

CCTSI Update - 2020 Town Hall

Ronald J. Sokol, MD Director and P.I. of CCTSI Assistant Vice Chancellor of Clinical and Translational Science University of Colorado – Anschutz Medical Campus





- 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.
- CTSAs provide many local resources, facilities, research personnel, pilot funding, regulatory and informatics support, research units and education & training programs
- Grants originate from NCATS at NIH



Colorado Clinical & Translational Sciences Institute

- CCTSI is the Colorado CTSA Hub
- Created in 2008, refunded in 2013, 2018
- 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, facilities, education and training, pilot grant funding, special functions and more



CCTSI Vision

Accelerate and catalyze the translation of innovative science into improved health and patient care





CCTSI 3.0 Mission

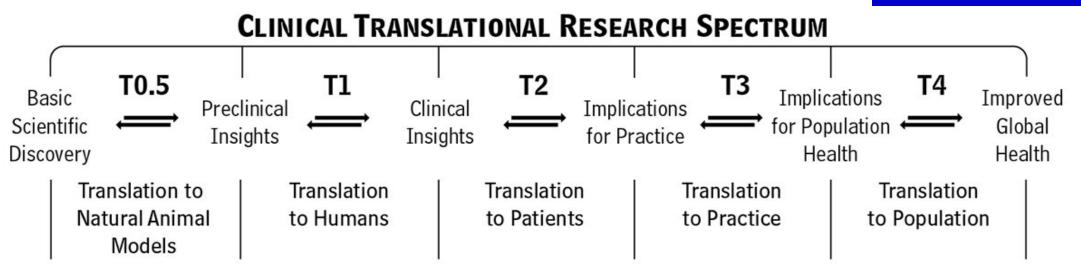


- Catalyze and enhance scientific discovery, innovation, dissemination and translation across the lifespan
- Educate and sustain a resilient, innovative and diverse translational science workforce
- Promote and ensure an efficient, safe, collaborative and integrated research environment
- Engage stakeholders and communities across the entire translational spectrum

