Navigating the Tides (of Data): Research and Training Opportunities with the CLSA

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CAG Workshop
Moncton, NB
Oct 26, 2019
Navigating the Tides (of Data): Research and Training Opportunities with the CLSA

Overview of the CLSA

Susan Kirkland, PhD
Professor and CLSA Co-Investigator
Dalhousie University

CAG Symposium
Moncton, NB
Oct 26, 2019
The Canadian Longitudinal Study on Aging (CLSA)

- Strategic initiative of the Canadian Institutes for Health Research (CIHR); on Canadian research agenda since 2001

- Team of 3 principal investigators, more than 160 co-investigators from 26 institutions

- Aim is to provide infrastructure and build capacity for state-of-the-art, interdisciplinary, population based research and evidenced-based decision making

- Largest study of its kind to date in Canada for breadth and depth
Participants aged 45 to 85 at baseline (51,338)

Active follow-up every 3 years

CLSA Research Platform

50,000 women and men aged 45 - 85 at baseline

TRACKING
Target: 20,000
Actual: 21,241
Randomly selected within provinces

COMPREHENSIVE
Target: 30,000
Actual: 30,097
Randomly selected within 25-50 km of 11 sites

Questionnaire
• By telephone (CATI)

Questionnaire
• In person, in home (CAPI)

Clinical/physical tests
Blood, urine
@ Data Collection Site

2010 - 2015

2015 – 2018

20 Years

Participants aged 45 to 85 at baseline (51,338)
Inclusion Criteria at Recruitment

• Residing in a Canadian province
• Not living on reserve or federal lands
• Not a full time member of the Canadian Armed Forces
• Able to complete interviews in English or French
• Community dwelling
• Cognitively competent
CLSA Participants in every province
Innovative Electronic Data Capture

- Pre-recruits Sent Study Information
  - Biological Data Processing
    - Blood
    - Urine

- Participants Consent to Participate in CLSA
  - DATA COLLECTION SITE VISIT
    - Physical/Neuropsychological Data

- Participants Provide Questionnaire Data (n=50,000)
  - Stored at Biorepository and Bioanalysis Centre
  - Stored at Statistical Analysis Centre
  - Questionnaire data processing
  - Telephone Interview (n=20,000)
  - Home Interview (n=30,000)

- Data dissemination to researchers
CLSA Questionnaire Modules at Baseline
51,338 participants

Demographic/Lifestyle
- Age
- Gender
- Education
- Marital status
- Sexual orientation
- Language
- Ethnicity
- Wealth/income
- Veteran Identifier
- Smoking, alcohol
- Nutritional risk
- Physical activity
- Health care utilization
- Medication use
- Supplement use

Health
- General health
- Women’s health
- Chronic conditions
- Disease symptoms
- Sleep
- Oral health
- Injuries, falls
- Mobility
- Pain, discomfort
- Functional status
- ADL, IADL
- Cognition
- Depression
- PTSD
- Life Satisfaction

Social
- Social
  - networks
  - support
  - participation
  - inequality
- Online communication
- Care receiving
- Care giving
- Retirement status
- Labour force participation
- Retirement planning
- Transportation
- Mobility, Migration
- Built environments
- Home ownership
CLSA Data Collection
30,000 visit a 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
3 Tablespoons of blood = 42 aliquots per participant
Biorespository and Bioanalysis Centre (BBC), McMaster University

- 31 nitrogen freezers (-190°C)
- Storage for 5 million samples
# Core Biomarkers: Baseline & FUP1

