



## The Case of the Honorary Authorship

Case by Dr. Brent Thoma

### Case

Dr. Brent Thoma

### Objectives / Questions:

Dr. Teresa Chan

### Expert Commentaries

Dr. Kerstin De Wit

Lindsay Baker

Farah Friesen

Dr. Stella Ng

### Curated Community

#### Commentary

Dr. Teresa Chan

### MEiC Project Lead

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Dr. Michelle Lin

Dr. Keurin was excited for her meeting with her research mentee, Andrei, today. He was a junior emergency medicine resident with a strong interest in research that had just completed his first project! They were just meeting to review the final draft before submission. As she walked into the coffee shop she saw him slumped in his chair, looking a bit dejected. That wasn't like him at all.

"Hey Andrei, is everything okay?"

He sighed. "I dunno. I just met with Dr. Lee to talk about this whole submission process. You know, which journal we should submit my manuscript to and such." Dr. Lee was the program's Research Director and one of the most renowned emergency medicine researchers in the country. She knew that one of the reasons that Andrei had ranked the program so highly was so that he could work with the illustrious Dr. Lee and he had confided to her in previous meetings that he had been disappointed about their lack of interaction so far in residency.

"Oh, and that didn't go well?" she asked. "Well, I dunno. It was the first time that we had discussed the project since I ran into him in the hall at the beginning of the year. You'll remember that he hadn't been too impressed with the idea at that time."

Dr. Keurin remembered. That was actually how she, a much more junior researcher in the Faculty, had come to be Andrei's mentor. She thought he had a great idea for a research project and had supported it to fruition.

"Anyways, I had met with him to ask for some advice on where we should submit the

manuscript and we had a good chat about that. But then he mentioned that I should send it to him to give it a final once over and add him as the senior author. He said that if we added his name it would strengthen the chance of our paper getting published. I was so shocked that I didn't know what to say. You've really mentored me through this project, that should be your spot! But I'm also worried about my future job and research projects if I were to piss him off. What do you think?"

Dr. Keurin pursed her lips. This was putting her in an awkward position. She recalled a similar conversation from when she was a resident. She had just gone along with it because she figured that was how research worked, but it didn't feel right then and it still doesn't feel right now. At the same time, it would be horrible for her prospects at her institution to be on Dr. Lee's bad side. What should she say?

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### Questions for Discussion

1. What are the requirements for being listed as an author on a manuscript? Does Dr. Lee meet these authorship criteria? How should the authorship order be determined?
2. How should Dr. Keurin deal with this situation? What advice should she give to Andrei? Should she confront Dr. Lee?
3. What are some policies that you have seen that are used to protect junior residents and faculty from encountering this problem?

## Competencies

ACGME	CanMEDS
Professional Values (PROF1)	Scholar Professional Collaborator

## Intended Objectives of Case

1. List the criteria for authorship as per the International Committee of Medical Journal Editors (ICMJE).
2. Describe an approach for preventing authorship team disagreements and problems.
3. List specific things that should and should not be done when working with research collaborators and determining authorship.

## Authorship & Ethics

by Kerstin De Wit MBChB, BSc, MSc, MD, MRCP, FRCER, FRCPC

As clinicians, we strive to provide the highest standards of care in our clinical profession. These standards are set in part by the College, by our teachers, our peers and professional examinations. Having worked as an emergency physician and researcher in the UK and in Canada, I have noticed that professional standard setting for research can be lacking. This is reflected in the by the paucity of teaching and examination around research ethics.

Although we train to be practicing clinicians, research touches all of our lives. Residents are required to produce a scholarly project, which inevitably involves data collection and conference presentation. Each resident requires supervision of their project by at least one staff physician, who is responsible for project conduct. In the emergency department, it is not uncommon for physicians to be asked to identify potential research patients, or to collect data on patients who are being included in a research study. Even for those physicians who actively avoid research, it is likely that they are indirectly involved in some capacity.

In the above case, the resident has put in the hard work to plan a study, collect the data and analyze the results. The scenario delineates a common problem. Authorship has not been agreed upfront. In the same way that it is important to delineate the research question, design and analysis, it is helpful to agree who will be an author, who will be first author and who will be last author, prior to starting the project.

