



Successful Team Communication

May 1, 2023

Whitney Sweeney, PhD
Team Science Core Scientist
Institute for Clinical and Translational Research
University of Wisconsin-Madison
wasweeney@wisc.edu





Workshop Objective

This workshop will help you facilitate interdisciplinary conversations to establish a shared team understanding of processes and systems.





Introductions

- Name
- Organization
- Research focus



2023 CAIRIBU Initiative: Best Practices in Collaborative Science



Kristina Penniston, PhD

PI, U24 Interactions Core (U24-DK-127726)

Senior Scientist
Department of Urology
UW-Madison School of Medicine & Public Health
Email: penn@urology.wisc.edu

Jennifer Allmaras, MPH

Program Research Coordinator Department of Urology UW-Madison School of Medicine & Public Health Email: allmaras@wisc.edu

Mariana Coughlin

Administrative Specialist
Department of Urology
UW-Madison School of Medicine & Public Health
Email: mcoughlin3@wisc.edu

CAIRIBU Interactions Core

Web: https://www.cairibu.urology.wisc.edu

Email: CAIRIBU@urology.wisc.edu

Twitter: @CAIRIBU1





ICTR Team Science Core





Whitney Sweeney, PhD
Scientist
ICTR Team Science Core
University of Wisconsin-Madison
wasweeney@wisc.edu



Betsy Rolland, PhD MLIS MPH
Director of Team Science + Research
Development
Carbone Cancer Center and ICTR
brolland@wisc.edu



Patrick Kelly, PhD
Program Manager
ICTR Team Science Core
University of Wisconsin-Madison
pwkelly@wisc.edu





Ground Rules

- Microphones off (when not speaking)
- Videos on (to generate community)
- Stay focused; avoid distractions
- Everyone participates; no one dominates
- Come with an open mind; learn from each other
- Honor confidentiality (Share lessons, not stories)
- Critique ideas, not people
- Take care of self

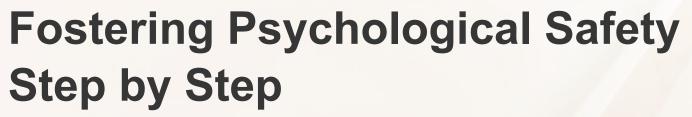




- Clarify and articulate project mission and goals
- Determine your team's essential roles
 - Expertise
 - Cognitive diversity
 - Other roles
- Create your definition of a good collaborator
- Identify candidates mindfully
- Get to know your new collaborators
 - Perspectives
 - Priorities







- Inclusion Safety
 - Cultivate awareness
 - Practice civility
- Learner Safety
 - Reframe mistakes as learning opportunities
 - Practice compassionate feedback
- Contributor Safety
 - Create space for all voices
 - Practice gratitude and humility
- Challenger Safety
 - Share responsibility for meetings and training
 - Assign dissent (and kudos) early







After completing this workshop, you will be better prepared to

- Facilitate discussions to span disciplinary boundaries and develop a shared understanding for an interdisciplinary research collaboration
- Develop processes for the coordination of an interdisciplinary research collaboration
- Provide effective feedback and resolve conflicts common to interdisciplinary research collaborations





Team Communication

- The team-emergent ability to integrate knowledge and expertise in team member interactions and tasks.
 - Team knowledge is the collective understanding of the group on how to coordinate efforts and satisfy the needs of other team members (Knowledge Sharing)
 - Task knowledge refers to accurate, relevant, and timely information about actions that must be performed (Transactive Memory)





Creating Shared Mental Models

Definition: SMMs refer to a shared understanding among team members relating to essential aspects of a team environment

Establishing SMMs helps to

- Reduce uncertainty
- Lower misunderstandings
- Prevent conflict
- Improve coordination and adaptation
- Increase effective team functioning













Activity: Tools for Speaking the Same Language

- Define Research Impact
 - What does it mean to you?
 - How can you measure it?
- Considering the Process
 - What is hard about this?
 - What are ways that you have used to establish your shared mental models?





Additional Topics to Discuss

- Equipment
 - Common understanding of tools needed
 - Use of others' equipment
- Execution
 - Strategies and best practices for task performance
- Interaction
 - How to communicate and share documents and data
- Composition
 - Understand the abilities, perspectives, and priorities of team members
- Temporal
 - Urgency and timing of work
 - Coordination of work towards deadlines

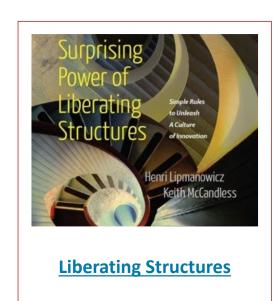




Facilitate Interdisciplinary Discussions



Brainstorming











Build Strong Research Support Systems



Communications

Necessary systems: Coordination and project management

Data management



Allows team to focus on the research

Makes mission, vision and goals concrete and trackable

Creates a culture of accountability, transparency, & openness

You do not rise to the level of your goals. You fall to the level of your systems.

