2020 COVID-19-Related Research Pilot Grant Program: Colorado CCTSI Experience
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Background
When the pandemic hit the USA in March 2020, the leadership team of the Colorado Clinical and Translational Sciences Institute (CCTSI UL1 TR002535) went into rapid response mode by establishing a new rapid-review pilot grant program, the CCTSI COVID-19-Related Research Pilot Program (C2R2-Pilot) for a total of $100K. The goal of the C2R2-Pilot Program was to immediately address the COVID-19 pandemic and its effects on the public and our healthcare system by accelerating the development of diagnostic and treatment methods and innovative technologies related to the COVID-19 outbreak.

C2R2-Pilot Program Goal
To immediately address the COVID-19 pandemic and its effects on the public and our healthcare system by accelerating the development of diagnostic and treatment methods and innovative technologies related to the COVID-19 outbreak.

Accelerated Application Phase
CCTSI announced the Request for Funding (RFA) for the newly formed C2R2-Pilot Program five days after the state of Colorado went into COVID-19 lockdown on March 26, 2020 (Figure 1). Under the direction of the CCTSI leadership team, a novel online application submission was created using REDCap, and an expedited peer-review process was deployed (Figure 2). On April 3, 2020 55 C2R2-Pilot applications were received from investigators at all our CCTSI partner institutions (Figure 3).

Figure 1: Timeframe of Grant Program Implementation

March 26: Colorado Enters Lockdown
March 30: C2R2-Pilot Grant RFA Announced
April 3: Application Deadline
April 10: Award Notification
April 20: Public Announcement

Figure 2: Each pilot grant application underwent expedited review from 22 faculty from across six institutions:
CU Anschutz Medical Campus
Children’s Hospital Colorado
National Jewish Health
Colorado State University
Denver Health
CU Boulder

Rigorous Peer Review
The Review Panel consisted of 22 internal experts who provided feedback on proposals in four days using NIH-style scoring. The top ten scoring applications were presented and discussed fully by the CCTSI C2R2-Pilot Grant Council on April 7, 2020.

Figure 2: Peer Review Panel

Award Announcement
On April 10, just 11 days after releasing the RFA, the four most impactful C2R2-Pilot proposals were each awarded $25,000 for a one-year funding period (Figure 4), total $100K in funding.

Conclusion
Thus, we compressed the usual several month process for pilot grant submissions, review, and awards to less than two weeks.

Figure 3: Applications by Institution

Figure 4: Funded COVID-19 Related Research Projects

C2R2-Pilot Grant Awards
A prospective, observational cohort trial for the treatment of hospitalized COVID19 patients with high-titer anti-SARS-CoV2 convalescent serum
Dr. J. David Beckham, MD
CU-Denver Anschutz Medical Campus

Rapid Point of Care Lung Ultrasound Implementation in the Evaluation of Hospitalized Patients with COVID
Dr. Anna Maw, MD
CU-Denver Anschutz Medical Campus

Prospective Identification of SARS-CoV2 Infection in Healthcare Workers
Dr. Brian Montague, DO
CU-Denver Anschutz Medical Campus

Additive Manufacturing of Certified PPE: A Path Towards Mass Production
Dr. David Prawel, PhD
Colorado State University