Becoming a published author adds to your CV, but it comes with responsibilities. When your name appears as an author, you are vouching that the study is true and valid. You are using your own name to say that the data is real (not made up), the study was conducted exactly as stated in the methods (the paper tells the truth about how the study was conducted and analyzed), the results and conclusion can be trusted. You are also saying that all the people who should be authors are authors. The only way to know all of these aspects is to have been intimately involved in the study from the outset.

### What are authorship categories?

The first author is the person who takes overall responsibility for the work. They are the person who did the majority of the work for the study and who knows every step of the process. In the case of a resident's project, the first author would usually be the resident who did the 'leg work' (for example applied to the ethics board, planned the study, performed

chart abstraction, worked on the analysis and drafted the paper). First authorship is recognized as the highest position in the study, and is weighted most heavily by universities.

The last author is the person who was the 'go to' supervisor. This was the person named on the research ethics application, who developed and approved the study design, who vouched for the ethics of the study (data confidentiality, adverse outcomes), who developed and approved the analytical approach and who redrafted the paper. The last author is the second most important author on the paper.

The authors who are listed in between the first and last authors constitute all the people who were central to the design or conduct of the study. Without these people, the study would either not be possible, or would be poorer. There can be conflict over authorship at each position; first, last or in between.

The International Committee of Medical Journal Editors has recognized this conflict, and has laid down clear guidelines for criteria for authorship (<http://www.icmje.org/icmje-recommendations.pdf>). According to their guidelines, authorship must be based on:

*1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work;*

AND

*2. Drafting the work or revising it critically for important intellectual content;*

AND

*3. Final approval of the version to be published;*

AND

*4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.*

Dr. Keurin is in a difficult situation. It would have been better to have agreed on authorship in advance. Dr. Lee's authorship depends on whether he contributed substantially to the study design at the start. If he did, and he helps draft the manuscript, and he is confident in the integrity of the data, he might qualify as an author. There are several ways he might assure himself about the quality of the data, including discussion with the first author and review of the raw data and analysis. However, it is unlikely that he fulfills the criteria for last author, if Dr. Keurin provided all study oversight. Note that there is no requirement for an author to be a physician, and there is no suggestion that

# Expert Response

those who are paid to do research are handled any differently to those who work unpaid.

Dr. Keurin can handle this in several ways. She can have a frank discussion with Dr. Lee. If he still insists on last authorship, she can bring the topic up with her university division or department head. Dr. Lee has a duty to the university to conduct his research ethically. She can also choose to step down as last author and let Dr. Lee replace her, however this sets a poor example to the resident and gives positive feedback to Dr. Lee. Dr. Lee feels he will add weight to a journal submission and increase the chances of publication, however this is only true because he has been bullying his way onto papers for many years. If Dr. Keurin endorses this, then no-one in the department will be able to publish without Dr. Lee's name, and when he leaves or retires, there will be a bleak future.

## **What can a department do to help with authorship issues?**

There are many ways that a teaching establishment can promote ethical authorship. Firstly, all residents should be taught on ethics of health research. Authorship is just one aspect of this. Secondly, residents can be placed into research teams where mentorship and oversight is explicit. In other words, no resident needs to do their project in isolation. Thirdly, each research project team should stipulate the plan for authorship 1. at the outset and 2. during the data analysis. The authorship list will likely grow during the study conduct as new people who you did not anticipate being involved, come on board. The first and last authors, however, stay the same.



## **About the Expert**

Dr. De Wit completed Emergency Medicine and clinical research training in Manchester, UK. She spent three years training in Thrombosis in Ottawa, Canada, and now work as both an Emergency and Thrombosis physician, in Hamilton Health Sciences. She is an active emergency medicine researcher and the McMaster Division of Emergency Medicine Research Director.

## Answers about Authorship

by Lindsay R. Baker <sup>BEd, MEd</sup>, Farah Friesen <sup>MI</sup>, Stella Ng <sup>PhD, Reg.CASLPO</sup>

*NB: The authorship order is alphabetical, to model ethical authorship practice. LB, FF, and SN collaborate on scholarly work regarding ethical academic authorship. They wrote this response together.*

### 1. What are the requirements for being listed as an author on a manuscript? Does Dr. Lee meet these authorship criteria? How should the authorship order be determined?