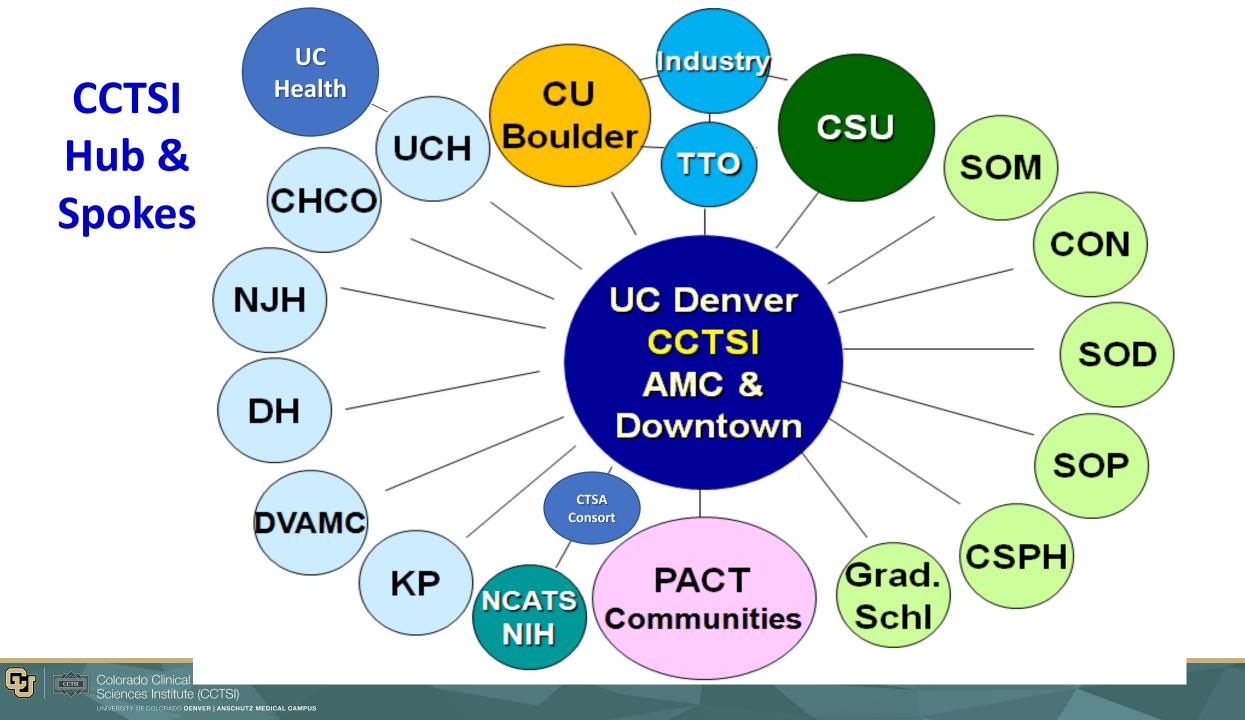
Spectrum of Translational Research

Bi-DirectionalCollaboration

Team Science



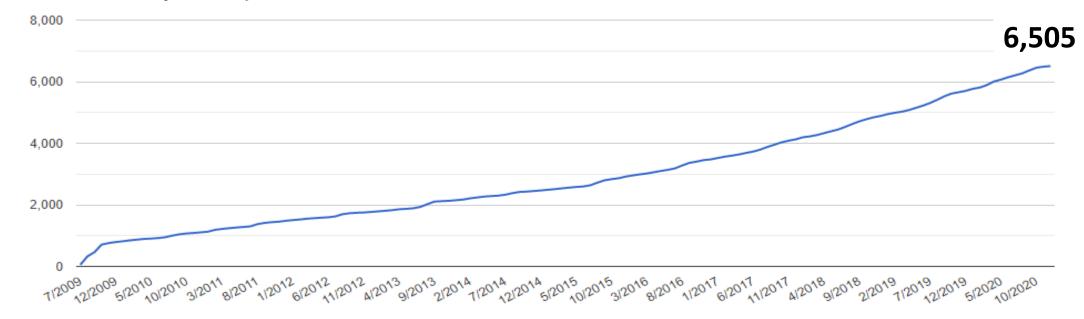




CCTSI Membership

CCTSI Monthly Membership Growth

OCTS/ Membership



CCTSI Membership by Academic Affiliation





CCTSI Leadership

Director: Ronald Sokol, MD **DFA:** Tim Lockie, MS, MBA

Director of Operations: Janine Higgins, PhD

Associate Directors:

- Wendy Kohrt, PhD
- Tell Bennet, MD, MS
- Alison Lakin, RN, JD
- Donald Nease, MD, MPH
- Thomas Campbell, MD
- Lisa Cicutto, PhD

CSU: Susan VandeWoude, PhD **CU-Boulder**: Chris Desouza, PhD





CCTSI Programs & Resources

- 1. Education, Training and Career Development KL2, TL1, CLSC, LITeS, etc.
- 2. Clinical Research Resources & Facilities (CTRCs inpt., outpt., mobile; CReST)
- 3. Community Engagement & Research Don Nease
- 4. Dissemination Implementation Research Bethany Kwan, PhD
- 5. Team Science Jeni Cross, PhD

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6. Biostatistics, Epidemiology and Research Design – CIDA (Nichole Carlson, PhD)

Resources

- 7. Translational Informatics Tell Bennett, MD, MS
- 8. Research Bioethics Marilyn Coors, PhD
- 9. Regulatory Knowledge and Support Alison Lakin JD, RN
- 10. Pilot Grant Programs Natalie Serkova, PhD
- 11. Trial Innovation Network Hub Liaison Team
- 12. Innovation and Entrepreneurship Cathy Bodine, PhD
- 13. Early Life Exposures Program (ELEP) Research Teri Hernandez, PhD

CCTSI Website

<u>https://cctsi.cuanschutz.edu/</u>

or "Google" CCTSI

Portal of entry

WEBSITE: 6,000 - 7,000 visits per month PROFILES: 15,000 – 20,000 visits per month

- Information, applications, links to services, RFAs, training, announcements, etc.
- Membership online quarterly Newsletter (Found in Translation – Wendy Meyer)
- Colorado Profiles





