

# CRELES:

## Costa Rican Longevity and Healthy Aging Study

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### PRINCIPAL INVESTIGATORS

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### FUNDING

Wellcome Trust  
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# Two Data Cohorts: Nationally representative sampling

- CRELES “Original Cohort”: Born pre-1945
  - N=2827 sampled from 2000 census (age 55+)
  - Interviewed 2005, 2007, 2009
    - ~10% died each wave, with family death interview
    - ~6% lost to follow-up each wave
- CRELES-RC “Retirement Cohort”: Born 1945-1955
  - N=2798 ages 55-65 + 1338 spouses
  - Interviewed 2010, 2012
    - 89% re-interviewed in wave 2

# Objective Health Measures

- Anthropometry, blood pressure
- Observed functioning:
  - grip strength, spirometry, standing on one foot, bending and crouching, timed walk
- Blood/urine:
  - CRELES original (similar to Taiwan SEBAS):
    - Fasting blood in 2005 and 2007
      - HbA1c, glucose, cholesterol (total, HDL, LDL), triglycerides, C-reactive protein, creatinine, DHEAS
    - Overnight urine in 2005
      - Cortisol, creatinine, epinephrine, norepinephrine
  - CRELES-RC (similar to U.S. HRS):
    - Non-fasting venous blood in 2010
      - HbA1c, total and HDL cholesterol, C-reactive protein
- DNA samples, telomere length

# Future Data Plans

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- No current plans for new survey waves
- Harmonized data in USC's HRS Global Aging Data Repository <https://g2aging.org>
- Adding GIS-linked data:
  - Neighborhood questionnaire, by interviewer
  - Health facility mapping, clinic surveys
  - Satellite weather, air quality
- Possible voting, pension linkages
- Mortality tracking in death registry
  - CRELES respondents
  - CR National Longitudinal Mortality Study, following 20,000 ages 35+ from 1984 census