



***Transforming Everyday Life  
into Extraordinary Ideas***





# The Canadian Longitudinal Study on Aging: Design Overview, Milestones, and Participant Characteristics at Baseline

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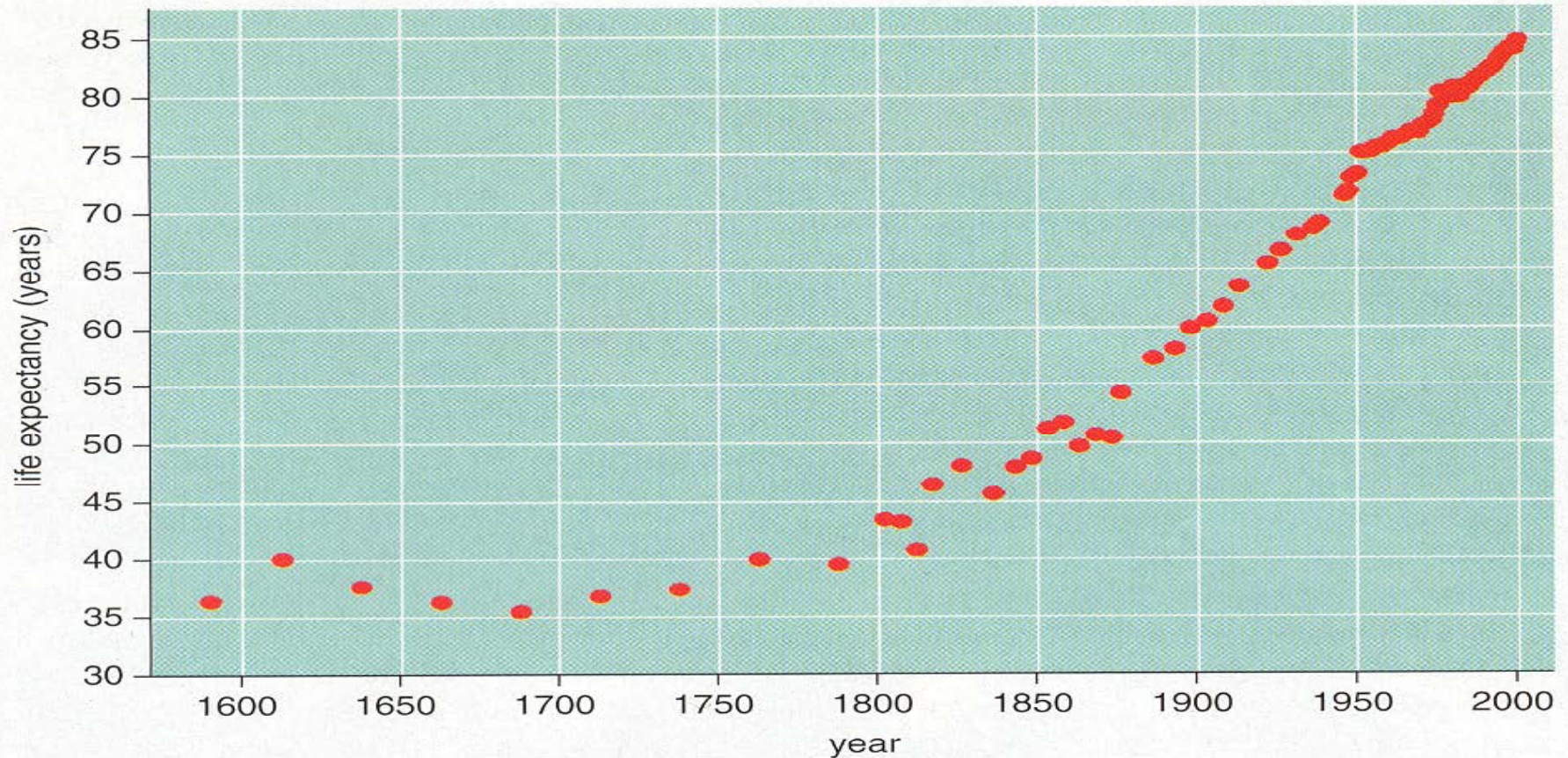


