

# Ideas to Impact White Paper One Page Summaries

## **Table of Contents**

Bridging the Gap: DO Mental Health and Wellness Collaborative	1
Center for a Regenerative Future	2
Center for Pathways to Access and Equity in Education	3
Climate and Society	4
Grand Challenges in Health Equity	5
Institute for Housing Affordability and Strong Communities	6
Interdisciplinary Institute for Democracy	7
Quantum at DU	8



## Bridging the Gap: The DU Mental Health and Wellness Collaborative Clinic

The DU Mental Health and Wellness Collaborative ("the Collaborative") is driven by compelling mental health needs of communities at a time when the urgency for high quality, accessible mental health care cannot be overstated. Prior to the COVID pandemic, mental illness affected 18.5% of Americans (43.8 million people). After the pandemic, the prevalence of mental illness rose to 20.78% (50 million Americans) (Mental Health America, 2023). Responding to this urgent need, the Collaborative will build and scale a multi-tiered mental health center that is embedded in the community, and led by directors of clinical service, research, and interprofessional training. This center will be the 'go-to' trusted source for mental health services, research, and training in Colorado and beyond. Developed over three phases, the mental health center aligns with DU's public good mission by fueling exemplary, innovative training for DU students. Our approach is wholly inclusive of diverse perspectives, including elevating voice and access for individuals from traditionally underrepresented racial, ethnic, linguistic, socioeconomic, nativity, gender, sexuality and ability groups and across the lifespan. With the support of donors, grants, contracts, and fees from services, we can scale our operation up to treating thousands of clients and educating hundreds of students each year.

**Phase 1: Finding our community and partners.** Building on prior work, the Collaborative will conduct a community needs assessment, drawing on mapping technology and community meetings. We will work with community partners to articulate the most pressing mental health needs of their community, and identify the faculty, staff, and students at DU that have relevant expertise to meet those needs. This will remedy a historic pattern of our university's top-down community engagement and elevate community voice. At the end of Phase 1, we will have identified a community location and partnerships through which we will collaboratively build a mental health center to address community-identified needs through research, clinical services, and workforce training.

Phase 2: Physical structure & Interprofessional Structure. In this phase, we will work with our community partners to identify a new or existing space that meets community mental health needs. We will consult with colleagues from other mental health centers to understand how to best staff our center for maximum effectiveness in services, outcomes, research, and interprofessional training. This space will serve DU's vision of providing clinical services to the community by faculty, staff, and students while generating opportunities for research and community-wide training, and it will incorporate spaces that are flexible and responsive to community needs identified in Phase 1 (e.g. meeting rooms open to the community, gathering/play space for youth while parents utilize services). Our community-based Interprofessional Education (IPE) structure will offer stellar training opportunities for DU students to be uniquely trained in community-based and IPE services, on-site research-capacity for high quality clinical trials to develop, and test evidence-supported interventions. Developing interventions in the community, and in partnership with the community, will produce mental health practices that are highly responsive to the needs of the community and begin to bridge the gap between surviving and thriving especially in underserved and vulnerable groups.

Phase 3: Opening the center's doors and operating the center for years to come. We will open the Center, which will become the "go-to" trusted source for mental health services, research, and training in Colorado and beyond. We will develop a sustainable funding model through a combination of foundation-based and federal funding, contracts from state and county level programs for specialized services (e.g., offering court-mandated treatment), workforce development events (e.g., CE trainings), and client-generated revenue (e.g., Medicaid reimbursement).

#### Ideas to Impact Proposal: Center for a Regenerative Future (CRF)

**Team Leads** (alphabetical order): Sarah Bexell (GSSW, Center for Sustainability), Dean Saitta (Anthropology), Anna Sher (Biological Sciences), Paul Sutton (Geography and the Environment)

Humankind is currently facing a civilizational crisis of multiple proportions. This "polycrisis" includes a failing economic system, collapsing ecological systems, and a rapidly evolving technological system that is outpacing social, cultural, and biological evolution.

