



CAIRIBU ARCTICS COMMUNITY FORUM

WHAT WOULD YOU DO? LEADING THROUGH LAB CHALLENGES



EXECUTIVE SUMMARY

December 10, 2025

GOAL: Learn how to navigate the complexities of research team leadership by examining real scenarios involving lab dynamics, mentorship, and conflict

ARCTICS COMMUNITY FORUM

**FEAT: INDIRA MYSOREKAR, PHD,
NATHAN TYKOCKI, PHD**

A recording of this forum, as well as those from many prior CAIRIBU ARCTICS Community forums, is available on the CAIRIBU YouTube channel [HERE](#). Find the playlist called “ARCTICS Community Forums” to view the more than 2 dozen recorded ARCTICS forums posted there.

Summary

Conflict Resolution

Conflict Resolution

- The speakers addressed teamwork and conflict resolution and agreed that teamwork should be mutually beneficial. Ideally, the ideas and skills of different scientists synergize to create new innovations, directions, perspectives, and advancements.
- However, issues in team function arise. **Dr. Tykocki** offered 7 key tips to resolving conflict, which were:
 1. Address conflict at the right time and place
 2. Manage emotions
 3. Be empathetic but factual
 4. Give everyone a voice
 5. Identify the root cause
 6. Be willing to compromise and brainstorm together
 7. Keep lines of communication open
- Given the attendee makeup, the speakers responded to example scenarios from the perspectives of faculty.

Case Studies of Lab Challenges

Scenario 1: Addressing Authorship Conflict

- In the scenario, two graduate students vie for first authorship. Though the work of the project was intended to be split evenly, one person ends up doing three-quarters of the work and the other student falls behind. However, because the second student believes she is working really hard to catch up, she believes she should be first author.*
- Dr. Mysorekar** emphasized that authorship should be based on contributions (experimental, intellectual, organizational, writing) and not necessarily on who is working hardest. When working through authorship conflict, it is helpful to look at the issue from all perspectives.
- Both agreed that **PIs should provide a clear shared framework of authorship criteria upfront** so as to mitigate any conflicts further down the road about who should be first author.
- Dr. Mysorekar** advised being inclusive and considering the student's career goals when deciding authorship.

Scenario 2: Communication with Busy Mentors

- In the scenario, a first-year postdoctoral trainee feels too overwhelmed to improve communication with his busy mentor; he worries about not being able to capture and understand everything she tells him during weekly meetings but doesn't know how to ask for clarification or help.*
- Dr. Tykocki** suggested that PIs take a step back and ask questions of the trainee to see if anything needs to be clarified and to ensure that they are curating a space that is open to dialogue.
- Dr. Mysorekar** advised the postdoc to take ownership of their project and prepare for meetings – take notes, know what they want to get out of the meeting, “take control of the narrative,” and be the one asking questions to the PI.
- Both agreed that asking for clarification is not a sign of incompetence. Trainees are not expected to know everything already – asking questions saves a mentor and trainee from misunderstandings down the road.
- Both encouraged that, when there are cultural factors at play that make verbal communication and self-advocating more difficult, **consider the utility of written communication** (for starting a discussion, creating summaries, etc).
- Both speakers emphasized the importance of clear communication and setting expectations.

Scenario 3: Personal Life Challenges Affecting Work

- *In the scenario, a postdoc has a family emergency and cannot complete an experiment for an upcoming manuscript submission.*
- **Dr. Mysorekar** suggested encouraging team members to support each other in such situations, for example, by filling in for each other.
- **Dr. Tykocki** advised PIs to be flexible and understanding of personal emergencies.
- Both speakers agreed that the postdoc's family emergency should be prioritized over the experiment.

Scenario 4: Work Environment and Personal Life Conflict

- **Dr. Tykocki** emphasized that PIs should be empathetic to trainees' personal responsibilities and to be realistic about how lab members can be accommodated in ways that support the overall lab, not just that one person.

Audience Questions

Would you advise an assistant professor-level researcher to take the risk of changing their field of research when they are first establishing a lab?

- **Dr. Mysorekar** advised having a clear path and support from collaborators and mentors.
- **Dr. Tykocki** emphasized the importance of having a supportive chair and a clear plan for the new field. Taking a page from the conflict resolution tips he offered, he advised selecting an appropriate time and place to have this discussion with one's chair.
- Both speakers agreed that pivoting can be intentional and beneficial if done with a strategic approach.

How do I navigate colleagues who don't share the same values?

- This may be more an issue of leadership and mentorship style. Sometimes a PI will have to consider not being a co-mentor or a trainee will have to consider finding a different mentor.

Nathan Tykocki, PhD, is an Associate Professor and Cubi3C Core Director in the Department of Pharmacology and Toxicology at Michigan State University. His research focuses on urinary bladder physiology, with specific emphasis on the bladder afferent nerves and the bladder vasculature as major regulators of bladder function. His lab employs a multi-disciplinary approach, including biochemical, pharmacological, physiological and genetic tools, to understand how the bladder muscle, nerves, vasculature and urothelium communicate to impact bladder function in health and disease. His work discovered that (1) transient contractions of the bladder wall generate bursts of afferent nerve activity that dominate sensory outflow from the bladder; (2) the vasculature of the urinary bladder, due to the unique physiological demands it experiences during bladder filling, possesses distinct contractile properties versus other vessels of similar size; and (3) social stress alone is sufficient to cause progressive bladder dysfunction that moves from overactivity to underactivity as stress duration/intensity increases.

Indira Mysorekar, PhD, Professor of Medicine; Chief of Basic and Translational Research at Baylor College of Medicine. Her lab group has made a number of novel and paradigm shifting discoveries in microbiology and microbial pathogenesis of Urinary tract infections (UTIs). After being the first to demonstrate that uropathogenic *Escherichia coli* (UPEC), the principal causative agent of UTIs, establish persistent reservoirs within the bladder wall that could re-emerge to cause recurrent UTIs, she then identified that the autophagy pathway is a conduit for UPEC to access the autophagosomal niche and that UPEC shuttles with ferritin-bound iron into the autophagosomal and lysosomal compartments within the bladder. Recently, her work has focused on dissecting mechanisms and therapeutic interventions to limit age-associated immune dysfunction and senescence in the aging bladder (postmenopausal women suffer from a high risk for recurrent UTIs and chronic inflammation). Her work is delineating how hormonal changes with age affect the regenerative capacity of urothelial cells.