May 2021

ADCFB Update

Beginning June 1, 2021, NCRAD will only be collecting plasma and buffy coats as part of the ADCFB study. NCRAD will no longer be supporting the collection of serum, RNA or PBMCs. **To ensure your center is properly reimbursed for PBMCs, serum, and RNA, please ship any outstanding frozen samples to NCRAD by May 31, 2021**.

BioSTAC Update

BioSTAC collections will come to an end this June. Please ship all frozen samples to NCRAD by May 31, 2021 to ensure reimbursements can be quickly processed by NACC.

Sending ADRC Samples for DNA to NCRAD

NCRAD continues to accept samples from all subjects with an MDS or UDS at NACC. NACC has updated the lists of samples for submission to NCRAD as of March 2021. The lists of subjects eligible to send to NCRAD have now been separated into "active" participants and "inactive" participants. Please see the lists on the NACC website here. While fresh or frozen whole blood samples are preferred, NCRAD also accepts frozen buffy coats, transferred DNA and brain tissue samples. Our goal is to have a DNA sample banked and available from all MDS and UDS subjects.

NCRAD UPS Shipping Update

As a reminder, NCRAD will no longer be providing preprinted UPS airbills in kit requests. If you still have existing preprinted **UPS** airbills from NCRAD, you may continue to use those on your upcoming shipments. Moving forward you will be able to generate and print your own UPS airbills, and schedule UPS pickups at your site through our new UPS ShipExec™ Thin Client! The shipping and pickup costs will all be charged to NCRAD or the study using this tool.

You can find an instructional video on how to generate airbills and schedule pickups on our website here. If you are involved in shipping samples to NCRAD and don't already have access to this website, please reach out to Kaci Lacy (lacy@iu.edu).

Requesting ADRC Samples from NCRAD

If you are interested in requesting samples from NCRAD, you can learn more information about samples currently available for distribution here. You may access the catalog of ADRC samples which includes DNA, PBMCs, plasma, serum, and RNA.

Globally Unique Identifiers (GUIDs)

Some ADRCs are generating and sending Globally Unique Identifiers (GUIDs) to NCRAD. GUIDs are generated by the Biomedical Research Informatics Computing System (BRICS) platform's centralized NIA/NINDS portal. The same GUID will be assigned to subjects that participate in both NIA and NINDS studies, allowing for data to be associated with a particular subject without exposing any protected health information (PHI). This reduces redundant analyses and maximizes the amount of information that can be gathered. We encourage all ADRCs to begin generating and sending GUIDs to NCRAD.

NCRAD GWAS Plan

We are currently pulling and shipping samples from UDS subjects that do not meet ADGC criteria for GWAS. This shipment will include samples from nearly 1,400 UDS subjects! Just like the samples genotyped by the ADGC, these samples will be sent to the Center for Applied Genomics (CAG) at the Children's Hospital of Philadelphia (CHOP). We will continue to send samples for GWAS from UDS subjects not meeting ADGC criteria annually to ensure GWAS data is available for all UDS subjects. GWAS data will be returned to the contributing ADRC.

NCRAD APOE Data at NACC

To obtain the most recent APOE data, visit the NACC website here, select your Center and choose the option to download *APOE* data from NCRAD. As always, please compare these data with any internal *APOE* genotype data you may have generated. Please notify Kaci Lacy (lacy@iu.edu) if you have any questions or find any discrepancies.

Key for *APOE* results on NACC site

1=e3/e3	4=e4/e4	9=missing/unknown/
2=e3/e4	5=e2/e4	not assessed
3=e2/e3	6=e2/e2	

NCRAD IPSC Initiative Update

Researchers funded by NIH are required to share the iPSC and fibroblast lines they develop with other researchers. NCRAD has begun to receive, expand, and distribute iPSC and fibroblast lines from multiple investigators. If you have lines you would like to centrally bank, please contact Jeanine Marshall (jldaltzma@iu.edu) to discuss this initiative further. You may also find more information on our website here.

ADSP Releases 16,906 Whole-Genomes

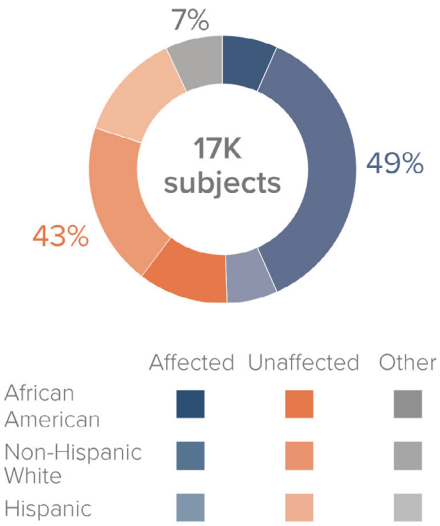
NIAGADS is pleased to announce the release of whole genome sequencing (WGS) data from 16,906 samples through the Data Sharing Service (DSS) from the Alzheimer's Disease Sequencing Project (ADSP). The data release includes CRAMs, gVCFs, and project-level VCFs across all samples. The pVCF released here is provided as a preview to the formal ADSP quality control that will be released in a few months.

The Release 3 (R3) preview pVCF includes whole-genome data from 1,020 ADSP Family Discovery and Discovery Extension samples, 2,959 ADSP Case Control Extension samples, 809 ADNI-WGS-1 samples, 886 CurePSP and Tau Consortium PSP samples, 408 PSP UCLA samples, 617 NINDS, CurePSP and Tau Consortium PSP samples, 209 University of Pittsburgh- Kamboh samples, 207 Cache County samples, 77 Knight ADRC samples, 91 FASe_families samples, 137 NACC-Genentech samples, 730 AMP-AD ROSMAP samples, 344 AMPAD MSSM samples, 252 AMP-AD MAYO samples, and 8,160 ADSP Follow-Up Study 1 samples.

These data were called by the Genome Center for Alzheimer's Disease (GCAD) using VCPA 1.1, a functionally equivalent CCDG/TOPMed pipeline.

More information about the dataset can be found on the dataset page NG00067. Information about what is needed for a Data Access Request can be found on the Application Instructions page.

"The following graphic contains a breakdown of cognitive status by race/ethnicity of participants included in the dataset."



2021 NIH Alzheimer's Research Summit

Last month, Dr. Li-San Wang (Penn) and Dr. Timothy Hohman (Vanderbilt) presented their work on "NIAGADS Data Resources and Harmonization of AD Genetic, Epidemiologic and Clinical Data" during Session Two: "Enabling Infrastructure and Incentives to Improve Research Rigor, Reproducibility, and Translatability."

Dr. Wang discussed the resources available in The National Institute on Aging Genetics of Alzheimer's Disease Data Storage Site (NIAGADS) while Dr. Hohman discussed the Alzheimer's Disease Sequencing Project (ADSP) phenotype harmonization.

If you'd like to catch up on the presentation by Dr. Wang and Dr. Hohman, or view the other great presentations, you can click here: **#ADSUMMIT2021**