Colorado Clinical and Translational Sciences Institute

https://cctsi.cuanschutz.edu/

Resources 🔹 Training 🔹 Funding 🔹 Community Engagement 🔹 News and Events 🔹 About Us 🔹 Volunteer for a Study 🖄

ACCELERATING RESEARCH TO IMPROVE HEALTH

The CCTSI helps build research teams of the future, speed the development of new treatments and improve human health

University of Colorado Anschutz Medical Campus



Resources and Services

CCTSI supports translational research by providing resources, integrating facilities and services, developing innovative research tools and catalyzing interdisciplinary research programs.



Funding

Each year, the CCTSI awards more than \$2 million in pilot grants, microgrants, and pre-doctoral and post-doctoral research scholar awards. You can find more information on each grant and how to apply

Education, Training and Career Development

The Education, Training and Career Development (ETCD) program provides clinical-translational scientists and trainees with knowledge, training and career skills



Clinical Translational Research Centers

The CTRC provides infrastructure, resources and dedicated space to conduct clinical research.

News from around the CCTSI

Cite our grant

Become a member

Join the CCTSI for free

Find a researcher

Colorado PROFILES



CCTSI

Mapping Our Molecules »

Jun 25, 2019, 12:00 AM by Wendy Meyer

Why know that exercise is good for us. Professor Wendy Kohrt aims to find out why. She is leading an exercise study called MoTrPAC to develop a so-called molecular map of tissue-specific and circulating signals produced by physical activity.

Found **I** Translation

Full story »

University of Colorado Anschutz Medical Campus



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Clinical Translational Research Centers

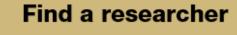
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Mapping Our Molecules »

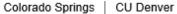
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Found **()** Translation

Full story »

CU Anschutz Medical Campus CU Boulder CU Colorado Springs



anatomy







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October 2, 2019



Suicide

anatomy

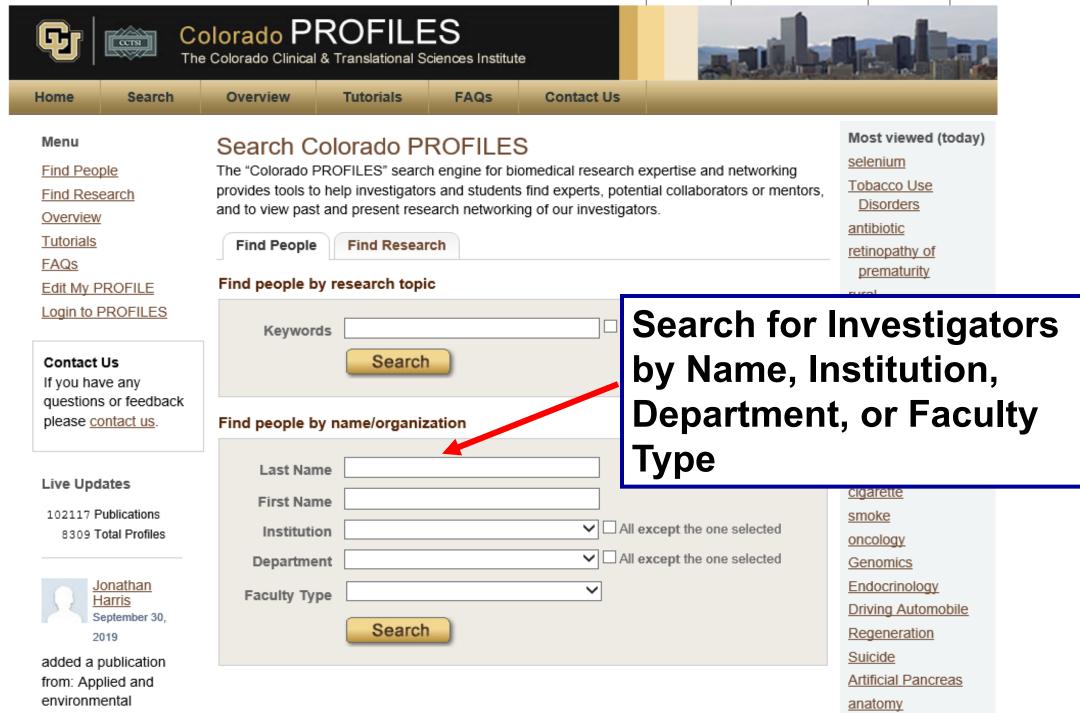
added a publication from: JFMS open reports