Worldviews also experience crises. Copernicus and Einstein were 'radical' thinkers, yet the disciplines of Astronomy and Physics survived and evolved with the benefit of these significant disruptions to the status quo. Today, Economics is in crisis; traditional economic thinking founded in a growth imperative is having dire impacts on real world policy and practice. "Sustainability" in the traditional sense is now making way for the more innovative concept of regenerative futures. RO1 institutions and organizations around the world are increasingly using this term to describe an approach that more effectively addresses today's challenges, including Harvard, MIT, Duke, San Jose State, and others. The Royal Society of Arts defines regenerative futures as a way "we can re-think our relationship with the planet and allow healthy ecosystems, as an interconnecting whole across environment, society and economy."

Importantly, regenerative futures represent a shift away from a myopic focus on climate change and towards a more holistic view of both impacts and solutions. Scholars, especially from Indigenous communities, have variously defined regeneration as involving rebirth, reformation, repairing of ecological damage, and reclamation of greater social choice. 'Green Growth', 'Smart Growth', and other development paradigms in fact do not acknowledge climate realities nor structural arrangements that produce social inequality. The new paradigm calls for **bringing populations and economies into balance with the living world in just, equitable, and regenerative ways.** It has been argued that degrowth will happen regardless of what we do; the challenge is how much we take collective action to make it fairer.

The Center for a Regenerative Future is a re-framing and re-dedication of the current Center for Sustainability that builds on its significant successes and capacities. It would partner with the Sustainability Council to integrate the extensive (but currently unconnected) programs and scholarship across campus to establish DU's leadership in this space for the Southwest and Rocky Mountain region. The CRF will leverage DU's sustainability-related expertise in the sciences, social sciences, arts, and humanities to develop and promote regenerative paradigms for addressing the civilizational crisis. Our 30 degrees and certificates, nearly 200 courses, and more than 50 faculty doing global change and sustainability-related research will finally be connected in a way that identifies DU as a center of interdisciplinary forward-thinking for the planet and society.

Working groups within the CRF will present choices and alternatives—grounded in biophysical reality—that are just and desirable. In so doing, we respond to students' anxiety about the future ability for Earth to sustain life. Students today are seeking mentors willing and able to explore with them regenerative systems for working and living. Working groups will also offer consulting for corporations and policy makers seeking innovative and even radical solutions to complex problems.

The CRF will sponsor basic and applied research, curriculum innovation, science communication, consulting, and policy development for a re-imagined and regenerative future. The CRF will be transformative and unique for its vision and capacity to face today's challenges with a clear-eyed realism. It will be (a) explicitly transdisciplinary and not housed in any one unit; (b) cross-cultural and transhistorical in its approach; and (c) outwardly focused to engage with international scholarly communities, policy-makers, and the general public, including corporations. In this way we contribute to the cocreation of socioeconomic systems that are just, sustainable, and desirable.

#### **Center for Pathways to Access and Equity in Education (CPAEE)**

Educational access and equity are fundamental human rights. All people deserve access to an equitable education that allows them to thrive and reach their full potential. A substantial body of research indicates that educational attainment impacts health, economic, and civic outcomes, to name a few (Desjardins et al., 2006; Zajacova & Lawrence, 2018). This is particularly the case for diverse communities that are historically underserved, including, but not limited to, FirstGen, BIPOC, rural, and low-income. Educational transitions occur across a person's lifespan, from preschool to retirement, and can be important entry points or gatekeepers to educational attainment and lifelong learning. Ensuring equity within and across educational transitions reduces dropout rates, increase higher education attainment, contribute to preparation for diverse learning and working environments, and promote wellness (Colorado Department of Education, 2019; Donaldson et al., 2023; Johnson et al., 2017; Jones, 2021). DU has the capacity, intellectual resources, and human capital to be the nucleus of access and equity in educational transitions, or pathways, across the lifespan—in the Rocky Mountain Region and beyond. However, these efforts are dispersed and not connected across schools, colleges, and units.

