

The National Cell Repository for Alzheimer's Disease

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The National Cell Repository for Alzheimer's Disease

- Significant expansion in the past 5 years
 - Number of samples being banked
 - Particularly from the ADCs
 - Number of studies banking samples
 - 22 studies
 - Types of samples banked
 - DNA, RNA, plasma, serum, CSF, LCL, PBMC
 - Collaboration with large-scale studies
 - ADGC, ADSP, ADNI

The National Cell Repository for Alzheimer's Disease

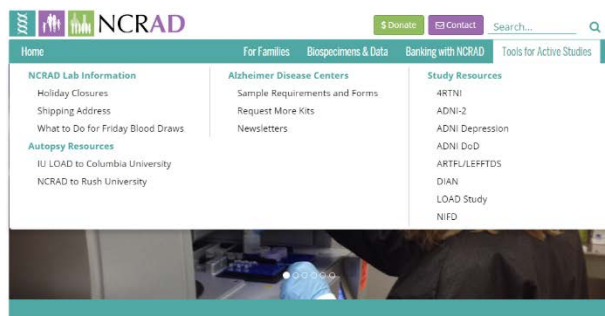
- Facilitate the receipt of samples from approved studies
 - Develop training materials for sites
 - Receive a variety of biospecimens
 - Generate regular reports for sites, study PIs and NIA summarizing sample collections
- Distribute samples to approved studies
 - Coordinate the request for samples
 - Assist researchers in the selection of samples for research studies
 - Distribute samples (and in some cases data) to approved researchers

New NCRAD Web-site

The screenshot displays the NCRAD website interface. At the top, the NCRAD logo is on the left, and 'Donate' and 'Contact' buttons are on the right. A search bar is also present. Below the logo, a navigation bar includes 'Home', 'For Families', 'Biospecimens & Data', 'Banking with NCRAD', and 'Tools for Active Studies'. The main content area is divided into three columns of links: 'NCRAD Lab Information' (Holiday Closures, Shipping Address, Friday Blood Draws), 'Autopsy Resources' (IU LOAD to Columbia University, NCRAD to Rush University), 'Alzheimer Disease Centers' (Sample Requirements and Forms, Request More Kits, Newsletters), and 'Study Resources' (4RTNI, ADNI-2, ADNI Depression, ADNI DoD, ARTFL/LEPFTDS, DIAN, LOAD Study, NFD). A banner image shows a person in a lab coat. Below this is the 'About NCRAD' section, which features four statistics: 'REQUEST Biospecimens from NCRAD' with a DNA helix icon, '50K Subjects with samples at NCRAD' with a family icon, '400 Publications using NCRAD Samples and Data' with a book icon, and '22 Studies with samples banked at NCRAD' with a lab glassware icon.

www.NCRAD.org

New NCRAD Web-site



- How to Request Samples
- How to Bank Samples/Sample Types Currently Banked
- Tools for Active Studies
- Helpful Resources for Families Participating in Research

