

ADRC Directors Meeting

Nina Silverberg, Ph.D.

Director, Alzheimer's Disease Research Centers Program

National Institute on Aging

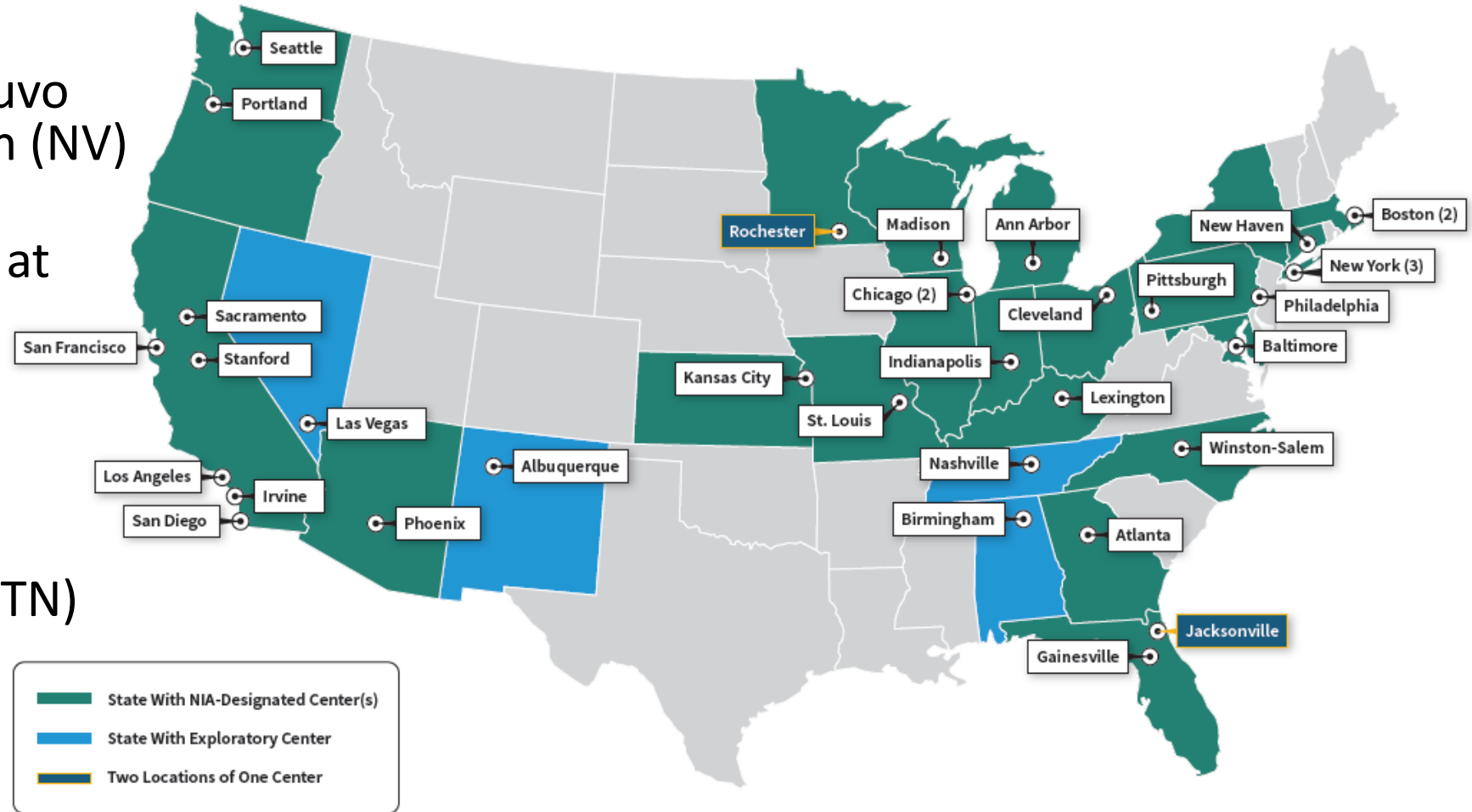
October 2, 2020

Announcing P20 Exploratory Alzheimer's Disease Research Centers

- **P20 Exploratory ADRCs**

- Cleveland Clinic Lou Ruvo Center for Brain Health (NV) (PI: Sabbagh)
- University of Alabama at Birmingham (AL) (PI: Roberson)
- University of New Mexico (NM) (PI: Rosenberg)
- Vanderbilt University (TN) (PI: Jefferson)

