

# CLSA OVERVIEW AND UPDATE

Quebec City  
October 28<sup>th</sup>, 2006



# 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

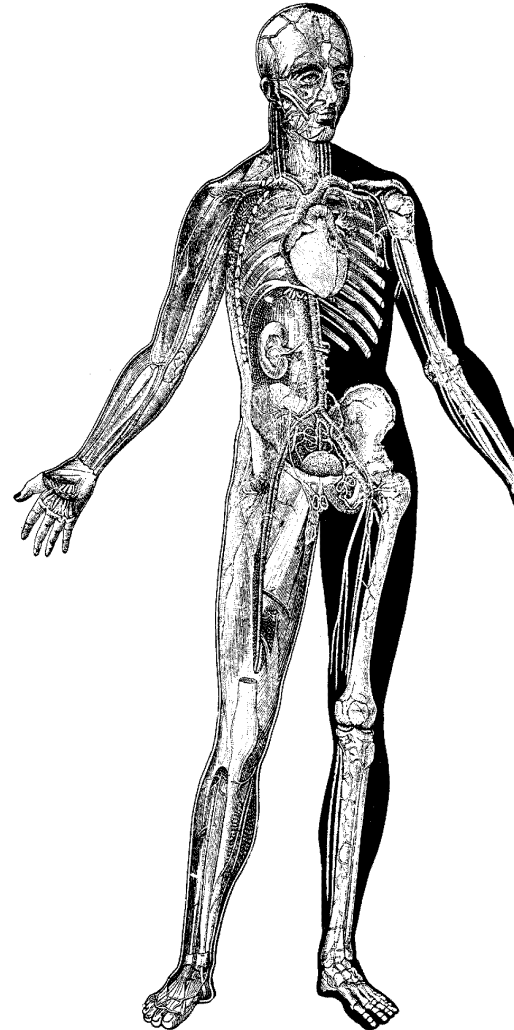
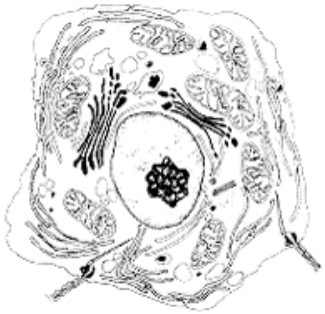
# The Canadian Longitudinal Study on Aging (CLSA)