The Center for Pathways to Access and Equity in Education (CPAEE) will catalyze interdisciplinary collaboration across DU units to promote transformative change that reimagines educational equity and access across the lifespan from early childhood education to retirement through a focus on 4 pathways: Birth to Pre-school, Early Years to Adolescence; Post-secondary & Career, and Post-career, Retirement, & Beyond. CPAEE will lead advancements within and across the pathways through the following 5 initiatives:

- **Academic Preparation**: Design and implement curricular offerings with an emphasis on educational equity and access.
- **Diversifying the Workforce**: Expand BIPOC representation in education, health, and technology professions through innovative, culturally responsive approaches.
- Wellness: Design and implement culturally responsive models that promote wellness education across the lifespan.
- Best Practice in Local and Global Contexts: Examine, synthesize, and disseminate best practice in educational access and equity in local and global contexts.
- Research & Policy: Develop and test community-engaged, critical research, policy, and evaluation frameworks that foster educational access and equity.

The pathway initiatives will be enacted through a phased approach using a Collective Impact Cohort model to advance scholarship and practices that promote educational access and equity across the 4 pathways. CPAEE will result in the following outcomes: (a) curricular offerings; (b) increased enrollment; (c) increased number of BIPOC educators and health professionals; (d) culturally responsive measures of educational equity and wellness; (e) open access clearing house of educational access and equity pathways research and exemplars; (f) community-engaged research, scholarship, and policy; and (g) external funding to support and sustain initiatives.

#### The Denver Climate and Society Initiative (DCSI)

#### May 11, 2023

There is a rapidly closing window of opportunity to secure a livable and sustainable future for all.

— United Nations Intergovernmental Panel on Climate Change

The climate crisis is upon us. In March, the IPCC summarized the increasingly strong scientific consensus: climate change is happening, it is caused by humans, and the window to limit its environmental effects is rapidly closing. Less well understood, however, are its societal impacts—on food insecurity, migration, economic inequality, social unrest, challenges to democracy, and environmental justice—and how to catalyze and coordinate the massive collective action needed to respond to them. These issues have, to date, received a good deal less attention, yet they are and will be the great challenges of our time.

#### **Our Ambition**

The Denver Climate and Society Initiative (DSCI) seeks to position the University of Denver as a recognized leader in teaching, research, and policy engagement on meeting these challenges.

- We envision being a destination for and an inspiration to the next generation of students committed to addressing the societal impacts of climate change. To forge a sustainable future, students must be prepared to act rooted in knowledge and ethical training.
- We aspire to be a major hub for impactful research on both the societal impacts of and policy responses to climate change. To meet the challenge of the climate challenge, we need to understand the full range of its consequences and the ways in which governments, businesses, and other stakeholders can most effectively respond.
- We seek to be a model for public engagement that informs both the general public and elites in positions of power. To catalyze action requires that knowledge not remain in the academy but is useful to those who seek to act.

#### Why DU?

The University of Denver is uniquely situated to accomplish these aspirations. DU's relevant strengths in the social sciences and humanities and in the professional schools of law, business, social work, and public and international affairs align perfectly with the mission of this initiative. Its strengths in the natural sciences and engineering provide a solid base. Furthermore, few universities are as well positioned as DU to integrate DEI considerations into teaching, scholarship and public engagement, particularly as they relate to climate justice and a just energy transition. In addition to the wide range of DU faculty expertise, the university has the advantage of extraordinary resources on the Front Range on which it can draw, including other universities, national labs, think tanks and other NGOs, and numerous climate-related firms.

#### The Return on Investment

The University has many assets that can be effectively leveraged through an investment in the DCSI. We envison an Initiative that would include funding for faculty chairs, post-doctoral and student support, seed funding for research and community engagement projects, funding for convenings and public events that range from small workshops to high-profile public speakers, and, very importantly, for a core staff to support these and other initiatives. Substantial philanthropic funding will also increase the capacity for DU faculty to seek greater sponsored research funding and enhance enrollments, growing that source of revenue.

