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 with 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 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 cognitive disabilities.

The Coleman Institute for Cognitive Disabilities was established in 2001 by the Regents of the University of Colorado. A private endowment and sustained annual contributions by its founding donors, William T. and Claudia L. ColeFman, support the Institute's activities through the Coleman Colorado Foundation (CCF). The CCF is a 501 (c) (3) public charity. It is classified as a 509 (a) (3) supporting organization to the University of Colorado (CU) that supports the Coleman Institute.

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.

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, unit, or investigator. Applications must be submitted to the Coleman Institute for Cognitive Disabilities no later than midnight, June 30th, 2024. Proposals will be reviewed by July 31st, 2024, with notification of awardees in August. 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 half page Abstract describing the potential relevance of the proposed technology and its application for people living with a cognitive disability.
- Six-page (maximum) Project Description with Cover Page – see provided Cover Page Template
- Two-page (maximum) Budget including:
  - CU-specific Budget – see provided Budget Template
  - Budget Narrative (justification)
  - A Facilities and Administration charge of 8% is built into the macro formulae. CU system administration is allocated 4% and the 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

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)
   o Project Abstract (no more than half a page)
2. Project Description (six pages max)
   o 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 to leslie.emery@cu.edu no later than midnight, June 30th, 2024.