- **Award date:** August 2020
- **Project period:** August 2020 – July 2023



Thank You: ADRC Clinical Task Force

Allan Levey, CTF Chair

Bud Kukull, NACC

NIA staff

Clinical Measures & Diagnosis Group

Greg Jicha (co-lead)
Cindy Carlsson (co-lead)
Jeff Burns
Howie Rosen
Brad Boeve
Suzanne Schindler
Teresa Gomez-Isla
Liana Apostolova

Cognitive Working Group

Andy Saykin (co-lead)
Lisa Barnes (co-lead)
Sandy Weintraub
Rhoda Au
Suzanne Craft
Mary Sano

Technology Group

Rhoda Au (lead)
Jeffrey Kaye
Zachary Beattie
Felicia Goldstein
Gregory Jicha
Jason Hassenstab
Howie Rosen
Ihab Hajjar
Theresa Gomez-Isla

Remote Assessment Adoption Survey Results

- 31 Centers responded to the survey
- 12 Centers have already adopted the **Telephone Initial Visit Packet (TIP) v3.0** and 12 Centers are planning to
- 23 Centers have adopted the **Telephone Follow-up Packet (TFP) v3.2** and 5 Centers are planning to
- 23 Centers have already adopted the **C2T (T-Cog) test battery** and 6 Centers are planning to
- 23 Centers have adopted the **COVID Impact Survey**
- 20 Centers have adopted the **COVID Technology Survey**, 8 are using a local form to capture similar information

Clinical Task Force and UDS 4.0

COVID-19: Developed and disseminated a survey for participants and caregivers to all centers; analysis pending
Aiming to better capture features relevant to the broader spectrum of AD and ADRD
Exploring a hybrid model for UDS 4 (in-person, phone/video, web-based modules) with recommended/optional items

Clinical Measures Working Group:

- Aiming to better integrate social determinants of health
- Considering adequacy of standardized assessment of medical conditions, labs, and medications that may impact dementia course
- Planning to develop standardized guidelines for consensus diagnostic conferences

Neuropsychology workgroup:

- Evaluating initial results using UDS 3 T-Cog/V-Cog
- Initial design concept is to pair a conventional validated clinical test and a next generation technology-based assessment for each key domain
- Planning for psychometrics (reliability, validity) and cross-walk studies
- MoCA

Technology workgroup:

- Optimizing digital phenotyping within the UDS protocol that is consistent across ADCs
- Enabling a customized digital strategy that is ADC site specific
- Developing aggregated data resource needed for discovery and validation of digital biomarkers

Monthly Updates in NACC report and newsletter

Will be seeking input from all Centers – watch for surveys and other opportunities to provide input!

