# Session #1: Teamwork and Collaboration

Presentation will begin at 12:00 PM (PT)

ITHS | Institute of Translational Health Sciences
ACCELERATING RESEARCH. IMPROVING HEALTH.

# Session #1: Teamwork & Collaboration

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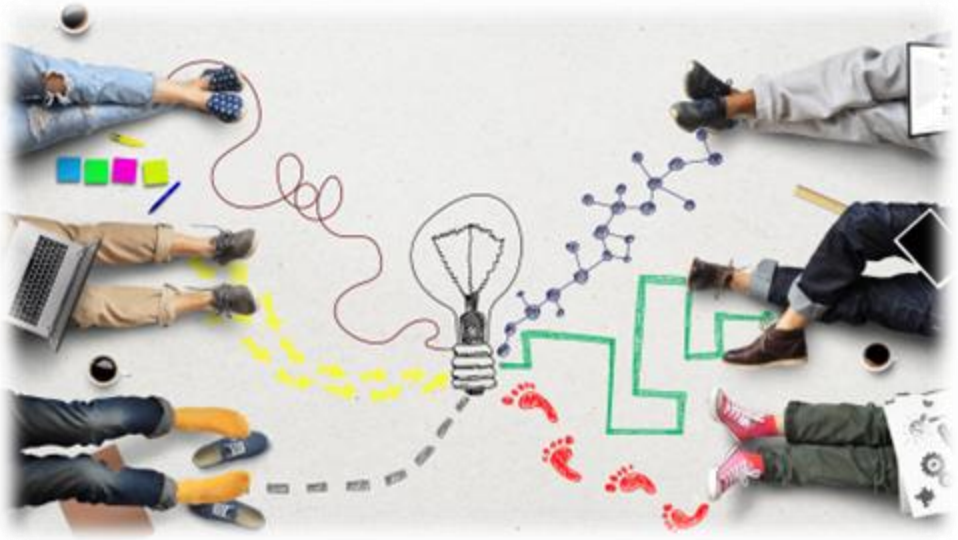
# Learning Objectives

**AT THE END OF THIS SEMINAR, PARTICIPANTS WILL BE ABLE TO:**

1) Describe the goals and approach of the new Team Science Seminar Series.
2) Discuss the benefits and challenges of teamwork in various contexts.
3) Describe ways to foster collaboration in research teams.
4) Identify supporting features of highly functioning collaborative teams.
5) Distinguish collaborative leadership characteristics.



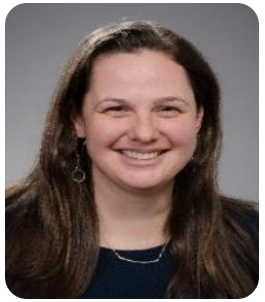
# Plan for the Day

- Welcome & Introductions
- Overview of Team Science Seminar Series
- Key Team Science Concepts
- Collaboration and Teamwork
- Debrief/Wrap-Up
- Q&A/Team Science Office Hours (final 15 mins of each seminar)

# Who Are We?

## ITHS TEAM SCIENCE CORE

Brenda Zierler, PhD, RN, FAAN
Co-Lead Team Science



Erin Abu-Rish Blakeney, PhD, RN
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# What We Do

Provide team training, consultation, leadership development & facilitation for clinical, education & interdisciplinary teams

## Examples

- Team science trainings (150+ since 2017)—including annual team science workshop (next in Feb 2023)
- Academic promotion & tenure toolkit for interdisciplinary researchers
- Team-Based Models of Care (i.e. interprofessional hospital rounds)
- National interprofessional faculty development program

# Who Are You?

## BREAKOUT ROOMS (5 MINS)

1) Share your name, area of research/study/work
2) What's one reason you came to today's team science seminar session?

# What is the Team Science Seminar Series?

**Overall Goal:** Assist researchers in addressing challenges to collaboration & collective team functioning, improving their ability to lead interdisciplinary teams, communicate & build trust with their collaborators, & identify the best ways to solve problems collaboratively.

