



**CLSA** Canadian  
Longitudinal  
Study on Aging

**ELCV** Étude Longitudinale  
Canadienne sur le  
Vieillessement

**The Canadian  
Longitudinal Study on Aging (CLSA): Understanding the  
complexity of aging and health through interdisciplinary research**

**Quebec seniors' research workshop on research, Montreal  
April 28, 2006**

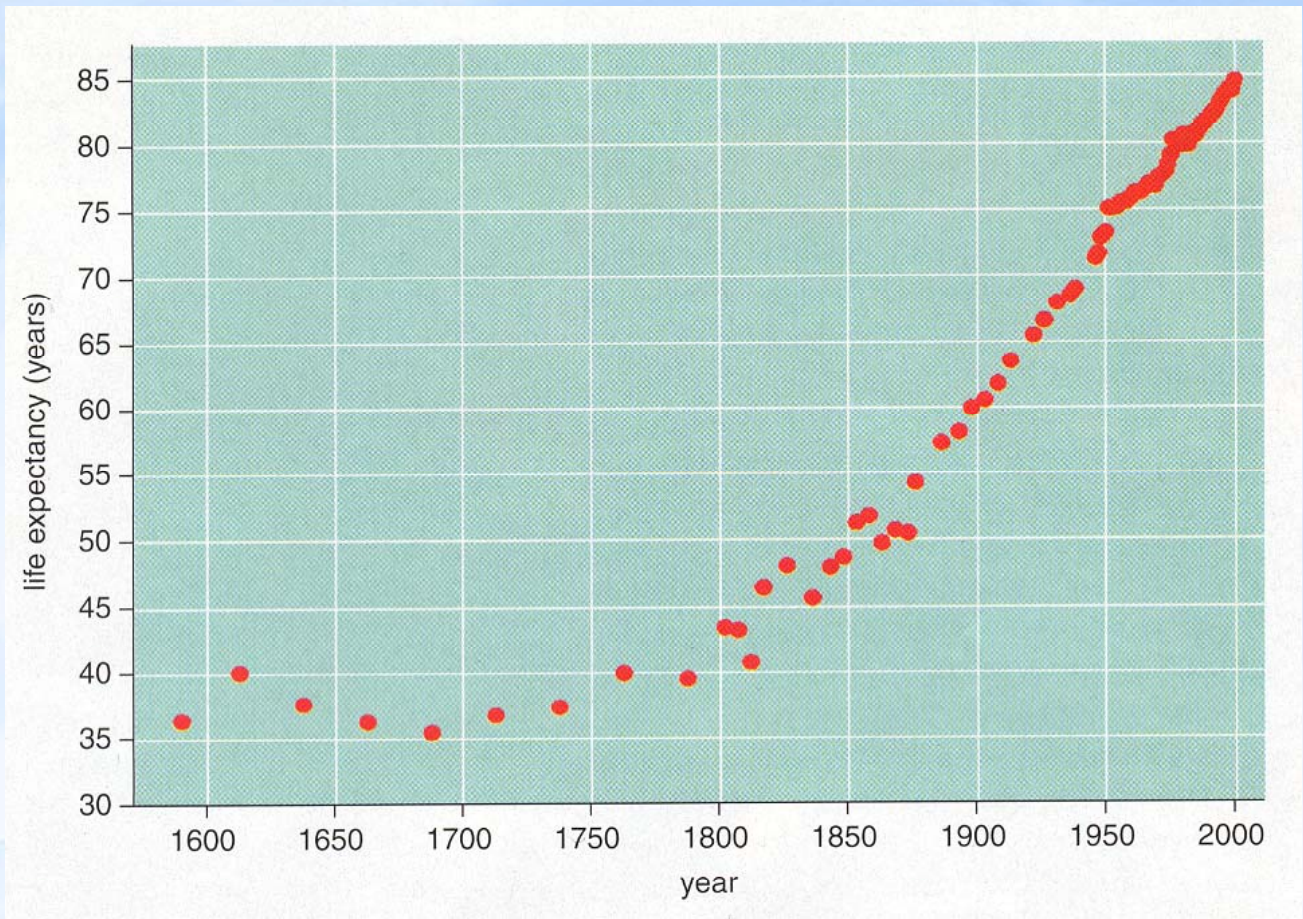
**Christina Wolfson, PhD  
McGill University**

# Why Study Aging in Canada?

- Canadians are living longer and older people are making up a larger share of the population.
- Between 1980 and 1999, the average Canadian's life expectancy increased to 79 years from 75 years.
- By 2025, 1 out of every 5 Canadians (20%) will be 65 or older, compared to 1 in 8 (12%) in 2000.