ADRC Recent Accomplishments - Examples

**COVID
Survey**

**COVID
Adjustments
Paper**

**Steering
Committee
Led
Webinars**

**Brief Data
Set**

**Study
Cessation
Group**

**Imaging
Administrative
Supplements**

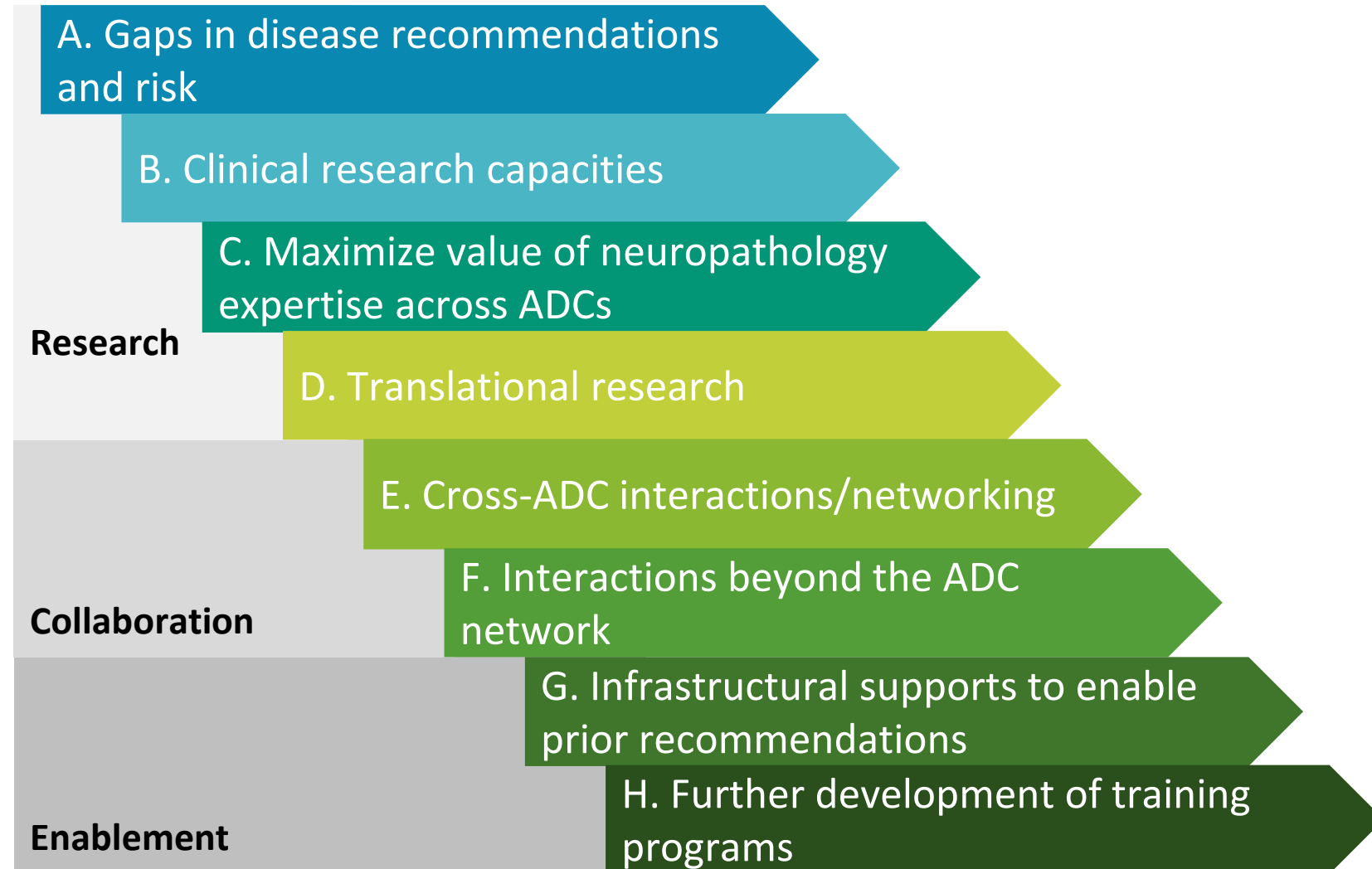
**Veterans
Administrative
Supplements**

**Joint
ADRC/IDDRC
Meeting**

**Remote
Assessment**

ADRC Steering Committees

- NACC and NIA put together for each committee a list of
 - Duties
 - Including Chair and member responsibilities
 - “The Chair should work with NIA, NACC and the Committee to set and achieve **1-3 major goals** during their term.”
 - Terms of Office
 - Election Process
- Future planning will support better transitions for new members



ADRC Steering Committees

**Directors
Executive
Committee**

**NACC Steering
Committee**

**Clinical Task
Force**

**Administrators
Steering
Committee**

**ORE Core
Steering
Committee**

**Neuropathology
Core Steering
Committee**

**Clinical Core
Steering
Committee**

**Imaging Core
Steering
Committee**

***Biomarker Core
Steering
Committee***

**Data Core
Steering
Committee**

***REC Steering
Committee***

ADRC Listservs

ADC interest groups	
ADC African American Interest Group	<i>ADC_AfrAm@uw.edu</i>
ADC Latinx Interest Group	<i>ADC_Latino@uw.edu</i>
ADC Vascular Interest Group	<i>ADC_Vascular@uw.edu</i>
ADC Native American Interest Group	<i>ADC_NatAm@uw.edu</i>
ADC Down Syndrome Interest Group	<i>ADC_DownSyn@uw.edu</i>
ADGC and NCRAD Interest Group	<i>ADC_Genetics@uw.edu</i>
ADC Lewy Body Dementia Interest Group	<i>ADC_LBD@uw.edu</i>