About NCRAD



Additional Resources

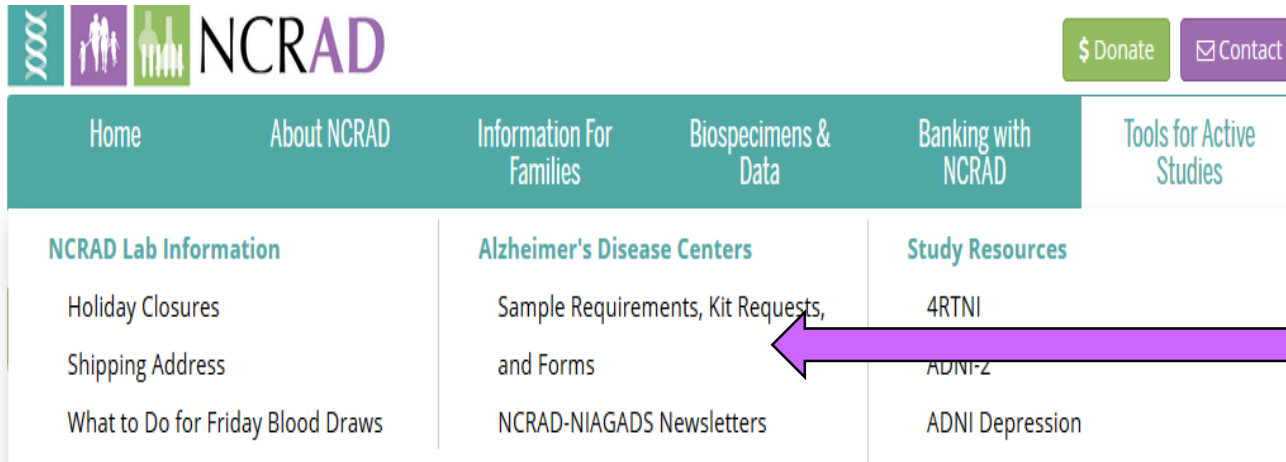


10 Signs of Alzheimer's Disease	
1. Memory Loss	6. Problems with Abstract Thinking
2. Difficulty Performing Familiar Tasks	7. Misplacing Things
3. Problems with Language	8. Changes in Personality
4. Disorientation to Time and Place	9. Changes in Mood or Behavior
5. Poor or Decreased Judgement	10. Loss of Initiative

For more information, call the Alzheimer's Association at (800) 272-3901

www.NCRAD.org

ADC Web-based Tools



The screenshot shows the NCRAD website header and navigation menu. The header includes the NCRAD logo, a 'Donate' button, and a 'Contact' button. The navigation menu has six main categories: Home, About NCRAD, Information For Families, Biospecimens & Data, Banking with NCRAD, and Tools for Active Studies. Below the navigation menu, there are three columns of links. The first column is 'NCRAD Lab Information' with links for 'Holiday Closures', 'Shipping Address', and 'What to Do for Friday Blood Draws'. The second column is 'Alzheimer's Disease Centers' with links for 'Sample Requirements, Kit Requests, and Forms' and 'NCRAD-NIAGADS Newsletters'. The third column is 'Study Resources' with links for '4RTNI', 'ADNI-2', and 'ADNI Depression'. A purple arrow points from a box on the right to the 'Sample Requirements, Kit Requests, and Forms' link.

Home	About NCRAD	Information For Families	Biospecimens & Data	Banking with NCRAD	Tools for Active Studies
NCRAD Lab Information <ul style="list-style-type: none">Holiday ClosuresShipping AddressWhat to Do for Friday Blood Draws		Alzheimer's Disease Centers <ul style="list-style-type: none">Sample Requirements, Kit Requests, and FormsNCRAD-NIAGADS Newsletters		Study Resources <ul style="list-style-type: none">4RTNIADNI-2ADNI Depression	

ADC section of NCRAD website

www.NCRAD.org

ADC Web-based Tools



ADGC Study Blood Sample Form

Please complete this form when sending blood to NCRAD. The form can be submitted electronically or it may be printed and faxed. **If faxing the form, please do so as soon as possible after the blood is drawn.** NCRAD would like to receive this form before the blood arrives.

Instructions for Electronic Submittal

1. Fill out the form completely.
2. Click the 'Submit Form' button at the bottom of the page
3. Print a paper copy of the form to include with the physical sample when shipped

Instructions for Fax/Email Submittal

Center Information

From	<input type="text"/>	Center	<input type="text"/>
Phone	<input type="text"/>	Fax	<input type="text"/>
Email	<input type="text"/>	Date	<input type="text"/>

Subject Information

Site#	<input type="text"/>	Sample Types Included	
PTID#	<input type="text"/>	Purple Tops for DNA	<input type="text" value="# of Tubes"/>
Gender	<input type="text"/>	Green Tops for PBMCs	<input type="text" value="# of Tubes"/>
Birth Year	<input type="text"/>	Cryovials for Buffy Coat	<input type="text" value="# of Tubes"/>