**Target Audience:** Early career faculty, pre- and post-docs, and professional research staff

**Design Principles (informed by adult learning theory):**

- Goal oriented content (tied to Team Science Competencies)
- Balance of didactic & interactive content to facilitate immediate application
- Provide additional resources for self-directed learning

# 2023-2024 TEAM SCIENCE SEMINAR SERIES SCHEDULE

**Logistics:** 10 one-hour sessions occurring Oct 2022-July 2023 from 12pm-1pm on the 1st Thurs of each month; certificate offered through ITHS if attend 8 or more sessions (80%) & complete session evaluations.

| Date | Topic | Date | Topic |
|---|---|---|---|
| 10/5/23 | Introduction to the Team Science Seminar Series 2023-2024: Collaboration & Teamwork | 3/7/2024 | |
| 11/2/2023 | Strategies for kicking-off new research grants or centers | 4/4/2024 | |
| 12/7/2023 | Team Writing: Opportunities & Challenges | 5/2/2024 | |
| 1/4/24 | | 6/6/2024 | |
| 2/1/2024 | | TBD | |

# What is Team Science?

- Team Science (TS) = is a collaborative effort to address a challenge that leverages the strengths & expertise of professionals, often trained in different fields
    - TS includes: small & large teams; uni- and multi-disciplinary groups; and efforts that engage multiple stakeholders
- Concurrent increase in study of best practices to facilitate positive team formation & functioning ("Science of Team Science")

References: Bennett & Gadlin, 2012; Baker B, 2015

# Why is Team Science Important?

- Interdisciplinary teams are needed to respond to complex clinical & societal problems
- Issues of reproducibility in research
- Teaming is challenging but:
  - Team skills can be learned
  - Best practices for team structures, processes, & policies are being identified & can be implemented


References: Wuchty, Jones, Uzzi, 2007; Baker B, 2015; Bergerowski et al, 2021

# What do we know about effective teams?

- The “who” of the team doesn’t seem to matter
- Group norms do matter (how groups function when they gather/work together)
  - Norms = traditions, behavioral standards, unwritten rules
- Successful teams share norms of:
  - Team members share air time (approximately equal time speaking aka conversational turn-taking)
  - High sensitivity to how others on the team felt (and responding/exploring) based on tone of voice, expressions, and other non-verbal cues
- Findings consistent with Amy Edmondson’s concept of “psychological safety”
  - “shared belief held by members of a team that the team is safe for interpersonal risk taking”; “sense of confidence that the team will not embarrass, reject, or punish someone for speaking up”



References: NYT Project Aristotle; Wuchty, Jones, Uzzi, 2007; Bennett & Gadlin, 2012; Baker, 2015; Edmondson, Psychological Safety (amycedmondson.com)

# Team Science Competency Models

*Journal of Clinical and Translational Science*

www.cambridge.org/cts

**Research Methods and Technology Review Article**

## Competencies supporting high-performance translational teams: A review of the SciTS evidence base

Allan R. Brasier[1], Elizabeth S. Burnside[1] and Betsy Rolland[1,2]

[1]Institute for Clinical and Translational Research, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI, USA and [2]Carbone Cancer Center, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI, USA

*Journal of Clinical and Translational Science*

www.cambridge.org/cts

**Implementation, Policy and Community Engagement Research Article**

**Cite this article:** Bisbey TM, Wooten KC,

## Implementing an evidence-based competency model for science team training and evaluation: TeamMAPPS

Tiffany M. Bisbey[1], Kevin C. Wooten[2,3], Maritza Salazar Campo[4], Theresa K. Lant[5] and Eduardo Salas[1]

[1]Department of Psychological Sciences, Rice University, Houston, TX, USA; [2]Office of the President, University of Houston Clear Lake, Houston, TX, USA; [3]Institute for Translational Sciences, University of Texas Medical Branch, Galveston, TX, USA; [4]Department of Organization and Management, University of California Irvine, Irvine, CA, USA and [5]Department of Management and Management Science, Pace University, New York, NY, USA

**Competency Domains**

- Affect
- Communication
- Management
- Collaborative problem-solving,
- Leadership

- Facilitating awareness & exchange
- Psychological safety
- Self-correction & adaptation

# Scientific Collaboration in Clinical & Translational Research

**Core Thematic Areas & Competencies:**

- Translational Teamwork
- Leadership
- Context – collaborative problem solving – much of the complex work in the modern world is performed by teams




(Graesser et al. 2018; Psychological Science; Vol 19(2): 59-92)

# Collaboration & Team Science



Published in final edited form as:
*J Investig Med*. 2012 June ; 60(5): 768–775. doi:10.231/JIM.0b013e318250871d.

