

## **CCPM Membership – Grant Submission Language**

The Colorado Center for Personalized Medicine (est.2013) provides an academic and physical home for clinicians, translational researchers, and computational scientists who leverage high-dimensional clinical and 'omics data and wish to integrate personalized medicine into clinical practice. The goals of CCPM are to develop new knowledge, establish and maintain training programs, provide access to expertise in relevant topics and approaches for the CU community including the Schools of Medicine, Pharmacy, and Public Health as well as the UHealth and Children's Hospital of Colorado health systems. As an administratively independent Center, CCPM is uniquely positioned to provide coordination, expertise, and leadership for personalized medicine activities across the diverse Anschutz Medical Campus. Over the past ten years, CCPM has grown to one of the largest institutional biobanks in the USA and collaborates extensively both across campus and across the world, as global leaders in multiple biobank consortia.

CCPM supports both research and clinical implementation strategies to measurably improve the outcomes and efficiency of delivery of patient care. CCPM's primary assets include the CCPM Biobank Laboratory, which processes and analyzes biospecimens collected from UHealth patients enrolled in the biobank study. The CCPM biobank currently has > 230,000 subjects enrolled, > 115,000 specimens collected, > 95,000 of which have been analyzed by microarray or whole exome-plus-backbone sequencing. All participant data can be matched with electronic health record data derived from UHealth encounters as well as survey information. Additional sampling can be performed as part of secondary analyses on a subset of participants, particularly assays needing plasma or serum.

CCPM contains multiple analytical and operating groups working closely with the data. The Translational Informatics Service (TIS) uses a variety of analysis strategies to support multiple uses of biobank data for both clinical and research purposes. CCPM's Research team includes opportunities for developing and implementation of risk models, methods for high-dimensional biomedical data analysis, and leveraging large-scale data for population health monitoring and identification of health disparities. CCPM's pharmacogenetics implementation program in collaboration with the biobank and UHealth has developed and manages a first-on-class automated pipeline for returning pharmacogenetic results to the EHR along with clinical decision support tools. CCPM's participant engagement team maintains contact with biobank participants for longitudinal research. Further, given our large existing participant base, clinical biobanking initiative, consent for recontact, and ongoing efforts on patient monitoring spanning multiple teams, CCPM can serve as a resource for both precision-guided and traditional clinical trials at scale.