Colorado PROFILES The Colorado Clinical & Translational Sciences Institute



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Contact Us If you have any questions or feedback please <u>contact us</u> .		Frederick J Suc	<u>chy</u>	University of Medical Ca	of Colorado Denvei Impus	- Anschutz	Why?		
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Clinical Translational Research Centers (CTRCs)



• UCH, CHCO, NJH, CU-B and Perinatal

- Inpatient and outpatient facilities no charge for space (industry studies excluded)
- Research Nursing inpatient, outpatient, mobile teams (NICU, PICU, ED, etc.) subsidized fee for service
- Bio-nutrition, metabolic kitchen, whole room calorimeter and body composition
- Vascular Ultrasonography and ECHO
- Core laboratories & specimen processing
- *Microgrants* to Jr. Investigators (\$10,000/yr. x 3)
- SARC review of all protocols
- 200 unique Pl's conduct research on >500 CTRC Protocols each year (10,000- 15,000 visits/yr)

CTRC Medical Directors

- UCH/Adult Thomas Campbell, MD
- CHCO/Pediatrics Phillip Zeitler, MD, PhD
- Perinatal Christopher Baker, MD
- NJH Donald Leung, MD, PhD <u>https://www.nationaljewish.org/research-science/clinical-and-translational-research/ctrc</u>
- CU-Boulder Chris DeSouza, PhD and Brian Stauffer, MD https://www.colorado.edu/ctrc/





Pilot Grant Awards Natalie Serkova, PhD

- **5 Pilot Grant programs** CO-Pilot, CMH, Community Engagement, New Methods, CU-CSU Collaboration Award
- •~\$900,000 available
- \$20,000, 30,000, \$60,000 levels
 - Letter of Intent in August
 - Deadline September (end)
 - Peer Review in November- December
 - Start-up in January-April





CCTSI Rapid Turn-Around COVID-19 Pilots

- March, 2020: CCTSI leadership developed \$100,000 C2R2 Pilot Grant Program and issued RFA in 3 days; applications due in 7 days
- 60 letters of intent received; 55 applications received
- Review committee: 22 experts across affiliated institutions (reviews completed in 4 d)
- Awards issued and speedtypes activated and funded 3 days later

CCTSI COVID-19 Research Related (C2R2) Pilot Program Awards (\$25,000)				
PI	Affiliation	Project Title		
David Prawel, PhD	Colorado State University	Additive Manufacturing of Certified PPE: A Path Towards Mass Production		
J. David Beckham, MD	Anschutz Medical Campus	A prospective, observational cohort trial for the treatment of hospitalized COVID19 patients with high-titer anti-SARS-CoV2 convalescent serum		
Anna Maw, MD	Anschutz Medical Campus	Rapid Point of Care Lung Ultrasound Implementation in the Evaluation of Hospitalized Patients with COVID		
Brian Montague, DO	Anschutz Medical Campus	Prospective Identification of SARS-CoV2 Infection in Healthcare Workers		

Translational Informatics Tell Bennett, MD, MS

- REDCap operated for entire campus by CCTSI >9,000 users,
 >6,000 active projects
- Health Data Compass enterprise-wide research data warehouse
 Michael Kahn, MD, PhD Previous Director
- Colorado **PROFILES**, Scheduler, Harvest, LIS, Freezerworks
- Data Delivery & Cohort Discovery TrinetX, Compass, ACT, N3C
- Multiple applications to support Grant Review and Education programs



Translational Informatics Team

- Director: Tell Bennett, MD, MS
- REDCap team

Amanda Miller, REDCap Senior Administrator and Team Lead Jenn Mauck, REDCap Administrator