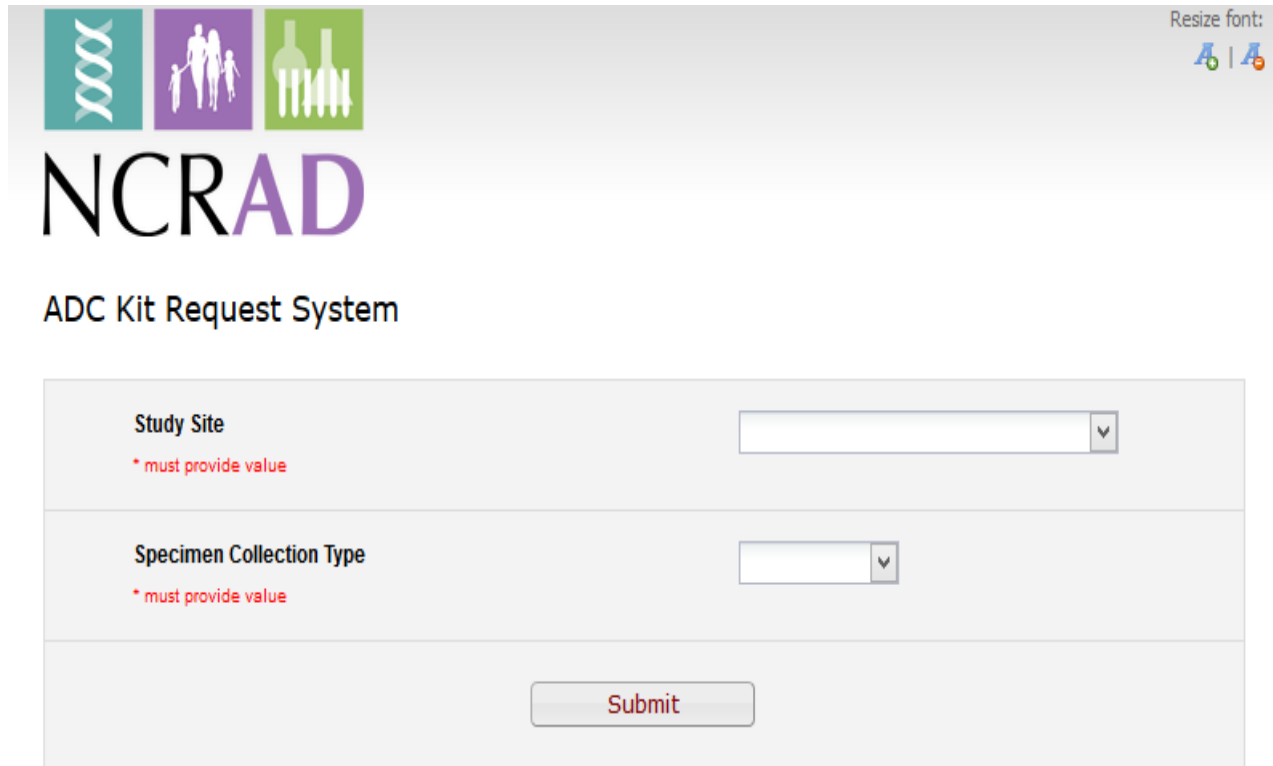
Sample Information

Date Blood Drawn:	<input type="text"/>	FedEx Tracking #	<input type="text"/>
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**New web-based
sample form
submission option**

www.NCRAD.org

ADC Web-based Tools



The screenshot shows the NCRAD ADC Kit Request System web interface. At the top, there are three icons: a DNA double helix, a family silhouette, and laboratory glassware. The NCRAD logo is prominently displayed. Below the logo, the text "ADC Kit Request System" is visible. The main form area contains two dropdown menus. The first is labeled "Study Site" and has a red asterisk with the text "* must provide value" below it. The second is labeled "Specimen Collection Type" and also has a red asterisk with the text "* must provide value" below it. A "Submit" button is located at the bottom of the form area. In the top right corner of the page, there is a "Resize font:" label with two font size icons.

Web-based kit request module for blood kits, DNA tubes, brain tissue tubes and buffy coat tubes. This can be found through the ADC section of the NCRAD web-site under each sample type or can be reached directly at kits.iu.edu/adc.



Accessing Biospecimens and Data

In order to ensure that researchers have the most accurate information, the National Cell Repository for Alzheimer's Disease (NCRAD) is continually updated with new information. At the time data is requested, NCRAD will provide the researcher with the most current information. Therefore, NCRAD encourages all researchers to request an updated set of variables prior to publication and implementation of analyses involving samples acquired from the Repository. While every effort is made to verify all data and information, NCRAD cannot be responsible for any errors or omissions in the distributed data.

