

# Workforce Development

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**Lisa Cicutto RN, MSc, PhD, ACNP(cert)  
Director**

**College of Nursing, CU|AMC  
National Jewish Health**



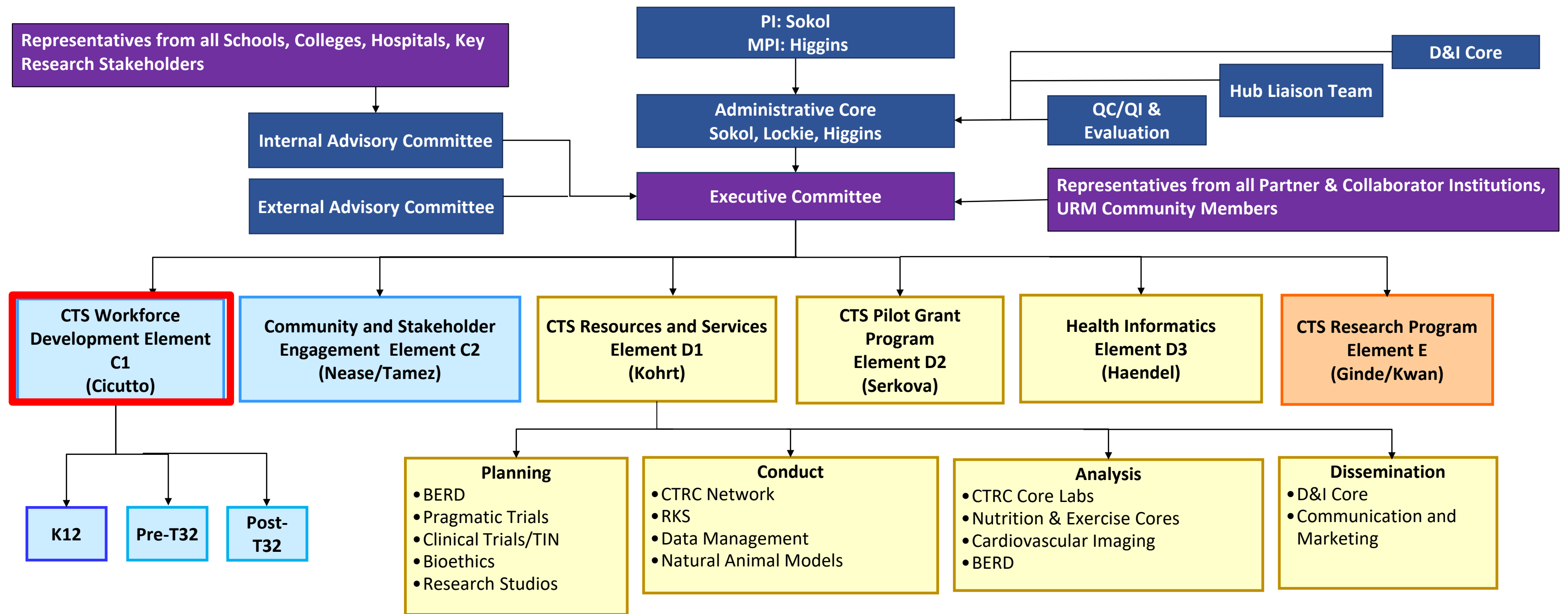
Colorado Clinical and Translational  
Sciences Institute (CCTSI)

UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPUS





# Integration Across CCTSI



# Leadership Team & Diversity

- Heather Aldrich PhD, CSU  
Teaming and Leading



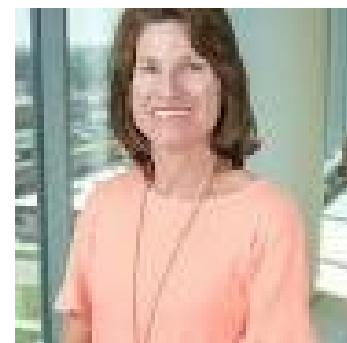
- Greg Austin MD, SOM CU|AMC, UCH  
CO-Mentor