#### **Grand Challenges in Health Equity**

Health inequities diminish the lives of people in Colorado and around the country who are marginalized by ethnicity, gender, geography, income, and other social factors. After three years of global pandemic impacts, health inequities have increased with severe consequences for individuals and communities. Despite national conversations about the importance of addressing the persistent, structural problems that drive and maintain health disparities, comprehensive efforts to meaningfully advance health equity remain stagnant.

The Grand Challenges in Health Equity initiative responds to this pressing situation by bringing together hundreds of DU faculty, staff, and students with community members to end health inequities through leading-edge research and education in health science. Together, we will:

Uncover the Factors that Drive and Sustain Health Inequities in Colorado. Rapid research will lead to a new, transdisciplinary understanding of the complex roots of health inequities outcomes, ranging from the social determinants of health and healthcare access to technological and cultural barriers.

**Design and Test Solutions to End Health Inequities.** Teams will test candidate interventions to end health inequities, from policy and technology to behavior health interventions. For example, projects might test scaling of screening for trauma across the lifespan; dissemination and implementation science via DU clinics; integration of the humanities expertise into health systems.

Prepare a New Generation of Students and Professionals in Integrative Health Science for an Equitable Future. Building on the expertise of and experiential learning opportunities, DU will develop graduate and postgraduate micro-credentials in integrative health science that builds on DU's behavioral health and humanities expertise. This will result in the integration of interprofessional education at undergraduate, graduate, and postgraduate levels.

To realize these outcomes and impacts, university-community action teams will be organized around specific issues that arise from and/or contribute to health inequities, such as houselessness, interpersonal violence, and early mortality. Charged with speeding the translation of foundational research into solutions for testing and scaling, teams will be comprised of Fellows with expertise across a range of research methods (e.g., from foundational to community-engaged and applied), disciplines (e.g., from STEM and business to humanities, ethics, and law), and approaches to solutions (e.g., from policy and technology to systems and behavioral health). Fellows will include DU faculty and staff, new postdoctoral and graduate student research assistant (GRA) positions, and community partners from health fields. The Fellow experience will offer a prestigious, world-class opportunity to pair work to advance public good discovery for health equity with professional development and growth.

The Fellows' work will be structured around one-year, iterative cycles during which each team develops a shared vision for a more equitable future in their issue area that is mutually beneficial in terms of community impact, discovery, and education. Building on successful DU centers/programs and national examples (e.g., UCLA Grand Challenges), each team will receive robust backbone support (e.g., facilitators trained in collective impact; staff support for logistics, external funding proposal development/management; and pilot project funding) to seed high impact projects that benefit the public good, advance discovery and teaching, and increase external funding. Importantly, each team will offer transformative learning opportunities related to integrative health for undergraduate and graduate students as well as health professionals.

The University of Denver's Institute for Housing Affordability and Strong Communities<sup>1</sup>

The U.S. suffers from a shortage of nearly 2 million homes. In Colorado, and across the West, these shortages have resulted in a housing crisis, in which nearly 70% of residents view housing affordability as a major problem in their communities. The roots of this crisis are multi-faceted: increasing materials and labor costs; lack of housing supply relative to demand; and an exclusionary regulatory environment. Its impacts affect economic growth, distort labor and job markets, undermine family stability, and impact environmental and natural resource quality. As communities grapple with these challenges, guidance is needed to harness technological innovation and create housing solutions that foster sustainable, inclusive growth.

The University of Denver is located in the epicenter of this crisis and in a region known for its leadership and innovation. With its expertise in real estate and construction management, land use law, public policy, housing and homelessness, and social justice, DU is positioned to make a significant and singular contribution to addressing the affordable housing crisis confronting the state of Colorado, the U.S. West, and the nation.

An interdisciplinary and community-engaged *Institute for Housing Affordability and Strong Communities* will build on DU's existing strengths, allowing us to develop, evaluate, and disseminate effective and equitable solutions that result in housing for all, in ways that are inclusive, sustainable, and innovative. The Institute's role in educating and training housing-related leaders will ensure continuous learning and adaptation in the housing market.

