

# ADRC Participant Access Request

## Access Request Goal

Goal - Formal request for ADRC data

## Principal Investigator

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No Co-PI listed in survey

# Study and Theme Details

## Hypothesis

Hyperactive fear memory, the core element of PTSD, increases with aging and is accelerated in AD due to progressive inflammatory-driven neurophysiological deficits in the BLA

## Specific Aims

In Specific Aim 1, this proposal will leverage a rodent fear conditioning protocol that models a critical component of PTSD (i.e., the inability to extinguish hyperactive fear memory) and assess how aging and Alzheimer's disease contribute to BLA cellular dysfunction (both ex vivo and in vivo during fear extinction) and inflammation.

Additionally, in Specific Aim 2, this proposal will determine if a ketone ester dietary intervention (known to have anti-epileptic and anti-inflammatory properties) or BLA inactivation can facilitate fear memory extinction and improve BLA hyperactivity and pathology in age and AD.

This study is not related to Deep South disparities

## Funding and IRB Details

Funding source - Already funded

Entity - NIH funded grant/application

Details - NIA K99AG078400

IRB Contact - Not yet discussed project with IRB

## Subject Sample Size and Profile

### Sample size by cognitive ability

Normal Controls	1
Moderate to Severe	1
<b>Total N</b>	<b>2</b>

### Additional inclusion/exclusion details

NA

### Racial minorities and other stratification

This study does NOT test hypothesis on racial disparities

### Additional stratification details

It would be good to know any history of neuropsychiatric disorder.

## Requested Resources

Banked biospecimen

Brain tissue

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Fixed

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Parafin

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Region (Amygdala)

## Statistical support

Would like to discuss statistics with the ADRC