Coleman Institute Funding

Technology Translational Research and Development (TTRD) Awards

Call for 2026 Applications

Call for 2026 Applications - Technology Translational Research and Development Awards

The Coleman Institute for Cognitive Disabilities works to catalyze and integrate advances in technology that promote the quality of life of people living with or aging into cognitive disabilities and their caregivers. The Institute is committed to providing scientific and technological leadership to improve the lives of those living with a cognitive impairment. **Approximately 30 million people in the U.S. have a cognitive disability such as intellectual disability, brain injury, Alzheimer's disease, or stroke. Currently, an estimated 449,000 persons in Colorado live with cognitive disabilities.**

The Institute supports translational science resulting in products or services reaching the hands of consumers. The Coleman Institute Technology Translational Research and Development (TTRD) Award directly advances this end by funding researchers and developers from the campuses of the University of Colorado in Boulder, Colorado Springs, Denver, and the Anschutz Medical Campus in Aurora to develop and disseminate technology products that directly aid persons living with or aging into cognitive disabilities.

The purpose of this request for proposals is to catalyze unique and vibrant campus researchers and developers interested in technologies designed to support those living with cognitive impairments. This research funding is aimed at advancing ideas from concept to deliverables to create viable and marketable products or services benefiting people with cognitive disabilities. Funding will focus on two distinct phases of research: early stage (Phase I) and later stage (Phase II) development. The intended outcome of such efforts will be to progress the development of tangible tools, resources, hardware, software, and/or strategies for improving quality of life. Proposals that are driven by use-inspired research and have a clear path of translation will be funded.

Requested budget amounts cannot exceed $50,000 for Phase I and $100,000 for Phase II. The selection committee will determine the number of Phase I/II awards. The funding is expected to be used within 12 months of the award. The awards are expected to position researchers and developers to secure additional ongoing funding from state, federal, foundation grantors, or outside investors. Applicants must specify whether they are applying

for Phase I or Phase II and demonstrate why such a funding level is appropriate.

Applicants who have previously received a Phase I award remain eligible to apply for Phase II funding. However, applicants who have already received a Phase II award are not eligible to apply for an additional Phase II award.

Applicant Instructions

All applicants must comply with these instructions. There is no limit to the number of applications that can be submitted from each campus. Applications must be submitted to the Coleman Institute for Cognitive Disabilities no later than midnight, April 30th, 2026. Proposals will be reviewed by May 31st, 2026, with notification of awardees in June. Late proposals will not be accepted.

ELIGIBILITY

University of Colorado Faculty (full or part-time) ranked at the Assistant, Associate, or Full Professor level are eligible to apply including:

- Tenure and Tenure Track: Assistant Professor, Associate Professor, Full Professor
- Research Faculty: Research Assistant Professor, Research Associate Professor, and Research Full Professor

Partnerships: Teams and/or partnerships are encouraged. Diverse stakeholders may be necessary to provide expertise, user-experience, and/or guidance for the translation research. Research assistants can be funded by the grant, but a faculty member as defined above must serve as the Principal Investigator on all proposals.

OVERVIEW OF APPLICATION COMPONENTS

- Signed one-page Cover Letter with the title of your proposal, and a no more than half-page Abstract describing the potential relevance of the proposed technology and its application for people living with or aging into a cognitive disability.
- Six-page (maximum) Project Description with Cover Page – see provided Cover Page Template

  Coleman Institute 2026 RFP Cover Page Template.docx [1]
- Two-page (maximum) Budget including:
  - CU-specific Budget – see provided Budget Template

    Coleman Institute 2026 RFP Budget Template [3]
  - Budget Narrative (justification)
    - An indirect Costs/Facilities and Administration charge of 4% is built into the macro formulae. Your campus is allocated 4%.
  - Allowable expenses include but are not necessarily limited to:
    - An Investigator's salary and benefits (please contact your Grants office for current fringe benefits rates)

        - Other salaried personnel (including CU laboratory personnel/students)
        - Professional services
        - Hourly compensation for laboratory personnel including students
        - Supplies and materials
        - Small equipment not to exceed $5,000 in cost for each piece
        - Professional travel
        - Indirect costs
- Additional Supplemental Materials
    - NIH-style Biosketches of all key personnel

REVIEW PROCESS

The review process will include the following steps:

Administrative Review: Applications will be screened to determine whether they are complete, adhere to the formatting requirements, and meet basic relevance and eligibility criteria.

