

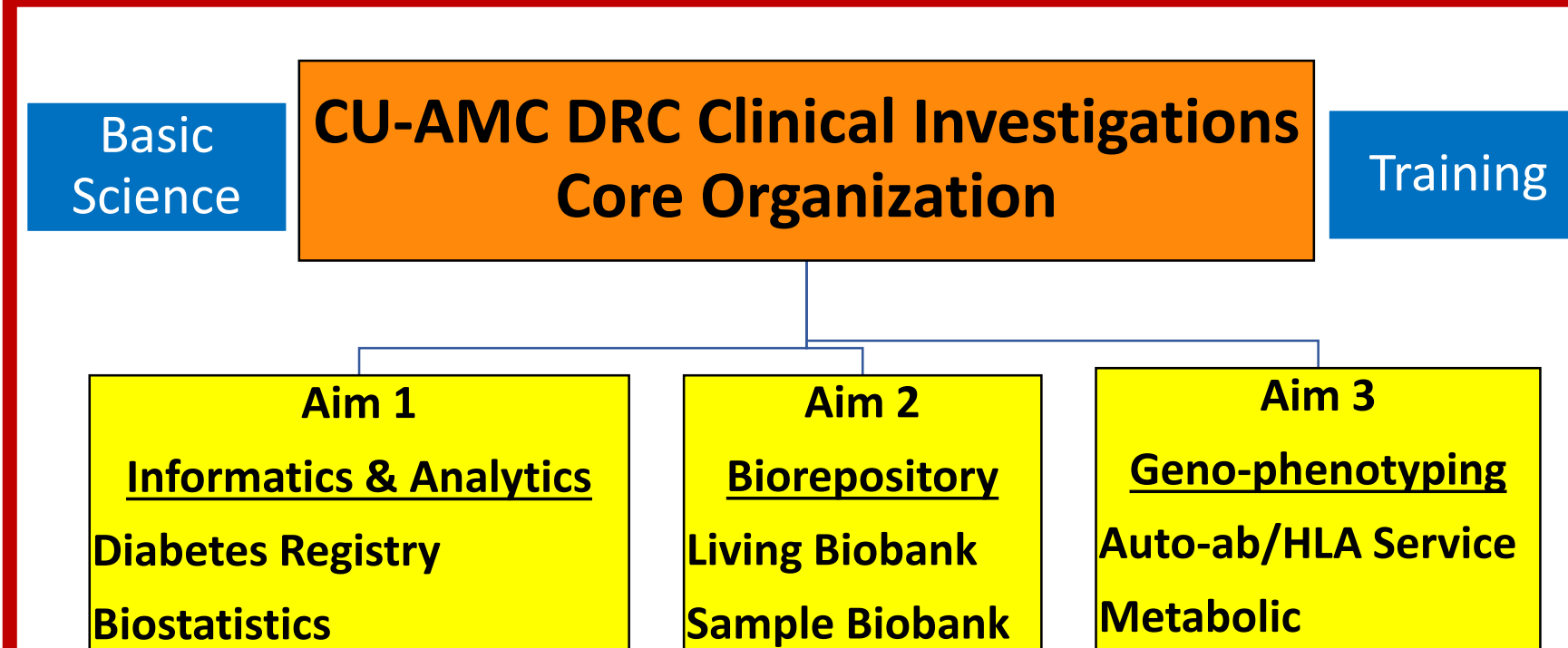
BACKGROUND

- Diabetes is a leading cause of morbidity and mortality and increasingly prevalent, especially among underserved populations
- Diabetes programs at CU-AMC currently suffer from lack of collaboration
- CU's Diabetes Research Center (DRC) funding lost, reviews noted T1D focus too narrow
- CU-AMC's single campus provides new possibilities for collaborative lifespan research

IAP OVERALL GOALS

- Reinvent CU-AMC DRC to increase quality & productivity of diabetes research via improved cross-campus communication, collaboration & access to specialized shared resources
- Integrate CU's diabetes clinics, labs, EMR's
- Boost basic/clinical research collaboration & access to technologies & analytical tools through DRC cores.
- Increase opportunities for training and growing diverse pool of academic diabetes researchers