~ James Clear



Strong systems:



Collaboration Planning

- What is Collaboration Planning? ICTR's Team Science Core offers 90-minute collaboration planning sessions that engage your team to think through the ways you will work together, proactively addressing the areas that most frequently cause conflict in teams, including authorship, communications, and project management. Originally designed by team-science experts at the NIH and NSF drawing upon decades of research on teams and collaboration, a collaboration plan may be useful in the following ways:
- To help your team create strong team processes from the beginning, which has been shown to result in improved scientific outcomes
- As a template for writing a multi-PI plan
- To address team-science-specific review criteria in future grant applications
- Skill-building for research staff and early-stage investigators in team leadership and collaboration



UW-ICTR Collaboration Planning Intervention



>40

teams received intervention

90

minute facilitated sessions

7 thematic focus areas



TEAM CULTURE

What are your team norms and expectations?

TEAM VISION

What is the overarching goal of this team?



TEAM OUTPUTS

What kinds of outputs do you anticipate arising from this project?





PEOPLE, ROLES & RESPONSIBILITIES

Who is on the team and how will they contribute?



PROJECT MANAGEMENT & INFRASTRUCTURE

How will you manage your tasks, information and data?

TEAM PROCESS & FUNCTIONING

How will you make decisions and resolve disputes?



IMPLEMENTATION & MAINTENANCE

How will your team implement your plan?



© 2022 UW-ICTR Team Science Core (teamscience@ictr.wisc.edu)





Team Outputs

- 3.A. What kinds of outputs do you anticipate arising from this project? Please specify what and where, if applicable.
 - 3.A.i. Publications
 - 3.A.ii. Intellectual property/patents
 - 3.A.iii. Data sets
 - 3.A.iv. Other scholarly output (conference talks, posters, etc.)
 - 3.A.v. Public outreach/communication (report back of results to communities, media, etc.)
 - 3.A.vi Preliminary data for future funding proposals
- 3.B. What will your authorship or attribution policies be?





Authorship Policies

- Authorship of scientific papers is one of the most contentious issues in research ethics
 - Honorary authorship named author who has not made a significant contribution
 - Ghost authorship failure to name someone who made a significant contribution
 - Big-team Science and many multiple authors
 - Handling disputes and dissenting opinions





International Committee of Medical Journal Editors (ICMJE)

 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.





Activity: Developing an Authorship Policy

- Describe your team's approach to authorship
 - Does your team have an official policy?
 - What factors are important for your team in determining authorship?
 - Has your team experienced conflict related to authorship?
 - How was it resolved?



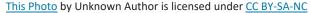


The Art of Feedback



- There is an art to providing effective feedback
- Be ready to listen and ask questions

It's not what you see, but what you make others see. ~Degas





Information is not useful. It is too general or confusing.

Does not possess the knowledge or training to understand and use the information

Strategies to incorporate information are not made clear.

GIVER RECEIVER

Unaware of how to incorporate the information.

Does not take the

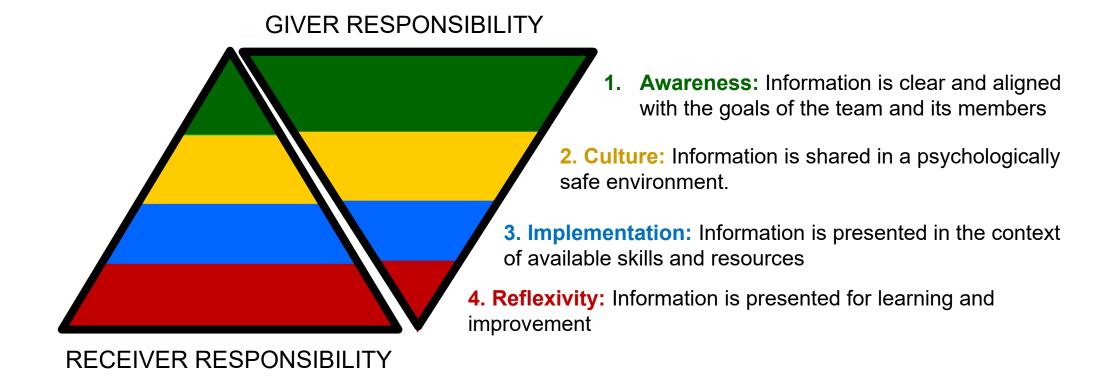
Does not provide opportunity to apply the information

Concern about negative reactions to the information provided. Underestimates the value of sharing the information.

opportunity to apply the information

Reacts negatively to the information provided. Unmotivated to incorporate information









Closing the Loop on Feedback

- Closed-loop communication can help ensure understanding
 - Initial communication
 - Partner/group reflection
 - The Close







Activity: Providing Clear Instructions

- Have one volunteer select a set of instructions from their team that is sometimes difficult to understand
- Use closed-loop communication to share that information with the group.
 - The speaker shares the information with the group
 - The group members reflect back what they heard and ask clarifying questions
 - Continue until the speaker can confirm that the group understands the message
- Please make a note of both the content and structure of the conversation.
- We will ask volunteers to share their experiences upon returning to the main session.