The Institute's role at buildout will include four mutually reinforcing elements:

- 1) <u>Research</u> (policy and practice) that is community-engaged and interdisciplinary, producing case studies and program evaluation to support research-backed recommendations.
- 2) <u>Curriculum</u> (enhanced educational offerings) that exposes students to the complexity of the housing ecosystem and provides the knowledge and skills for housing-related careers.
- 3) <u>Convening and Communications</u> (community-engagement) that brings experts together in the creation, sharing, and dissemination of innovative approaches and best practices.
- 4) <u>Training</u> (continuing education) that builds capacity and expertise to implement best practices and scale innovative housing approaches.

To build the Institute, we propose a phased approach, taking on pilot research projects to leverage our existing strengths as we expand strategic partnership and develop additional capacities. The pilot will bring together an interdisciplinary research team, together with community partners, to examine recent housing affordability programs in Colorado to analyze successes and shortcomings, distill lessons learned, and offer recommendations.

<sup>&</sup>lt;sup>1</sup> The Ideas to Impact White Paper, summarized here, was developed by Daniel Brisson, Center for Housing and Homelessness Research (Graduate School of Social Work); Susan Daggett, Rocky Mountain Land Use Institute (Sturm College of Law); Eric Holt, Burns School of Real Estate and Construction Management (Daniels College of Business); and Lapo Salucci, Scrivner Institute for Public Policy (Korbel School of International Studies). Additional faculty from these units, as well as Geography, Economics, and the Leadership Studies Program, signed on as supporters.

### The University of Denver Interdisciplinary Institute for Democracy<sup>1</sup>

Democracy has come under a range of pressures and threats around the world. Globally, a populist antidemocratic wave continues to surge, while institutional deficits in addressing our most troubling collective challenges have been laid bare. In the United States, political radicalization and social polarization have undermined trust in democratic institutions and made society ever more vulnerable to widespread mis- and disinformation. Civil discourse and civic mindedness have suffered at even the most local levels under these pressures, as witnessed during the Covid-19 pandemic. The challenge before us is to reimagine and rebuild democracy, from the global to the local levels, for the 21<sup>st</sup> century.

The University of Denver's Interdisciplinary Institute for Democracy takes on the challenge of democratic renewal. It does so through a concerted commitment to improving our collective ability to understand and address the challenges to democracy both at home and abroad. Recognizing that democracy requires a range of supportive attitudes, practices, and institutions to successfully serve the diverse communities it governs, the Institute will support innovative interdisciplinary research, education, and public engagement centered around two major interrelated themes:

- 1. **Civic identity and citizenship:** focused on cultivating the next generation of civically-engaged, public good-oriented leaders through the advancement of civil discourse, information and media literacy, community engagement, and political efficacy.
- 2. **Democratic institutional renewal:** focused on understanding and fortifying effective models of democratic governance capable of addressing complex public policy challenges from local to global levels, via broad and rigorous analysis of institutions, behaviors, and practices across time and space.

The university-wide Institute is well-positioned to marshal existing centers and substantive expertise across the faculty as a foundation for creating a truly interdisciplinary, cross-campus, and equitable initiative serving multiple University aims. The Institute will knit together the range of democracy-related work at the University of Denver to develop complementary linkages between them and amplify their collective impact and reach. The Institute stands to deliver substantive research, curricular innovation, and public engagement of critical importance within the United States and abroad, enhancing DU's commitment to the public good in the broadest sense. Embedded in this approach is a cross-cutting emphasis on how Colorado can serve as a laboratory for effective citizenship and governance approaches for other communities across the world. The Institute can also incentivize research on just, inclusive, and equitable democratic institutions and practices, and incorporate this research into educational and community programs on renewing and safeguarding democracy.