To determine whether someone meets the definition of an author, most medical journals follow the [International Committee of Medical Journal Editors \(ICMJE\) guidelines for authorship](#). The ICMJE recommends that authorship be based on the following 4 criteria:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

According to the ICMJE's criteria, Dr. Lee does not currently qualify for authorship given that his involvement was limited to review of the final manuscript. [Editor's note: At least not based on the account provided in the case by Andrei.] Granting Dr. Lee authorship, as it stands, would qualify as honorary, or unmerited, authorship [1-3]. Honorary authorship not only violates the principles of justice, it contributes to a loss of integrity in the academic research enterprise, and can gradually erode public trust in medical research.

Authorship order, on the other hand, is often more of a quandary than determining who qualifies as an author. Decisions regarding authorship order are often based upon the degree to which an individual has contributed to the first and second ICMJE guidelines above. The ICMJE does not provide guidelines for authorship order, partly because different disciplinary cultures have different norms and values associated with authorship positions. For example, , the first, second, and last (anchor) positions 'count' the most, communicating a greater contribution and garnering more recognition. Typically, the first author connotes the greatest overall contribution to the project and usually entails drafting the manuscript. The second authorship position is usually given to the individual who has made a very

substantial contribution to the project, although to a lesser degree than the . For example, the second author may have been significantly involved with project design and data analysis, but did not contribute as much to manuscript drafting and editing as the first author. Finally, the last, or senior, author is viewed as the anchor of the project. Oftentimes this is the principal investigator who provided the overall supervision and mentorship required for the project to succeed. Regardless of the disciplinary culture and environment one works in, authors should be able to explain and justify the authorship order that is agreed upon. As discussed later, we strongly recommend that individuals involved in the project discuss authorship order early in the timeframe of the project, and revisit the authorship order as the project progresses.

### 2. How should Dr. Keurin deal with this situation? What advice should she give to Andrei? Should she confront Dr. Lee?

Just as guidelines exist for authorship and contributorship decisions, they also exist for [dispute resolution](#) (see page 33 of the 2003 COPE report). Disputes are disagreements about authorship that do not contravene ICMJE guidelines and are largely questions of interpretation, such as whether someone's contribution was 'substantial' or not. Negotiation will likely be required to resolve such disputes; during such negotiation, authors may wish to identify evidence to support how an individual has contributed significantly, as per ICMJE guidelines.

Beyond guideline-following, we must acknowledge the power imbalance that Dr. Keurin and Andrei are facing. While strict adherence to guidelines for authorship might be ideal, this approach may not be realistic. From Dr. Keurin's and Andrei's perspectives, a conversation with Dr. Lee may seem daunting given their concern that Dr. Lee will consciously or subconsciously hold their decision against them in the future. Dr. Lee, as a prospective author, should be willing to engage in a face-to-face conversation with Dr. Keurin and Andrei to discuss who has contributed to the work to date, how he could/should become involved at this point, and which authorship position that degree of contribution might merit. A face-to-face meeting and conversation, as opposed to an email, may help Dr. Lee think more carefully about what he proposed to Andrei previously.

# Expert Response

Assuming Dr. Keurin and Andrei agree that Dr. Lee could contribute meaningfully, they could consider framing a conversation along the lines of “we would appreciate your involvement even though it’s late in the process; let’s look together at how you could contribute at this point.” Engaging in this discussion respectfully and with reference to ICMJE guidelines should not be faulted.

We are certainly not suggesting that engaging in such a conversation is easy. However, everyday ethics matter to all aspects of academic medicine practice and academic authorship is no different. If the meeting is approached with a collegial and ethical intent, Dr. Lee would be hard-pressed to advocate for the anchor position. He should be able to shift his lens to see how, at this point, becoming a co-author is challenging given the possibility of meeting criterion ICMJE #1 has passed. If ultimately Dr. Lee does substantially contribute to the shaping of the paper, perhaps a middle author position would be warranted. But more likely, an acknowledgement would be the most appropriate representation of Dr. Lee’s current contributions.