<table>
<thead>
<tr>
<th>Category</th>
<th>N*</th>
<th>Biomarkers</th>
</tr>
</thead>
</table>
| **HEMATOLOGY**                    | 25,427 | • Erythrocytes  
| Data Collection Sites (DCS)      |      | • Granulocytes  
|                                   |      | • Hematocrit  
|                                   |      | • Hemoglobin  
|                                   |      | • Lymphocytes  
|                                   |      | • Platelets  
|                                   |      | • MCV  
|                                   |      | • MCH  
|                                   |      | • MCHC  
|                                   |      | • MPV  
|                                   |      | • RBC  
|                                   |      | • RDW  |
| **CHEMISTRY**                     | 27,012 | • Albumin  
| Calgary Laboratory Services (CLS)|      | • Alanine aminotransferase (ALT)  
| (Analysis repeated every 3 years) |      | • C-reactive protein (CRP)  
|                                   |      | • Creatinine  
|                                   |      | • Cholesterol  
|                                   |      | • Ferritin  
|                                   |      | • Free T4  
|                                   |      | • Hemoglobin A1c (n = 26,961)  
|                                   |      | • HDL  
|                                   |      | • LDL  
|                                   |      | • Non-HDL  
|                                   |      | • Thyroid stimulating hormone (TSH)  
|                                   |      | • Triglycerides  
|                                   |      | • 25-Hydroxyvitamin D  
|                                   |      | • eGFR  |
| **GENETICS**                      | 26,871 | • Genotypes (Affymetrix Axiom array, 794k SNPs)  
| Genetic and Epigenetic Centre (GEC)|      | • Imputation (Haplotype Reference Consortium release 1.1, 39.2M SNPs)  |
| **EPIGENETICS**                   | 1,488  | • DNA methylation  
| Epigenetic Centre (EC)           |      | • DNA extracted from PBMCs  
|                                   |      | • 850K Infinium MethylationEPIC BeadChip (Illumina)  |
| **METABOLOMICS**                  | 10,000 | • LC-MS/MS systems  
| Metabolon                         |      | • ~1,300 metabolites  |

*N represents Baseline only. Biomarkers from Follow-up 1 are forthcoming.
Linkage with CANUE and Health Canada datasets

Social & Material Deprivation Indices

Air Quality

Can-ALE Data

Nighttime Light

Weather & Climate

Greenness
CLSA as a Platform for Research: 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
- Available to researchers and trainees at public institutions
- Must have approval from the CLSA Data Sample and Access Committee, and an accredited Research Ethics Board
Navigating the Tides (of Data)
Research & Training Opportunities with the CLSA:
Data Availability: Data Preview Portal

Istvan Molnar-Szakacs, PhD
CLSA Data Access Officer
McGill University
Navigating the Tides (of Data) Research & Training Opportunities with the CLSA: Data Access: Magnolia

Lauren Griffith
Dept. of Health Research Methods, Evidence and Impact, McMaster University

on behalf of the CLSA Research Team
Why do we use sampling weights?

We want to generalize from the sample to the population, but the sample is almost never fully representative. Let’s assume:

- **Population**: 50% female, 50% male
- **Sample**: 60% female, 40% male
Sample Weights

- Sample weights are used to make statistics computed from the data more representative of the population.

- It is a standard practice in surveys to use sampling weights.

- Each participant in the study is assigned a sample weight constructed based on the inclusion probability.

- Sample weights are always positive and non-zero.
SAMPLE WEIGHTS

- Each female in the sample represents $\frac{100}{18} = 5.56$

- Each male in the sample represents $\frac{100}{12} = 8.33$

- Respondent in under-represented group gets higher weight; respondent in over-represented group gets lower weight.
CLSA Sample

Sample was obtained via four sources:

- **Canadian Community Health Survey-Healthy Aging (CCHS-HA):** only for Tracking
- **Provincial Health Registries (HR)**
  - HR1-initial Health Registry mail-outs
  - HR2-Health Registry mail-outs targeting low-education (LowED) areas
- **Telephone Sampling (TS)**
  - Random Digit Dialing (RDD)-done by Leger
  - Random Telephone Sampling-conducted by CLSA CATI in targeted LowED areas.
- **Quebec Longitudinal Study on Nutrition and Aging (NuAge):** only for Comprehensive
Strata

- 10 provinces
  - 10 provinces in Tracking cohort
  - 7 provinces in Comprehensive cohort
- Age groups
  - 45-54
  - 55-64
  - 65-74
  - 75-85
- Sex
- Geographic areas
  - DCS
  - Non-DCS

Tracking cohort:
136 Strata

Comprehensive cohort:
56 (DCS only) Strata

In QC, ON, and BC, there was more than one DCS, so the DCS area consisted of non-contiguous areas.

In provinces with one or more DCSs there were 16 strata; in NB, PE, SK, there was No DCS and thus there were 8 strata.
Strata

- Early analyses showed we under-representation of people with lower SES (education, income)
- This under-representation could potentially lead to low statistical power
- Thus, to increase heterogeneity in SES, we chose to over-sample people from dissemination areas with higher a proportion of people with lower levels of education (based on census data)

- This adjustment to the sampling added another stratification variable:
  - Low-Ed
  - Non Low-Ed
Types of Weights: Inflation Weights

- The CLSA Tracking and Comprehensive Cohort inflation weights were constructed
  - to account for
    - sample misrepresentation resulting from unequal sampling probabilities,
    - frame coverage error,
    - non-response,
  - to improve the precision of estimates through the use of auxiliary information.

