CTSA Program

- Clinical and Translational Science Award (NIH)
- An NIH-funded national consortium of biomedical research institutions collaborating to transform how clinical and translational science is conducted nationwide
- Currently, ~60 funded Hubs, many of which include multiple universities and hospitals.
- Grants originate from NCATS at NIH
Colorado Clinical & Translational Sciences Institute

- CCTSI is the Colorado CTSA Hub
- Created in 2008, refunded by NIH in 2013, 2018, 2023
- Substantial institutional support (funding)
- Supports all faculty, post-docs, trainees involved in clinical or translational research at 3 universities and 6 hospital partners
- “Disease – agnostic”
- Infrastructure, research facilities, education and training, resources & services, pilot grant funding, biostatistics & informatics, and much more.....
CCTSI Vision

Accelerate and catalyze the translation of innovative science into improved, equitable health and patient care for all
CCTSI 3.0 Mission

• **Catalyze** and enhance scientific discovery, innovation, dissemination and translation across the lifespan

• **Educate** and sustain a resilient, innovative and diverse translational science workforce

• Promote and ensure an efficient, safe, collaborative and integrated research environment

• **Engage stakeholders and communities** across the entire translational spectrum
Spectrum of Translational Research

CLINICAL TRANSLATIONAL RESEARCH SPECTRUM

Basic Scientific Discovery
- Translation to Natural Animal Models
- Translation to Humans

Preclinical Insights
- Translation to Patients

Clinical Insights
- Translation to Practice

Implications for Practice
- Translation to Population

Implications for Population Health
- Improved Global Health

• Bi-Directional
• Collaboration
• Team Science
CCTSI Leadership and Diversity

MPI, Director: Ronald Sokol, MD
MPI, Director of Operations: Janine Higgins, PhD
DFA: Tim Lockie, MS, MBA
Associate Directors:
• Wendy Kohrt, PhD
• Tell Bennet, MD, MS & Melissa Haendel, PhD
• Alison Lakin, RN, JD
• Donald Nease, MD, MPH & Montelle Tamez
• Natalie Serkova, PhD
• Lisa Cicutto, PhD
• Bethany Kwan PhD & Adit Ginde MD, MPH

CSU: Susan VandeWoude, DVM
CU-Boulder: Chris Desouza, PhD
VAMC: Jane Reusch, MD

CCTSI Leadership:
50% Female
50% PhD or equivalent
Representation across Schools & Depts
SOM, CON, CSPH, Engineering

CCTSI Exec Committee:
52% Female
55% PhD or other
2 URM Community Representatives
Representation across AMC Schools and Depts, and all Partner Institutions
WEBSITE:
6,000 - 7,000 visits per month

PROFILES:
15,000 – 20,000 visits per month

ACCELERATING RESEARCH TO IMPROVE HEALTH
The CCTSI helps build research teams of the future, speed the development of new treatments and improve human health
Clinical Translational Research Centers (CTRCs) – Wendy Kohrt, PhD

- Adult-AHSB, CHCO, NJH, CU-B
  - Inpatient and outpatient facilities – no charge for space (except industry studies)
- Research Nursing – inpatient, outpatient, mobile teams (NICU, PICU, ED, etc.)
- Nutrition - metabolic kitchen, whole room calorimeter and body composition
- Adult Vascular Ultrasonography, ECHO, and liver elastography
- Core laboratories & specimen processing
- Microgrants to Jr. Investigators ($10,000/yr. x 3)
- 200 unique PI’s conduct research on >500 CTRC Protocols each year

- Subsidized pricing for investigator-initiated studies
Pilot Grant Awards
Natalie Serkova, PhD

- 5 Pilot Grant programs – CO-Pilot, CMH, Community Engagement, New Methods, CU-CSU Collaboration Award
- ~$900,000 available
- $25,000 for Community Engagement
- $30,000 for Translational Methods
- $40,000 for CO-Pilot and CMH mentored, junior, and early career diversity pilots
- $60,000 for CU-SCU collaborative pilots
Translational Informatics
Tell Bennett, MD, MS & Melissa Haendel, PhD

- REDCap – operated for entire campus by CCTSI
  - >9,000 users, >6,000 active projects
- Health Data Compass – enterprise-wide research data warehouse
- Colorado PROFILES, CTRC Scheduler, Harvest, LIS
- Data Delivery & Cohort Discovery – TrinetX, Compass, ACT, N3C
- Multiple applications to support Grant Review and Education programs
Education, Training and Career Development

Translational Workforce Development

Lisa Cicutto, PhD, APN, RN

1. Summer Undergraduate Minority Mentoring in Translational Science (SUMMiT) (n=14)

2. Pre and Post Doc T32: Pre- and Post-doctoral PhD/MD training programs

3. Clinical Sciences Graduate Program (Masters, PhD)

4. K12 Research Scholar program - up to 3 yrs. of support – Ellen Burnham, MD

5. Support for Clinical Faculty Scholars Program – Anne Libby, PhD

6. Clinical Research Training and Education Program (CRSC)
Education, Training and Career Development
Lisa Cicutto, PhD, APN, RN