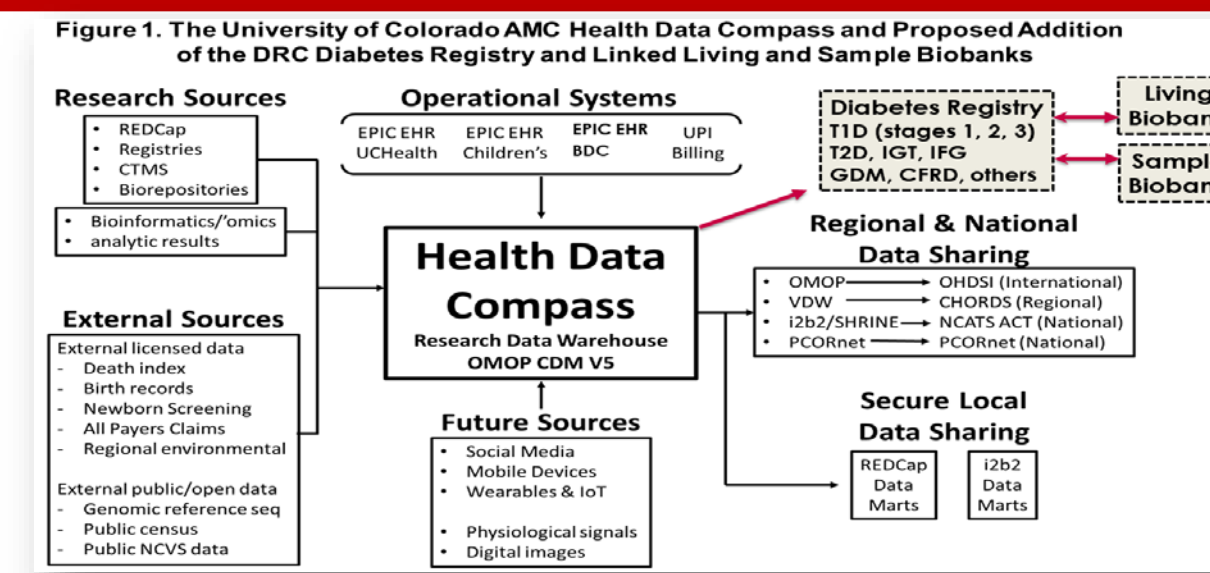
STEP 1: DRC FUNDED!



OUTCOMES: DRC CLINICAL INVESTIGATIONS CORE

Aim One: Registry

- Broaden CU-AMC T1D youth registry (N>16,000) across the lifespan and to youth/adults with other diabetes types, leveraging campus-wide COMPASS Database
- Track outcomes and complications over time
- Improve relationships between diabetes silos
- Accomplishments:** Met and enlisted teams from T1D youth Registry, UC Health Adult T1D/T2D, CHCO Obesity/T2D, VAMC, and Health Data Compass to begin creating inclusive Diabetes Registry; Created Peds Endo/BDC Relationships Working Group and Survey



Aim Two: Biobank

- Develop DRC Living Biobank by cataloging/integrating well-characterized people with diabetes & controls & consent for re-contact for research, linked to DRC Registry and Sample Biobank, to facilitate recruiting and use of existing data and samples
- Develop DRC Sample Biobank by cataloging/integrating existing samples to facilitate DRC users in performing pilot studies, linked to CO Center for Personalized Medicine (CCPM)
- Accomplishments:** Met with current T1D and CCPM biobank teams; IRB for adult CCPM and Pediatric MBS data/sample biobanks and began MBS recruitment

Aim Three:

- Improve provision of and expand specialized diagnostic and analytic services for characterization of diabetes endotypes and their outcomes over time
- Expand BDC Autoantibody/HLA Service Center to characterize new populations, better define subgroups via autoantibody patterns & genotyping in collaboration with CCPM; Consult and train new DRC investigators in using, adapting and interpreting cardiometabolic services available
- Accomplishments:** Met with BDC T1D metabolic lead investigator, inventorying, met with CCPM

OUTCOMES: DRC TRAINING CORE

- Increase opportunities for training and growing diverse pool of academic diabetes researchers
- Accomplishments:** Leveraging my NHLBI K24 mentoring grant, supported 15 diabetes researchers (One mid-career MD, 6 Jr. Faculty MD's, 1 Jr. Faculty MD PhD, 1 PhD, 2 MD fellows, 2 medical students, 1 post-doctoral student, 1 doctoral student)
- Created "Supporting Women in Medicine" (SWIMS) per-mentored group including women Jr. faculty from Peds Endo, VAMC, Adult Endo, BDC, design published in J Investigative Med, Aug 2020!
- Supported DRC Pilot and Feasibility Core, 1st pilot grants awarded 7/2020 including a CCPM genotype-focused pilot and Peds Endo T2D outcomes-focused pilot recipients
- Building on Ped Endo Research Conference and Diabetes RIP, created Peds Endo Recognition Program, Peds Endo Research and Teaching Awards, Peds Obesity/T2D Research Day

SUMMARY/NEXT STEPS

- High level of interest & support for DRC goals
- Hard to define diabetes types and date of Dx
- COVID-19 creating new \$ barriers
- CU-Health further behind in EPIC
- Need to meet with CNRU, CSPH, LEADS, MBS, CU Satellites to expand reach
- Need DRC Fee structure & methods to review requests for data and samples

FUTURE DIRECTIONS

- Track grant funding, individual and team publications, use of DRC Cores
- Improve Integration with Basic Science
- Create a Diabetes Scholar program focused on diverse Jr. Faculty diabetes researchers
- Integrate Endo Research Day and Diabetes Research Days and Conferences, broaden outside speakers
- Expand Diabetes Registry to Community Primary Care Clinics
- Secure additional buy-in from CHCO and UCH
- Fundraising for maintenance and expansion



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