



ADRC BIOMARKER CORE

ADRC SPRING MEETING 2023

MAY 2ND, 2023



BIOMARKER CORE STEERING COMMITTEE

- DONNA WILCOCK PH.D. (CHAIR) – UNIVERSITY OF KENTUCKY ADRC
- LYNN BEKRIS PH.D. – CLEVELAND CLINIC ADRC
- JEFF DAGE PH.D. – INDIANA UNIVERSITY ADRC
- RICARDO OSORIO MD – NEW YORK UNIVERSITY ADRC
- THOMAS WINGO MD – EMORY ADRC
- CERISE ELLIOTT PH.D. – NIA (EX-OFFICIO)

ADRC BIOMARKER CORE AGENDA

1. **BIOMARKER SURVEY UPDATE:** DONNA WILCOCK, PHD. UNIVERSITY OF KENTUCKY
2. **NCRAD BIOMARKER LAB UPDATE:** JEFF DAGE, PHD. INDIANA UNIVERSITY
3. **UPDATES ON GLOBAL BIOMARKER STANDARDIZATION PROJECTS:** HENRIK ZETTERBERG, PHD. UNIVERSITY OF GOTHENBURG
4. **AMYLOID-LOWERING ANTIBODIES EFFECT ON PLASMA AND CSF BIOMARKERS – WHAT DOES IT MEAN AND HOW CAN WE USE IT IN THE CLINIC?** RANDALL BATEMAN, MD. WASHINGTON UNIVERSITY
5. **DISCUSSION OF NEXT STEPS FOR IMPLEMENTING AD BLOOD BIOMARKERS IN THE COMMUNITY:** MICHELLE MIELKE, PHD. WAKE FOREST PARK
6. **EXAMINING ATN-DEFINED BIOMARKERS AMONG DIVERSE POPULATIONS – DATA FROM THE HABS-HD STUDY:** SID O'BRYANT, PHD. UNIVERSITY OF NORTH TEXAS HEALTH SCIENCE CENTER

ADRC Biomarker Survey

February 2023

NACC Biomarker Core Steering Committee

- Donna Wilcock Ph.D. (Chair) – University of Kentucky ADRC
- Lynn Bekris Ph.D. – Cleveland Clinic ADRC
- Jeff Dage Ph.D. – Indiana University ADRC
- Ricardo Osorio MD – New York University ADRC
- Thomas Wingo MD – Emory ADRC
- Cerise Elliott Ph.D. – NIA (Ex-officio)

Survey goals: Assess what sites are banking and collecting with respect to fluids and data. Begin working on data entry variables for biomarker data in NACC. Determine obstacles to biomarker data entry by ADRCs.

Common Themes

- Need for best practices!
- Minimize burden on sites for data entry (for instance, can we record only where best practices have been deviated from?).
- Additional biomarkers are wanted by Centers.
- Vast majority of Centers share biospecimens and share biomarker data with data core for centralized data storage within Center.
- There needs to be consideration of harmonization of fluid biomarkers and data types (raw, normalized etc.).

90% ADRC participated in the Biomarker survey

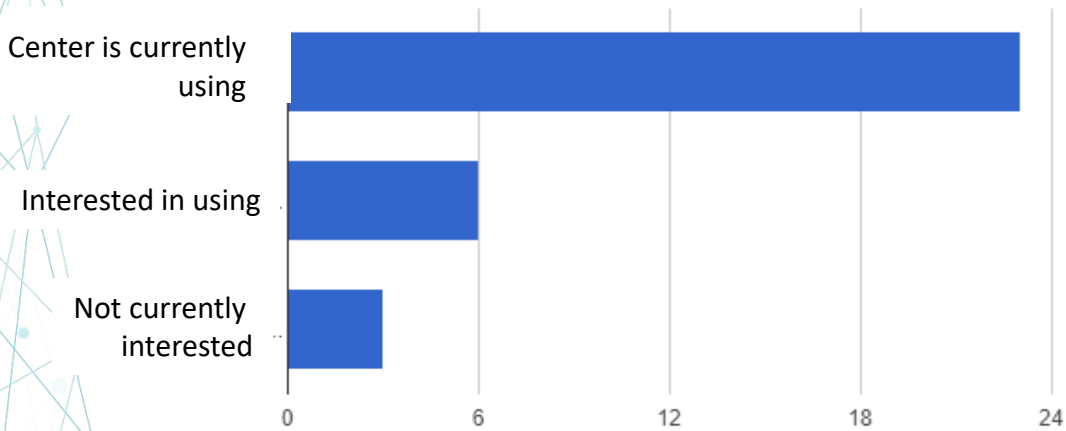
NIH National Institute on Aging (NIA)
Alzheimer's Disease Research Center Program