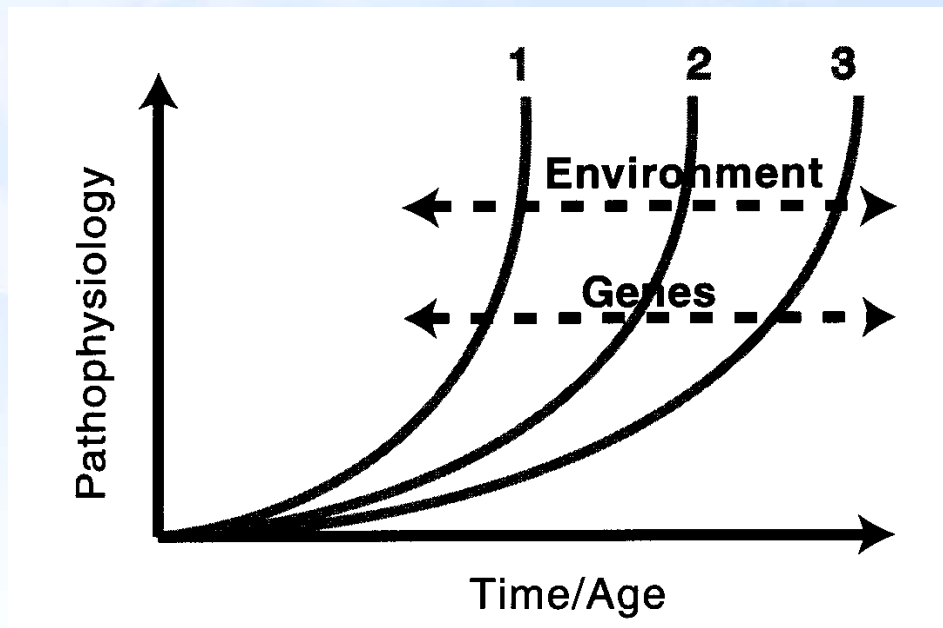
# Why Study Aging in Canada?

- Baby boomers begin turning 65 in 2011
- Different needs, expectations
- Implications for health care system, social programs
- Need for evidence based decision making
- Generation of new knowledge



# Why does Aging happen?

- What is “normal” in the aging process - primary aging
- More susceptibility to disease - secondary aging
- More heterogeneity in the elderly population
- Onset indeterminable and progression varied
- Genetic and environmental factors



# Why does Aging Happen?

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- Genes
- Nutrition
- Lifestyle
- Environment
- Chance

# Future of Research on Aging

- Age-related changes---"complexity"
  - INDIVIDUAL LEVEL
  - SOCIETAL AND CONTEXTUAL LEVEL
- Innovative study design that advance science of aging and health as well as inform health and social policy
- Need for interdisciplinary long-term longitudinal studies

# What is the Canadian Longitudinal Study on Aging (CLSA)?



# The Canadian Longitudinal Study on Aging (CLSA)

- One component of the Canadian Lifelong Health Initiative, a strategic initiative of CIHR
  - The Canadian National Birth Cohort
  - The Canadian Longitudinal Study on Aging (CLSA)

# CLSA Conceptual Framework

- Characterize aging beyond the absence of disease: Healthy/successful aging
- Aging not aged
- Life course approach
- Determinants of health
- Continuum of micro to macro levels
- Complex interplay of bio-psycho-social
- Gene-environment interactions
- Adaptation

# Overall Aims of the CLSA

- To examine aging as a dynamic process.
- To investigate the inter-relationship among intrinsic and extrinsic factors from mid life to older age.
- To capture the transitions, trajectories and profiles of aging: healthy/successful aging.
- To provide infrastructure and build capacity for sustained high quality research on aging in Canada.