Innovation Review: Eligible applications will be evaluated by at least three external innovation reviewers. These reviewers include experts from across technology disciplines (e.g., biomedical science, clinical medicine, social science, engineering, computer and data science, health technology, and more). Reviewers will have a history of thinking “outside the box” and conducting innovative work.

Selection Committee Review: A final selection panel will review the applications for scientific merit and feasibility as well as consider the external reviewers’ assessment of innovation. The committee will seek to identify innovative, novel, and potentially groundbreaking projects with the highest potential for commercial application and success.

Criteria to be considered by the review committee include but are not limited to:

- The scientific and technical merit of the proposed work.
- The extent to which the proposed technology research and development has the promise to improve the lives of people living with a cognitive disability.
- The likelihood the proposed work will lead to acquisition of additional future funding.
- Potential for intellectual property.
- The reasonableness of the budget and the appropriateness of the timeframe proposed for the project.
- Additionally, other criteria developed by the review committee that are commonly applied in a peer review process.
- Note: Parity in campus representation (proposals from different campuses) will be considered but is not a requirement.

General criteria for a strong proposal include:

- *Innovation*: The extent to which the proposed idea challenges existing paradigms and employs new methodologies or concepts.
- *Quality*: The extent to which the proposed idea and planned research development phase are clearly explained, and the application includes compelling and well-defined outcome metrics appropriate for either Phase I or Phase II funding.

- *Potential for Impact*: The extent to which the proposed idea may have commercial potential resulting in a significant impact on the physical, mental, or social well-being of people with cognitive disabilities.
- *Scope*: The extent to which the proposed idea addresses a challenge impacting the community of people living with cognitive disabilities.

APPLICATION (see Cover Page and Budget Templates)

1. Cover Letter (Title/PI) (one page max, include Phase I or Phase II)
   - Project Abstract (no more than half a page)
2. Project Description (six pages max)
   - Template Cover Page (does not count towards the six pages)
      A. Project Summary (Innovation, Impact, and Scope)
      B. Partnerships including Roles and Responsibilities
      C. Deliverables and Timeline (Quality)
      D. Commercial, Market, and Economic Potential (Impact and Scope)
      E. Research Support
3. Supplemental Material
      F. References Cited
      G. Template Budget and Budget Justification (two pages max)
      H. Facilities, Equipment, and Other Resources (one page max)
      I. Data Management Plan (if relevant)

SUBMISSION

The complete application, including all the required components, should be submitted toCathy Bodine at Cathy.Bodine@cu.edu [4] no later than midnight, April 30th, 2026.

Link to this page as a PDF:

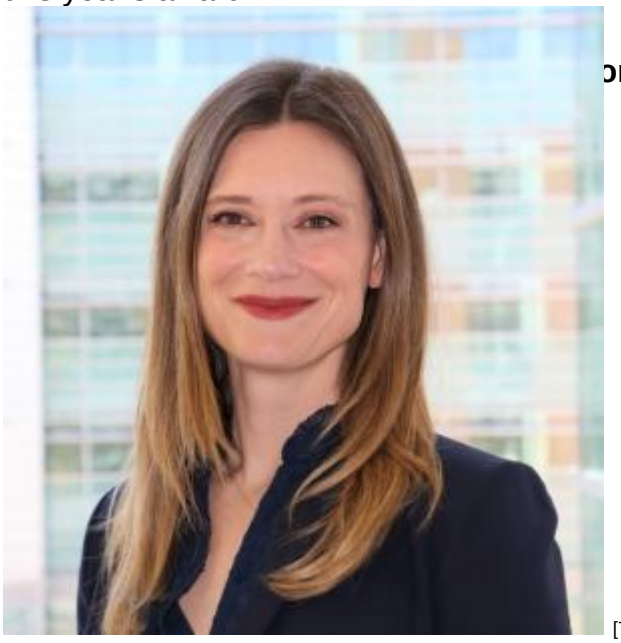
Coleman Institute 2026 RFP.pdf [6]

2025 TTRD Winners

Announcing the 2025 Winners - Technology Translational Research and Development Awards

This past spring, the Coleman Institute released a request for proposals for their second round of Technology Translational Research and Development (TTRD) Awards. The goal of the TTRD Awards is to catalyze translational science resulting in products or services reaching the hands of consumers. The award funds researchers and developers from the four CU campuses to develop and disseminate technology products that directly aid people living with cognitive disabilities. Phase I (early-stage development) awardees receive $50,000 and phase II (late-stage development) awardees receive $100,000.

