

The Power of Partnership

Colorado State University & the annual CU-CSU Summit

Matt Hickey, Ph.D.

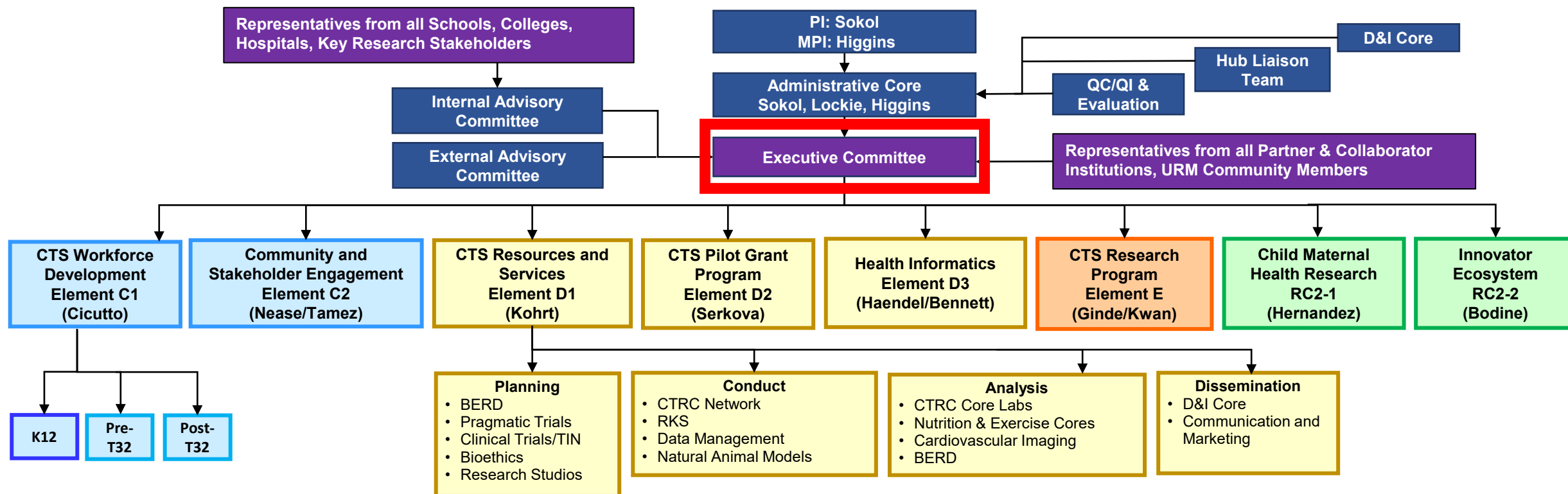
Associate Dean for Research

College of Health and Human Sciences



Colorado Clinical and Translational
Sciences Institute (CCTSI)