Infrastructure and Services Team

Tom Yaeger, Director

Melanie Tsosie, Associate Director and Applications Specialist

Chris Caldwell, Web Manager

Matt Latus, Information Security Officer

Ambreen Zaver, Developer

Open Position, Systems Administrator

National COVID Cohort Collaborative (N3C)

 A centralized, secure portal for hosting national patient-level COVID clinical EHR data and deploying statistical methods and tools for clinicians, researchers, and healthcare – to answer pressing clinical and research questions



National COVID Cohort Collaborative

- EHR data (UCH, CHCO) entered by CTSA program institutions, distributed clinical data networks (e.g., PCORnet, OHDSI, ACT/i2b2, and TriNetX), and many other clinical partners and collaborators
- <u>https://ncats.nih.gov/n3c</u>



Key N3C Stats – 6 Dec 2020

COVID-19 Positive Patients*	Total Patients	Sites	Total Rows
372,716	2,146,059	34	2.0b

Procedures	Lab Results	Drug Exposures	Visits	Observations
152.5m	955.0m	359.1m	92.0m	120.6m

Click to see more COVID Cohort key stats >



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N3C Data Enclave Access

• Researchers can access the **N3C Data Enclave**, a centralized national COVID-19 data analytics platform to enable the rapid

Contact Tell Bennett, MD, MS - Informatics Core for more details and access

Occure data plationini with powentil analytics capabilities

- Data robust in scale and scope
- Harmonized data set
- Video: <u>https://www.youtube.com/watch?v=0JPjw1_iRKY</u>



Education, Training and Career Development Lisa Cicutto, PhD



- Summer Undergraduate Minority Mentoring in Translational Science (SUMMiT) (n=14)
- 2. TL1 (T32) Pre- and Post-doctoral PhD training program
- 3. Clinical Sciences Graduate Program (Masters, PhD)
- 4. KL2 (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. Leadership in Innovative Team Science (LITeS) Judith Albino
- 9. Colorado Mentor (CO-Mentor) Training Program Greg Austin MD
- 10. K-to-R Transition Grant Review Maggie Wierman MD
- 11. Pre-K Award Assistance and Grant Review Paul MacLean, PhD
- 12. Research Studios Jane Reusch MD, Alan Prochazka MD
- 13. Innovation Corps @ CCTSI Cathy Bodine, PhD
- 14. Teaming for Early Career Researchers Jeni Cross, PhD



Pre-K Grant Review Program

- Assist junior faculty and their mentors write successful career development awards
 - 5 criteria (candidate, career development, mentors, environment, and research plan)
- 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

Letter of Intent due December 28, 2020



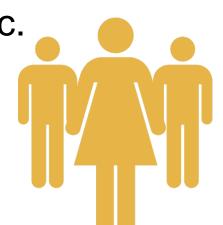


K to R Transition Program

- 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 4-6 weeks before submission to funding agency
 - Deadline for Letter of Intent
- Mock study section and written reviews
- PI and mentor attend mock study section
- 3 cycles NIH grant application deadlines
- Maggie Wierman, MD 303-724-3952

Research Studio Program Jane Reusch, MD and Alan Prochazka, MD

- Expert Panel (5-6 person) formed to provide targeted advice about research project, grant application, idea generation, etc.
- T1-T2 or T3-T4 research topics
- Studio sessions are Face to Face (over Lunch)
 - ✤ 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)



Research Studio Process

- Web-based Consult Request CCTSI website
- Studio Consult Categories:
 - hypothesis generation
 - study design specific aims
 - ✤ grant review
 - ✤ implementation
 - ✤ analysis and interpretation
 - manuscript review
 - translation





Research Studio Dates

- Next Dates: Jan. 28, April 1, June 4 (4-5 Studios per session)
- Contact:

Dan Holtrop, MA

Studio Program Manager

Daniel.Holtrop@cuanschutz.edu



Excellent feedback and usefulness "Very beneficial service and significantly improved the quality of my research project"

- Investigator





- i-Corp @ CCTSI
- Teams of faculty, staff or students with a biomedical discovery or health innovation idea.
- Uses customer discovery methods for startups for academic researchers
- A team-based short course designed for faculty, staff and students
- Guides teams through early stages of customer discovery
- Test the business model hypotheses for a technology or idea
- Spring 2021 session website