## Collaboration and Team Science: From Theory to Practice

**L. Michelle Bennett, PhD**[1] and **Howard Gadlin, PhD**[2]

[1]Division of Intramural Research, NHLBI, NIH, 10 Center Drive, Bethesda Maryland, 20892, LMBennett@nih.gov, 301-451-0036 (phone), 301-480-5775 (FAX)

[2]Center for Cooperative Resolution, OD, NIH, 31 Center Drive, Bethesda Maryland, 20892, GadlinH@OD.NIH.GOV, 301-594-6916

# Fostering Collaboration: Key Elements

- Trust
- Shared vision
- Strategically identify team members
- Build an interdisciplinary team
- Promote disagreement while containing conflict
- Set clear expectations for sharing authorship & credit
- Leadership – self-awareness & strong communication skills

"Helen, you're the Team Leader, why don't you jump first?"

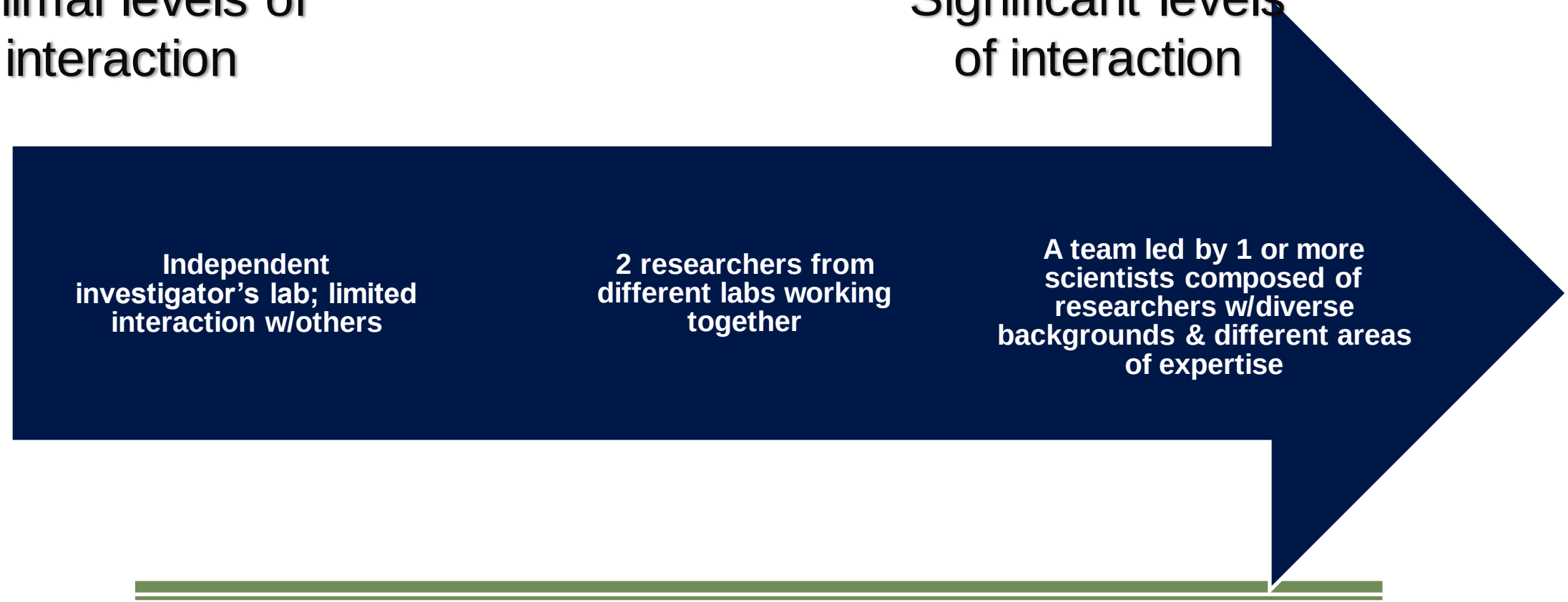


Bennet & Gadlin, J Investig Med. 2012 June; 60(5): 768-775.
doi:10.231/JIM.0b013e318250871d.