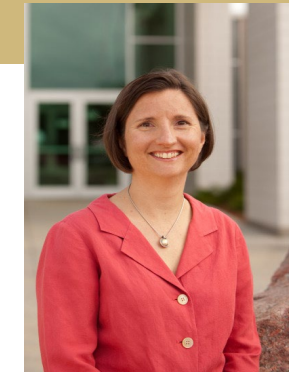
- Aimee Bernard PhD, SOM & SOD CU|AMC  
Effectively Communicating your Research  
to the Public



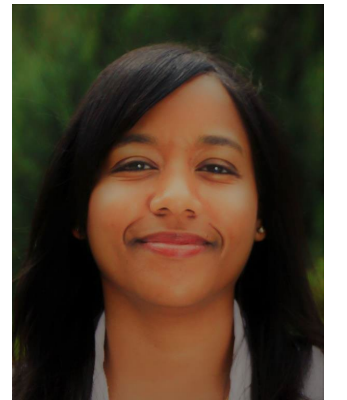
- Ellen Burnham MD, SOM CU|AMC, UCH  
K12



- Jeni Cross PhD, CSU  
Teaming and Leading



- Amira del Pino-Jones MD, SOM CU|AMC, UC  
Diversity, Inclusion and Health Equity



- Kristine Erlandson MD, MSCS, SOM CU, UCH  
Pre-K Grant Review and Mock  
Study Section



- Patricia Gesualdo MSN/MSPH, RN, CU|AMC  
Clinical Research Professionals  
Development Program, Research  
Development Strategy



# Leadership Team & Diversity

- Joshua Johnson PhD, SOM CU|AMC  
Pre-F Grant Review and Mock  
Study Section



- Anne Libby PhD, SOM CU|AMC  
CO-Mentor, Clinical Faculty  
Scholars



- Galit Mankin MSW, CCTSI, CU|AMC  
WD Programs Administrator



- Paul MacLean PhD, SOM CU|AMC  
Pre-K Grant Review and Mock Study  
Section, T32 and K12



- Dominic Martinez EdD, Office of DEI  
and Community Engagement  
SUMMiT



- Bruce Mandt PhD, Graduate School  
Mentoring<sup>3</sup>



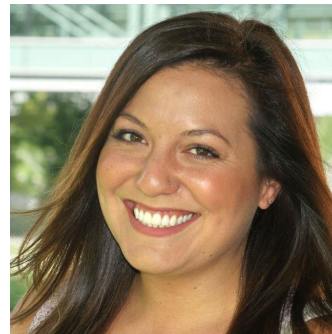
- Wendy Meyer MA, CCTSI, CU|AMC  
Effectively Communicating your Research  
to the Public





# Leadership Team & Diversity

- **Kaylee Rivera-Gordon MPH, CHES, CU|AMC**  
CCTSI Community Engagement  
and Health Equity



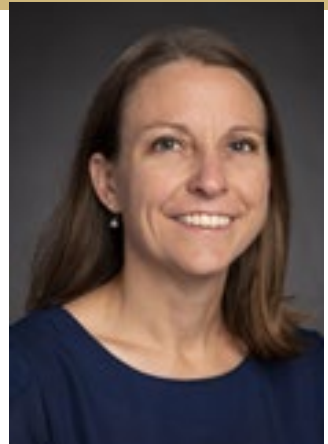
- **Lauren Shomaker PhD, CSU, CSPH, CHCO**  
K12, Pre-K, T32



- **Haley Steinert BA, MS, CCRP, CU|AMC**  
Clinical Research Professionals  
Development Program



- **Arianne Theiss PhD, SOM CU|AMC**  
Pre-F Grant Review and Mock Study Section



- **Maggie Wierman MD, VAMAC, SOM CU|AMC**  
Pre-R Grant Review and Mock  
Study Section



- **Amanda Whiting CCTSI**  
WD Programs Administrator Assistant



# CTS Roadblocks Addressed

1. Diversity in translational workforce, science and research
2. Misinformation and mistrust in translational research
3. Improve collaboration and team science
4. Improve rigor (study design, data collection and quality)
5. Attain funding for translational science and research