Cultivating Communication Step by Step

- Explain Jargon
- Facilitate Discussions
 - Generate Shared Mental Models
 - Create Transactive Memory Systems
- Strategically Plan Your Collaborations
 - ICTR Collaboration Planning
 - Document essential policies and procedures (e.g., authorship)
- Use Closed Loop Communication to Ensure Understanding





What is one "next step" you can take to improve team communication?





We value your feedback!





References

- Clark TR. The 4 Stages of Psychological Safety: Defining the Path to Inclusion and Innovation. Berrett-Koehler Publishers; 2020.
- Brasier AR, Burnside ES, Rolland B. Competencies supporting high-performance translational teams: A review of the SciTS evidence base. Published online 2023. doi:10.1017/cts.2023.17
- van Rensburg JJ, Santos CM, de Jong SB, Uitdewilligen S. The Five-Factor Perceived Shared Mental Model Scale: A Consolidation of Items Across the Contemporary Literature. *Front Psychol*. 2022;12. doi:10.3389/fpsyg.2021.784200
- Rouse WB, Cannon-Bowers JA, Salas E. The Role of Mental Models in Team Performance in Complex Systems. *IEEE Trans Syst Man Cybern*. 1992;22(6):1296-1308. doi:10.1109/21.199457
- Khuri S. Collaborative Capacities. In: Annual Meeting of the SciTS.; 2022.
- Schnapp LM, Rotschy L, Hall TE, Crowley S, O'Rourke M. How to talk to strangers: Facilitating knowledge sharing within translational health teams with the Toolbox dialogue method. *Transl Behav Med*. 2012;2(4):469-479. doi:10.1007/s13142-012-0171-2
- Rolland B, Burnside ES, Voils CI, Shah MN, Brasier AR. Enhancing reproducibility using interprofessional team best practices. *J Clin Transl Sci.* 2021;5(1). doi:10.1017/cts.2020.512
- Coles NA, DeBruine L, Azevedo F, Baumgartner H, Frank M. "Big team" science challenges us to reconsider authorship. Nat Hum Behav.



References continued

- Resnik DB, Tyler AM, Black JR, Kissling G. Authorship policies of scientific journals. *J Med Ethics*. 2016;42(3):199-202. doi:10.1136/medethics-2015-103171
- Clear J. Atomic Habits. Penguin Random House; 2018.
- Nash RA, Winstone NE. Responsibility-sharing in the giving and receiving of assessment feedback. Front Psychol. 2017;8(SEP). doi:10.3389/fpsyg.2017.01519
- Abi-Esber N, Abel J, Schroeder J, Gino F. "Just letting you know..." Underestimating others' desire for constructive feedback. *J Pers Soc Psychol*. Published online 2022.
- Salas E, Sims DE, Shawn Burke C. Is there A "big five" in teamwork? Small Gr Res. 2005;36(5):555-599.
 doi:10.1177/1046496405277134





Resources

- Facilitating Interdisciplinary Discussions
 - Brainstorming: https://miro.com/templates/brainstorming/
 - Communities of Practice: https://focusonfacilitationcop.com/
 - Liberating Structures: https://www.liberatingstructures.com/home/
 - Toolbox Dialogue Initiative: https://tdi.msu.edu/about-us/
- ICTR Team Science Core: https://ictr.wisc.edu/team-science/
- ICTR Team Science Core Collaboration Planning
- International Network for the Science of Team Science (INSciTS): https://www.inscits.org/scits-a-team-science-resources
- NIH Field Guide: https://www.cancer.gov/about-nci/organization/crs/research-initiatives/team-science-field-guide/collaboration-team-science-guide.pdf



Community of Practice: May 15, 2023

- Optional (virtual) adjunct to the first CAIRIBU Collaborative Science workshop
- Explore improving your team's communication through case studies and examples. Bring your questions about collaboration planning, authorship, and other challenging conversations.
- · You will enjoy this session most if you come prepared to share your
 - Successes
 - Questions
 - Problems
- Preparation is NOT required. All are welcome to join us and learn together.
- Drop in any time during the 60-minute session!



Future Sessions

- Successful Team Communication
 - Community of Practice: May 15
- Setting Your Science Team Up for (Measuring) Success
 - Workshop: June 5
 - Community of Practice: June 19
- Leading Your Team to Success
 - Workshop: July 10
 - Community of Practice: July 31
- All sessions will be recorded and available 1-2 days following the live session