# Population Aging in Canada



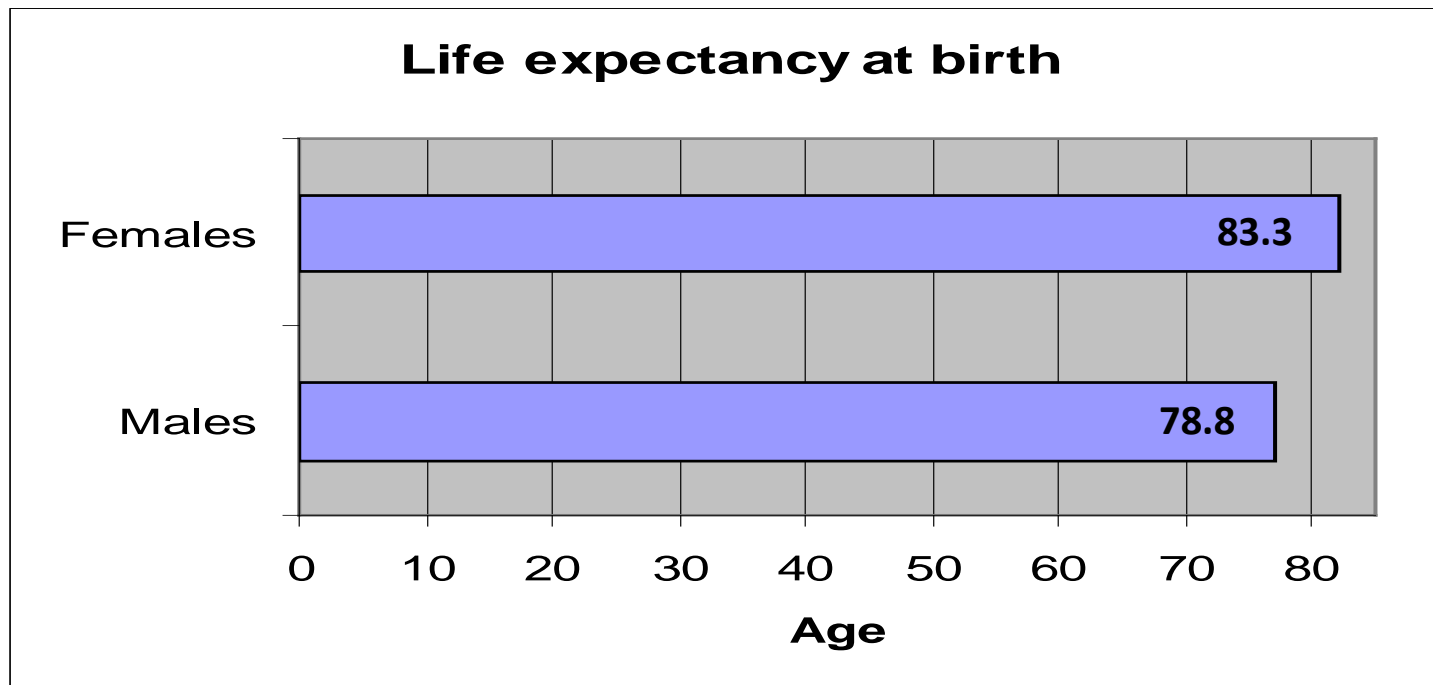
- Canadians are living longer and older people are making up a larger share of the population
- 1 in 6 Canadians (16%) are 65 or older
- By 2025 1 in 5 (20%, 8M) will be over 65

# Life expectancy continues to increase by about 2 years per decade



# Life expectancy

## Statistics Canada



At age 65: Women 21.6 years (86.6)

At age 65: Men 18.5 years (83.5)



# Challenge: Live long AND well

Need to shift our focus:

- Mortality
  - Morbidity
  - Longevity
- ➔
- Function
  - Ability/Disability
  - Well being
  - Quality of life
  - Autonomy/Independence



# The Canadian Longitudinal Study on Aging (CLSA)



- Team of 3 principal investigators, more than 160 co-investigators from 26 institutions
- Involves experts from a wide range of disciplines - biology, genetics, medicine, psychology, sociology, economics, epidemiology, nutrition, health services
- Largest study of its kind to date in Canada
- An epidemiologist's dream!