# Health Equity & DEIA Goal

## Goal 1: Weave our value, Diversity Accelerates Research and Translation (DART), into all WD programming

1

Amira del Pino-Jones MD, SOM  
CU|AMC, UCH:  
Director, Diversity,  
Inclusion and  
Health Equity



Supports all WD programs including, T32, K12

2

### Workshops

- 3/year for WD Leadership Advisory Council
- 2-3/year T32 programs
- Annually K12
- Part of CRP Onboarding
- Part of CCTSI mentoring programs

3

### Selection Process

- Holistic review used for selecting new WD program leaders and CCTSI trainees/scholars
- Application involves responding to question about how they would contribute to DART



Roadblock addressed: **Diversity in translational workforce, science and research**

# Strategic Goals

## **Goal 2: Support tailored learning to address needs of CRP and scientists.**

- Roadblocks addressed: Clinical trial participant diversity, Improve rigor

## **Goal 3: Enhance workforce effectiveness by providing training in Teaming and Leading, Mentoring, and Communicating Research.**

- Roadblocks addressed: Misinformation and mistrust in translational research, Improve collaboration and team science

## **Goal 4: Ensure workforce receives training in Diversity, Inclusion and Health Equity in Research, GCP, RCR, research ethics, and regulatory compliance.**

- Roadblocks addressed: Clinical trial participant representation, health equity

## **Goal 5: Achieve beneficial impact of WD programming using established metrics.**

- Roadblocks addressed: Skilled workforce using CQI





# Year 1 Progress & Impact

- **Goal 2: Support tailored learning to address needs of CRPs and scientists.**
  - Series of **Grant Review and Mock Study Section** Programs to meet development and career stages of translational investigators
    - **Pre-F (New Program)** 76 pre-/post-doctoral trainees attended workshop
    - **Pre-K** 44 letters of intent submitted; 35 full applications reviewed; 83 interdisciplinary reviewers
    - **Pre-R** 23 letters of intent submitted; 16 full applications reviewed; 47 interdisciplinary reviewers
  - Held prior to standard NIH grant deadlines
  - Process
    - Specific Aims page reviewed with program faculty feedback
    - Submission of entire/complete grant
    - Reviewed by 3 reviewers
    - Attendance of PI at mock study section
    - Receipt of feedback written and orally
    - Option to follow-up with program faculty following receipt of feedback
  - > 80 participating faculty reviewers



# Year 1 Progress & Impact

- **Goal 2: Support tailored learning to address needs of CRPs and scientists.**
  - *Addresses EAC critique - Emphasis on CRPs*
  - Identified 2 leads Patricia Gesualdo and Haley Steinert
  - Coordinate and integrate across university and CCTSI
  - Members of WD Leadership Advisory Council plus monthly meetings with Lisa Cicutto
  - Activities and directions
    - Conducted landscape and needs assessment survey with CRPs to inform next steps
    - Hold monthly CRP meetings, *Clinical Research Connections*
    - Cross campus collaboration to explore an onboarding program
    - Partnering with SUMMiT (summer undergraduate programs) to provide preceptorships with CRPs and their teams as strategy to increase awareness of career and provide leadership opportunities for CRPs
    - Now participating in CTSA SIG for CRPs and WDE
    - Attending ACTS/Translational Science Conference





# Year 1 Progress & Impact

- **Goal 2: Support tailored learning to address needs of CRPs and scientists.**

## WD Programs supporting CRPs:

- Teaming and Leading
- Effectively Communicating your Research to the Public
- ATLAS.Ti
- Clinical Science (about 20% of students)
- **Clinical Translational Training Program**
  - 2-4 lunchtime modules /month
  - Topics repeated 3-4 times/yr: responsible conduct of research, informed consent, COMIRB beginner training, introduction to INfoEd (CU IRB portal), measurement of vitals and anthropometrics, recruitment and retention of study participants, etc.



