

# NCRAD establishes a new laboratory to support Alzheimer's disease research innovations

Over the past decade, researchers have sought to develop tests that can be used to identify the earliest changes that occur in Alzheimer's disease. Work initially focused on brain imaging, using both MRI and PET imaging. However, researchers wanted to develop an easier way to be able to identify the earliest changes. Over the past 5 years, there has been a great deal of progress in this area, and we now have evidence that there are some substances in the blood, called biomarkers, whose levels or amounts in the blood will change even before an individual can be diagnosed with Alzheimer's disease.

This is an important area of research, and the National Centralized Repository for Alzheimer's Disease and Related Dementias (NCRAD) has established a new laboratory which can measure these biomarkers in blood samples. Many of these biomarker tests are still exploratory and are not yet used clinically. However, having the ability to measure these biomarkers in samples banked at NCRAD will allow researchers to move more rapidly to better understand the early progression of Alzheimer's disease and use this information to develop improved treatments.

To support these new biomarker tests, NCRAD has recruited two new scientists. Dr. Jeffery Dage joined Indiana University School of Medicine from Eli Lilly & Co in August of 2021 and Dr. Kristen Russ also joined the NCRAD team in 2021.

NCRAD continues to support cutting edge research in Alzheimer's disease. We are grateful to all participants who support Alzheimer's disease research.

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Pictured Left: Dr. Jeffery Dage; Pictured Right: Dr. Kristen Russ

#### NCRAD Attends AAIC 2022

### **Alzheimer's Association International Conference**





Pictured Left: Casey Snoddy; Pictured Right: Zoë Potter

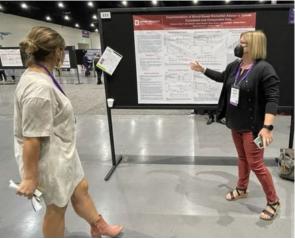
This year, two members of the NCRAD team hosted a booth at the 2022 Alzheimer's Association International Conference (AAIC) in San Diego, CA. For the past few years, AAIC has been primarily a virtual event due to the ongoing, global COVID-19 pandemic. AAIC provides a unique opportunity for laboratory and clinical researchers, clinicians, and others from the research community from both academic and commercial institutions to come together to share new and exciting advancements in Alzheimer's and dementia research.

Casey Snoddy and Zoë Potter greeted colleagues, old and new, at a NCRAD hosted booth where they passed out flyers regarding NCRAD services as well as the new NCRAD biomarker laboratory. In addition, they met with researchers from all over the world, answered questions about NCRAD and described both the sample banking and distribution opportunities available.

Over 150 new colleagues from varying research backgrounds visited the NCRAD booth! Casey and Zoë will keep in touch with these new colleagues. Many of them were interested in the availability of research samples in NCRAD. Others were interested in the new "Data Front Door" which is a collaborative effort between NCRAD and other NIA funded data warehouses to develop a one-stop-shop for all Alzheimer's Disease Research Center (ADRC) data. Casey and Zoë also had a chance to visit other exibitors and posters, including some that featured the use of NCRAD samples!

As first time AAIC goers, Casey and Zoë were pleased to represent NCRAD and found the event invaluable. They thoroughly enjoyed AAIC and were happy to see everyone in person!





Pictured left: Casey and Zoë at the NCRAD booth in the Exhibit Hall; Pictured right: Zoë visits Dr. Kristen Russ's poster presented about the new NCRAD biomarker laboratory.

## **Study Spotlight**



## Alzheimer's Gut Microbiome Project Duke University (U19AG063744-02)

The Alzheimer Gut Microbiome Project (AGMP) is an initiative looking at the complex interconnections between diet, lifestyle influences, and the microbiome of the gut (stomach) and how it relates to Alzheimer's disease. A microbiome is a group of bacteria that live in our gut that help with digestion, destroy harmful bacteria and help control our immune system. By measuring thousands of chemicals produced by the gut, this study hopes to determine how the brain is connected and influenced by the gut.

AGMP, in partnership with eight ADRCs across the US, is collecting fecal and blood samples from ADRC participants aged 60 and above using our at-home collection kits. Collected samples are stored at NCRAD. This study aims to recruit a racially diverse group of about 1000 participants, balanced between those diagnosed with Mild Cognitive Impairment, Alzheimer's Disease, and controls with no impairment.