ADC core-focused listservs		
CORE	FOR USE OF CORE LEADERS ONLY	UMBRELLA LISTSERV (Includes core leaders, others)
Directors	<i>ADC_Director@uw.edu</i>	<i>ADC_Dir@uw.edu</i>
Administrators	<i>ADC_Administrator@uw.edu</i>	<i>ADC_Admin@uw.edu</i>
Clinical Core	<i>ADC_Clin_Leader@uw.edu</i>	<i>ADC_Clin@uw.edu</i>
Neuropathology Core	<i>ADC_NP_Leader@uw.edu</i>	<i>ADC_NP@uw.edu</i>
ORE Core	<i>ADC_ORE_Leader@uw.edu</i>	<i>ADC_ORE@uw.edu</i>
Data Core	<i>ADC_Data_Leader@uw.edu</i>	<i>datamngrs@uw.edu</i>
REC	<i>ADC_REC_Leader@uw.edu</i>	<i>ADC_REC@uw.edu</i>
Biomarkers Core	<i>N/A at this time</i>	<i>ADC_Biom@uw.edu</i>
Imaging Core	<i>ADC_Image_Leader@uw.edu</i>	<i>ADC_Image@uw.edu</i>

<https://www.alz.washington.edu/WEB/listservs.html>

Latino ADC – Special Interest Group

Co-Leads: Yakeel T. Quiroz and Katya Rascovsky

Research Working Group:

- Accomplishments:
 - Website with information about ongoing research studies for Latinos
 - <http://mapp.mgh.harvard.edu/latino-adc/>
 - List of potential reviewers for papers/grants related to Latino issues
- Exploring opportunities for cross-Center research collaborations to improve the representation of diverse Latinos into our studies.
- Website will feature ongoing research with Latinos being conducted at the Centers, including our recent publications.

Assessment Working Group:

- Spanish translation and adaptation of UDS T-Cog, COVID and technology surveys. (formatted drafts in 1-2 weeks).
- Preliminary norms for Spanish UDS3 neuropsychological battery (ongoing)

Outreach, Caregiver and Central Repository Working Groups:

- Participated in listening / focus groups on recruitment and retention of Latino populations in ADRD Clinical research.
- Consulted on Spanish translation of NIA website and AD Fact Sheet.

Welcome information about new studies and new potential reviewers. Please email yquiroz@mgh.harvard.edu and katyaras@penncmedicine.upenn.edu



ADRC Webinars

Previous webinars:

- **Data Core: Implementing Electronic Data Capture for a Decentralized Visit Model**
 - June 4, 2020
- **Clinical Core: Social Determinants of Health**
 - June 26, 2020
- **ORE Core: COVID Response**
 - September 3, 2020
- **Clinical Core: Researching New Models of Dementia Care**
 - September 25, 2020

Upcoming webinars:

- **ORE Core**
 - October 23, 2020
- **Imaging Core**
 - November 6, 2020

Translational Webinars Series

- **Aim:** Enhance bidirectional knowledge and resource sharing between NIA's Alzheimer's Translational Research Program and the ADRCs
- **First webinar: October 26, 3:00 PM – 5:00 PM EDT**
- **Topic: Increasing Research Rigor, Reproducibility and Translatability**
 - Improving the Rigor, Reproducibility and Predictive Validity of Preclinical Research for Alzheimer's Disease: Alzheimer's Disease Preclinical Efficacy Database ([AlzPED](#)) *Lorenzo Refolo, NIA*
 - Bridging the Preclinical to Clinical Translation Gap in Alzheimer's Disease: MODEL-AD Preclinical Testing Pipeline *Stacey Rizzo, University of Pittsburgh and Paul Territo, Indiana University*
 - Rigor in Validation of Commercial Antibodies for Neurodegeneration Research *Carl LaFlamme and Peter McPherson, McGill University*

**SCAN Update:
(Standardized Centralized Alzheimer's & Related Dementias Neuroimaging)**

Mission: Standardize MR/PET image acquisition, provide QC, harmonization, data analysis, curation