After careful review of our impressive applicants, we are proud to announce two recipients for this year's award!



or Executive Function (Phase II)

[7]

Dr. Cristin Welle, PI

First, is a CU Anschutz phase II project led by Cristin Welle, PhD, and Dan Kramer, PhD, co-PI, titled "Creating a Cognitive Neuroprosthesis for Enhanced Executive Function." The primary objective of the project is to pioneer a cognitive neuroprosthesis aimed at improving executive function (EF). They hope to decode neural biomarkers for EF dysfunction and apply real-time neurostimulation to improve EF. To achieve their goal, they will be combining two existing, highly unique, and advanced programs at the University of Colorado Anschutz Medical Campus – brain computer interface and transcutaneous auricular vagus nerve stimulation. Ultimately, they plan to create a "smart stimulation" therapeutic system leading to the first treatment system based on neural biomarkers to improve EF in people with Parkinson's Disease.

viduals with Traumatic Brain Injuries (Phase I)

[8]

Dr. Danna Gurari, PI

Second, is a phase I cross-campus (CU Boulder and CU Anschutz) project led by Danna Gurari, PhD, titled “Vision Canceling Technologies for Individuals with Traumatic Brain Injuries.” Dr. Gurari is joined by co-PI Jeffrey Hebert, PhD, and lead researcher Jarek Reynolds, PhD student. As they explain, humans continually collect large amounts of visual sensory data from their environment. They must accurately and efficiently process these incoming visual signals to safely participate in daily life activities. However, this processing ability is impaired for many people with traumatic brain injuries (TBIs). Their goal is to design and develop an AI-based technology that helps visual processing by filtering out visual “noise,” allowing them to focus on the task at hand. The goal is to empower TBI survivors to live more independent and connected lives.

Both projects have the potential to help not just their target populations (people with Parkinson’s Disease and TBIs) but also a wider world of other cognitive disabilities. We are confident both teams will accomplish their goals, and we wish them the best!

In addition to congratulating our new recipients, we also want to recognize the previous year's recipients and their excellent work. Three projects were funded - PointItOut – Bing Han (PI), Jim Sandstrum, Caroline Clevenger, and Kendall Hunter; SkyWalkerTM – Petra Conaway (PI), Dana Carpenter, and Dan Griner; and the vibrotactile stimulation team – Mazen Al Borno (PI), Peter Teale, Brice McConnell, and Zhengxiong Li. Thank you all for helping advance our mission to promote the quality of life of people with cognitive disabilities and their caregivers by catalyzing advances in technology.

2024 TTRD Winners

Announcing the 2024 Winners - Technology Translational Research and Development Awards

In late 2022, the Coleman Institute for Cognitive Disabilities announced a request for proposals from CU faculty members for the Technology Translational Research and Development (TTRD) Awards. The TTRD Awards were developed to support the Coleman Institute’s mission to catalyze and integrate advances in technology to promote the quality of life of people with cognitive disabilities and their caregivers. The TTRD Awards advance the institute’s support of translational science resulting in products or services reaching the hands of consumers. The goal of the awards is to fund researchers to develop and disseminate technology products to directly aid persons living with cognitive disabilities.

Two levels of funding were available for application - Phase I grants of $50,000 for early-stage developments and Phase II grants of $100,000 for late-stage development. The intended outcome of both phases is to progress the development of tangible tools, resources, hardware, or software, and/or other technology strategies for improving quality of life for persons living with cognitive disabilities across their lifespan. Proposals driven by user-

inspired research and with a clear path of translation to the marketplace were funded. Recipients have the next 12 months to use the funding.