Drs. Rima Kaddurah-Daouk (Duke), Rob Knight (UCSD), and Sarkis Mazmanian (Caltech) lead this initiative that involves over 40 scientists from 13 major academic research institutions across the US and Europe. More information about this project can be found at: <a href="https://alzheimergut.org/">https://alzheimergut.org/</a>



## Participating in Research with NCRAD

The National Centralized Repository for Alzheimer's Disease and Related Dementias (NCRAD) collaborates closely with research studies and institutions around the world. We have compiled a list of studies currently enrolling participants and banking samples with NCRAD. A NCRAD staff member can help connect you to these programs via phone at 1-800-526-2839 or by email at <a href="mailto:alzstudy@iu.edu">alzstudy@iu.edu</a>. You can explore each study for more information, visit: <a href="mailto:https://ncrad.org/participate.html">https://ncrad.org/participate.html</a>

#### Indiana University and NCRAD are actively recruiting new study participants.

Alzheimer's Disease-Family Based Study eligible participants include:

- A person, age 60 or older, with a diagnosis of Alzheimer's disease or related dementia, AND
- A sibling, age 60 or older, with a dementia diagnosis, <u>AND</u>
- A third related family member, age 50 or older, with or without a dementia diagnosis.

Participation activities includes:

• Annual telephone survey, possible blood sample collection and Optional Brain Autopsy program.

For more information and screening, please visit:

https://ncrad.iu.edu/load informed consent.html or call 1-800-526-2839



### **The NCRAD Autopsy Program**

At NCRAD, we encourage pre-planning of autopsies for individuals affected with AD and for healthy non-affected individuals who wish to donate their brain tissue. Planning in advance helps ensure all of the necessary steps at the time of death are completed smoothly to avoid any undue burden to the family at a difficult time, and to facilitate the removal and processing of the brain tissue as quickly as possible. Any questions or concerns regarding autopsy in general, autopsy planning, or an existing plan, may be directed to the NCRAD staff by phone at (800) 526-2839 or by e-mail at <a href="mailto:alzstudy@iu.edu">alzstudy@iu.edu</a>. Please do not hesitate to contact us at any time.



The National Centralized Repository for Alzheimer's Disease and Related Dementias (NCRAD) is a National Institutes on Aging (NIA) funded biorepository for clinical information and biological materials to support research focused on the etiology, early detection, and therapeutic development for Alzheimer's disease and related dementias. Since the study started in 1990, NCRAD continues to expand our sample collections, including: DNA, plasma, serum, RNA, CSF, PBMCs, iPSCs and other types of cell lines as well as brain tissue can be stored and requested. NCRAD currently maintains samples from individuals with Alzheimer's disease and/or related dementias as well as healthy controls.

1-800-526-2839 alzstudy@iu.edu www.ncrad.org



## **Additional Information and Resources**

<u>Alzheimer's Disease and</u> Related Dementias Resources

Alzheimer's Association www.alz.org

Tel: 800-272-3900

Alzheimer's Disease Education and Referral Center (ADEAR)

www.nia.nih.gov/Alzheimers

Tel: 800-438-4380

Association for Frontotemporal Dementias (AFTD)

www.theaftd.org

Tel: 866-507-7222

Center for Disease Control and Prevention (CDCP)

www.cdc.gov

Tel:800-311-3435

Creutzfeldt- Jakob Foundation Inc. (CJD) cidfoundation.org

Tel: 305-891-7579

National Organization for Rare Disorders (NORD) www.rarediseases.org

Tel: 800-999-NORD (6673)

National Parkinson

www.parkinson.org/

Tel: 800-327-4545

Parkinson's Disease Foundation (PDF)

www.pdf.org

**Foundation** 

Tel: 800-457-6676

Caregiver Resources

Alzheimer's Disease Education and Referral Center (ADEAR)

www.nia.nih.gov/Alzheimers

Tel: 800-438-4380

Assisted Living, Nursing Facilities & Hospice Care www.medicare.gov/

Family Caregiver Alliance www.caregiver.org

Tel: 800-445-8106

National Institute on Aging-Alzheimer's Caregiving https://www.nia.nih.gov/health/care giving

US Department of Health and Human Services

https://www.alzheimers.gov/life-with-dementia/tips-caregivers

Clinical Research Resources

ClinicalTrials.gov is a resource provided by the U.S. National Library of Medicine. It contains information about research trials, who may participate, locations, and phone numbers for more details.

www.clinicaltrials.gov/

Research Match is supported in part by the National Institutes of Health (NIH) Clinical and Translational Science Award (CTSA) program. It is a free service that pairs volunteers, including healthy participants, with research opportunities.

www.researchmatch.org

Trial Match is supported by the Alzheimer's Association, and connects individuals with Alzheimer's, caregivers and healthy volunteers to clinical trials that may advance Alzheimer's research.

www.alz.org/alzheimersdementia/research progress/cli nical-trials/trialmatch

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