



THE OHIO STATE UNIVERSITY
COLLEGE OF MEDICINE

C. Alexander Grieco, M.D.

Interim Vice Dean for Education
Associate Professor of Biomedical Education and Anatomy
Associate Professor of Radiology

320 Hamilton Hall
1645 Neil Avenue
Columbus, OH 43210
614.685.3059 phone
Grieco.11@osumc.edu

Dr. Julie Johnson
Professor of Medicine (Internal Medicine) and Pharmacy (Pharmaceutics and Pharmacology)
Director, Clinical and Translational Science Institute
Associate Dean for Clinical and Translational Research
Associate Vice President for Research
The Ohio State University College of Medicine
260 Prior Hall
376 West 10th Avenue
Columbus, OH 43210

November 10, 2025

Dear Dr. Johnson:

Thank you very much for sharing your proposal to establish the Clinical and Translational Science Institute (CTSI) Business of Team Science Certification Program. As Interim Vice Dean for Education and as Associate Dean for Student Life in the College of Medicine, I recognize the critical importance of equipping our faculty and staff with the skills needed to lead and thrive in interdisciplinary scientific teams. Thus, I am writing to express my enthusiastic support for this program.

It goes without saying that the CTSI plays a vital role in educating, training and sustaining The Ohio State's clinical and translational science workforce. This proposed program is timely and innovative, offering a multi-session, non-credit certificate to build essential competencies in team leadership, collaboration, and adaptive problem-solving. Grounded in evidence-based frameworks such as the Six Team Conditions and Polarity Navigation, the curriculum blends conceptual learning with hands-on practice and peer engagement, ensuring participants can apply strategies to real-world challenges.

The strong initial interest, with over thirty applicants from three colleges and seventeen departments in just one month, underscores the clear need and enthusiasm for this initiative. Furthermore, the program aligns with national best practices and recommendations from the National Academies of Sciences, Engineering, and Medicine, enhancing our institutional capacity for high-impact, interdisciplinary research and leadership. This program would fill a critical gap in research workforce development at The Ohio State.

In summary, I fully endorse the CTSI Business of Team Science Certification Program and strongly encourage its approval. I am confident that the program will contribute significantly to the professional growth of our faculty and staff and strengthen the excellence of our shared academic and research missions.

Sincerely,

C. Alexander Grieco, M.D.
Interim Vice Dean for Education
Associate Dean for Student Life
Associate Professor of Biomedical Education and Anatomy
Associate Professor of Radiology
The Ohio State University College of Medicine



Proposal for a Non-credit, Multi-session Program

Program Title: CTSI Business of Team Science Program

OAA Certificate Program Category: Category 4, non-credit, workforce development, Certificate of Completion

I. Program Description

The CTSI Business of Team Science Workshop Series is a unique, forward-thinking program designed to equip learners with the skills and frameworks necessary to lead and participate effectively in cross-disciplinary scientific teams. Inspired by the team developmental arc (Kozlowski & Bell, 2012), the series guides participants through the stages of team formation, role clarity, and adaptive leadership, emphasizing both conceptual understanding and practical application.

Participants will engage in six interactive workshops (two cohorts per academic year, one delivered virtually in Fall and in-person in Spring), covering topics such as compelling purpose, integrating task and relationship, role clarity, and the Six Team Conditions for effectiveness. The program is grounded in evidence-based models and includes hands-on practice, peer learning, and coaching circles for real-world applications.

Figure 1. Session Outline



Each session in this series is grounded in established schools of thought in team science that have been field-tested and proven effective. Four sessions will emphasize conceptual understanding, and the other two will focus more on practical application

II. Program Structure

- Format: Multi-session, non-credit program (virtual and in-person)
- Duration:



- **Fall Semester Cohort:** six virtual ZOOM sessions (1.5 hours each), September – December biweekly sessions
- **Spring Semester Cohort:** two full-day, in-person workshops hosted in late February
- Enrollment Cap: 30 participants per cohort
- Admissions Criteria: To apply for the program, interested candidates will be required to complete an application through the link on the CTSI website. Applicants will be selected based on fit with the program (e.g., career stage, career experience and goals, campus unit representation, leadership role). It is the commitment of the CTSI to support faculty and staff across The Ohio State University's colleges.
- Certificate: Certificate of Completion awarded upon successful completion of course.
 - **Fall Virtual Program:** To satisfy the requirements of the certificate and ensure meaningful engagement and continuity, enrolled participants must attend at least **five out of the six sessions** in order to receive a certificate of completion.