8. Colorado Mentor (CO-Mentor) Training Program – Greg Austin MD

9. K-to-R Transition Grant Review – Maggie Wierman MD

10. Pre-K Award Assistance and Grant Review – Paul MacLean, PhD

11. Research Studios – Jane Reusch MD, Alan Prochazka MD

12. Innovation Corps @ CCTSI – Cathy Bodine, PhD

13. Leading and Teaming – Jeni Cross, PhD

14. Communicating Your Science to the Public – C. Sasson, MD
Pre-K Grant Review Program
Paul MacLean PhD & Josie Broussard PhD

• Assist junior faculty and their mentors write successful career development awards
• Mock grant reviews: 3 times a year
  – Applicants and mentors attend
  – K24 awardees, K12 directors, biostats, other K awardees are reviewers
  – Format: reviewers and then panel discusses, followed by Q&A
• Helpful materials on website relevant to K applicants
K to R Transition Program
Maggie Wierman, MD

- Pre-submission mock grant review process
- Faculty with K-level awards who are submitting first R-level grant award or any R-level grant submission
- Submit grant proposal for internal review about 6 weeks before submission to funding agency
- Mock study section and written reviews
- PI and mentor - attend mock study section
- 3 cycles – NIH grant application deadlines
Research Studio Program
Jane Reusch, MD and Alan Prochazka, MD

• **Expert Panel** to provide targeted advice about research project, grant application, idea generation, etc.

• **Studio sessions** are Face to Face - 90 Minutes
  - Investigator presents brief summary (10-15 minutes)
  - Focused discussion with experts for 3 or 4 predetermined questions from the investigator - focus on problem-solving and the development of helpful solutions (60-70 minutes)
  - Moderator and panelists provide summarized comments (10-15 minutes)

• 2019-2020 participants believed the experience contributed >$2M in subsequent grant funding
I-Corps@CCTSI
Cathy Bodine, PhD

• I-Corps @ CCTSI

• Teams of faculty, staff or students with a biomedical discovery or health innovation idea.

• Uses customer discovery methods used for startups for academic researchers

• A team-based short course designed for faculty, staff and students

• Test the business model hypotheses for a technology or idea
Communicating Your Science to the Public
Comilla Sasson, MD, PhD

• Offered Quarterly for up to 30 per session. Started in Spring 2021.
• Workshop #1: Effectively communicating your message to the public
• Workshop #2: Sharing your message effectively and giving/receiving feedback
• Workshop #3: Expanding your media horizons
Community Engagement & Health Equity
Don Nease, MD

- Community Research Liaison (CRL) program
- Colorado Immersion Training in Community Engagement (CIT)
- Research Readiness Certification for Community Based Organizations
- Community Engagement Consults
- CE Pilot Grant Program
- Boot Camp Translation for Patient-Centered Outcomes: Facilitator Training
- Introduction to CBPR for Community-Academic Partnerships
Trial Innovation Network (TIN)

• National CTSA Consortium effort to facilitate design and conduct of Multi-Site (NIH) Clinical Trials

• Provides local and national support for the entire study lifespan
  • Study design, central IRBs, study operations, data collection and analysis, recruitment and retention strategies, etc.
  • TIN Hub Liaison Team – Local linkage to national TIN

• Investigators can request a single service (e.g., single IRB) or complete study life cycle assistance
RKS - Clinical Research Support Center (CRSC) — Alison Lakin, RN, PhD, JD

- FDA submissions
- Education and training for study start up and management
- Access to and maintenance of ClinicalTrials.gov records
- Research agreements (confidential disclosure agreements, clinical trial agreements and materials transfer agreements)
- Study drug/device management advice – IND/IDE
- OnCore, the clinical trials management system
Pragmatic EHR Embedded Trials (PEET)
Adit Ginde, MD, Bethany Kwan, PhD, Janine Higgins, PhD

• New Program!
• Build the Program infrastructure at UCH/UCHealth (initially)
• Engage stakeholders in co-design of materials and for dissemination across the CTSA consortium.
• Conduct PEET trials – for up to three years each, 2 ongoing per year
  • Initial demonstration trial – metformin in men with prostate cancer
• Watch for RFAs for submission of new trial proposals in 2024
11th Annual CU-CSU CCTSI Summit – at the Spur!

• Goals:

2. Highlight ongoing research, resources and progress in Colorado
3. Promote new collaborations, scientific exchange, mentor- mentee relationships

• In Person Format: 5 sessions, Lightning Talks and a Poster Session, Breakfast and Lunch, Networking Time, Finish by 3:30 pm

https://cctsi.cuanschutz.edu
Thank You

CU-CSU Summit Planning Committee

- Program Chair Bethany Kwan, PhD, MSPH, CU Anschutz
- Matthew Hickey, PhD, Colorado State University
- Wendy S. Meyer, MA, CU Anschutz
- Lisa Cicutto, PhD, CU Anschutz
- Heather Gilmartin, PhD, CU Anschutz
- Janine Higgins, PhD, CU Anschutz
- Ronald J. Sokol, MD, CU Anschutz