Cohort	Population	Genomic DNA	Cell Line DNA	RNA	Plasma	Serum	LCLs	PBMCs
ADNI	AD Cases, Controls, MCI	✓	✓	✓			✓	
AA Genetics	AD Cases, Controls		✓				✓	
ADCs	AD and other dementia cases, Controls, MCI	✓	✓					✓
DIAN	Early Onset AD Families with known mutations		✓				✓	
GEMS	Dementia prevention	✓			✓	✓		
GIFT	AD, FTD, Controls	✓	✓				✓	
Indianapolis-Ibadan	Elderly African Americans from Indianapolis, Yoruba living in Ibadan	✓	✓				✓	
NCRAD Family	AD and other dementia families	✓	✓				✓	✓
NIA-LOAD	Late Onset AD Families, Controls	✓	✓				✓	

- [ADNI](#)
- [AA Genetics](#)
- [ADCs](#)
- [DIAN](#)



Additional Resources

- [MTA for Receiving Samples](#)
- [Publication Acknowledgement](#)
- [Sample Types We Bank](#)
- [NCRAD Executive Committee](#)

Study Websites

- ADNI**
Alzheimer's Disease Neuroimaging Initiative
- ADCs**
Alzheimer's Disease Centers
- DIAN**
Dominantly Inherited Alzheimer's Network
- Indianapolis-Ibadan**
Indianapolis Ibadan Epidemiological Study of Dementia

Questions/Comments

Email: alzstudy@iu.edu
Phone: 800-526-2839

This page can be accessed by visiting the Biospecimens & Data section of the website

Accessing Catalogs

DIAN

GEMS

GIFT

Indianapolis-Ibadan

Established in 1991 as a longitudinal, prospective, population-based, comparative epidemiological study of the prevalence, incidence rates, and risk factors for Alzheimer's disease and other age associated dementias.

Study Subjects

The project enrolled community-dwelling, elderly (age >65 years) African Americans living in Indianapolis and Yoruba living in Ibadan, Nigeria, employing the same research design, methods, and investigators.

Available Data

The funding for this study ended in 2012. During the course of the study, over 8000 (n=8528) elderly African American and Yoruba participants were evaluated over a 20 year period. A fixed minimal dataset is available through the NCRAD catalog. An additional dataset can be requested through the Indianapolis Ibadan Executive Committee.

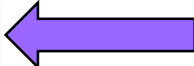
Available Biospecimens

Genomic DNA, Cell Line DNA, Lymphoblastoid Cell Lines (LCLs)


[Price Structure](#) | [Catalog](#) | [Request Access to Biospecimens](#)

NCRAD Family

NIA-LOAD



More detailed information can be found for each cohort listed in the table by clicking on the name in these boxes. More than one box can be opened at a time to allow comparison across studies.



Study specific price structures, catalogs and request forms are found in the detailed boxes.

www.NCRAD.org

Catalog Selections

Please follow the steps below to select the criteria necessary for your research.

1. View the study **Data Dictionary** to see all available catalog fields* and their descriptions.

[Dictionary](#)

*Additional data were collected for this study (see the [study website](#)). Contact us to request more information about additional data not listed in this dictionary: alzstudy@iupui.edu or 800-526-2839.

2. Click on **Select Columns** below to choose the fields you would like to display in the catalog.

[Select Columns](#)

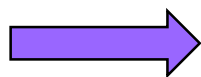
3. Click on **Filter Columns** below to filter the catalog by applying criteria to individual fields.

[Filter Columns](#)

4. Please **Download** the records you have selected from the catalog. The downloaded CSV file will include all of the columns you have selected and the subjects that met your filtering criteria. Please use this list to work with your statistician to determine feasibility for your research project.

[Download](#)

5. **Contact us!** Please use your downloaded file to work with your statistician to determine feasibility for your research project. When you feel comfortable with the list of samples you have selected, please contact NCRAD to work through the request process. You can reach us at: alzstudy@iupui.edu or 800-526-2839.



Step-by-step instructions walk researchers through each feature.

Indianapolis Ibadan Epidemiological Study Catalog

Welcome and thank you for visiting the NCRAD catalog for the Indy-Ibadan study! Please use this tool to help you determine feasibility of this collection for your request. Located on the left hand side of the screen, you will find expandable data mining tools for personalized sample selection. Use these tools to narrow our catalog to only those samples applicable for your research. This application is designed to help you find a list of subjects that can meet your research needs. Please do not hesitate to contact us at any point in the process to ask any questions, provide comments, or talk through your sample needs. You can reach us at: alzstudy@iupui.edu or 800-526-2839.