# Design Overview

**50,000 women and men aged 45 – 85 living in the community at baseline**

**Tracking (20,000)  
Randomly selected  
10 provinces**

**Questionnaire**  
• By telephone (CATI)

**Comprehensive (30,000)  
Randomly selected  
25-50 km of 11 sites in 7 provinces**

**Questionnaire**  
• In person, in home (CAPI)

**Physical Assessments  
Blood, Urine**  
• At Data Collection Site

**20 year study: Full follow up every 3 years, maintaining contact in between**

**Data Linkage**



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# National Scope Representative Sampling Frame



# CLSA covers a wide range of aspects relevant to aging



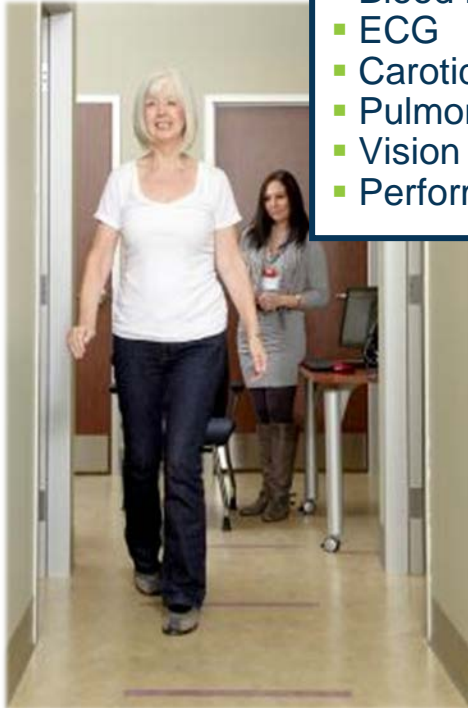
- **DEMOGRAPHIC**
  - Education
  - Marital status
  - Ethnicity
- **HEALTH BEHAVIOURS**
  - Smoking, alcohol
  - Nutritional risk
  - Food frequency
  - Physical activity
  - Health care utilization
  - Medication use
  - Supplement use
  - Sleep
  - Consumer products (assistive devices)
- **HEALTH STATUS**
  - General health
  - Women's health
- Chronic conditions, symptoms
- Oral health
- **PHYSICAL**
  - Injuries, falls
  - Mobility
  - Pain, discomfort
  - Functional status
  - ADL, IADL
  - Life space index
- **PSYCHOLOGICAL**
  - Cognition—Executive function, memory, psychomotor speed
  - Depression
  - Mood
  - Psychological distress
  - Veteran identifier
  - Satisfaction with life
- PTSD
- **SOCIAL**
  - Social networks
  - Social support
  - Social participation
  - Online communication
  - Social inequality
  - Care receiving
  - Care giving
  - Retirement status
  - Labour force participation
  - Retirement planning
  - Transportation
  - Mobility, Migration
  - Built environments
  - Home ownership

# CLSA Data Collection

## Data Collection Site

### Physical Assessments:

- Height, Weight, BMI
- Bone Density, Body Composition, Aortic Calcification
- Blood Pressure
- ECG
- Carotid Intimal-Medial Thickness
- Pulmonary Function
- Vision & Hearing
- Performance testing



### Biospecimen Collection:

- Blood
- Urine

### Cognitive Assessments:

- Neuropsychological Battery
  - Memory
  - Executive function
  - Reaction time



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# What you don't get to see...





# Data and Biospecimen Access

- **Fundamental tenets:**
  - The rights, privacy and consent of *participants* must be protected and respected at all times
  - The confidentiality and security of *data and biospecimens* must be safeguarded at all times
  - CLSA data and biospecimens are resources that will be used optimally to support research to benefit all Canadians
  - Available to researchers at public institutions by applying to the CLSA Data and Sample Access Committee



# Milestones

- Recruited 51,338 participants
- Baseline data available for use by researchers
- Will finish the first follow up in Spring 2018
- 99 projects approved to date to use the CLSA data



# The CLSA includes....

- Veterans
- Aboriginal peoples
- Francophone population
- Ethnic groups
- Urban and rural populations
- People living with chronic diseases
- Caregivers
- Retirees

# Interesting facts about CLSA participants...

- 19% chose to be interviewed in French
- 84% live in a house
- 46% have a pet
- 93% voted in the last election
- 16% were born outside of Canada
- 23% use an assistive device for hearing, vision, mobility
- 40% say their health is excellent, 20% say their health is very good, 30% say their health is good, 10% say their health is fair or poor
- 86% are satisfied with their life



# CLSA Research Team

## Operations Committee and Scientific Leads



# CLSA Funders and Partners



Veterans Affairs  
Canada



Anciens Combattants  
Canada

Health PEI





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but we couldn't do it without our participants.  
THANK YOU!**



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