primary and secondary ACs can still discuss via CMT email.



### **AC Final Meta-Reviews**

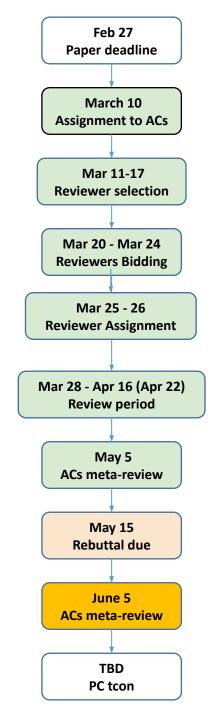
- Meta-reviews must be completed for all primary & secondary assignments
  - NEW THIS YEAR: Detailed justifications are only required for REJECT RECOMMENDATIONS
  - Consider the reviews and how well the authors' rebuttal addressed the reviewer critiques
  - Avoid raising new critiques unless they can be justified to be fatal flaws overlooked
  - You must make an ACCEPT or REJECT decision for all rebuttal papers - no borderline rankings
- Recommendations:
  - Accept vs. Reject
  - Suitability for special recognition (oral presentation, award, special issue invitation, ...)
  - Categorize the papers to help with program construction
  - Rate the reviews



#### **AC Final Meta-Reviews**

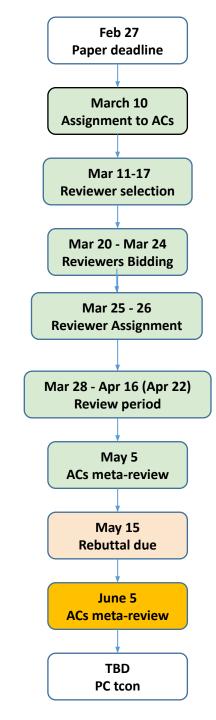
- Detailed justifications are required for papers where you recommend rejection
  - You should provide concrete rationale for your decision - do not simply cite the review scores!
  - If your decision differs from the reviewer opinions, then you must provide reasons why

 Justifications are optional for "accept" decisions – these will be made public if the paper is accepted



## Final AC Meeting

- Report summary of paper statistics
- Discuss oral programs
- Gather feedback and suggestions for next year



#### General remarks

- Reviews and meta-reviews of accepted papers will be public
- Reviewers will be back in the loop after rebuttal
- Reserve time for the two phases: Mar 11 May 5 and May 15 June 2
- CMT emails can be flagged as spam. Check the AC information here: https://conferences.miccai.org/2025/en/INSTRUCTIONS-TO-AREA-CHAIR S.html and keep an eye on unresponsive reviewers
- Throughout the process
  - Please check the <u>MICCAI Review Process</u> and <u>AC guidelines</u> (website)
  - For questions on CMT, ask Kitty Wong <u>submissions@miccai.org</u>
  - Contact Program Chairs at <u>program chairs@miccai2025.org</u> (or via CMT)

## Q&A