# Collaboration as Continuum

Minimal levels of interaction

Significant levels of interaction






Bennet & Gadlin, J Investig Med. 2012 June; 60(5): 768-775.

# Impetus to Form Collaborations

1. **The interpersonal context (relations among scientists)***
2. The funding context
3. The sectoral context (academic, corporate, governmental)
4. The context of participating organizations (university departments, research labs, etc.)

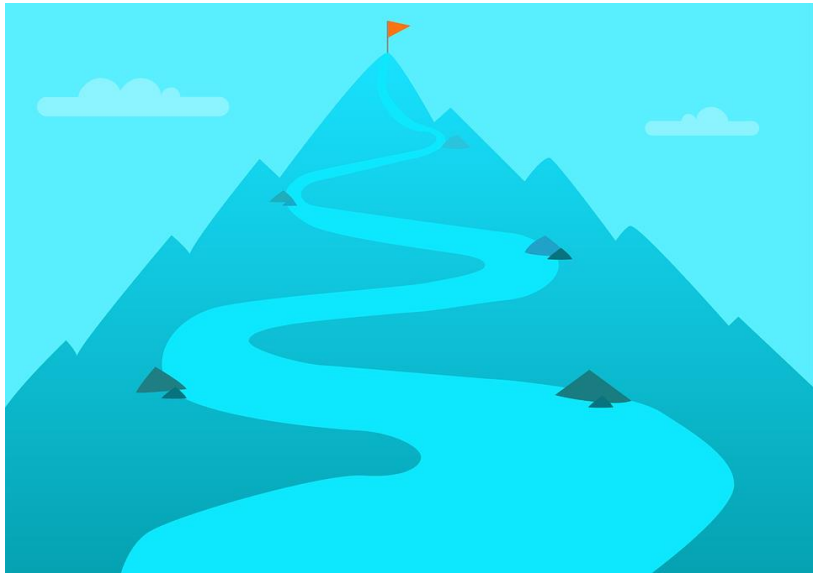



Bennet & Gadlin, J Investig Med. 2012 June; 60(5), p.3: 768-775. Shrum, W., Genuth, J., et al. Structures of Scientific Collaboration. Boston: The MIT Press; 2007.

# Highly Functioning Collaborative Teams

- ✓ Self awareness (social styles, Thomas Kilmann Inventory)
- ✓ Emotional intelligence (conscious of self, conscious of others, conscious of context)
- ✓ Lean Project Charter
- ✓ Team Agreements
- ✓ Teaming (need to create psychological safety & trust)
- ✓ Communication plan
- ✓ Running effective meetings
- ✓ Professional development (leadership) and mentoring of team
- ✓ Continuous quality improvement (reflection on what is working well; what could be improved)

# Collaborative Leadership Characteristics

# Recognize Communication Differences

***"the more I know about you, the more I know about me, and the more I can take responsibility for managing the differences between us."***



- https://global.wilsonlearning.com/resources/interpersonal-skills-take-off/ (quote on slide 24)

# Sharing Recognition & Credit


Taylor & Francis
Taylor & Francis Group

Journal of Interprofessional Care

ISSN: 1356-1820 (Print) 1469-9567 (Online) Journal homepage: https://www.tandfonline.com/loi/ijic20

## Interprofessional education and practice guide: interprofessional team writing to promote dissemination of interprofessional education scholarship and products

Mia T. Vogel, Erin Abu-Rish Blakeney, Mayumi A Willgerodt, Peggy Soule Odegard, Eric L. Johnson, Sarah Shrader, Debra Liner, Carla A. Dyer, Leslie W. Hall & Brenda Zierler