UNIVERSITY OF COLORADO DENVER | ANSCHUTZ MEDICAL CAMPUS



Colorado State University

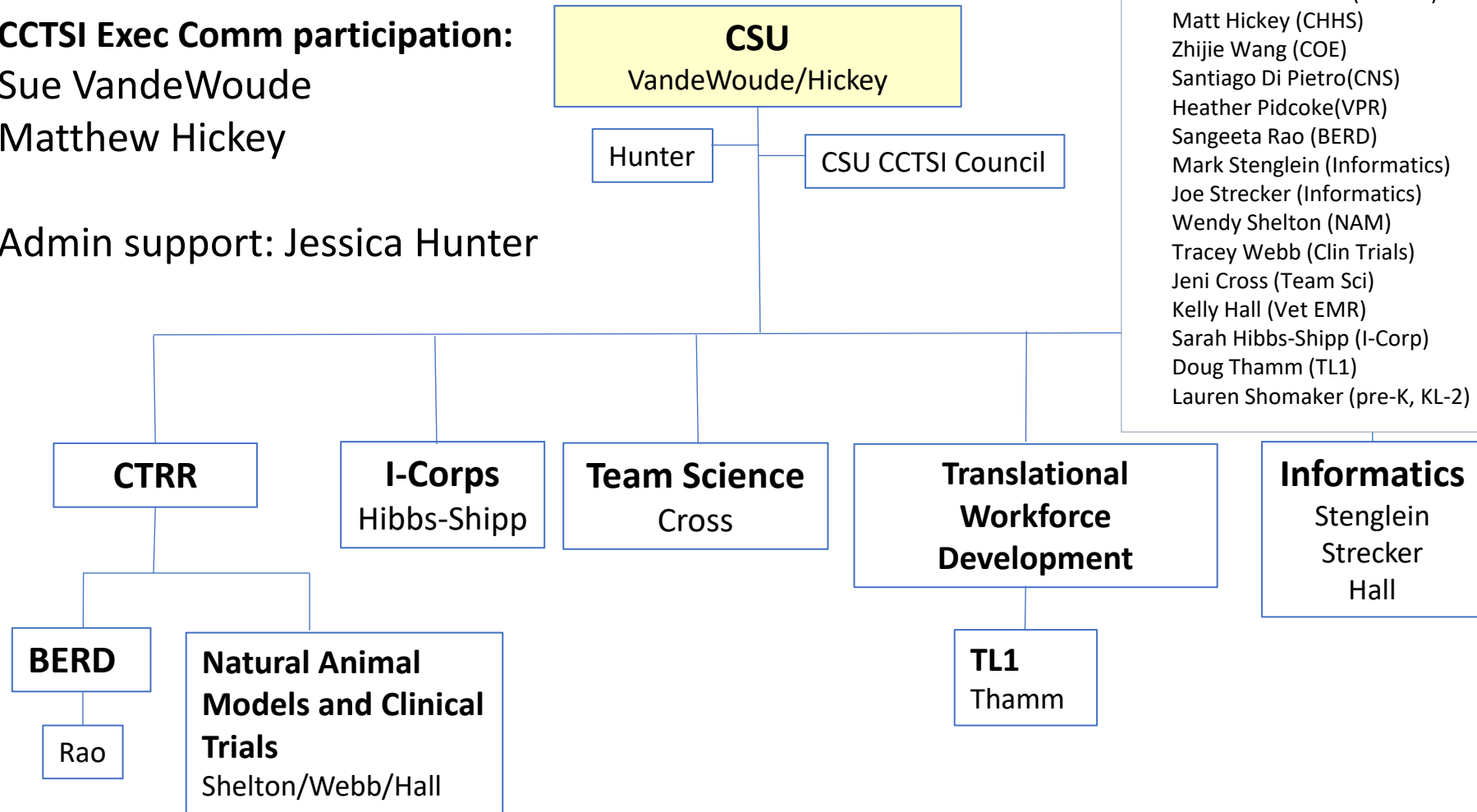


- Land grant institution for CO
- Founded 1870
- Ranks 2nd in research funding among public institutions w/out a medical school (NSF)
- \$456M annual research expenditures in FY22
- 8 colleges, 5 with significant CCTSI interactions
 - CVMBS, CHHS, COE, CNS, CLA
 - **568 CCTSI members (18% increase in 2022)**



CCTSI Exec Comm participation:
Sue VandeWoude
Matthew Hickey

Admin support: Jessica Hunter



2021 CSU CCTSI Council
Sue VandeWoude (CVMBS)
Matt Hickey (CHHS)
Zhijie Wang (COE)
Santiago Di Pietro(CNS)
Heather Pidcoke(VPR)
Sangeeta Rao (BERD)
Mark Stenglein (Informatics)
Joe Strecker (Informatics)
Wendy Shelton (NAM)
Tracey Webb (Clin Trials)
Jeni Cross (Team Sci)
Kelly Hall (Vet EMR)
Sarah Hibbs-Shipp (I-Corp)
Doug Thamm (TL1)
Lauren Shomaker (pre-K, KL-2)

Governance

LOCAL

- Subaward PI and admin coordinator in CSU OHI
- Approximately monthly meetings of core directors, biostats/ bioinformatics, Associate Deans for Research in participating colleges
- Website <https://www.research.colostate.edu/cctsi/>

PROGRAM

- EAC representation (VandeWoude, Hickey*)
- Program implementation (Cross, Shomaker, Thamm)
- Co-Pilot (VandeWoude)
- Bioinformatics/Biostatistics (Stenglein, Rao)

*Transition of co-leadership



Annual CU-CSU Summit

2013: Introduction to CCTSI

2014: Obesity/ Diabetes (a.m.); Cardiovascular (afternoon)

2015: Community Engagement/ Clinical Trials

2016: Regenerative Medicine/ Stem Cell Biology (a.m.)
Precision/ Personalized Medicine (afternoon)

2017: Microbiome

2018: Lifespan Research

2019: AI and Health Care

2020: COVID-19 Response

2021: Evolving Impacts of COVID-19: Research Advances in Colorado and Beyond

2022: Research in Health Equity and Social Determinants (6 speakers from CSU)

2023: Preliminary aim: D&I focus, seeking to host at CSU Spur campus with CSU Extension



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CU-CSU Summit-2022

CSU Contributions

- ***Engaged Approaches to Advance Environmental Health Trials in Resource-Poor LMIC Settings.*** Maggie Clark, PhD
- ***Strengthening Community-Academic Partnerships through Radical Relationship,*** Chrissy Chard, PhD & Deborah Fard (community partner)
- ***Campus Resources for Research in Social Determinants of Health and Diversity and Inclusion.*** Sonali Diddi, Ph.D., Engaged Faculty Lead, Office of Engagement and Extension
- ***Pracademic Work as Pathway to Policy Change.*** Molly Gutilla, DrPH
- ***One Health in Veterinary Practice--Engaging Students in Addressing Gaps in Accessible Care.*** Danielle Frey, DVM
- ***Access to Care: Structural Racism in Veterinary Medicine.*** Jon Geller, DVM