Given that the intended audience for this course includes faculty and individuals in mid- to upper-level staff leadership roles, one absence is permitted; however, the participant must view the **recording of the missed session** and complete **two discussion questions** designed to encourage critical thinking and application of the session's content.
 - **Spring In-Person Program:** To satisfy the requirements of the certificate and ensure meaningful engagement and continuity, enrolled participants must attend 90% of the two full-day in-person sessions in order to receive a certificate of completion.

III. Curriculum & Modules

Session 1: Compelling Purpose

This session centers on how teams can collectively develop, communicate, and sustain a compelling purpose. There is a deep human yearning to be part of something bigger than oneself, and a compelling purpose captures that “something bigger.” The vitality of this purpose—and each member's relationship to it—is a critical determinant of team success. It acts as the force that draws the team toward convergence while skillfully managing the



creative tension arising from diverse perspectives and expertise. In this session, we will leverage insights from *Strategic Doing* (Morrison et al., 2019) and the Six Conditions for Team Effectiveness (Hackman, 2002; Wageman & Lowe, 2019) to explore the concept of compelling purpose. You will learn practical facilitation techniques, sentence structures, and tools such as the ladder of abstraction, and the divergence-convergence diamond (Kaner, 2014) to help team members connect deeply with the purpose and articulate a coherent narrative about their role within the larger whole.

Session 2: Integrating Task and Relationship

Task and relationship are two essential dimensions of effective teaming—and they must be integrated. In fact, they form a polarity pair (Emerson & Lewis, 2019), meaning they are interdependent forces that exist in dynamic tension. Overemphasizing one at the expense of the other can lead to imbalance, unintended consequences, and a sense of stagnation. Unlike problems, which can be solved, polarities are ongoing tensions that must be continuously navigated. The good news is that there are generative pathways beyond compromise or resignation to push-pull dynamics. In this session, we will introduce the Polarity Navigator—a powerful tool that helps teams identify and map these dynamics, develop a shared language around them, and shift from reactive responses to intentional, adaptive strategies. Participants will experience the transformative shift from Either/Or thinking to Both/And—a foundational mindset for navigating the complexity of team collaboration and creative work.

Session 3: Practicing Polarity and Both/And Thinking

Building on the foundation laid in Session 2, this session offers extended practice with the Polarity Navigator, applying it to additional polarity pairs that are particularly relevant to team science. These could include tensions such as Direct::Empower, Support::Challenge, and Competence::Warmth. Participants can choose a polarity pair that is their own growth edge, and practice filling out the Polarity Navigator with peers for important actionable insights.

Session 4: A Team as a Network of Roles

This session explores how leaders in cross-disciplinary science teams can intentionally design, align, and recalibrate roles to enhance team coherence and agility (Jiang & Lurie, 2025). Moving beyond technical and interpersonal skills, this session positions role clarity as a foundational leadership capability. Participants will learn how to initiate role contracting at the start of a project, design effective role relations, establish clear rules of engagement, and maintain agility through ongoing re-contracting. Drawing on the RACI



framework and the Organomics methodology, we will examine how role confusion, overlapping authority, and unspoken assumptions can hinder collaboration—and how structured conversations and sense-making rituals can help teams evolve with clarity and coherence. Through interactive activities and reflection, participants will leave with practical tools for leading teams that are greater than the sum of their parts.