### **3. What are some policies that you have seen that are used to protect junior residents and faculty from encountering this problem?**

We suggest that faculty development regarding authorship ethics is needed to help prepare academic clinicians for ethical practice in relation to the types of conflicts described in this case. For example, we have developed and implemented an authorship simulation game to educate clinicians about these issues. After providing learners with the ICMJE and other guidelines as source material for discussion, they are assigned various roles on a research team (staff physician, medical student, basic scientist, librarian, etc.) and are tasked with working through a scenario derived from our local context to determine an authorship order. After the simulated role play, we facilitate an in-depth debriefing about ethical considerations. The goal of this exercise is to gain appreciation of the different perspectives that each project team member may have regarding the degree of their contributions to a project. For example, if a staff physician plays the role of the medical student in the simulation it allows him/her to gain appreciation of the barriers encountered by junior team members when trying to voice concerns and opinions to more senior team members given the inherent power structures.

At a project level, we recommend authorship and contributorship be discussed at the beginning of a project and then revisited throughout the research process. It is important to

create a climate where everyone feels comfortable discussing their perspectives openly. Having authorship guidelines physically present (distributed to all members of the team) in advance and during these meetings can also help to ground the discussion in ethical principles for authorship and contributorship.

At an organizational level, any explicit or implicit pressures to publish should be matched by an organizational commitment to ethical conduct in academic practice. An example of such commitment would be organizations that engage in staff development regarding ethical academic practice within all staff development sessions on academic publishing. Prioritizing ethical conduct alongside encouragement for academic productivity both explicitly and implicitly demonstrates a commitment not only to publishing, but also to publishing with integrity. Developing strategies that appropriately credit collaborative academic contributions, wherein the academic clinician is deserving of authorship but not as first or anchor author, may also help alleviate the pressure that can lead to honorary authorship. Publishing is a part of academic medical practice. Similar to the expectation that clinical practice will be performed in an ethical manner, the practice of publishing within academia is no different. Both of these practices require repeated faculty development and organizational support to ensure that ethical standards are understood and maintained. The integrity of the academic medicine enterprise rests on everyday ethics and systems-level policies that impact ethical academic practice. Therefore, both the explicit (e.g. the types of academic contributions – excellent teaching versus academic publications – indicated by the organization as most valuable on annual reviews) and implicit (e.g. the types of academic contributions – excellent teaching versus academic publications – that garner the most symbolic capital or sense of prestige within the organization) messages of the organization must foster ethical practice rather than inadvertently drive practices like honorary or unmerited authorship.[1-3]

### **References**

1. Kennedy MS hawn, Barnsteiner J, Daly J. Honorary and ghost authorship in nursing publications. *J Nurs Scholarsh.* 2014;46(6):416-22.
2. Karani R, Ognibene FP, Fallar R, Gliatto P. Medical students’ experiences with authorship in biomedical research. *Acad Med.* 2013;88(3):364-8.
3. Rajasekaran S, Lo A, Aly A-R, Ashworth N. Honorary authorship in postgraduate medical training. *Postgrad Med J.* 2015;91(1079):501-7.

# Expert Response

4. Albert T, Wager E. How to handle authorship disputes: a guide for new researchers (The COPE Report 2003). Retrieved from Committee on Publication Ethics website: <http://publicationethics.org/files/2003pdf12.pdf>. 2003.

## Recommended Resources

1. Albert T, Wager E. How to handle authorship disputes: a guide for new researchers. [http://publicationethics.org/files/2003pdf12\\_0.pdf](http://publicationethics.org/files/2003pdf12_0.pdf)
2. Marušić A, Bošnjak L, Jerončić A. A systematic review of research on the meaning, ethics and practices of authorship across scholarly disciplines. PLOS one. 2011 Sep 8;6(9):e23477. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0023477>



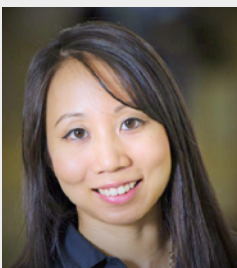
## About the Expert

Lindsay Baker ([@bakerlinds](https://twitter.com/bakerlinds)) is Scientist at the Li Ka Shing Knowledge Institute at St. Michael's Hospital and a Research and Education Consultant at the Centre for Faculty Development, St. Michael's Hospital, University of Toronto. Her main research interest is in using a critical approach to examine the boundaries and relations between disciplines, professions, and knowledge communities.



