CCTSI Strategic Management & Integration

Ronald Sokol, MD
Director & MPI

Janine Higgins, PhD
Director of Operations & MPI

cctsi.cuanschutz.edu
Leadership Team & Diversity

CCTSI Leadership:
62% 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

Director & MPI: Ronald Sokol, MD
Director of Operations & MPI: Janine Higgins, PhD
DFA: Tim Lockie, MS, MBA

Associate Directors:
• Wendy Kohrt, PhD
• Melissa Haendel, PhD
• Alison Lakin, RN, LLB, LLM, PhD
• Donald Nease, MD, MPH & Montelle Tamez
• Natalie Serkova, PhD
• Lisa Cicutto, PhD, APN, RN
• Bethany Kwan, PhD
• Adit Ginde, MD, MPH

CSU: Susan VandeWoude, DVM & Matt Hickey, PhD
CU Boulder: Chris Desouza, PhD
VAMC: Jane Reusch, MD
Strategic Integration Across CCTSI

- Unified, collaborative CCTSI structure
- Centralized governance through Executive Committee
  - Meets bi-monthly
  - UM1, T32, K12 leadership have worked together >10 years
  - Share/feedback on ideas, metrics, and innovations; frequent communication and collaboration between all Partners
- Align goals across Elements and Modules
  - Improve efficiency and impact of the translational research enterprise
  - Partner with communities and stakeholders
  - Address health equity and disparities
  - Train professional research staff and the next generation of clinical and translational scientists
Integration Points Across Elements/Modules

• UM1, T32, K12 grant finances and HR run through the CCTSI Administrative Core

• Multiple UM1 WD programs are leveraged to provide education and career development components of the K12 and T32s

• CCTSI educational Leadership Advisory Council (LAC) - directors and leaders of all CCTSI WD programs, DEI leads, CEHE (Module C2), BERD (Module D1) and Evaluation Core (Element B) - uses shared decision-making to review training activities, evaluation and feedback, metrics/outcomes, and integration across Elements/Modules/programs
  • Creates synergy, prevents duplication

• CEHE team provides education and training across all grants/programs

• T32 and K12 content provided by faculty from Modules D1 R&S, and D3 Bioinformatics

• Pre-F, Pre-K, Pre-R (Module C2), and Pilot Program (Module D2) reviews conducted by faculty at all partner universities, including those in Modules D1 and D3, and Element C2.
### Integration Points Across Partners

<table>
<thead>
<tr>
<th>INTEGRATION OF PROGRAMS ACROSS PARTNER INSTITUTIONS</th>
<th>CU-Anschutz</th>
<th>CU-Boulder</th>
<th>CU-Denver</th>
<th>CSU</th>
<th>UCH</th>
<th>CHCO</th>
<th>NJH</th>
<th>DH</th>
<th>VAMC</th>
<th>URM/Community Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B - Strategic Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Core</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Committee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hub Liaison Team/TIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous Process Improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation Core</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissemination/Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Advisory Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C1 - Workforce Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFSP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PreF, PreK, PreR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO-Mentor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Research Education Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C2 - Community &amp; Stakeholder Engagement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PACT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PACT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bootcamp Translation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Immersion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE Pilot Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D1 - CTS Resources and Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BERD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioethics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Studios</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTRC Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaming and Leading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissemination/Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Animal Models</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Labs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition and Exercise Cores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D2 - Pilot Grant Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D3 - Health Informatics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E - CTS Research Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T32s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Engagement, University Partners

CU-Denver
- CCTS Evaluation Core in Element B
- Provides structured professional development programs and seminars that are openly accessible to CCTSI faculty
- Faculty and students participate in workforce development activities, Element C

CU-Boulder
- Boulder CTRC, Element D Pilot Projects, Element D
- Faculty and students participate in workforce development activities, Element C
- Faculty mentors for trainees, K12/T32s

CSU
- Education programs, Element C
- Faculty mentors for trainees K12/T32s
- Pilot projects, Element D
- Animal Clinical Trials, Element D
- Health Informatics, Element D
- Partner T32-Postdoc program
- Natural Animal Models Core is located at CSU, Element D

Pilot Program Reviewers, Element D
Engagement, Hospital Partners

**UCH**
- Adult IP CTRC and recruitment services, Element D
- Virtual clinical trials, Element D and E
- Conduct clinical research and trials
- Provide EHR data for bioinformatics, Element D

**CHCO**
- Pediatric OP & IP CTRC, Element D
- Rare disease trials
- Conduct clinical research and trials
- Provide EHR data for bioinformatics, Element D

**NJH**
- NJH CTRC, Element D
- Conduct clinical research and trials
- Training for junior faculty, Element C
- Mentors for trainees, K12/T32s

**DH**
- URM populations with recruitment assistance
- Community-based education about research, Element C
- Training for junior faculty, Element C
- Mentors for trainees, K12/T32s

**VAMC**
- Conduct clinical research and trials
- Recruitment assistance for unique patient population that they serve
- Mentors for trainees, K12/T32s

Pilot Program Reviewers, Element D
Working Relationships Between CCTSI Hub and Partnering Institutions

University Academic Partners
- University of Colorado Anschutz Medical Ctr.
- University of Colorado Denver
- University of Colorado Boulder
- Colorado State University

Hospital & Health Systems Partners
- University of Colorado Health
- Children’s Hospital Colorado
- National Jewish Health
- Denver Health & Hospitals
- Rocky Mountain Veterans Affairs Medical Center

CCTSI Hub
- UM1 MPIs: Sokol & Higgins
- Internal Advisory Committee
- Administrative Core
  - Deans, VCRs
  - Admin Directors, Grants & Contracts
  - CTR MD/PhD Leaders
- CCTSI Executive Committee
- CCTSI Module Leaders & Steering Committees
  - Module Content Experts
  - Research Teams, Faculty, Staff, Post-Docs, Trainees
- CCTSI Programs, Trainings, WFD, Pilot Grants, Informatics Support, Resources and Services, etc.

CCTSI PACT Council, Pilot Grants, CEHE, Trainings

Community Partners & Collaborators
- Community Members & Organizations

Interact with all above Hub Functions

CCTSI

Schools & Colleges Involved with CCTSI:
- Medicine
- Nursing
- Pharmacy
- Dental
- Public Health Graduate
- LAS Evaluation Ctr.
- Engineering Education Public Affairs Graduate
- Arts & Sciences Engineering Business
- Veterinary Med Engineering Public Health Human Sciences Natural Sciences Agriculture Liberal Arts Graduate
1. **Examples of scientific integration are lacking. While there is sufficient infrastructure at the CSU College of Veterinary Medicine, there are no clear examples of how animal models would be translated to clinical practice**
   - ARPA-H Novel Innovations for Tissue Regeneration in Osteoarthritis (NITRO) program – Boulder, CSU, Anschutz collab: $39M to study osteoarthritis, including horse models before clinical trials

2. **Statewide reach of the CTSA is somewhat limited given the heavy concentration of services in Denver/Boulder. Individual institutions are not coordinated.**
   - UCHHealth state-wide clinic network being utilized for Element E
   - PBRN is a state-wide network and CSU extension program reaches all corners of the state
   - Started the UM1 grant cycle using a scheduled EC meeting for partner leaders only to discuss integration and barriers to coordination among institutions/geographic locations. Do this semi-annually to ensure integration and coordination is ongoing.
   - Dr Higgins conducting bi-lateral assessment of non-CTRC clinical research infrastructure at NJH with potential for collaborative efforts to increase efficiency and capacity