Timetable

Q4 2020: Survey sites for image equipment, publish website
Produce tech manuals, data upload procedures

Q1/2 2021: Image uploads (via LONI)/QC/analysis begin

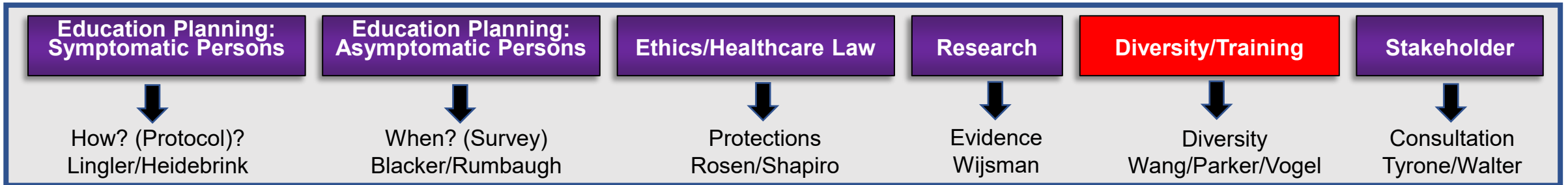
Q3/4 2021: Expand website with documentation, upload links, FAQs/help

Advisory Group on Risk Evidence Education for Dementia (AGREED)

Aggarwal, Gleason, Rosen

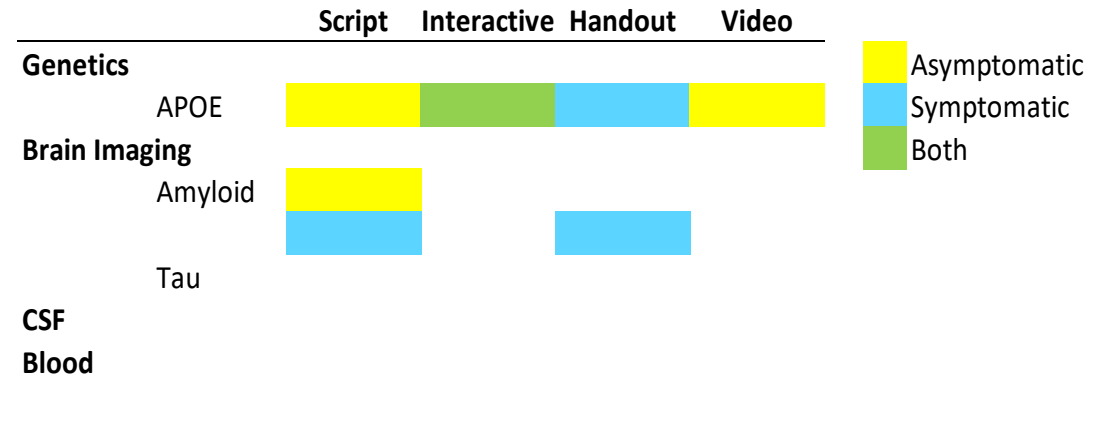
Aims:

- 1) Risk Evidence Evaluation of Science
- 2) Guide When and How to Provide Effective Risk Evidence Education
- 3) Consultation to support ethical and legal risk mitigation



Collecting Communication Protocols: Please Contribute! (Jen Lingler, Judy Heidebrink)

- **Other Modalities (e.g. Blood-based Biomarkers, Digital),**
- **Other Information (e.g. Tau, High Penetrance Mutations)**
- **Populations: Diverse Cohorts**
- **Settings: Research, Clinical**
- **Phase: Before Disclosure (decision), After Disclosure (education)**
- **Outcome Measures: Emotional Distress, Trust in Clinician, Feeling of Empowerment, Healthy Behaviors**



Other Activities

- **Planning for Spring Webinar: Disclosure of Research and Clinical Findings Related to Cognition**
- **Educational Library:** Stigma (Stites), Perspectives of Person with Dementia (Huling-Hummel), Participant Scientist (Walter/Aggarwal)

Biospecimens Best Practices Guidelines – Update

Blood/Urine/Saliva	DNA/RNA/Protein
Brain	Informatics
CSF	Intellectual Property
Consent/Confidentiality	iPSCs
COVID Concerns?	Material Transfer
CSF	Metabolomics/Proteomics
Digital Neuropathology (NEW!)	Microbiome (NEW!)
Disseminating/Discarding	Technology (NEW!)