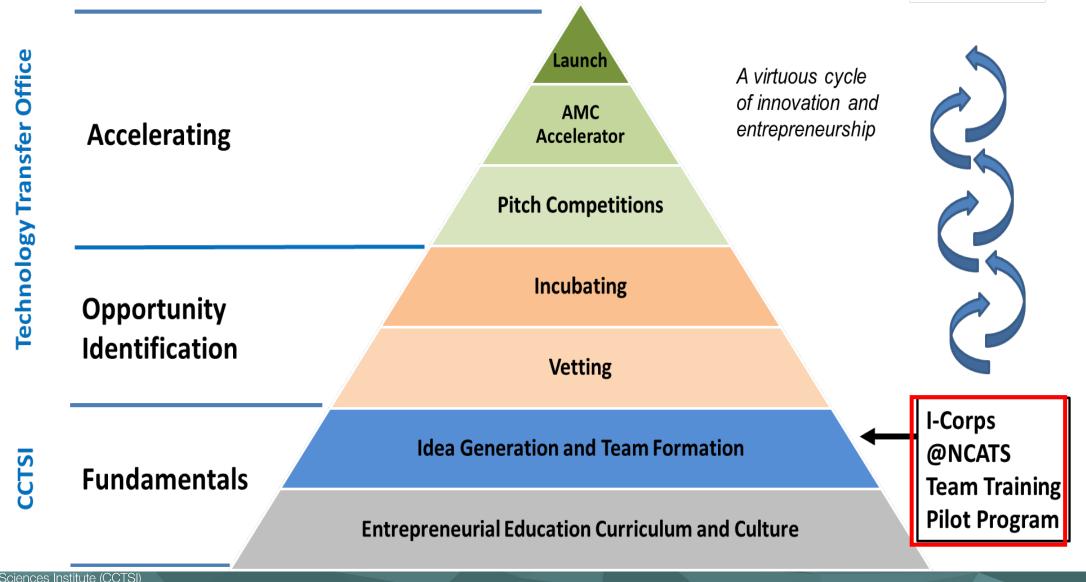


Innovation & Entrepreneurship Ecosystem at AMC

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Community Engagement & Research Programs 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)

trialinnovationnetwork.org

- 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
- First contact the Hub Liaison Team for assistance and guidance



Trial Innovation Network Hub Liaison Team

- Director: Adit Ginde, MD
- Medical Directors: Tom Campbell, MD (UCH) Jesse Davidson, MD (CHCO)
- Project Manager Aaron Mobley PhD Phone: 720-848-5523
 aaron.mobley@cuanschutz.edu
- Contracting Lead Deb Barnard, MS, TK Keith, JD
- Central IRB Lead Christy Williamson
- Recruitment (Participants) Lead Barbara Hammack

Local TIN Website, workflow, educational materials, etc.



RKS - Clinical Research Support Center (CRSC) – Alison Lakin, RN, JD

- FDA submissions
- Education and training on all aspects of study start up and management
- Assistance with IRB submissions
- 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
- OnCore, the clinical trials management system

https://research.cuanschutz.edu/crs



Anschutz Health Sciences Building

- Planned occupancy Fall 2021
- All CCTSI Leprino 3rd Floor operations moving to 6th floor
- Two large procedure rooms (~300sf) to accommodate some activity that is currently performed IP
- Two negative pressure rooms
- Five chair infusion suite
- Building will have a dedicated research pharmacy



Diversity, Equity, Inclusion, Systematic Racism

- Education of CCTSI Staff
- Leadership education and commitment
- Position statement of commitment accountable
- Expanding diversity of Leadership
- Incorporation of Community Members in CCTSI oversight committees
- Address inequities through CE&R program, pilot grant awards
- Diversity supplements



CCTSI is here to support you!

- <u>https://cctsi.cuanschutz.edu</u> or google CCTSI
- Become a Member (quick, free, powerful)
- Become familiar with the website
- Use PROFILES often
- Cite our Grants





QUESTIONS?