# Year 1 Progress & Impact

- **Goal 3: Training in Teaming and Leading, Mentoring, and Communicating Research**

## Teaming and Leading

- Curriculum revised
- Both onsite and Zoom workshops
- Broader target audience
- Stay-tuned for Jeni's presentation



## Effectively Communicating your Research to the Public

- New co-director model of CCTSI communications director and biomedical PhD active in research communication
- Stay-tuned for Wendy's and Aimee's presentation



# Year 1 Progress & Impact

## • Goal 3: Training in Teaming and Leading, Mentoring, and Communicating Research

- **CO-Mentor:** highly successful and longstanding program targeting new faculty and their mentor; participate as dyads
  - About 30 dyads per year participate in series of 4 daylong workshops
  - Nearing KA, et al. Training Mentor-Mentee Pairs to Build a Robust Culture for Mentorship and a Pipeline of Clinical and Translational Researchers: The Colorado Mentoring Training Program. Acad Med. 2020 May;95(5):730-736.
- **Mentoring<sup>3</sup>: Mentors, Mentees, Peers:** brand new program developed targeting pre- and post-docs along with their mentors
  - Based on CIMER (Center for the Improvement of Mentored Experiences in Research; University of Wisconsin) and CO-Mentor
  - Workshops held for only mentors, only mentees, and as mentor-mentee dyads
  - First offering held with CCTSI T32 trainees and mentors
  - Workshops held in March, April and May; includes mentoring across differences
  - Evaluation will inform revision



# Year 2 Plans

## Goal 2: Support tailored learning to address needs.

- Develop additional courses offered through the Clinical Science Program
  - *Design and Conduct of Successful Rare Disease Clinical Trials (Matthew Taylor, MD, PhD)*
    - Needs assessment conducted to inform course topics, instructor/facilitators, timing and gauge overall interest
    - Overwhelming interest by broad range of researchers (across specialties and career stage)
    - Start AY2024-25
  - Develop onboarding curriculum/program for CRPs
    - Include modules regarding diversity, inclusion, accessibility and health equity developed with Community Engagement and Health Equity

## Goal 3: Enhance workforce effectiveness by providing training in Teaming and Leading, Mentoring, and Communicating Research.

- Broader dissemination of Mentoring<sup>3</sup>: Mentors, Mentee, Peers to all T32 programs and start program development for train the trainer type of program
- Effectively Communicating your Research to the Public: Revising/restructuring format to flipped classroom. Learners complete webmodules prior to workshop to permit 100% experiential learning





# Year 2 Plans

## **Goal 4: Ensure workforce receives training in Diversity, Inclusion and Health Equity in Research, GCP, RCR, research ethics, and regulatory compliance.**

- Develop and implement Diversity, Inclusion and Health Equity in Research modules and workshops into CRP onboarding curriculum
- Quarterly Communities of Practice meetings with ALL CRPs regarding Diversity, Inclusion and Health Equity in Research