Session 5: The Six Team Conditions

This session introduces the *Six Team Conditions* framework (Hackman, 2002; Wageman & Lowe, 2019), a research-based model developed by J. Richard Hackman and Ruth Wageman that identifies the key factors contributing to team effectiveness. Participants will explore how creating the right conditions—rather than focusing solely on individual performance—can unlock a team’s potential. We’ll begin by grounding in the three **essential conditions**: a *real team* with clear membership and boundaries, a *compelling purpose* that energizes and aligns, and the *right people* with the knowledge, skills, and diversity to deliver. Building on this foundation, we’ll examine three **enabling conditions**: a *sound structure* with clear roles and norms, a *supportive context* with access to resources and information, and *team coaching* that helps the group reflect and adapt. Through guided reflection and conversation, participants will assess one of their own teams using this framework, identifying strengths, gaps, and areas ripe for experimentation. The session invites a shift from fixing individuals to designing better systems—recognizing that healthy teams are grown, not born.

Session 6: Practicing the Six Team Conditions

This hands-on session builds on our introduction to the Six Team Conditions framework by focusing on practical application through experimentation, peer learning, and real-time coaching. Instead of a fixed agenda, we’ll co-create the session structure based on the conditions most relevant to participants’ current challenges—whether that’s clarifying roles, energizing purpose, or deepening reflection practices. Through small-group work and shared exploration, we’ll reflect, test tools, and learn collaboratively in real time.

IV. Coaching Circles

Coaching Circles are intimate spaces for selected participants to actively apply what they’ve learned in their own professional contexts. Each gathering will center on real-world use cases brought by circle members, drawing on insights from the workshops as well as peer support to clarify learning intentions and co-develop strategies for moving forward. In essence, these are facilitated communities of practice.



Monthly virtual meetings will be held for each coaching circle, allowing participants to regularly engage and apply workshop insights to real-world scenarios. Meeting times will be determined by the members to best fit their schedules.

Each coaching circle will be facilitated by Dr. Gemma Jiang and will be limited to a maximum of seven participants, formed based on individual initiative. Priority will be given to awardees of the pilot program. We are able to accommodate up to three coaching circles.

V. Outcomes-Based Learning

Participants will learn to:

1. Develop and sustain a compelling team purpose
2. Integrate task and relationship dimensions for effective teaming
3. Apply polarity navigation and Both/And thinking
4. Design and recalibrate team roles for clarity and agility
5. Assess and enhance team conditions for effectiveness
6. Apply frameworks and tools to real-world team challenges

VI. Evaluation Approach

We take a three-pronged approach to evaluate the impact of the program:

1. Immediate Feedback (Ticket Out the Door)

At the end of each workshop, participants will complete a brief reflection responding to two questions:

- a. What is your main takeaway from today's session?
- b. What is one thing you would like to see done differently?
- c. Please share any other thoughts regarding today's session

This will allow for real-time feedback and inform iterative improvements throughout the series.

2. End-of-Series Evaluation

At the conclusion of all six workshops, a more formal evaluation will be conducted in collaboration with CTSI's evaluation team. Sample questions may include:



- a. How has your understanding of team development evolved through this workshop series?
- b. To what extent do you feel more equipped to lead or participate in cross-disciplinary teams after completing the program?
- c. What, if anything, have you applied from the sessions to your current team or project?
- d. How effective was the balance between conceptual understanding and practical application?

3. Long-Term Impact Assessment

We will follow up with participants at 6 months and 12 months post-program to assess sustained impact. Example questions may include:

- What aspects of the workshop series have had the most lasting impact on your work and leadership?
- Have the tools and frameworks continued to support your team's evolution over time?
- In what ways has your approach to leading and teaming evolved over the past year?
- Are there new questions or challenges you're now facing that feel connected to your continued development?

VII. Prerequisites

No previous experience in team science required. Recommended for individuals engaged in research, administration, or leadership roles in clinical and translational science.

VIII. Sufficient Resources

- Adequacy and availability of facilities and staff: The CTSI has allotted space and facilities. This certificate program would be able to use the already acquired facilities and staff.
- Projected resource needs and plans to meet those needs: there are no projected additional resource needs.