- First, basic design weights were computed proportional to the reciprocals of the individual inclusion probabilities; they were then re-calibrated to the sum of the targeted (eligible) Canadian population.
Types of Weights: Inflation Weights

- Re-calibration requires the use of auxiliary information about the population and may take a number of different variables into account.

- CLSA used the CCHS-HA sample of 20,087. Sampling weights of the 20,087 CCHS-HA participants were grouped by the 136 strata mentioned above. For each sampling frame, the weights were calibrated within stratum (to stratum totals).

- After weights were calibrated for each sample separately, the weights were combined within strata using the general addition rule of probability.

- In some cases the values of weights were extremely large. In a small number of cases, the weights with highest values were trimmed, or set equal to second highest values within their provinces, and calibration was repeated.
Types of Weights: Analytic Weights

- Analytic weights are proportional to the inflation weights but rescaled to sum to the sample size within each province, so that their mean value is 1 within each province.
Available Sample Weights in CLSA Data

Inflation Weights
WGHTS_TRIMMED_TRM
WGHTS_TRIMMED_COM
WGHTS_TRIMMED_CLSAM

Analytic Weights
WGHTS_ANALYTIC_TRM
WGHTS_ANALYTIC_COM
WGHTS_ANALYTIC_CLSAM
Primary Sampling Unit and Sampling Strata Variables

- The use of complex survey software is recommended for analyses, so that the sampling design can be accounted for.
- This will require specification of the appropriate weights variable and characteristics of the sampling design, namely strata and primary sampling units (PSU).
Primary Sampling Unit and Sampling Strata Variables

- A stratified sampling design involves dividing the population into mutually exclusive strata, and sample is taken from every stratum.
  - Within strata, individuals may be selected directly (single stage sampling)
  - Alternatively, the sampling may be done in multiple stages within geographic strata
- The samples from the HR and TS fram are effectively single stage, and we take the CCHS-HA design to be single stage.
Primary Sampling Unit and Sampling Strata Variables

- **Primary Sampling Unit (PSU)** is the first unit that is sampled in the design. In CLSA, PSU is individual, as represented by the unique ‘entity_ID’.

- For the strata variable to be specified in complex survey software, we recommend using the geographic strata variables:
  
  - WGHTS_GEOSTRAT_TRM (10 provinces crossed with DCS/non-DCS with LowED/not LowED) for Tracking Cohort
  - WGHTS_GEOSTRAT_COM (7 provinces within DCS crossed with LowED/not LowED) for Comprehensive Cohort
  - WGHTS_GEOSTRAT_CLSAM (10 provinces crossed with DCS/non-DCS with LowED/not LowED) Pooled Data
When and How to Use the Weights

- Inflation weights: For the estimation of a descriptive parameter of the finite study population, the inflation weights should be used.

- Analytic weights:
  - For analyses that examine relationships between variables at the national or provincial level, analytic weights should be used.
  - For analyses of relationships in smaller sub-groups, the analytic weights are likely to be appropriate.

- The weighting variables (sex, age) should be included as covariates in the analyses.
Example 1. Prevalence of Cancer in Canada, Comprehensive cohort – SAS code

SAS code: Estimates prevalence of cancer with 95% CI

```
proc surveyfreq data=CLSA_comprehensive;
tables CCC_CANC_COM/ cl;
strata WGHTS_GEOSTRAT_COM;
weight WGHTS_TRIMMED_COM;
run;
```

<table>
<thead>
<tr>
<th>CCC_CANC_COM</th>
<th>Frequency</th>
<th>Weighted Frequency</th>
<th>Wgt Freq</th>
<th>Percent</th>
<th>Std Err of Percent</th>
<th>95% Confidence Limits for Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Yes</td>
<td>4637</td>
<td>466027</td>
<td>8093</td>
<td>12.4699</td>
<td>0.2195</td>
<td>12.0999 to 12.9001</td>
</tr>
<tr>
<td>2: No</td>
<td>25367</td>
<td>3271190</td>
<td>15365</td>
<td>87.5301</td>
<td>0.2195</td>
<td>87.0999 to 87.9602</td>
</tr>
<tr>
<td>Total</td>
<td>30004</td>
<td>3737217</td>
<td>13368</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Frequency Missing = 93
Example 1. Prevalence of Cancer in Canada, Comprehensive cohort – R code