- Release of ~1/2 of the new modules by mid-October 2020 with more to follow
- Planning for a more “living” document than previous
- Thank you to everyone who has contributed! And to **Krista Moulder** for overseeing!

<https://www.alz.washington.edu/BiospecimenTaskForce.html>

Table A7 – Biospecimens available

Plasma	Serum	Buffy Coat	CSF	DNA	DNA at NCRAD	Frozen Tissue	Fixed Tissue	Dermal Fibroblast	IPSCs
25,567	17,449	8,980	6,963	2,4050	17,560	11,284	14,014	885	146

<https://www.alz.washington.edu/NONMEMBER/progrep.html>

Brain Donation Resources

Brain Donation: A Gift for Future Generations

Brain donation helps researchers study brain disorders, such as Alzheimer's disease and related dementias, that affect millions of people. Learn about why people donate their brains, the process of brain donation, and how you can enroll to make this generous gift.

<https://www.nia.nih.gov/health/brain-donation-gift-future-generations>

Collaboration, culture, coordination: Keys to supporting brain donation

March 04, 2020

<https://www.nia.nih.gov/research/blog/2020/03/collaboration-culture-coordination-keys-supporting-brain-donation>

Brain Donation Resources for ADRCs

- [Brain Donation FAQs](#)
- [Tips on Communicating About Brain Donation](#)

BRAIN DONATION FAQs

We have created this list of FAQs to help support your ADRC's communication efforts about brain donation. This is a template—you can pick and choose which questions you want to use, based on your Center's policies and participant demographics. Please note that the answers to some questions are customizable based on your Center.

<https://www.nia.nih.gov/health/brain-donation-resources-adrcs>

<https://www.nia.nih.gov/braindonationtoolkit>

ADRC NP Cores and Neurobiobank

Pilot Project

- Led by **Dirk Keene, UW**
- Monthly calls since July 2018
- [The Brain Donor Project](#)
- ADRC NP Cores (UW, Yale, Pitt)
- Neurobiobank
- NIA/NINDS

Goals:

- Identify/develop ways to advance brain donation and utilization for ADRD research
- Demonstrate feasibility
- Determine if donor coordination can improve frequency and utility of brain donation
- Identify areas for improvement
- Extend to the broader research community

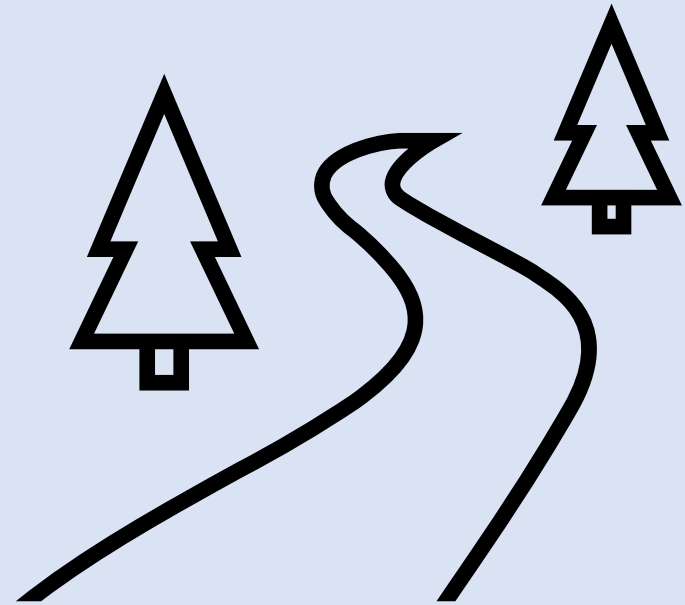
Results of Pilot so far:

- Criteria for inclusion/exclusion into the pilot have been established (e.g. Controls, Diverse populations, AD families, Clinical trial participants), Communication protocols/pipeline set up between The Brain Donor Project and NP Cores to refer donors
- 9 controls; 23 future donors w/reported AD, dementia, vascular dementia, generalized dementia or MCI have been referred to ADRCs
- At least 4 successful donations (3 UW, 1 Pitt)
- NP Cores upload NP data to NBB, NP Cores will honor tissue requests through NBB catalog