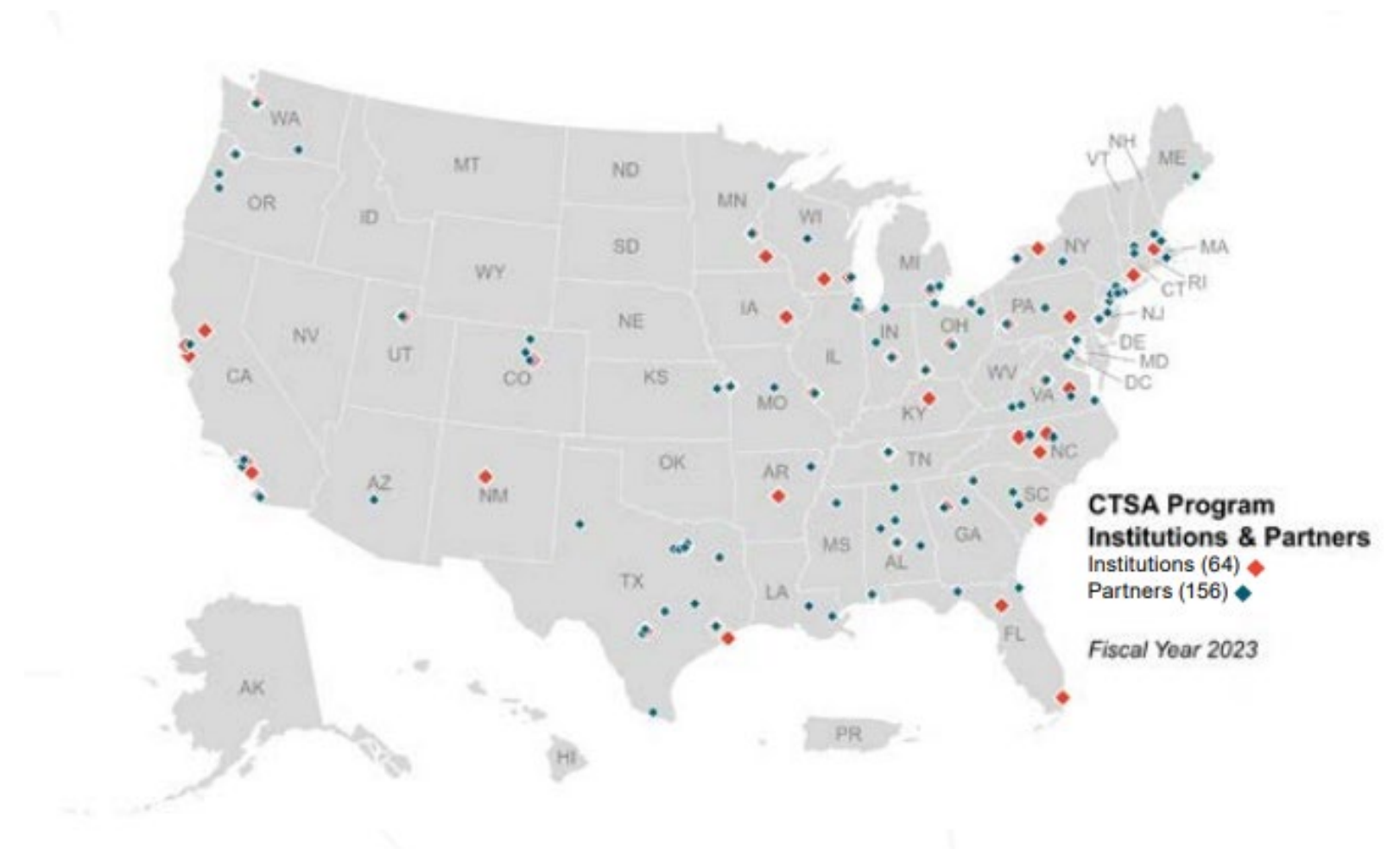
## **Goal 5: Achieve beneficial impact of WD programming using established metrics.**

- All RCR workshops (not course based) will use standardized evaluations to inform the need and type of revision and overall satisfaction and usefulness
- These workshops are attended by about 1,000 people /year



# National Representation

- **CTSA Consortium involvement:**
  - Workforce Development Enterprise - members
  - Workforce Development Enterprise - leader
  - Workforce Development - Planning Committee
  - SIG: Translational Scientist Competencies
  - SIG: Clinical Research Professionals
- **Collaborations with other CTSA projects/programs**
  - Wisconsin - CIMER mentoring program





# Dissemination and Implementation

- **CO-Mentor**
  - University of Miami
- **Leadership in Innovative Team Science (LITeS)**
  - University of Minnesota
- **Researcher Management and Leadership**
  - Coursera course- majority of users are outside of CO and the USA
- **Dissemination and Implementation Graduate Certificate Program**
  - Online program
  - About 50% of learners are from outside of Colorado



# Response to EAC Critiques

## ***1. Strategies to increase awareness of CCTSI resources to support new faculty:***

1. Drs. Sokol and Higgins have led many Town Hall type events (at CU-AMC and partnering institution campuses – in person and virtual)
2. WD core developed a communications plan
3. All LAC members will serve as a CCTSI ambassador to their home centers, programs, divisions, departments





# Questions for EAC

1. Do you integrate career development program offerings across roles and career stages? If so, how and what topics/skills/competencies?

