



## September 2020

### **NCRAD Has Reopened!**

Our facilities reopened on June 1<sup>st</sup> and the lab staff has been receiving samples from multiple centers. We are also able to fulfill kit requests as well. Please remember to email sample forms ahead of your shipment ([alzstudy@iu.edu](mailto:alzstudy@iu.edu)) so that we know what samples to expect to arrive each day. Please do not fax the sample forms as the fax machine is not routinely monitored at this time. If you have any questions, please reach out to Kaci Lacy at [lacy@iu.edu](mailto:lacy@iu.edu).

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 September 2020. 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 [GWAS Phase 2 page on the NACC website](#).

NCRAD accepts fresh or frozen whole blood samples, frozen buffy coats, transferred DNA and brain tissue samples. Our goal is to have DNA banked and available from all subjects with an MDS or UDS at NACC.

### **Globally Unique Identifiers (GUIDs)**

Some ADRCs have begun 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 Biospecimen Requests**

NCRAD has a simple way to identify studies with samples available for researcher requests. See our banked studies and available sample types on the [Accessing Data page](#) on our website.

NCRAD has streamlined and simplified the process to request biospecimens. Please see our [Biospecimen Application Process page](#) for more information.

### **NCRAD APOE Data at NACC**

To obtain the most recent APOE data, visit the [ADGC Center Access for PLINK Genotype Files page](#) on the NACC website, 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](mailto: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/ not assessed
2=e3/e4	5=e2/e4	
3=e2/e3	6=e2/e2	

As of January 2020, we have begun APOE genotyping in-house at NCRAD! Samples are now genotyped upon intake, so results will be returned more frequently. Results will continue to be reported to NACC and routinely available for your access.

### **NCRAD GWAS Plan**

We are currently pulling and shipping samples for GWAS from UDS subjects that do not meet ADGC criteria. This shipment will include samples from over 5,000 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). Annually, we will continue to send samples for GWAS from UDS subjects not meeting ADGC criteria. Our goal is to have GWAS data on all UDS subjects with a DNA sample at NCRAD. GWAS data will be returned to the contributing ADRC.

### **NCRAD iPSC Initiative Update**

Researchers funded by NIH are required to share iPSC and fibroblast lines they develop with other researchers. It can be a significant burden in terms of cost and time to expand the lines, perform extensive characterization, and then distribute them to other researchers. NCRAD has begun to receive, expand, and distribute iPSC and fibroblast lines from multiple investigators. If you would like to centrally bank lines you have developed, contact Jeanine Marshall ([jdaltzma@iu.edu](mailto:jdaltzma@iu.edu)). More information is available on our [iPSC and Fibroblast page](#) on our website.

**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!**

Please contact us with any questions or concerns about NCRAD at 800-526-2839, by email at [alzstudy@iu.edu](mailto:alzstudy@iu.edu) or visit our website: [www.ncrad.org](http://www.ncrad.org). Thanks!!

## NIAGADS presents at AAIC 2020

Members of the NIAGADS, and other world leaders in dementia science, convened July 26th-July 30th at the Alzheimer's Association International Conference (AAIC). Although AAIC was initially planned for Amsterdam, the conference was held virtually so that researchers from around the world could collaborate and share from home.

NIAGADS was well represented at AAIC with Research Assistant Professor Yuk Yee Leung, PhD, who presented her poster "Alzheimer's disease variant portal (ADVP): harmonized genetics data and evidence collection for Alzheimer's disease," and Research Project Manager Briana Vogel, MPH, who presented her poster "NIAGADS: The National Institute on Aging Genetics of Alzheimer's Disease Data Storage Site."

Dr. Leung's presentation on ADVP described the uniqueness and necessity of having a curated and harmonized interactive platform that provides unified access and visualization of a uniquely extensive up-to-date collection of GWAS data for AD. Dr. Leung's presentation goes on to explain the curation and organizational processes for the contents of the ADVP database as well as its integration with the National Institute on Aging Genetics of Alzheimer's Disease Data Storage Site (NIAGADS) GenomicsDB. The integration will allow for researchers to cross-reference public sources. Currently, ADVP collection contains genetic findings from more than 60 cohorts and >200 studies across a variety of populations including Caucasians, Hispanics, African-Americans,

and Asians. ADVP is freely accessible at <http://advp.niagads.org>.

Research Project Manager Briana Vogel, MPH, presented her poster on "NIAGADS: The National Institute on Aging Genetics of Alzheimer's Disease Data Storage Site." The poster described the data that is available at NIAGADS as well as information on how to apply.

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

[NG00091 - Results of gene-based weighted burden analyses using SCOREASSOC and GENEVARASSOC applied to the ADSP discovery sample](#)

[NG00093 - Washington Heights-Inwood Community Aging Project \(WHICAP\) GWAS](#)

[NG00095 - ROS \(Religious Orders Study\) ad MAP \(Memory and Aging Project\) GWAS](#)

[NG00096 - University of Miami/ Texas Alzheimer's Research Care Consortium Wave 2/Case Western Reserve University \(MTC\):](#)

[NG00097 - Texas Alzheimer's Research Care Consortium \(TARCC\)](#)

[NG00098 - Case of CBD for determining Cryo-EM structure of 4R tau](#)

[NG00100 - Novel risk loci and pathways associated with Alzheimer disease in African Americans: A GWAS and meta-analysis summary statistics](#)

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DATASETS

91,663

SAMPLES

12

DATA TYPES