R code: Estimates prevalence of cancer

## Load package
library(survey)
## Define the design: fpc=variable showing the number of participants in each strata
CLSAdsgn <- svydesign(ids=~1, strata=~WGHTS_GEOSTRAT_COM,
  weights=~WGHTS_TRIMMED_COM, data=CLSA_comprehensive, fpc=~strata_total,
  nest=TRUE)

## Get the weighted frequencies
svytable(~CCC_CANC_COM,CLSA.dsgn)
Example 2. Odds ratios of having fair/poor health in Canada, Comprehensive cohort – SAS code

SAS code: Adjusted model with 95% CI

```sas
proc surveylogistic data=CLSA_comprehensive;
class DIA_DIAB_COM (ref=first) CCC_CANC_COM (ref=first) AGE_GRP_COM (ref=first) SEX_ASK_COM (ref=first)/param=ref;
model GEN_HLTH_COM (event='1')=DIA_DIAB_COM CCC_CANC_COM DEP_CESD10_COM AGE_GRP_COM SEX_ASK_COM/clodds;
strata WGHTS_GEOSTRAT_COM;
weight WGHTS_ANALYTIC_COM; run;
```

<table>
<thead>
<tr>
<th>Effect</th>
<th>Unit</th>
<th>Estimate</th>
<th>95% Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIA_DIAB_COM Yes vs No</td>
<td>1</td>
<td>0.381</td>
<td>0.301 0.483</td>
</tr>
<tr>
<td>CCC_CANC_COM Yes vs No</td>
<td>1</td>
<td>0.598</td>
<td>0.458 0.781</td>
</tr>
<tr>
<td>DEP_CESD10_COM</td>
<td>1</td>
<td>0.839</td>
<td>0.826 0.851</td>
</tr>
<tr>
<td>AGE_GRP_COM 55-64 vs 45-54</td>
<td>1</td>
<td>0.898</td>
<td>0.68 1.185</td>
</tr>
<tr>
<td>AGE_GRP_COM 65-74 vs 45-54</td>
<td>1</td>
<td>0.872</td>
<td>0.645 1.18</td>
</tr>
<tr>
<td>AGE_GRP_COM 75+ vs 45-54</td>
<td>1</td>
<td>1.004</td>
<td>0.708 1.424</td>
</tr>
<tr>
<td>SEX_ASK_COM M vs F</td>
<td>1</td>
<td>0.771</td>
<td>0.617 0.965</td>
</tr>
</tbody>
</table>
Example 2. Odds ratios of having fair/poor health in Canada, Comprehensive cohort – R code

R code: Adjusted model with 95% CI

```r
## Load package
library(survey)
## Define the design: fpc=variable showing the number of participants in each strata
CLSA.dsgn <- svydesign(ids=~1,strata=~WGHTS_GEOSTRAT_COM,
                       weights=~WGHTS_ANALYTIC_COM, data=CLSA_comprehensive, fpc=~strata_total,
                       nest=TRUE)

## Get the logistic regression results
svyglm(GEN_HLTH_COM ~ DIA_DIAB_COM+CCC_CANC_COM+DEP_CESD10_COM+AGE_GRP_COM+SEX_ASK_C
       OM, design=CLSA.dsgn, family=quasibinomial())
```
Example 3. Weighted mean value of age, Comprehensive cohort – SAS code

SAS code: mean value of age

```
proc surveymeans data=CLSA_comprehensive ;
var AGE_NMBR_COM;
weight WGHTS_TRIMMED_COM;
strata WGHTS_GEOSTRAT_COM ;
run;
```

<table>
<thead>
<tr>
<th>Variable</th>
<th>Label</th>
<th>N</th>
<th>Mean</th>
<th>Std Error of Mean</th>
<th>95% CL for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE_NMBR_COM</td>
<td>AGE_NMBR_COM</td>
<td>30097</td>
<td>59.49043</td>
<td>0.069189</td>
<td>59.35481 59.62604</td>
</tr>
</tbody>
</table>
Example 3. Weighted mean value of age, Comprehensive cohort – R code

R code: mean value of age

```r
## Load package
library(survey)

## Define the design: fpc=variable showing the number of participants in each strata
CLSA.dsgn <- svydesign(ids=~1,strata=~WGHTS_GEOSTRAT_COM,
weights=~WGHTS_TRIMMED_COM, data=CLSA_comprehensive, fpc=~strata_total,
nest=TRUE)

## Get the means values of age
svymean(~AGE_NMBR_COM, CLSA.dsgn )
```
Example 3. Weighted mean value of age, Comprehensive cohort – SPSS syntax