## About the Expert

Farah Friesen is Education Knowledge Broker and Program Coordinator at the [Centre for Faculty Development](#), St. Michael's Hospital, University of Toronto. Her main research interest is in critically examining traditional academic performance indicators, encouraging alternative perspectives on metrics, and working towards a broader (re)definition of educational impact.



## About the Expert

Stella Ng ([@StellaHPE](https://twitter.com/StellaHPE)) is Director of Research at the Centre for Faculty Development, St. Michael's Hospital, University of Toronto and Education Scientist at the Centre for Ambulatory Care Education, Women's College Hospital, University of Toronto. Her research focuses on epistemologies of practice (reflective practice and critical theories of practice) in the contexts of: compassionate and ethical care, and integrated care for children with disabilities.

# Curated Community Commentary

By Teresa Chan MD, FRCPC, MHPE(candidate)

A thematic analysis was used to curate the community discussion. Blog comments were analyzed and three overarching themes were extracted.

This week (The Case of the Honorary Authorship) explored the nature of authorship in academic scholarship. In the case, Dr. Keurin is a junior researcher who is supervising a student named Andrei on a project. Her challenge is to determine how to incorporate feedback and involvement of a senior scientist (Dr. Lee).

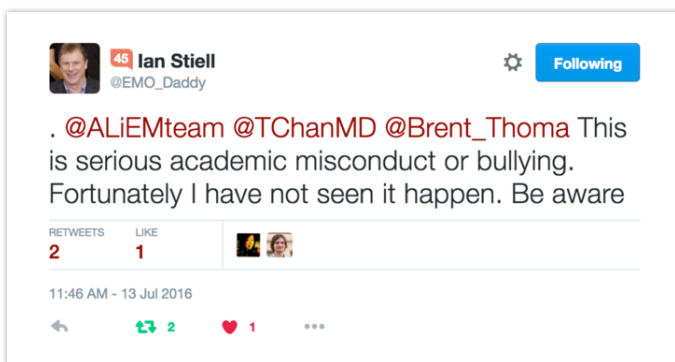
Generally speaking this month, there was a nearly a consensus answer to our case by the participants:

**No, Dr. Lee does NOT deserve to be an author.**

Regardless, this month's discussion did dive more deeply into this topic around a number of different issues around the topic of authorship in academic writing. The issues explored in the case commentary fell into three main categories. First, participants identified the situation as a case of academic bullying. Second, participants discussed the importance of creating a culture of open collaboration. Third, participants discussed other measures that might take to prevent similar situations from occurring.

## Academic Bullying

Dr. Anne Messman suggested that this incident may be an example of academic bullying. This was supported by Dr. Ian Stiell, experienced senior scientist who tweeted:



As with most situations of bullying, it was thought that open and honest communication might be the best way to handle the present situation. Though many participants cringed at the thought of being stuck in a similar situation, all agreed that Dr. Keurin should step up and handle the situation as Andrei's research supervisor.

## Contributors

Thanks to the participants (in alphabetical order) for all of their input:

### Blog:

Dr. Teresa Chan,  
Dr. Margaret Chisolm,  
Dr. Bertha Garcia,  
Riley Golby,  
Dr. Swapnil Hiremath,  
Dr. Kory London

Dr. Anne Messman  
Dr. Eve Purdy.

### Twitter:

Dr. Edmond Kwok,  
Dr. Hans Rosenberg,  
Dr. Ian Stiell.

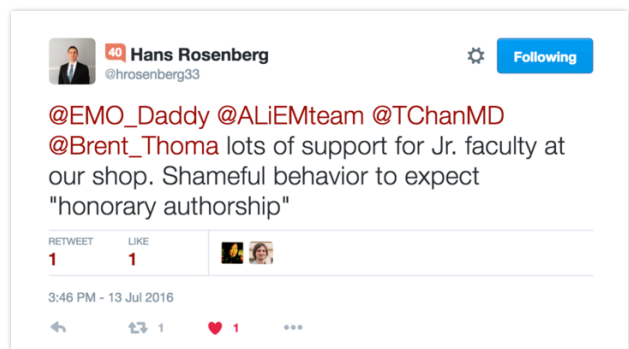
## The importance of creating a culture of open collaboration

Regardless of how you do it, providing clear coaching for those unfamiliar with authorship (i.e. new collaborating authors, new first authors) was also deemed to be important. Honest and direct conversations was thought to be critical in developing authors.