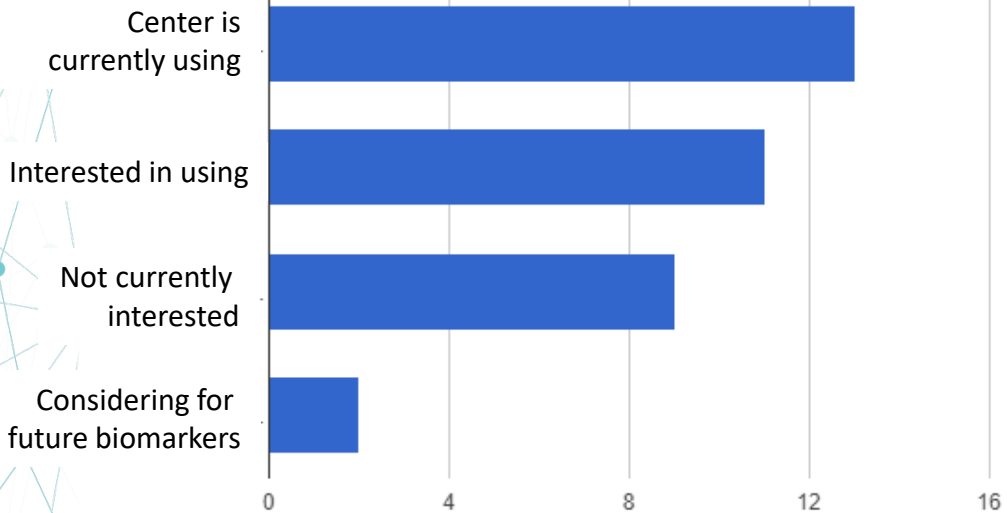
■ State with NIA-Designated Center(s)
■ State with Exploratory Center

NCRAD-assessed biomarkers

NCRAD Analysis ApoE



NCRAD Analysis Plasma Biomarkers

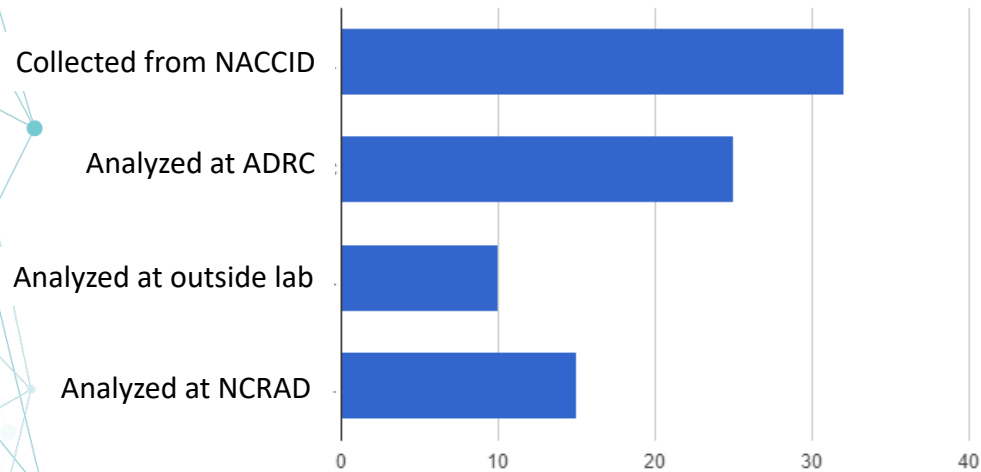


• New Assays Requested

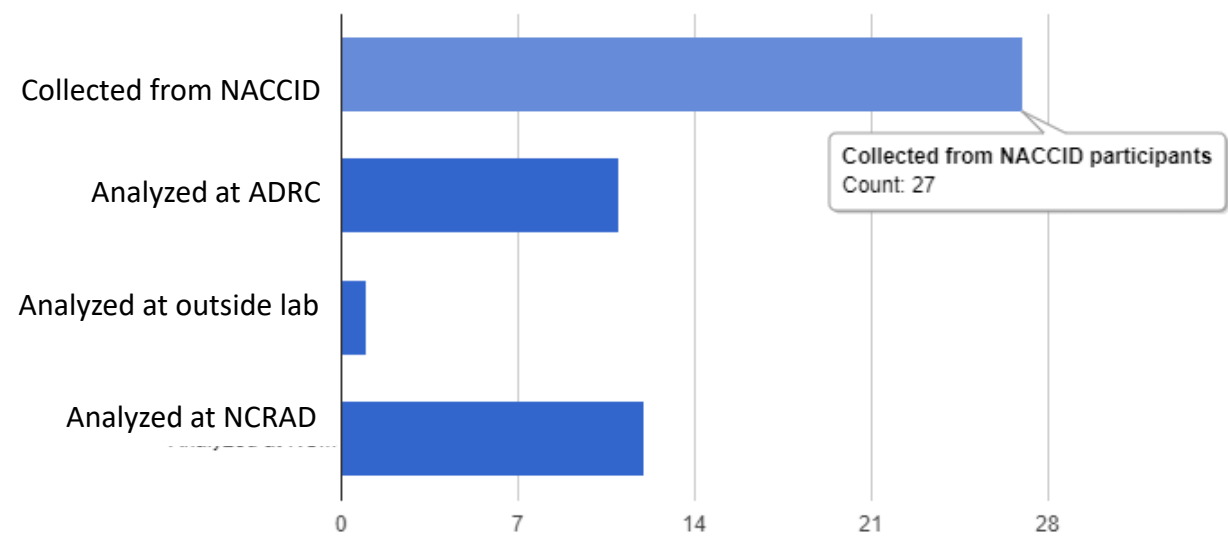
- 14 Centers want ptau217
- 3 Centers want ptau 231
- 2 Centers want CRP
- Plasma cytokines, angiogenesis markers and complement factors were mentioned also