# Team Writing

CENTER FOR HEALTH SCIENCES
INTERPROFESSIONAL EDUCATION
RESEARCH AND PRACTICE
UNIVERSITY of WASHINGTON

**Interprofessional Team Writing Toolkit**

This toolkit is designed for IPE and Collaborative Practice researchers of all levels interested in improving scholarly writing with their interprofessional teams.

https://collaborate.uw.edu/programs/team-science-initiative/interprofessional-team-writing-toolkit/

# Other Challenges

Appointment, Promotion, and Tenure (APT) within the context of interdisciplinary research (team science):

- Early career faculty perceive team science as risky
- Establishing themselves as independent investigators
- Review criteria for the evaluation of investigators participating in team science
- Ongoing work on developing an APT Toolkit for faculty, chairs, APT Committees, external reviewers

# Collaboration Planning

Rolland B, Scholl L, Suryanarayanan S, Hatfield P, Judge K, Sorkness C, Burnside E, and Brasier AR. Operationalization, implementation, and evaluation of Collaboration Planning: A pilot interventional study of nascent translational teams. Journal of Clinical and Translational Science 5: e23, 1–6. doi: 10.1017/cts.2020.515

| Rationale for team approach and configuration | Why is this work being done as a team? |
|---|---|
| Collaboration readiness | How ready are the individuals, team(s), and institution(s) to collaborate? |
| Technological readiness | What technologies will be used to support collaboration? |
| Team functioning | What team processes will be leveraged to support collaboration? |
| Communication and coordination | How will the team communicate and coordinate their work? |
| Leadership, management, and administration | What approach will the team take to leadership, management, and administration of the project? |
| Conflict prevention and management | How will the team prevent and manage potential conflicts? |
| Training | How will team members be trained to collaborate on this project? |
| Quality improvement activities | How will the team assess the quality of its team processes? |
| Budget and resource allocation | How will the team use its resources to support strong team processes? |

# References


Bennett, L. M., & Gadlin, H. (2012). Collaboration and Team Science: From Theory to Practice. *Journal of Investigative Medicine : The Official Publication of the American Federation for Clinical Research*, *60*(5), 768–775. https://doi.org/10.231/JIM.0b013e318250871d

Wuchty S, Jones BF, Uzzi B. The Increasing Dominance of Teams in Production of Knowledge. Science [Internet]. 2007 May 18; 316(5827):1036–9. Available from: https://www.science.org/doi/10.1126/science.1136099

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Bisbey TM, Wooten KC, Salazar Campo M, Lant TK, and Salas E. Implementing an evidence-based competency model for science team training and evaluation: TeamMAPPS. Journal of Clinical and Translational Science 5: e142, 1–10. doi: 10.1017/cts.2021.795

Genuth, J., et al. Structures of Scientific Collaboration. Boston: The MIT Press; 2007.

"Thriving in an Era of Team Science" Burroughs Wellcome Fund https://www.bwfund.org/wp-content/uploads/2020/06/Team-Science.pdf

Rolland B, Burnside ES, Voils CI, Shah MN, and Brasier AR. Enhancing reproducibility using interprofessional team best practices. Journal of Clinical and Translational Science 5: e20, 1–8. doi: 10.1017/ cts.2020.512

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- UW Center for Health Sciences Interprofessional Education, Research, and Practice (CHSIE)
- 6 Health Sciences and College of Engineering APT Leads


# Local (UW) Resources

- ITHS Funding Opportunities: https://www.iths.org/funding/
- UW Center for Health Sciences Interprofessional Education, Research, & Practice: https://collaborate.uw.edu/
- UW Population Health Initiative - https://www.washington.edu/populationhealth/
- UW Collaboration Consortium - an informal collection of interdisciplinary centers on campus that has been meeting regularly to brainstorm and strategize ways to build support for interdisciplinary and community-engaged efforts on campus. Contact: Jennifer Davison @jnfrdvsn@uw.edu
- UW Collaboration Consortium: Collab_consortium@u.washington.edu

# Debrief/Wrap-Up

- Please provide feedback on today's session!
  - Feedback in chat
  - Complete Today's Session Evaluation

- Next month's session:
  - Strategies for kicking-off new research grants or centers
  - Thurs 11/3/22 12:00pm-1:00pm
  - Registration will go live in early October