Showing 1 to 25 of 2,914 entries

Site	Subject ID	Alzheimer Disease	Age	APOE	GWAS Data	Genomic DNA
Indianapolis	KCVL	No	93.9	33	Yes	Yes
Ibadan	TOOZ	No	81.6	33	No	No
Ibadan	WGNG	No	72.9	33	Yes	Yes
Indianapolis	WGNG	No	79.8	33	Yes	Yes
Indianapolis	VKPN	No	84.2	33	Yes	Yes
Ibadan	ALCN	No	89.6	34	Yes	Yes
Indianapolis	ALCN	No	90.2	33	Yes	Yes
Ibadan	JEFF	No	94.3	33	Yes	Yes
Indianapolis	MXBG	No	78.5	23	Yes	Yes
Indianapolis	PZQU	No	84.1	33	No	No
Indianapolis	OERU	No	81.5	33	Yes	No
Ibadan	JIBZ	No	94.9	23	Yes	Yes
Ibadan	QJLK	No	86.8	34	Yes	Yes
Ibadan	UWHT	No	88.1	23	Yes	Yes
Indianapolis	PUWA	No	83.7	33	Yes	No
Ibadan	OHOX	No	76.6	23	Yes	Yes
Indianapolis	NTRP	No	88.8	23	Yes	Yes
Indianapolis	YHCW	Yes	88.5	34	Yes	Yes
Ibadan	CFHG	No	78.2	44	Yes	Yes
Indianapolis	NJDW	No	101.8	33	Yes	Yes
Indianapolis	APOL	No	86.1	33	Yes	No
Indianapolis	WQHV	Yes	93.2	22	No	Yes
Indianapolis	XPPS	No	85.8	33	Yes	Yes
Indianapolis	QEFW	No	73.7	34	No	Yes
Ibadan	WULD	No	88.0	33	Yes	Yes

Show entries

Services Offered for New Studies

Study Resources

Kit Request Module

Study Specific Sample Notification Forms

ARTFL-LEFFTDS Manual of Procedures

Study Related Video Tutorials

ARTFL-LEFFTDS Training Slides

ARTFL-LEFFTDS Study Common Questions and Answers

ARTFL-LEFFTDS Site Locations

- Kit Request Modules
- Sample Forms
- Manual of Procedures
- Video Tutorials
- Web-based Training Sessions
- FAQs

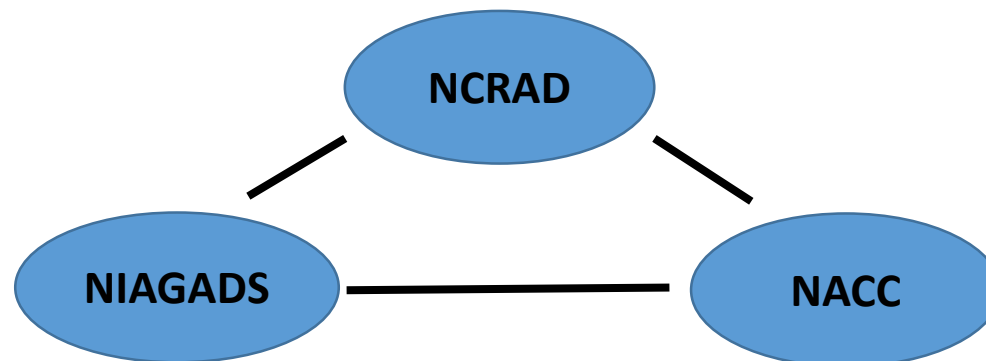
Plasma and Buffy Coat Processing and Aliquoting



