



# NCRAD

January 2020

## **Annual Sample Distribution Reports**

It is time again for NCRAD to send out annual Sample Distribution Reports! This report is intended to assist your Center in demonstrating your contribution to central sample banking efforts encouraged by NIA. Reports are sent out every January to the Center Director. Please contact Kaci Lacy ([lacy@iu.edu](mailto:lacy@iu.edu)) if you would like a copy sent directly to others as well.

As a reminder, last year we made updates to the format of the report compared to previous years. The report now summarizes the number of subjects with each sample type provided by your site as part of initiatives banking samples at NCRAD. This is done for both the last year and overall. For example, a Center could be sending samples as part of the ADGC, ADNI, and LOAD initiatives. The report would show the number of subjects with DNA, PBMCs, Cell Lines, etc. samples in each study. Please note that the number of subjects provided on the report is a count of unique individuals with each sample type within a study. Some studies are collecting longitudinal samples and these will show as a single subject, not number of visit.

The annual report also summarizes how many samples contributed by your site are requested by researchers. The report shows the total number of aliquots distributed to researchers from samples contributed by your center. We report aliquots for both the past year and overall. This is a total count of aliquots and is not restricted to unique subjects. Samples from the same subject may be requested by more than one investigator. Please note, this count does not reflect the samples that were returned to the contributing site as their one free aliquot.

Our summary report also provides the number of unique investigators that have requested samples contributed by your Center. We provide this information for the past year and also in a cumulative form across all years. Finally, all NIH grants that were supported by

the samples contributed by your site are listed with those highlighted in blue designated in blue being supported in the last year.

If you would like to request a report that covers a date range other than the last calendar year, such as the last grant period for your Center, we can provide reports with custom date ranges as well. Please contact Kaci Lacy ([lacy@iu.edu](mailto:lacy@iu.edu)) to make a custom request.

## **Annual ADC Conference Calls**

We appreciate the opportunity to review progress and discuss new initiatives with ADCs during our annual conference call. It is time to schedule our spring calls with all Centers. Kaci has begun to contact Centers to schedule a call for February, March, or April. We look forward to speaking with you soon!

## **Expanded Blood-Based Collection**

Thank you to all of the Centers that have begun participating in the Alzheimer's Disease Centers Fluid Biomarkers (ADCFB) pilot initiative to expand the range of blood-based samples banked at NCRAD! The ADCFB protocol involves collecting and sending plasma, serum, DNA, RNA and PBMCs to NCRAD using a uniform protocol. The ADCFB protocol ensures uniform blood collection and processing across all sites, reducing pre-analytical variables from samples collected at different Centers. We have already begun receiving samples from the fifteen Centers that have been trained in the collection protocol since launching this pilot initiative in June 2019.

As a reminder, we are reserving a subset of the aliquots from each sample type submitted for the exclusive use of the contributing center for five years.

We are currently preparing for the NCRAD competitive renewal. We will be asking for your suggestions for ways NCRAD can further support the ADCs.

**A Central Repository with samples available to match the rich dataset collected for all subjects seen in the ADCs is a very valuable resource for the field of AD research. We hope you will continue to support this effort!**

## NIAGADS Data Sharing Service (DSS) Releases 20K Whole Exomes

NIAGADS is pleased to announce the release of 19,922 whole exomes called on GRCh38 through the [Data Sharing Service \(DSS\)](#). Nine different studies contributed to the release, including 10,088 ADSP Discovery Case Control WES samples, 3,144 ADGC African American WES samples, 75 Brkanac Families WES samples, 346 Corticobasal degeneration WES samples, 3,861 Columbia WHICAP WES samples, 1,100 FASe Families WES samples, 650 Knight ADRC WES samples, 108 Miami Families WES samples, and 550 Progressive supranuclear palsy WES samples. These data were called by the Genome Center for Alzheimer's Disease (GCAD) using VCPA 1.01, a functionally equivalent CCDG/TOPMed pipeline. The release includes CRAMs, gVCFs and phenotypes. A subsequent release containing the ADSP quality control checked GATK joint called VCF will follow in mid-2020. More information about the dataset can be found on the dataset page, [ng00067](#). Instructions for applying for the data can be found on the [Documentation page](#) of the DSS website.

## Alzheimer's Disease Centers: Accessing your Center's Data

Alzheimer's Disease Centers can obtain the ADSP sequenced data for their own subjects by contacting NIAGADS ([niagads@penncmedicine.upenn.edu](mailto:niagads@penncmedicine.upenn.edu)) and completing a Data Transfer Agreement with the University of Pennsylvania. With the new data release, a total of 5,123 ADC samples have been sequenced under ADSP efforts. New samples are from the

Alzheimer's Disease Genetics Consortium African American dataset. Available data types for request are CRAMs, GATK called gVCFs, as well as GATK joint-genotype called project level VCFs (pVCFs) that have undergone basic sequencing quality control checks. More detailed instructions about accessing data for ADCs can be found here:

<https://www.niagads.org/adsp/content/instructions-adcs>

## New Datasets available at <https://www.niagads.org/datasets>

NIAGADS has added a number of new datasets, bringing the total number of datasets in NIAGADS to 59, with over 59,000 samples and 33 billion genotypes.

### [NG00083](#)

Circular RNAs in Alzheimer Disease Brains – RNA-seq Data

### [NG00088](#)

GWAS Summary Statistics of informed conditioning analysis in African Americans

### [NG00089](#)

CSF TREM2 Summary Statistics