Milestones

2001: Aylmer Meeting and RFA launch
2002: Response to RFA and funding of CLSA protocol development
    – CLSA recognized as strategic initiative of FRSQ geriatric reseau – funding provided
2004: Submission of CLSA protocol for international review
2004: Submission of, and funding for, Phase I of developmental studies
2006: Submission of Canada Foundation for Innovation application
2006: Submission of, and funding for, Phase II (80%) developmental studies
Accomplishments
Networks and Collaborations

- Established network of researchers
  - McMaster, McGill and Dalhousie
  - Support from 26 academic institutions
  - 180 co-investigators
    - 80 investigators played the major role in content development
  - International Collaborations

- Statistics Canada, Health Canada, PHAC, HRSD

- Support from CIHR and its Institutes (IA), FRSQ Geriatric Réseau
Accomplishments

- Development of protocol – version 1
- Refinement of protocol
  - Development of thematic templates
  - Design modification
- Ethical, Legal and Societal Issues
- Phase 1 feasibility studies and activities
CLSA OVERVIEW
The Canadian Longitudinal Study on Aging (CLSA)

A key component of the Canadian Lifelong Health Initiative, a strategic initiative of CIHR

The Canadian National Birth Cohort

The Canadian Longitudinal Study on Aging

Interdisciplinary - biology, genetics, medicine, psychology, sociology, demography, economics, epidemiology, nursing, nutrition, health services, biostatistics, population health
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: successful aging.
- To provide infrastructure and build capacity for sustained high quality research on aging in Canada.
Innovation - Cell to Society

- Mid life to old age
- Quantitative traits
  - Physical
  - Social
  - Psychological
- Gene-environment interactions
- Disease, disability, psychosocial consequences
- Adaptation
Aging

Innovation

Environmental influences
(e.g., rural, socio-economic, exercise, nutrition)

Chronic diseases
(e.g., diabetes, cancer, dementia, arthritis, cardio)

Genetics

(e.g., telomeres/oxidative stress, psychological & cognitive abilities, immune functions)

Aging

Infections

Health Services Utilization

Time (Longitudinal Study)
Focus of Measurement

Biomedical

- Activities of daily living/disability/injuries
- Frailty/co-morbidities
- Chronic diseases
- Cognitive function
- Mental Health
- Oral health
- Vision, hearing
- Medications
- Health Care Use
- Institutional care
- Genetics/Biomarkers
- Nutrition

Psychosocial

- Lifestyle/behaviours
- Social networks and social support/Social participation
- Values and meaning
- Everyday competence, adaptive functioning, coping
- Personality, emotion, psychopathology
- Work to retirement transitions
- Structural inequalities
- Built environments/physical environment
- Economics (wealth)
- Healthy aging and well being
CLSA Architecture

Data collection on all 50,000
Questionnaires, Database linkage
Follow-up over 20 years

Inception Cohort: 50,000
In-depth data collection on 30,000 (at 10 sites)
Clinical, Biological, Physical

Every 3 years age 40-79; Every year age 80+
Canada Foundation for Innovation
Application for Infrastructure
The Vision

A national network of infrastructure to enable state-of-the-art longitudinal interdisciplinary population based research across Canada

Once in place this network will support the largest interdisciplinary research project in aging conducted to date: the **Canadian Longitudinal Study on Aging**
Core National Network of Facilities

National Coordinating Centre

Manage and Coordinate; Timelines; Develop Protocols, Procedures; Training & Documentation

Operations Data / Measures / Analyses

Interim Follow Up

Operations Data

Operations

Operations Data Collection Sites (10)

CATI Data Collection Centre

Data Management / Statistics Centre

Biological Sample Kits

Primary & Operations Data

Primary & Operations Data
CURRENT ACTIVITIES

- Phase 2
  - Finalizing the measures
  - Interview/training manuals
  - Pilot studies
  - Pilot field test of the full CLSA in late 2007
Collaboration with Statistics Canada

- CCHS 4.2 in 2008
  - Healthy Aging
  - CLSA team- CCHS content development
  - Inception Cohort for CLSA
  - Data access working group
Email: CLSA@epid.jgh.mcgill.ca
Website: www.CLSA-ELCV.ca
Study Architecture

- 50,000 individuals
- 20 year follow-up beginning in 2008
- Women and men between the ages of 40 and 85 at baseline
  - Boomers
    - Born between 1946 (62 y in 2008) and 1964 (44 y in 2008)
  - “pre” and “post” boomers
    - Born between 1923 and 1968
- Community dwelling at baseline
- Repeated assessment every 3 years
- Linkage to existing databases
The Data

- Questionnaires administered over the phone or in person to all 50,000 participants
- Subgroup of 30,000 individuals selected to undergo in-depth “comprehensive” assessment over the course of the study
  - within a reachable distance of study sites that can support the data collection
- The goal is be able to “reassemble” the 50,000 to provide valid and reliable information on the full sample
  - at least with respect to common questionnaire data collected
Data collection: Basic baseline and longitudinal

- Questionnaire data (50,000)
  - Telephone interviews and/or face-to-face
  - Common set of questions
    - demographics, social, economic, nutrition, lifestyle

- Linkage to existing data bases (50,000)
  - Administrative: physician services, hospitalizations, medications
  - Homecare, community services, mental health services
  - Mortality
  - Environmental, neighbourhood indicators

- Infrastructure needs
  - Computer assisted telephone interviews
  - Web based interviews
Data collection: Comprehensive baseline and longitudinal

- Comprehensive (in-depth) assessment (30,000)
  - Additional questionnaire based information face-to-face
    - Social, behavioural, economic, nutrition, lifestyle
  - Clinical/physical assessment
    - Medical, neuropsychological, physical measures
  - Blood/urine samples
    - Blood chemistry panel, biomarkers, genetics, genomics

- Infrastructure needs
  - 10 sites across the country with the capability of high volume throughput
Sustainability

- Research funds for the conduct of the CLSA
  - CIHR, Federal Government
- Networks of Centres of Excellence (NCE)
- Canada Foundation for Innovation (CFI)
- Provincial Funding
  - Fonds de la recherche en santé du Quebec (FRSQ)
**Key Outcomes**

- **Advance** the research agenda in aging, population health
- **Enable** new science leading to reduced disability and suffering among Canadians
- **Inform** social and health care policy, clinical and public health policy
- **Provide** a new framework for interdisciplinary, collaborative research
- **Retain/Recruit** outstanding researchers
- **Train** highly qualified personnel, graduate students, new researchers