www.NCRAD.org

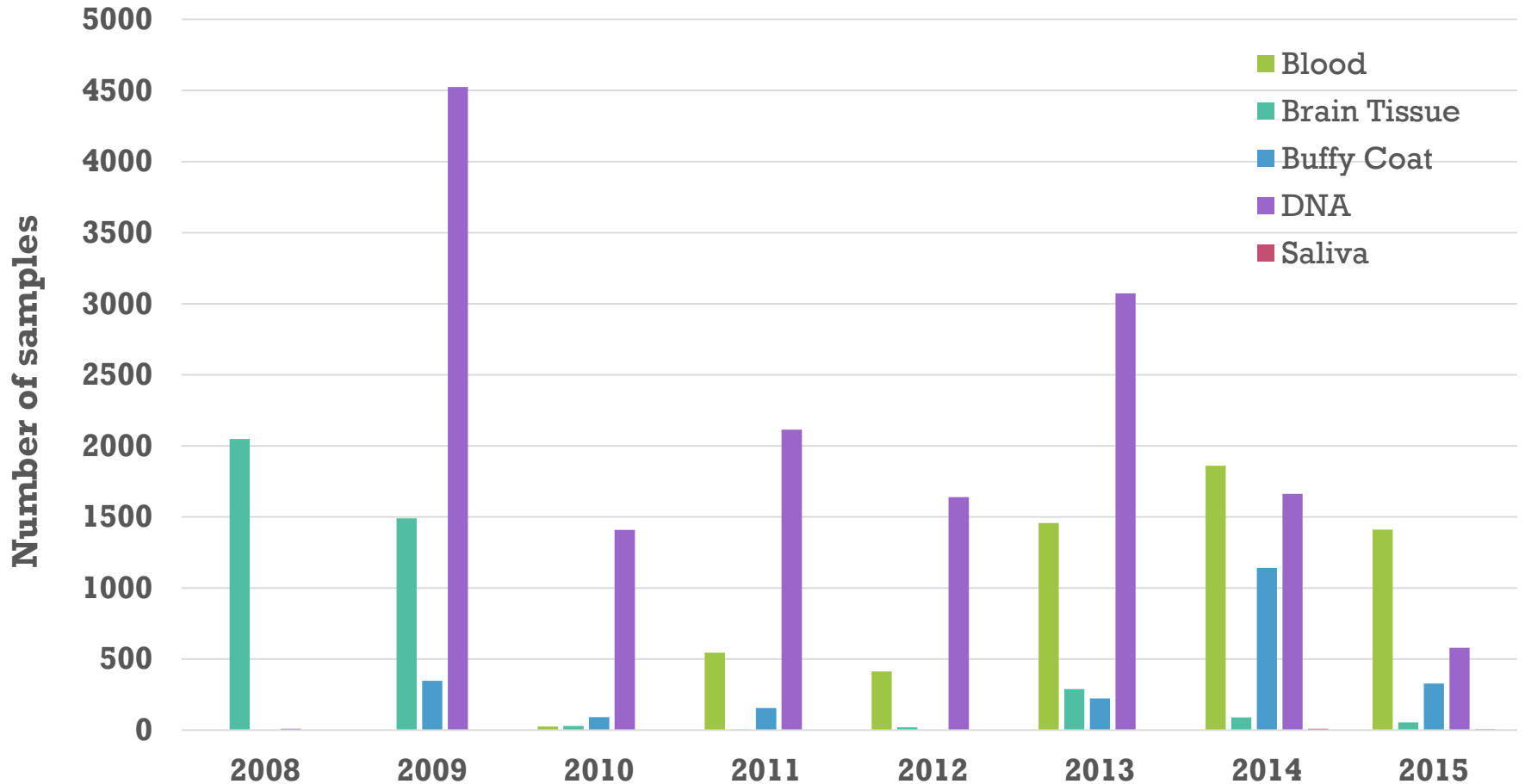
ADCs Role in Genetic Research

- NCRAD receives samples
- NACC maintains clinical data
- NIAGADS manages genetic data obtained from samples
- Together, these 3 groups support ongoing research studies



ADC Samples Received

> 27,000 samples received



This is total number of samples, not unique subjects



Acknowledgements

- NCRAD Staff
 - Kelley Faber
 - Ashley Vektor
 - Kelly Horner
 - Jan Hamer
 - Colleen Mitchell
 - Chris Hobbick
- Alzheimer's Disease Centers
- Studies contributing samples to NCRAD
- NACC
- NIAGADS
- ADGC
- NIA
- NCRAD Executive Committee
 - Deborah Blacker (Chair)
 - Steve DeKosky
 - Bernie Devlin
 - Alison Goate
 - David Holtzman
 - Bud Kukull
 - Richard Mayeux
 - Rosa Rademakers
 - Gerard Schellenberg
 - Julie Schneider
- ADSP Replication Working Group
 - Richard Mayeux
 - Sudha Seshadri