The Institute will advance these aims through a range of educational, research, and public engagement activities. Its educational programming will provide new curricular and research opportunities to students and faculty alike, including, for example, a new interdisciplinary Democracy Studies certificate program for undergraduate students. It will also establish DU as host of a "Democracy Quarter" program that brings together students from across the world for an intensive and immersive democracy-focused educational and networking program. The Institute will establish DU's reputation as a leading producer of knowledge by supporting a multi-pronged fellowship program that incentivizes and enables DU and external faculty and post-doctoral fellows to engage in democracy-focused research, teaching, and public events. The Institute will also serve as a focal point for connecting and amplifying the significant range of democracy-related public engagement already underway across DU, enhancing the University's ability to deliver on the public good and burnishing its reputation for doing so.

7

<sup>&</sup>lt;sup>1</sup> Ideas to Impact white paper summary, May 2023. White paper contributors: Naazneen Barma, Sara Chatfield, Susan Daggett, Anne DePrince, Cara DiEnno, Darrin Hicks, Seth Masket, Fritz Mayer, Rebecca Montgomery, Linda Olson, Sarah Pessin, Lynn Schofield Clark, Susan Schulten, Rachel Sigman, Elizabeth Sperber, Joshua Wilson.

## **Quantum@DU** — an Ideas to Impact Proposal

Society stands on the brink of a transition into a quantum age. Just as the development of digital computer technology based on semiconductors fueled immense growth and change and enabled our current age of information, replacing the simple 1's and 0's of digital technology with the unique laws of quantum mechanics will enable massive leaps in information processing that will reorder life as we know it.

DU is in a unique position that can be leveraged for tremendous growth and impact in quantum science research and education. The current research efforts in Quantum concepts at DU are unique and creative, and complement work done at other Colorado schools. Also, the liberal arts ethos of DU's culture allows flexibility and lowers institutional barriers for exploring meaningful interactions across disciplines. DU's Quantum research and teaching efforts are poised for rapid and cohesive growth, given strategic investment and intentionally interdisciplinary design.

To equip students to excel in this quantum world, DU must grow its existing strengths in quantum research and experiential learning, and build new connections across disciplines from Physics and Chemistry to Biology, Psychology, and Law. Just as important, and where our efforts can be most unique, is in supporting and exploring the *connections between these disciplines*, by not only asking and exploring scholarly questions, but teaching students in these vital intersections.

**DEI and the public good in Quantum:** The quantum revolution will bring with it critical moral questions, and DU should play a leading role in answering them. For example:

- <u>Security and Privacy:</u> Quantum computing may break current encryption methods, which could have far-reaching consequences for online security and privacy. Do individuals, especially underserved individuals, and organizations have a right to protect their sensitive information from being accessed by quantum computers? Can we ensure this right for all?
- Responsibility: If a quantum computer is used to make decisions that result in harm to individuals or the environment, who should be held accountable?
- Ethical use: Quantum computing could be used to research new medicines and groundbreaking materials, but it could also be used to develop unethical weapons. How can we ensure that quantum computing is used ethically and for the public good?
- Access and Inclusion: How can we reduce understanding and cost barriers to quantum to ensure that the benefits of quantum computing are distributed equitably and inclusively?
   And can we engage a diverse group of students in developing this new knowledge at DU?

**Funding sources:** There are many new federal funding streams supporting quantum information, quantum materials, and development of a quantum workforce. The NSF Quantum Leap Challenge Institutes is one example; nanofabrication and nanoimaging tools are needed to be competitive.

This *Ideas to Impact* project will require: infrastructure investment, faculty development, and student support, with the possibility to build new degree programs at every level and across a broad range of disciplines. Quantum@DU will catalyze unique cutting edge quantum research that explore the entangled impacts across every area of human experience. In the near term, Quantum@DU will support critical needs of the faculty, students, and staff already working in quantum related areas, including: Laboratory Infrastructure for Quantum Materials and Information, Postdoctoral Fellowships in Quantum Concepts, Endowed Faculty Positions, Education and Interdisciplinarity in Quantum Concepts and Connections, and staff support to build interdisciplinary quantum connections. *Our goal is to make DU a hub for quantum research, and to equip DU graduates with the awareness and skills to lead their fields in the quantum age.*