SPSS syntax: mean value of age

```
## Prepare for Analyses (if this is the first time with Analyze/Complex Samples tool)
DATASET ACTIVATE CLSA_Comprehensive.
* Analysis Preparation Wizard.
   CSPLAN ANALYSIS
   /PLAN FILE='/LOCATION ON COMPUTER TO SAVE THE COMPLEX SAMPLE PLAN/ComplexSamplePlan.csaplan'
   /PLANVARS ANALYSISWEIGHT=WGHTS_TRIMMED_COM
   /SRSESTIMATOR TYPE=WOR /PRINT PLAN
   /DESIGN STRATA=WGHTS_GEOSTRAT_COM
   /ESTIMATOR TYPE=WR.

## Get the descriptive statistics
* Complex Samples Descriptives.
   CSDESCRIPTIVES
   /PLAN FILE='/LOCATION ON COMPUTER TO WHERE THE COMPLEX SAMPLE PLAN IS
   SAVED/ComplexSamplePlan.csaplan'
   /SUMMARY VARIABLES=AGE_NMBR_COM /MEAN /STATISTICS SE CIN(95)
   /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```
What’s Next

▪ Examining other references (census) to calibrate weights to make them more accurate
▪ Creating longitudinal weights
Acknowledgement

- Dr. Mary Thompson, Dr. Changbao Wu, Dr. Harry Shannon (Development of CLSA weights)
- Nazmul Sohel, Urun Erbas Oz, Hon Yiu (Henry) So (CLSA Statisticians)
Navigating the Tides (of Data) Research & Training Opportunities with the CLSA: Data Access: Magnolia

Istvan Molnar-Szakacs, PhD
CLSA Data Access Officer
McGill University
Navigating the Tides (of Data) Research & Training Opportunities with the CLSA: Data Access: Magnolia

Timothy Krahn
CLSA Training Co-Ordinator
Dalhousie Dept. of Community Health & Epidemiology
1. Research Support: Data Access – Fee Waiver for Trainees
2. Approved Trainee Projects
4. Training Opportunity – Summer Program in Aging (2020)
7. Networking Opportunity: Stay Connected: Social Media & the CLSA
8. Discussion
Data Access | Fees

This is our current fee schedule, which is under revision. Please check the CLSA website for updates. Any changes would also be communicated via our newsletter, *CLSA Update*.

The charge for an approved application is $3000 for researchers based in Canada, and $5000 for researchers based in institutions outside of Canada. Additional fees of $1000 apply for access to image files, raw data, and data sets that require more complex customization.

The CLSA charges researchers fees using a partial cost-recovery model. The fees incorporated partial recovery of administrative costs, data processing, data retrieval, and delivery costs incurred by the CLSA as part of the data and biospecimen access process.
• Graduate students (M.Sc. or Ph.D.)—those enrolled for their degree at Canadian universities and who wish to obtain the CLSA data for the sole purpose of their thesis—as well as postdoctoral fellows may request a fee waiver. There is a limit of 1 waiver per postdoctoral fellow.
• Canadian trainees working outside Canada but funded through a Canadian source are also eligible.
• CIHR Catalyst Grants for the use of CLSA Data are not eligible for Trainee Fee Waivers.
As of September 2019, of the projects approved for use of CLSA data, 78 of 228 (34.2%) were for trainees conducting research. Here are some examples found under the “Researchers” tab, and “Approved Project Summaries” drop-down menu.
Examples of Approved Trainee Projects

Applicant
Dr. Yukiko Asada, Dalhousie University
Trainee: Emily Rosta

E-mail Address
yukiko.asada@dal.ca

Project Title
The association between rurality, social capital, and nutritional risk in community-dwelling older adults in Canada: An analysis of baseline data from the Canadian Longitudinal Study on Aging

Project Summary
Addressing malnutrition in the community setting is key to promoting aging in place and reducing potential burdens on the health care system. Identifying factors which are associated with high nutritional risk is key to developing effective nutrition interventions for community-dwelling older adults. This project will determine how the risk of malnutrition varies between rural and urban areas in Canada. It will also consider whether social capital is a feature of rurality that can help protect against nutritional risk. The proposed study aims to expand the discussion of malnutrition beyond the specialized field of nutrition and into broader discussions of health and aging.

Keywords
Social capital, Nutritional risk, Rural, Urban, Community-dwelling
Grants are another form in which primarily the federal government, but also some partnering provincial governments, have supported researchers whose projects use CLSA data. The Canadian Institutes of Health Research (CIHR) funds an extremely large proportion of Canada’s health research overall. The aim of the CIHR **Catalyst Grant program** is to provide seed money to support research activities which represent a step towards the pursuit of more comprehensive applications to funding opportunities (e.g., Operating Grants).
Let's look at how the Catalyst program has supported research with CLSA data.

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Keep up to date with the accomplishments of the CLSA, and learn about upcoming webinars or public events.

