NCRAD

June 2020

NCRAD Has Reopened!

We are happy to announce that our facilities have reopened and the lab staff is able to receive samples again! We are also able to fulfill kit requests as well. We appreciate your patience during our lab's closure due to COVID-19. Please email sample forms ahead of your shipment (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.

Annual ADRC Conference Calls

THANK YOU to everyone that participated in an annual call with us this year. We always appreciate the opportunity to talk to each Center and learn about ways to make sample collection and shipping as well as the return of data easier for you.

NCRAD APOE Data at NACC

To obtain the most recent APOE data, visit the NACC website at: https://www.alz.washington.edu/adgc.html, 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	

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 than before. Results will continue to be reported to NACC and routinely available for your access.

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!

NCRAD GWAS Plan

We are currently in the process of 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). We will continue to send samples for GWAS from UDS subjects not meeting ADGC criteria annually as well, with the goal to have GWAS data on all UDS subjects. GWAS data will be returned to the contributing ADRC.

NCRAD IPSC Initiative Update

Researchers funded by NIH are required to share the iPSC and fibroblast lines they develop with other researchers. There 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 is supporting the distribution of these cell lines. We have 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. More information is available on our website at: https://ncrad.org/ipsc_fibroblasts.html.

ADC Samples 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 2020. The lists of subjects eligible to send to NCRAD have now been separated into "active" participants and "inactive" participants. Please see the lists at the following link:
https://www.alz.washington.edu/GWASPHASE2/gwasphase2.html

NCRAD accepts fresh or frozen whole blood samples, 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.

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

Working from home? Check out new genetics data for Alzheimer's disease research!

The NIA and NIAGADS are excited to announce the release of the latest genomics data set from the Alzheimer's Disease Sequencing Project (ADSP). NIAGADS is a vital tool as we seek to better understand genes that increase risk for — or protection from — AD/ADRD. Researchers can now access new, robust sequencing data generated by the ADSP of nearly 20,000 exomes from 9 different studies so they can continue their Alzheimer's disease research from home.

Additional genomic data will be available down the road. The next major release, consisting of roughly 17,000 complete genomes will be available later this year at the NIAGADS Data Sharing Service (DSS).

Read the full blog post at Inside NIA: A Blog for Researchers.

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 70, with over 86,000 samples and 12 data types.

NG00087
WashU2 GWAS

NG00091
Results of gene-based weighted burden analyses using SCOREASSOC and GENEVARASSOC applied to the ADSP discovery sample

NG00093
WHICAP GWAS

NG00095
ROSMAP2 GWAS

NG00096
MTC GWAS

NG00097
TARCC GWAS

NG00098
Case of CBD for determining cryo-EM structure of 4R tau