- ▶ 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

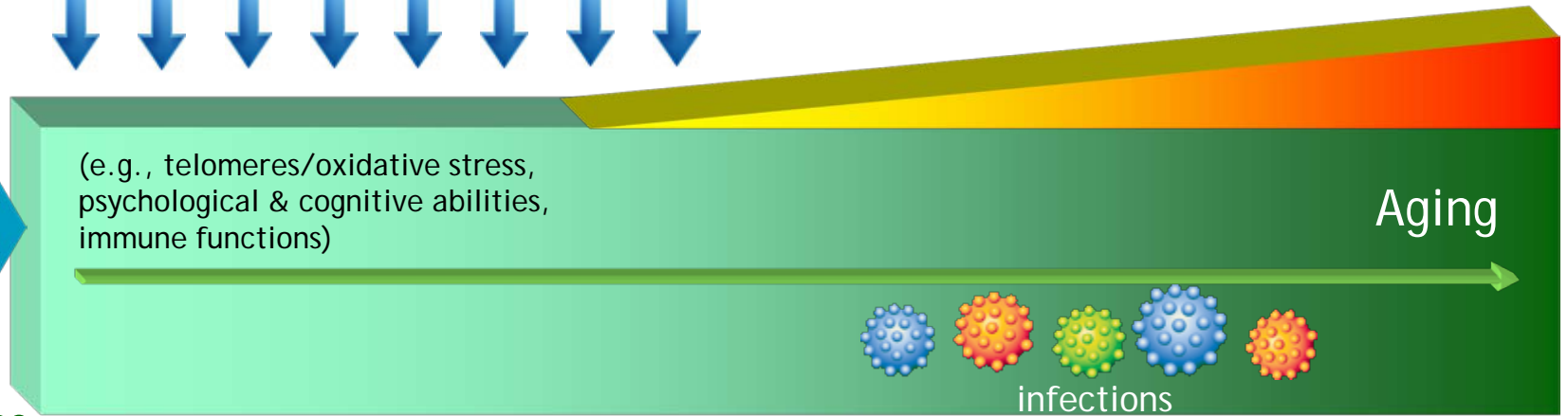


# Innovation

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



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



Genetics

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

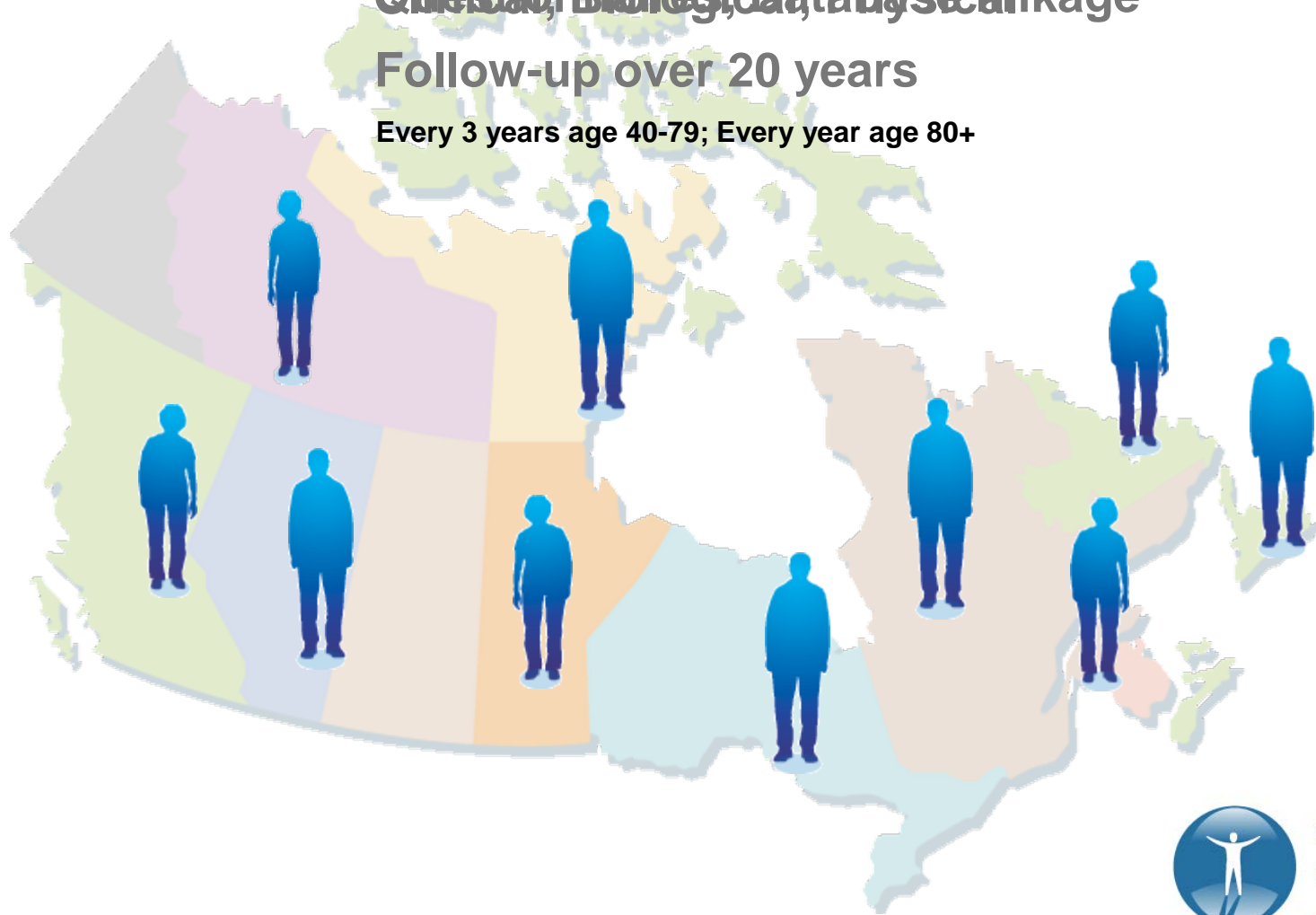


**Population enrolled: 50,000 (at 10 sites)**

**Questionnaires, Biological, and Physical**

**Follow-up over 20 years**

**Every 3 years age 40-79; Every year age 80+**

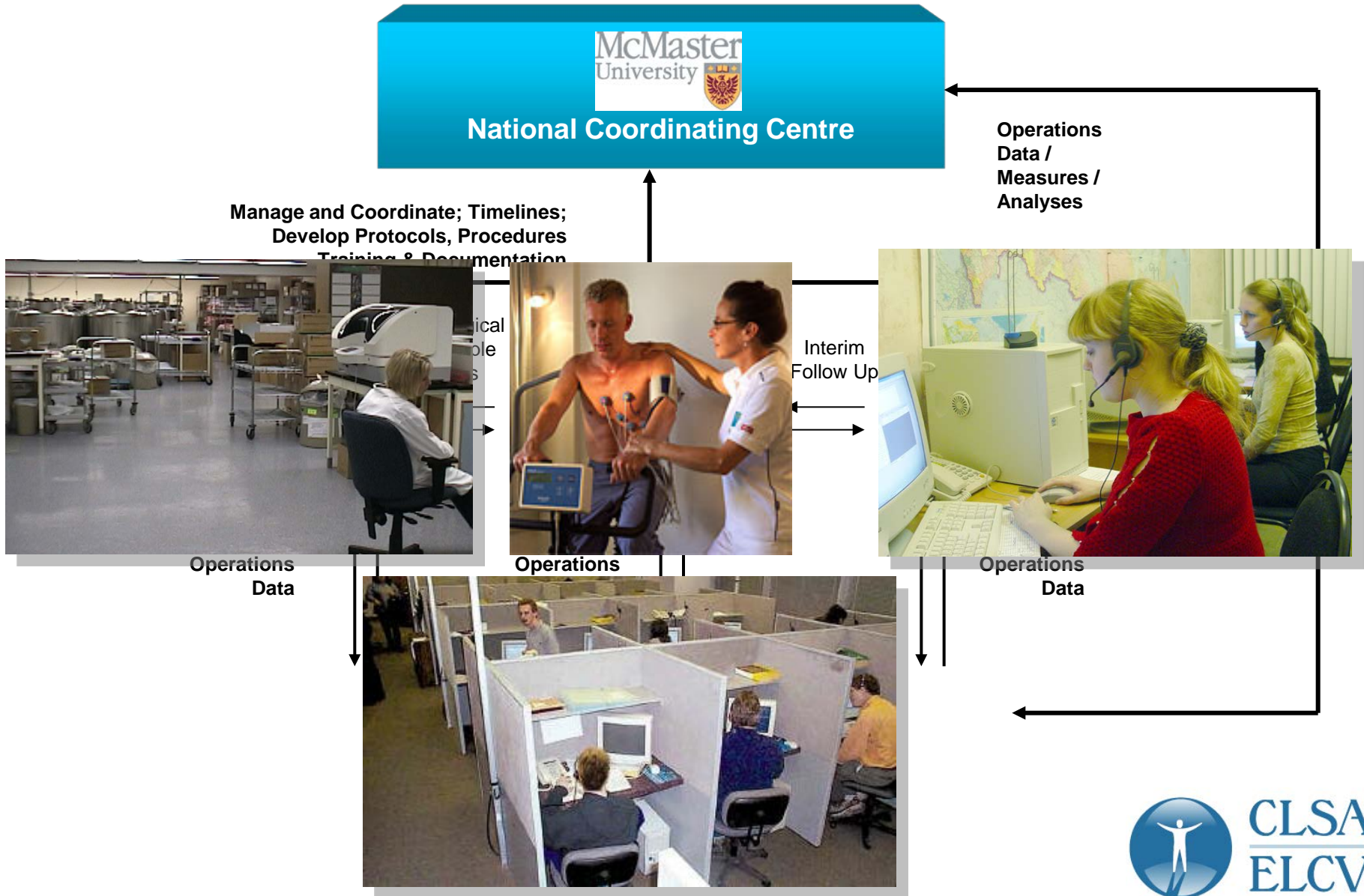


# Canada Foundation for Innovation Application for Infrastructure

# 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



# 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





CLSA  

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ELCV

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# 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

# Partnerships



**Statistics Canada**  
**Health Canada**  
**HRSD**  
**Provincial Agencies**

*Fonds de la recherche en santé*  
**Québec**



**Canada Foundation for Innovation**  
**Fondation canadienne pour l'innovation**




**HEART & STROKE FOUNDATION**  
*Finding answers. For life.*

**Health Charities**  
**Private Sector**



**Alzheimer Society**  
**CANADA**



**CIHR IRSC**



**CLSA**  
**ELCV**

# 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 Québec (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