# Who will Participate in the CLSA?

- Longitudinal study
- Women and men aged 40 and over
- 50,000 individuals
- 20 year follow-up
- Repeated measurement (every 3 years)
- Linkage to existing databases
- Eventual public access data

# What Issues is the CLSA Trying to Address?

# PHYSICAL HEALTH

- Activities of daily living/disability
- Co-morbidities
- Chronic diseases
  - Cardiovascular, cerebrovascular,
  - diabetes, hypertension, Parkinson's disease, cognitive impairment, osteoporosis, injuries, arthritis, cancer
- Health conditions and states
  - Oral health, communication, vision, hearing



# PSYCHOLOGICAL HEALTH

- Cognitive functioning
- Values and meaning
- Everyday competence, adaptive functioning, coping
- Personality, emotion, psychopathology
- Psychological distress

# SOCIAL HEALTH

- Social networks and social support
- Work to retirement transitions
- Structural inequalities
- Matters of place and mobility
- Basic social characteristics



# BIOLOGY

- Biochemical, physiological, metabolic markers of aging
- Genetics of aging
  - disease susceptibility
  - longevity

## BEHAVIOURS

- Nutrition/diet
- Obesity
- Physical activity
- Alcohol/Tobacco
- Sleep

## HEALTH SERVICES

- Medications
- Assistive devices
- Institutional care
- Homecare

# What kind of Information will the CLSA collect?

# Active data collection

- **Telephone Interviews**
- **Face-to-face Interviews**
  - Psychological, social, economics, nutrition
- **Clinical examination**
  - Neuropsychological, medical, physical measures
- **Blood and urine samples**

# “Passive” Data Collection

- **Data linkage at the individual level (with consent) to existing databases:**
  - **Administrative databases:**
    - physician services, hospitalizations, medications
    - homecare, community services, mental health
  - **Death certificates**



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# What are some Ethical, Privacy and Confidentiality Issues in the CLSA?

- Informed consent

- Capacity to consent

- Cognitive versus other factors that may impact on the capacity to consent
    - Proxy consent

- Full consent versus staged consent

- 20 year duration
    - For biological samples, clinical assessment, questionnaire based information
    - Genetic and biochemical testing
    - For unspecified research projects in the future
      - Blanket consent versus issues related to re-consent



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- Informing participants/family physicians
- Risks and benefits
- Linkage with existing healthcare and other data bases
  - Privacy and confidentiality
  - Data ownership issues
- Facilitating the Public access of CLSA data
  - protecting confidentiality and privacy
  - Timely use of the data
  - Promoting innovative research



# How will Canadians benefit from the CLSA?

# Benefits

- New knowledge on factors that affect health and aging.
- Identification of ways to prevent disease and disability, and promote healthy aging and improved services.
- Rapid adoption of sound research into practice, programs and policies.

# Benefits

- Building capacity and providing opportunities for existing and new Canadian and international researchers.
- Platform for future research.
- Recognition of Canada's position as a leader in cutting edge health and health care research.
- Stimulation of the economy through discovery and innovation.

# Who is Working Behind the Scenes on the CLSA?

# The CLSA Research Team

- 3 Principal Investigators
  - Christina Wolfson (McGill)
  - Parminer Raina (McMaster)
  - Susan Kirkland (Dalhousie)
  
- 180 clinicians and researchers from across Canada
  - All 10 provinces
  - 26 Universities

# Ethical, Legal, Societal Issues (ELSI)

- Special committee set up by CIHR
  - Lawyers
  - Ethicists
  - Philosophers
  - Geneticists
  - Epidemiologists
  - Social scientists
  - Privacy commissioner
  - Community representative

# Canadian Institutes of Health Research

- Institute of Aging (Dr. Anne Martin-Mathews)
- Other Institutes of CIHR
- Dr. Alan Bernstein (President of the CIHR)
- Governing Council (CIHR)

# Where is the CLSA Train now and where is it going next?



# CLSA TRAIN

**November 2001**  
Planning Workshop and RFP launch

**January 2002**  
Investigator Team Responds to RFP

**October 2002 – December 2003**  
Protocol Development

**March 2004**  
International Peer Review Site Visit

**June 2004**  
Review of Development Phase Activities

**April 2004 - December 2005**  
Revision of Protocol and CLSA Feasibility Studies



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# CLSA Developmental Phase

- Phase I: April 1, 2004 to December 2005
  - Refine the study content
  - Conduct methodological feasibility studies
- Phase II: January 2005 to December 2006
  - Content related feasibility studies
  - Validity, reliability testing and translation of selected measures
- Phase III: January 2007 to March 2008
  - Pilot full protocol

# Proposed CLSA Launch 2008!



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**Contact Us:**

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