Fluids Collected and Analyzed

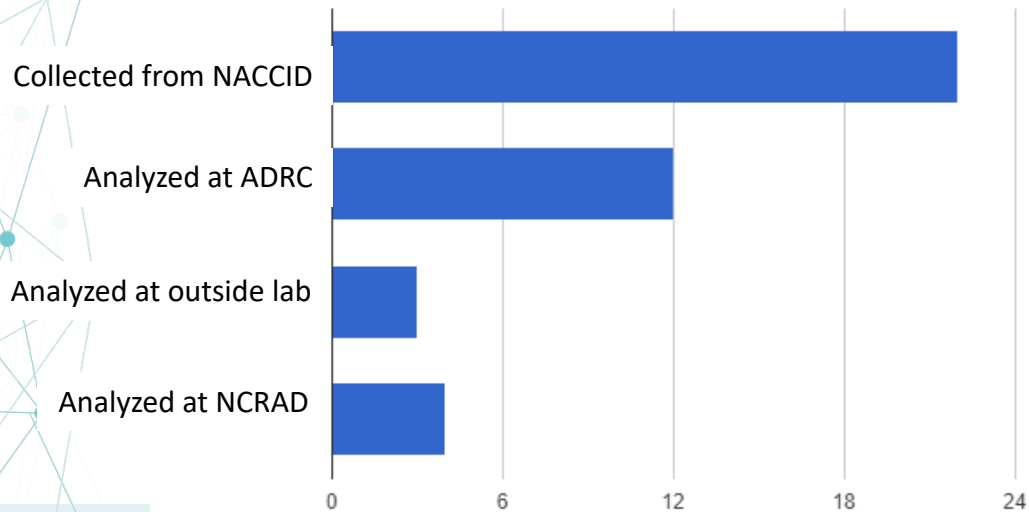
Plasma



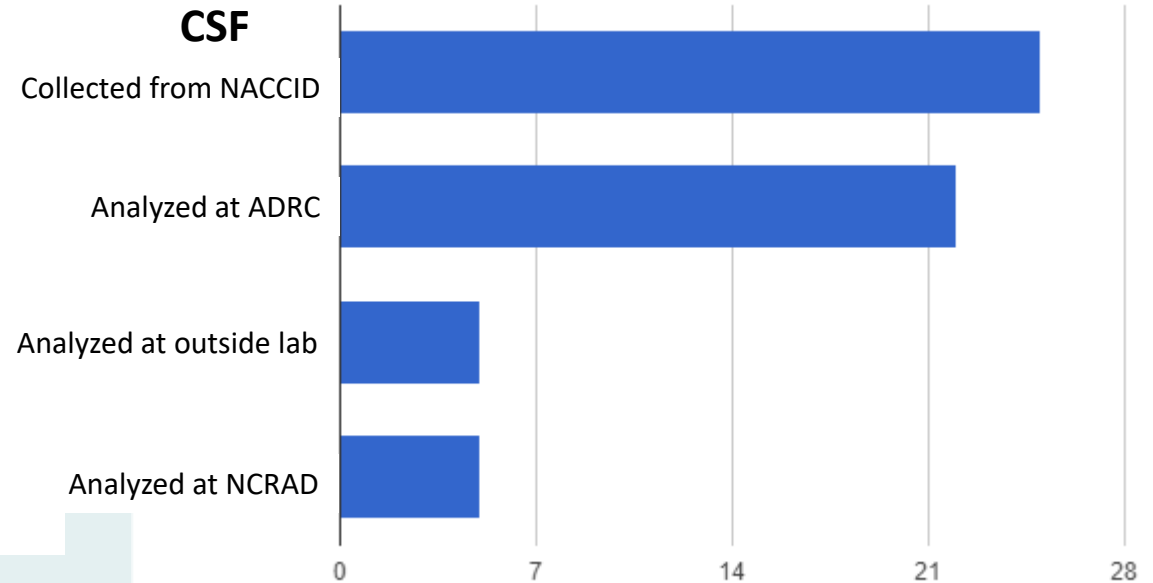
Buffy Coat



Serum



CSF



Call to Action

- Working group to develop fluid best practices. Scan QR code by May 20th if you want to be a part of the group.
- Working group to establish develop list of variables (in coordination with NACC) and consider harmonization methods and data entry formats. Scan QR code by May 20th if you want to be a part of this. Ideally would include DMS members as well as biomarker core members.

Scan QR code to volunteer for either working group or go to:

<https://nacc.redcap.rit.uw.edu/surveys/?s=NN9CCAP9EXKP87DN>