The role of the senior author (or mentor) in the process was highlighted by both Dr. Swapnil Hiremath and Dr. Margaret Chisolm. Dr. Hiremath stated that there may be differences in certain cultures about the role of the supervising scientist that funds the general operations of a full, research lab. Dr. Chisolm highlighted the role of a senior author should include mentorship (coaching a junior author through the process), ensuring that the junior first author has 'fun' during the daunting process, and to ensure that the first author receives credit for their work.

Dr. Kory London highlighted the need to get the whole story. He considered the story and suggested that it would be important to facilitate an open, clear discussion with all parties involve to clarify their roles. He highlighted that the interaction between Andrei and Dr. Lee was not witnessed by Dr. Keurin, and that he would advise Dr. Keurin to take the lead on clarifying the confusion about authorship roles

Hans Rosenberg tweeted that creating a culture of support is important to prevent such academic maleficence.





# Curated Community Commentary

## Prevention Measures

There were three main strategies for avoiding the scenario unfolding within this case.

### 1) Being upfront

Participants suggested that being upfront about authorship is important. The International Committee of Medical Journal Editors (ICMJE) authorship criteria were thought to be an important resource for junior academics.

Some participants stated that they have seen authors use the aforementioned ICMJE guidelines to clarify roles within the authorship teams. Dr. Teresa Chan showed a picture of how she communicates this with her co-authors. She provided a grid that she asks her co-authors to complete.

Details of Authors' Involvement

Name of Author	Criteria 1 (Design, Data, or Interpretation)	Criteria 2 (Drafting and/Revising for Intellectual Content)	Criteria 3 (Final Approval)
Teresa Chan	Conception & Design, Data Collection, Analysis & Interpretation	Drafting the article or revising it critically for important intellectual content	Final approval of the version to be published
XXX XXX	Conception & Design, Data Collection, Analysis & Interpretation	Drafting the article or revising it critically for important intellectual content	Final approval of the version to be published

\* We would like the authorship list to state that this paper was written by Drs. Chan & XXX, on behalf of the XXX Collaborators.

### 2) Be flexible and revise (your authorship list).

Our discussion highlighted an important paper that might augment discussions around authorship order. The heuristic approach described by Dr. Laura Roberts in her recent paper within Academic Medicine provides a framework for prospectively addressing authorship issues. [1]

### 3) Find a good mentor.

Many participants highlighted how important it is for a more senior person to protect junior authors from bullies, but also

to guide them through the process. Riley Golby noted that having a trustworthy mentor is important a good research experience.

### 4) Accepting that the best things in life might be (done for) free.

Swapnil Hiremath suggested that the pressures of academia might contribute the practices similar to those undertaken by Dr. Lee in the case. Bertha Garcia suggest that not all work that you will do as a senior academic researcher or physician will be credited – sometimes such work will be just service you provide to the ‘academic community’ (i.e. reviewing, editing, reading manuscripts for learners or colleagues).

Sometimes the authorship team will see fit to reward substantial contributors or collaborators. Teresa Chan pointed out that collaborators are now searchable by PubMed/MEDLINE, [2] thereby allowing those who have contributed but not authored a submission to gain some form of credit.

## References:

1. Roberts LW. Addressing Authorship Issues Prospectively: A Heuristic Approach. Academic medicine: journal of the Association of American Medical Colleges. 2016 Jun 28.
2. Study Collaborators Included in MEDLINE®/PubMed®. Posted March 10, 2008. Available at this link. Accessed last on July 20, 2016.

## About

The Medical Education In Cases (MEiC) series puts difficult medical education cases under a microscope. We pose a challenging hypothetical dilemma, moderate a discussion on potential approaches, and recruit medical education experts to provide their insights. The community comments are also similarly curated into a document for reference.

## Did you use this MEiC resource?

We would love to hear how you did. Please email [MEiC@aliem.com](mailto:MEiC@aliem.com) or tweet us @Brent\_Thoma and @TChanMD to let us know.

## Purpose

The purpose of the MEiC series is to create resources that allow you to engage in “guerrilla” faculty development – enticing and engaging individuals who might not have time to attend faculty development workshops to think about challenging cases in medical education.

## Usage

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