CSU-CU/AMC Collaborative CO-Pilot Award

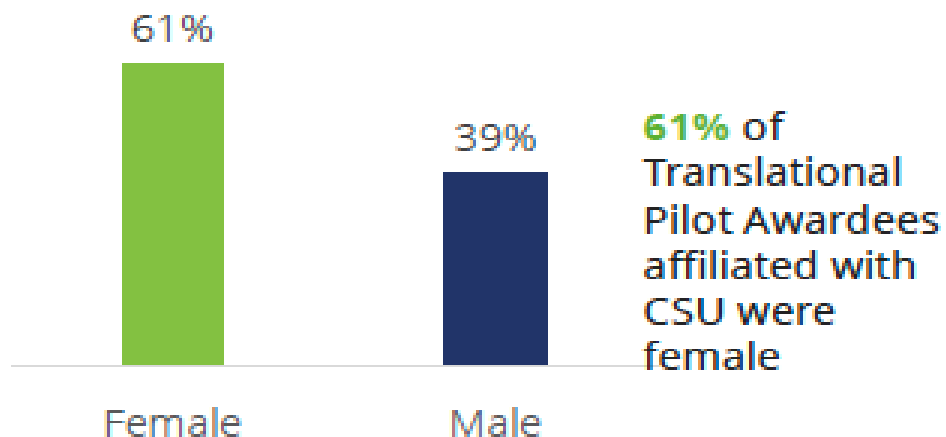
- \$30K CSU + \$30K CU match for collaborative projects (non CCTSI dollars)
- Application, review, award parallel to other co-Pilot awards

19 CO-Pilot projects funded since 2014

- CCTSI members eligible for other award categories



CSU Pilot Award Highlights



Pilot Award Category Affiliation:

CO-Pilot	Translational Methods	Community Engagement	COVID-19	CU-CSU Collaboration
33%	18%	29%	2%	18%



The Evaluation Center

UNIVERSITY OF COLORADO
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- Translational Pilot Awards (2010-2021)
 - 51 grants to 43 CSU-affiliated researchers
 - ROI - > 13
 - \$1.3m in grants, \$18.5m in follow-on funding
- UG3/UH3 Award Pending, Haendel, PI; Zersen, CSU-co-I



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CSU Natural Animal Models Outcomes/ WIP

- Clinical Trials research space and equipment progress
- Clinical Review Board (Veterinary IRB): continued policy development and growth, reviewed >110 protocols
- Development/enhancement of website content: CSU CCTSI, CSU CRB, CSU One Health Institute, COHA
- REDCap adoption for veterinary clinical trials



CSU Natural Animal Models

Common Data Models

- UCD symposium on Comparative Animal Health Datasets and ontologies, May, 2022
- UG3/UH3 application pending review: "Realizing precision medicine and translational science through integration of veterinary and human health data", Haendel PI; UC Denver, CSU (K. Zersen, J. Strecker, K. Hall, T. Webb), Tufts, UC Davis
- Ongoing "One Health Datasets" Activities



CSU Natural Animal Models Core: T0.5

Innovative pathway for translating pre-clinical discoveries into naturally occurring animal models (companion and domestic animals) to accelerate the discovery pipeline

- Tracy Webb, DVM, PhD, CSU Designee
- Wendy Shelton, DVM, MS, liaison
- Kelly Hall-Wilke, DVM, MS, Critical Care/Trauma; Veterinary Trauma Database and Translational Trauma Working Group



CTSA One Health Alliance (COHA)

Collaboration among ~15 veterinary colleges with CTSA medical partners with four focus areas:

- Naturally occurring models of human disease
- Biorepository/biobanking
- Clinician scientist education
- Communication and collaboration

CSU leadership on **COHA advocacy committee** supports federal OH legislation

COHA pilot project award supports communication and collaboration activities

And interprofessional education between DVM and MD awards



NASEM Monograph

- NAS workshop, Dec 2021
- Financial support from **NCI, NIA, NIEHS and EPA**
- ...and **UC Anschutz Cancer Center, CSU** and Morris Animal Foundation
- 80 in-person and 1500 virtual participants across the US and world (**10 from CSU, UCD-AMC**)
- CSU: **Shelton, Page, Farland, Ryan, Webb, Avery, VandeWoude, Hoover;**
UCD-AMC: **Thessen, DiGregori**



CSU CCTSI Vision

- Grow CSU **contributions** to CCTSI
 - Embed CCTSI in new faculty onboarding (piloting in CHHS now)
 - Increase CSU participation at summit (more than just attendance)
 - Increase CSU participation at CCTSI Ethics Conference
 - Increase CSU submissions to CCTSI pilots grants programs
 - Expand CSU involvement in Pre-H and K-R programs
- Build/ expand **connections** to CSU Centers/ faculty
 - Translational Medicine Institute
 - Center for Healthy Aging
 - School of Biomedical Engineering