We are thrilled to announce three proposals were awarded funding. The winning teams are: PointItOut – Bing Han (PI), Jim Sandstrum, Caroline Clevenger, and Kendall Hunter; SkyWalker^{TM} – Petra Conaway (PI), Dana Carpenter, and Dan Griner; and the vibrotactile stimulation team – Mazen Al Borno (PI), Peter Teale, Brice McConnell, and Zhengxiong Li.

PointItOut: Grocery Shopping Independence for Intellectual and Developmental
oled Destination Visualization (Phase II)


[9]

PointItOut team (from left to right): Claudia Coleman (Co-Founder, Coleman Institute), Jim Sandstrum, Bing Han (PI), Caroline Clevenger, Kendall Hunter, Cathy Bodine (Executive Director, Coleman Institute).

PointItOut's research objective is to understand if visual cues of point locations in open-floor-plan retail spaces, such as grocery stores, using an augmented reality application have the potential to extend the independence of individuals with intellectual and developmental disabilities (IDD) during routine errands like grocery shopping. The goal of this project is to provide greater independence to people with IDD performing activities of daily living.
The PointItOut team is led by Bing Han, PhD, Assistant Professor, Department of Civil Engineering, CU Denver. The other team members, all also from CU Denver, include Jim Sandstrum, MA, SLP, Professional Services Coordinator, Center for Inclusive Design and Engineering, Caroline Clevenger, PhD, Professor, Department of Civil Engineering, and Kendall Hunter, PhD, Department of Bioengineering.

SkyWalkerTM: Innovative and Stylish Mobility Devices to Support Adults living with


[10]

SkyWalker team (from left to right): Claudia Coleman (Co-Founder, Coleman Institute), Petra Conaway (PI), Dana Carpenter, Cathy Bodine (Executive Director, Coleman Institute), Meryl Unger (Mobella industry collaborator). Not pictured: Dan Griner.

This team is developing the SkyWalkerTM, a stylish, tech-enabled mobility device to support adults living with dementia. In addition to cognitive impairments, people with dementia are more likely to experience falls as the disease progresses, causing problems with coordination and balance. Moreover, regular exercise and good mobility has been shown to slow the progression of dementia. For these reasons, mobility support is key for adults living with dementia. The team plans to use TTRD funds to conduct focus group interviews, build a refined prototype, and evaluate usability.
The SkyWalkerTM team is led by Petra Conaway, PT, DPT, Research Instructor, CIDE, CU Denver. The other team members include Dana Carpenter, PhD, Associate Professor, Department of Mechanical Engineering, CU Denver, and Dan Griner, Director of Smart Futures Lab, Design, Innovation, and Strategy, CU Denver. Meryl Unger, Founder, Mobella, will serve as an industry collaborator.

Team Three: Feasibility Trial of Vibrotactile Stimulation for Alzheimer's Disease (Phase


[11]

Team Three (from left to right): Claudia Coleman (Co-Founder, Coleman Institute), Peter Teale, Brice McConnell, Mazen Al Borno (PI), Cathy Bodine (Executive Director, Coleman Institute), Zhengxiong Li.

Studies have shown that sensory stimulation reduces symptoms associated with Alzheimer's Disease (AD). The team plans to develop a noninvasive neuromodulation therapy for the treatment of AD symptoms based on sensory stimulation of the hand. They plan to use the TTRD funding to collect pilot data demonstrating the feasibility of vibrotactile stimulation for AD.
The team is led by Mazen Al Borno, PhD, Assistant Professor, Department of Computer Science and Engineering, CU Denver. The other team members include Brice McConnell, MD, PhD, Assistant Professor, Neurology, CU Anschutz, Peter Teale, Clinical Instructor, Neurology, CU Anschutz, and Zhengxiong Li, PhD, Department of Computer Science and

Engineering, CU Denver.

Groups audience:
Coleman Institute for Cognitive Disabilities

Source URL:https://www.cu.edu/coleman/funding-opportunities/coleman-institute-funding

Links
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[3] https://www.cu.edu/sites/default/files/Coleman%20Institute%202026%20RFP%20Budget%20Template.xlsx
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