

## DAC Global Cohorts Program

### Who we are:

We are a global research network, promoting a collaborative, multi-modal approach—spanning genomics to digital tools—to understand Alzheimer’s disease in diverse settings. **DAC’s Global Cohorts Program (GCP) has a portfolio of seven active cohorts.**

### What we do:

DAC GCP validates tools for assessing dementia across diverse populations, creating global standards. This enables data collection, early interventions in low-resource settings, and collaboration among brain health researchers.

We aim to generate insights from a globally connected network of Alzheimer’s disease and brain aging cohorts, reflecting the disease’s diversity, patient environments, and lived experiences.

### Where we are active:

#### 1) Kenya (n = 5,000)

Ethnographic profiling, bio-sample collection (blood, saliva) for genetics & genomics, FDG-PET, and cognitive assessments in a clinical based cohort for development & validation of a novel (digital) cognitive assessment suite for early detection of cognitive decline and AD

#### 2) South Korea (n = 3,000)

Partnership provides support for bio sample collection from individuals representing all stages of Alzheimer’s disease based on clinical assessments, and neuroimaging (MRI; amyloid & tau PET) confirmation (*see QR code below*)

#### 3) LATAM/Caribbean (n = 14,000)

Partnership with 10/66 to curate and harmonize 10 years of trans-national cognition, clinical and socio-demographic data from 14,000 participants across 3 waves. Data accessible via the ADDI data platform (*see QR code below*)

#### 4) Egypt (n = 20,000)

Population-based sampling with detailed baseline data collected on demographics, health status, lifestyle, cognitive function, bio-samples, dried blood spots for validation of risk assessments and early diagnosis tools (blood and digital) (*see QR code below*)

#### 5) India (n = 10,000/year)

High throughput brain health assessments via cognitive tests, digital measures such as speech, eye tracking, retinal imaging (OCT, Fundus), olfactory, mental health scales and risk factor questionnaires in workplace and community settings

#### 6) Chile (n = 8,900)

Digital cognitive assessments (speech, cognition), environmental tox exposure & bio-sample collection to validate diagnostic tools (digital, blood) and study impact of environmental stressors in brain health and cognition

#### 7) Malaysia (n = 6,000)

Collection of (longitudinal) digital cognitive assessments, blood, and cognitive frailty to validate early diagnostic tools and blood biomarkers

### DAC Global Cohort Research Interests

- Blood biomarkers & (epi)genetics
- Brain health & climate change
- Brain health & risk reduction
- Digital diagnostics
- Data harmonization
- Resilience markers of cognitive aging



**Domains Assessed:**  
Memory, Language, Executive Function, Attention/Speed

**Speech:** Verbal memory (word list recall), semantic verbal fluency (animal naming)

**Blood**  
Saliva, Urine, Hair, Fecal (subset)

Mental Health (Depression, Anxiety, Stress)

Heat, Air Pollution

**Tools Used:**  
HCAP, TabCAT, CSI-D MoCA

**Olfactory:** 16 smell odor identification

**Ocular:** OCT, Fundus (India)

Social Isolation  
Co-morbidities (Cardiometabolic)

Neurotoxin exposure (questionnaire + wrist bracelets)

**Clinical Diagnoses:**  
(Neurologists, Consensus Clinical Diagnosis)

Hearing Loss  
Smoking, Alcohol  
Head injuries

### How to Access:

- Data from 10/66, Egypt, and South Korea are accessible via the AD Data Initiative’s AD Workbench



### Other DAC Cohort Activities:

- Expanded the **DAC Global Scholars program** with 3 fellows in the first wave to accelerate insight generation locally and across cohorts, incl. diagnostics frameworks, brain age gap, and exposome research