

## NIA LOAD Study: The Next Phase

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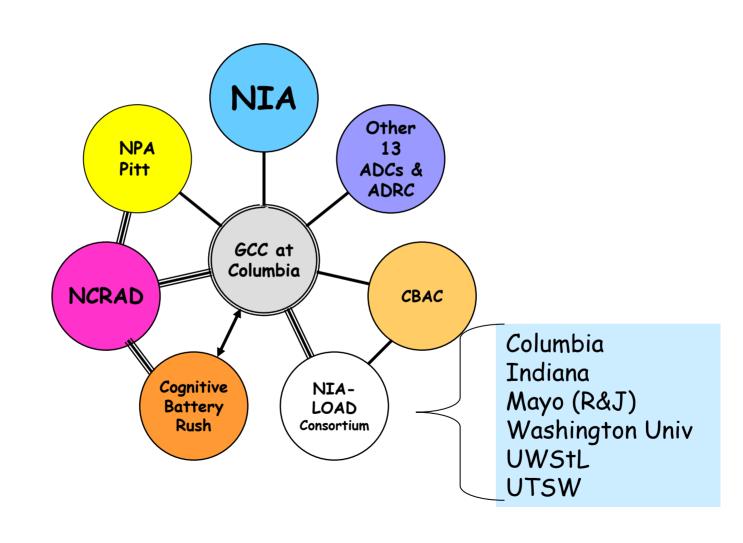


## Goals

- 1. Complete the collection of 1,000+ families
- 2. Identify newly affected family members and unaffected members in recruited families
- 3. Begin standardized follow-up procedures
- 4. Expand phenotyping with quantitative traits
- 5. Complete the recruitment and begin follow-up of controls
- 6. Analysis of data from CIDR in the first 300+ families
- Make samples, clinical data, genotyping data and preliminary analyses available to all qualified investigators

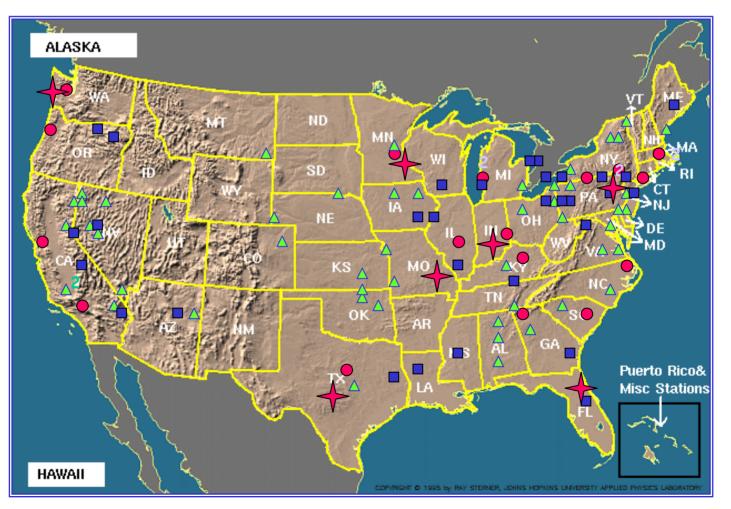


## NIA-LOAD: Phase II





## NIA LOAD Genetics Initiative





## LOAD Study Samples (10/4/06)

- 420 completed families (341)
- 369 qualifying families (297)
- 935 pedigrees Approved\*
  - 825 families approved and actively recruited
  - 590 families with 1 or more samples at NCRAD (3,003 individuals)
- · 414 controls/355 with data and samples



## NIA LOAD: Phase II Why are more families needed?

- May be as many as 4 -5 additional major genetic variants
- Large sample sizes are required to examine gene\*gene interactions (e.g. APOE- $\epsilon$ 4 ~ 12% with AD10 ~20% = 2.4% with both variant alleles)
- Large sample sizes are also required to examine gene\*environment interactions, (e.g.  $APOE-\varepsilon4 \sim 12\%$  with stroke  $\sim 15\% = 1.8\%$ )



# NIA LOAD Study

- Establish a collection of families predisposed to Alzheimer's disease so that scientists can:
  - Identify all or most of the genetic variants
  - Have better understanding of disease pathogenesis
  - Develop a clearer understanding of risk and how genetic variants interact with environmental and other health risk factors
  - Develop new treatments



## Role of ADC - Education Core

- · Educate all members of the team
  - Never know who is going to remember that brother who also has AD
- · Educate our patient's families
  - "what's in it for them?"
- · Encourage continued participation
- Pamphlets
- Slide for talks

# Get Your Family Involved in the NIA-LOAD Genetic Initiative

National Cell Repository for Alzheimer's disease:

Hot Line: 1-800-526-2839

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