Digital Neuropathology Update

- The group, led by **Brittany Dugger** and **Melissa Murray**, includes people from many ADRCs, additional subject matter experts, as well as NACC
- Produced FAQ Sheet on Digital slide scanners and associated infrastructure
 - <https://www.alz.washington.edu/BIO/slide-scanner-faq.pdf>
- ADRC-wide survey results on digital pathology
- Beta test of workflow process to de-identify the slide labels kindly shared by Dr. Thomas Pearce (Pitt)
- Also working to harmonize with NINDS U54s on TBI

Future Planning



PAR 20-099: Harmonization of ADRD Genetic, Epidemiologic, and Clinical Data for the ADSP (U24)

A component of the Alzheimer's Disease Sequencing Project (ADSP)

Targeting all cohorts within ADSP (~60 cohort studies, many with longitudinal biomarkers)

By 2023 at least 50,000 whole genomes, **multi-ethnic**

ADCs have ~ 20,000 subjects with sequencing, clinical / phenotypic data

Informal work group of domain experts formed in 2018

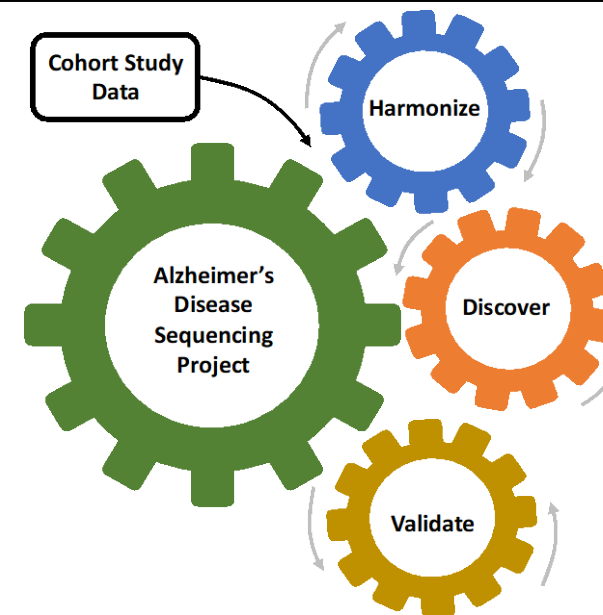
Harmonize phenotypic data using established best practices

Establish harmonized data sets as a "legacy" data set that will be perpetually curated and shared

Transparent, scalable data harmonization with **wide data sharing** through a central data repository (www.niagads.org)

Comprehensive catalogue of meta-data including data dictionaries and availability tables **to be made freely available to the research community**

