Alzheimer’s Disease Research Center (ADRC) New Site Training
NCRAD Staff

NCRAD Staff (left to right):
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Training Overview

• Kit Requests Module
• Sample Collection and Processing
• Sample Shipping
• Review and Questions
Kit Request Module

Brain Tissue, Buffy Coat, and Transferred DNA Supplies

WWW.KITS.IU.EDU/ADC

NCRAD
ADC Kit Request Module

- Choose your site from the drop-down list.
ADC Brain Tissue Supplies

- The coordinator name and contact information will appear.
- Verify that this information is accurate, or correct it if necessary.
- If contact information is unknown or incorrect, please check “No” and provide new information in free text fields that will appear.

Enter number of tubes needed
| Total Number of NCRAD Tubes Requested | 1 |

ADC Buffy Coat Supplies

- Enter number of tubes needed
ADC Transferred DNA Supplies

- Enter number of tubes needed
Handling/Processing Study Specimens
Brain Tissue

Brain Tissue Requirements

• 2-5 grams of tissue minimum
• Grey matter maximized, preferably frontal cortex
• **Must** be shipped within a self standing polypropylene 30 mL tube (pictured)
  • NCRAD will provide these tubes, if needed
Brain Tissue Sample Form

Send by e-mail prior to shipment, and include a copy in each shipment

- Note: Individual ID=PTID
  - (ID submitted to NACC with UDS data)
- Please organize samples within the shipment box in the same order as they are listed on the sample form.
Buffy Coat

Buffy Coat Requirements
- No volume requirements BUT we must receive the whole buffy coat
- No required tubes
  - NCRAD will provide tubes, if needed
    - DOT Scientific 819-S 2.0ml screw cap microcentrifuge tubes with O-ring
### Buffy Coat Sample Form

**Note:** Individual ID=PTID
- (ID submitted to NACC with UDS data)

- Please organize samples within the shipment box in the same order as they are listed on the sample form.

Send by e-mail prior to shipment, and include a copy in each shipment.

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Individual ID</th>
<th>Volume</th>
<th>Gender</th>
<th>Year of Birth</th>
<th>DNA Source (blood, cell line, brain tissue)</th>
<th>Date Drawn (date of blood draw or autopsy)</th>
</tr>
</thead>
</table>
Transferred DNA

Transferred DNA Requirements

- Specimen should be at least 20 ug
- Minimum concentration of 0.1 ug/ul
- Minimum volume of 50 ul
  - Note: do not send 50ul at 0.1ug/ul in total as that is not enough DNA. However, when sending 20ug, please do not use a concentration less than 0.1ug/ul and do not send a volume less than 50ul.
- Must be shipped in DOT Scientific 819-S 2.0ml screw cap microcentrifuge tubes with O-ring
- NCRAD will provide tubes, if needed
DNA Sample Form

- Note: Individual ID=PTID
  - (ID submitted to NACC with UDS data)
- Please organize samples within the shipment box in the same order as they are listed on the sample form.

**Send by e-mail prior to shipment, and include a copy in each shipment**
Sample Shipments
Frozen Samples

Ship Monday-Wednesday Only

- Hold packaged samples in a -80°C freezer until pickup.

- Batch Samples together
  - Please organize samples within the shipment box in the same order as they are listed on the sample form.
  - Ensure that all samples are appropriately labeled

- Use dry ice pellets
  - Do not use dry ice chunks: will crack the tubes and damage the specimens

- Schedule UPS Pickup

- Send Sample Form to IU ahead of shipment
  - Email: alzstudy@iu.edu
Future Directions
ADCFB

Alzheimer’s Disease Centers Fluid Biomarker Initiative
- Uniformly collecting and processing blood samples across all Centers
- Send samples to NCRAD

Launched in June 2019
- Aim to collect samples from 3,000 subjects by June 2020
- 20 Centers currently participating

Benefits to Centers
- Standardized collection protocol to facilitate cross center studies
- ADCs paid for sample collection
- Subset of Center’s biospecimens reserved at NCRAD and returned back to Center at no cost
- New grant being written to obtain data from these samples
  - Plasma assays
  - GWAS
  - Select routine labs (e.g. HbA1C)
- Future opportunities for training/education through the use of these samples
## ADCFB Kits

<table>
<thead>
<tr>
<th>Kit Type</th>
<th>20 ml</th>
<th>40 ml</th>
<th>50 ml</th>
<th>52.5 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20</td>
<td>40</td>
<td>50</td>
<td>52</td>
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</tbody>
</table>
### ADC FB Study Specimens

<table>
<thead>
<tr>
<th>Biospecimen</th>
<th>Visit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasma</td>
<td>X</td>
</tr>
<tr>
<td>Buffy Coat (DNA)</td>
<td>X</td>
</tr>
<tr>
<td>PBMC</td>
<td>X</td>
</tr>
<tr>
<td>Serum</td>
<td>X</td>
</tr>
<tr>
<td>Whole Blood (RNA)</td>
<td>X</td>
</tr>
</tbody>
</table>
**Contact Information**

Kaci Lacy
- Phone: (317) 278-1170
- E-mail: lacy@iu.edu

General NCRAD Contact
- Phone: (800) 526-2839
- E-mail: alzstudy@iu.edu
- Website: www.ncrad.org