IX. Justifiable Expenses

- Additional faculty: no additional faculty are needed to operationalize this certificate of study as the program operates with or without a certificate program.



- Course addition or deletions: there are no course additions or deletions needed to operationalize this certificate of study.
- Necessary budget adjustments: there are no budget adjustments needed to operationalize this certificate of study.
- Available and anticipated funding: the CTSI is funded through NCATS Clinical and Translational Science Award (CTSA) and through COM. We will continue to use that funding to offer all the core elements.

X. Adequate Demand

- Evidence of Sufficient Demand: Applications for the Fall 2025 Business of Team Science cohort were open for just one month, yet thirty-one faculty and staff leaders from three colleges and seventeen departments at Ohio State University and Nationwide Children's Hospital applied, showing strong interest despite limited marketing. We expect continued ease in recruiting participants, and offering a workforce certificate will likely make additional training even more appealing to those seeking further education.
- Duration of Demand: Team Science is a growing field, we expect the demand to be long term.
- Ability of other programs to meet demand: The CTSI in collaboration with the Fischer College of Business hosts a "Business of Science" course. The Business of Science, which runs annually and admits 25 participants, provides faculty researchers in the health and biomedical sciences with enhanced skills in innovation, project management and team leadership. The Business of Team Science delves deeper into the skills and frameworks necessary to lead and participate effectively in cross-disciplinary, cross-institutional scientific teams. The Translational Data Analytics Institute (TDAI) provides an at-cost [Team Science Training and Facilitation Consulting Services](#) for funded research teams to enable team-building, capacity building, and knowledge integration. Topics for the TDAI training include; Team Science 101, Collaboration Planning, All-Hands Meetings, Strategic Planning. Between these two programs, those seeking basic introductory Team Science skills and individualized team science consulting services may seek these programs.



XI. Competitiveness with other Institutions: Limited Overlap within the University

- Overlap with other program or department: Currently there is not a standalone workforce development certificate within the University focused on Team Science competencies.
- Duplication of effort in the University: As previously mentioned, the CTSI Business of Science course, offered by CTSI in collaboration with the Fisher College of Business, meets some of the demand for Team Science training by providing annual instruction to 25 faculty researchers in innovation, project management, and team leadership, but its scope is limited and does not cover the full depth of cross-disciplinary team science skills. The TDAI's Team Science program offers at-cost, customizable training and facilitation for funded research teams, focusing on practical topics like collaboration planning and strategic meetings, but is not accessible to teams or leaders without funding. The CTSI Business of Team Science certificate fills the gap between these resources by delivering more comprehensive, in-depth training and group coaching to both faculty and leadership staff at no cost, making foundational Team Science education accessible to those not yet funded or not seeking research funding. However, for highly individualized, project-specific support, especially for funded teams, TDAI's consulting services may still be necessary, as the CTSI program is designed for foundational and group-based learning rather than tailored project facilitation.
- Similar programs nationally: Clinical and Translational Science Award (CTSA) Hubs across the country have programs designed to support and develop Team Science skills in faculty and staff including Duke CTSI, Southern California CTSI, and Tufts CTSI. The National Academies of Sciences, Engineering, and Medicine (National Research Council, 2015) recommends that universities and research institutions strengthen team science by providing professional development and leadership training that equip researchers with collaborative, communication, and team management skills to enhance the effectiveness and impact of interdisciplinary research.

XII. Program Administration

- Stand-alone, non-credit program
- No overlap with degree programs
- No OSU tuition or fee assessment; program fee [to be determined]



- Certificate of completion issued upon successful completion of course

XIII. Proposal Contact Information

Jasmine Neal, MPH

Program Manager

[Clinical and Translational Science Pilot Program](#)

[Academy of Community Reviewers](#)

[Business of Team Science](#)

The Ohio State University

[Clinical and Translational Science Institute](#)

Office 614-257-2657 / Fax 614-293-9799

Jasmine.Neal@osumc.edu

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