Contact: timothy.j.hohman@vumc.org



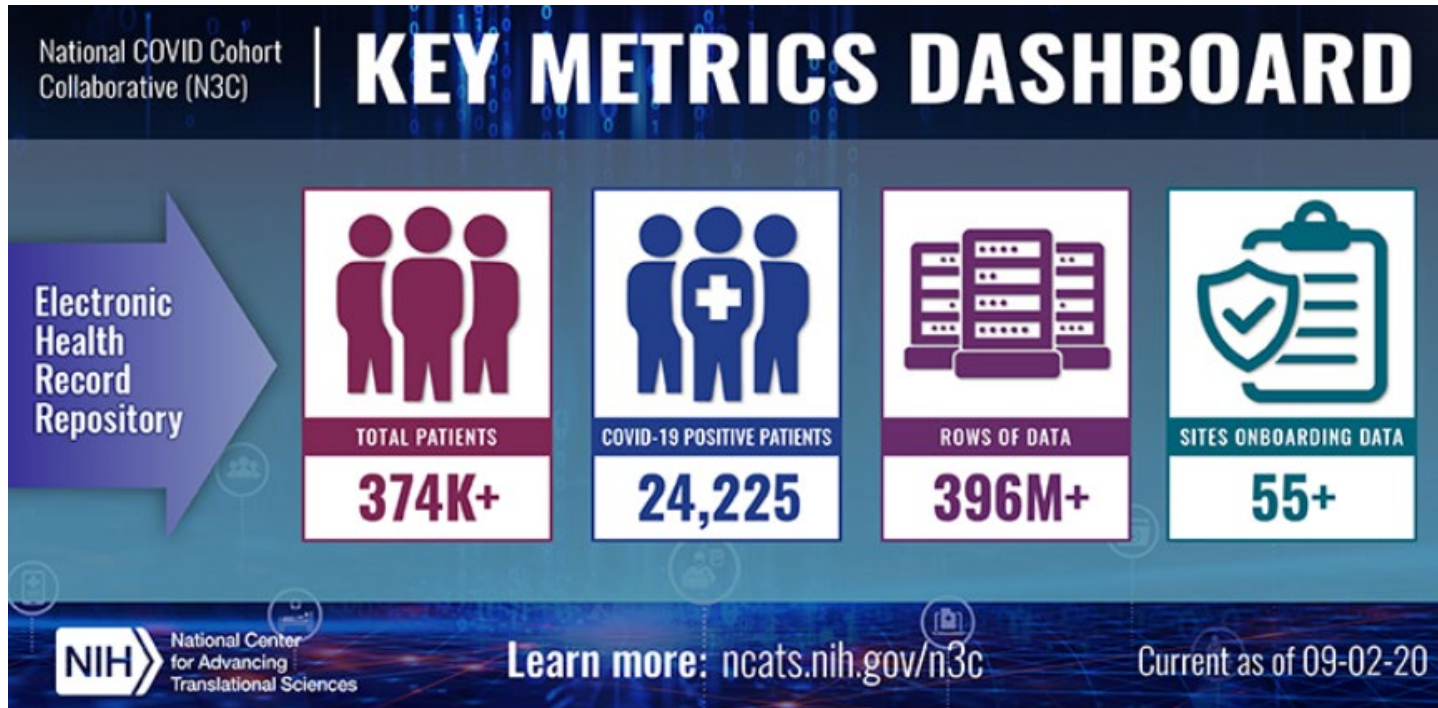
- *Longitudinal Clinical and Cognitive Data*
- *Imaging: Structural MRI, PET Amyloid/Tau*
- *Neuropathology Data*
- *Cardiovascular Risk Factor Data*
- *Fluid Biomarker Data*

Background

Purpose

Available Data

National COVID Cohort Collaborative (N3C)



The N3C is a partnership among the NCATS-supported Clinical and Translational Science Awards (CTSA) Program hubs and the National Center for Data to Health (CD2H), with overall stewardship by NCATS. Collaborators will contribute and use COVID-19 clinical data to answer critical research questions to address the pandemic.

<https://ncats.nih.gov/n3c>

Potential of EHR and Other Data Linkages to Propel AD/ADRD Research

NACC's goal is to support ADRCs to leverage existing local institutional infrastructure to collect and harmonize electronic health record data to enhance other existing data offerings within the consortium

EHR and Claims data can augment existing and planned clinical research datasets

Standardize consent for linkages

Next steps: If your ADRC is interested in EHR linkages, please reach out to nacchelp@uw.edu

Future ADRC Directors' Meetings

May 2021, Los Angeles

- Keep NACC updated on your institutional travel restrictions
- Steering Committees participating
 - Imaging Core
 - Biomarker Core
 - Administrators
 - Clinical Core
 - Directors
 - REC
 - <https://www.alz.washington.edu/WEB/futureADCmeetings.html>

Concluding comments

- **Virtual Format Benefits – Inclusive, available later, live demos, cross core interactions!**
- **Thank You! [Cerise and Grayson](#)**
 - NACC (esp Elizabeth) - Welcome to Kari Stephens and Sean Mooney!
 - CTF
- **Numerous accomplishments, even with COVID**
- **Steering Committees – essential roles in future planning**
- **Our work is benefitting the larger community**
- **Dementia is still such a common condition, even with COVID we still need to continue our dementia research**
- **We look forward to planning for the spring meeting**
- **Next Steps**
 - Launch all Steering Committees
 - Maximize biomarker analysis (Biomarker Steering Committee)
 - Centralized, standardized imaging data to research community
 - Getting participant level data connected to biospecimens