Stay Connected

Stay connected with the latest in CLSA news and information by reading the annual CLSA participant newsletter, signing up for the annual research newsletter and our quarterly update e-newsletter, and by following us on social media.

CLSA Webinars

The CLSA webinar series features online presentations from researchers who are studying various aspects of the aging process. The CLSA webinars provide a forum to discuss the latest health and aging research in Canada, with an opportunity for audience questions at the end of the talk.

In the News

The work of the CLSA and its key investigators is regularly featured in mainstream broadcast, print, and online media. You can access some of this coverage through this link.

Publications
3.1 News of the 2016 granting competition

Stay Informed │ Past Training Opportunities Announcements

New at the CLSA

**CLSA Webinar Series 2017-2018**

The Canadian Longitudinal Study on Aging (CLSA)'s webinar series covering a broad range of topics related to the study of health and aging will resume this fall with a focus on CLSA researchers' findings.

*Read More*

**Update: Technical issues now resolved**

Update: All technical issues have been resolved. The Canadian Longitudinal Study on Aging (CLSA) is currently experiencing technical issues affecting our toll-free helpline and info@clsaelcv.ca. Please note there may be a delay in responding to your message. We apologize for any inconvenience and thank you for your patience.

*Read More*

**Federal Government invests in research on healthy aging**

The Honourable Jane Philpott, Minister of Health, today announced that the Government of Canada is providing a total of $1.7 million to support 25 projects to be carried out by researchers across the country to use and analyze baseline data from the Canadian Longitudinal Study on Aging (CLSA) to answer important health questions.

*Read More*
Training Opportunities: CIHR Catalyst Grants

42 Projects funded to date

2016 Competition: Government of Canada provided support in the amount of $1.7 million to support 25 projects to be carried out by researchers across the country to use and analyze baseline data from the CLSA.

2018 Competition: Catalyst Grants to support research with CLSA data. Government of Canada provided support in the amount of $1.2 million for 17 projects led by researchers across the country that analyze baseline data from the CLSA to answer important health questions.

2019 Competition: CIHR has committed $715,000 in funding opportunities to support the analysis of Baseline and Follow-up 1 data from the CLSA (to be announced in spring 2020)
July 29, 2019: CIHR announced up to $1,975,000 in funding opportunities to support research that uses existing cohort data, administrative datasets and data platforms that link to or allow access to datasets from multiple sources, including the CLSA.

As such, the CIHR Data Analysis Using Existing Databases and Cohorts funding opportunity is providing a one-year operating grant for successful applicants within three streams of research:

- **Cancer prevention and control** (10 grants up to $100,000 each)
- **Healthy cities intervention research** (7 grants up to $75,000 each)
- **Reproductive, maternal, child and youth health** (6 grants up to $75,000)

Researchers applied through ResearchNet. Application deadline was Oct 10, 2019, with funding expected to begin March 2020.
Summer Program in Aging: Interactive Training Opportunity

CIHR in partnership with Dr. Parminder Raina, CLSA Lead PI: Summer Program in Aging

- 5-day program
- Hockley Valley resort in Mono, ON (1hr North of TO)
- 7-12 June 2020
- focussed on longitudinal studies in aging (generally)
- up to 40 spots
- apply to CIHR through Research.net
- application launch: January 2020
  - travel support grants
  - hospitality supports provided

“...provid[ing] graduate students and post-doctoral fellows interested in longitudinal studies in aging an advanced training program that crosses disciplines, institutions and geographical boundaries. ...Trainees who are conducting, or who have an interest in learning about research in the area of longitudinal studies on aging are encouraged to apply to this program.”
Learning Opportunity for Trainees

The CLSA webinar series features online lectures from new, mid-career, and established health researchers who are interested in aging.

CLSA Webinars

The CLSA webinar series features online lectures from new, mid-career, and established health researchers who are interested in aging. The CLSA webinars provide a forum to discuss the latest health and aging research. Some examples of lecture topics include aging research and policy development, aging and medication use, and aging in the workforce. The webinars are held monthly from September to June, run for one hour, and provide an opportunity for audience questions at the end of the talk.

Please join us for the first presentation of the 2019-2020 CLSA webinar series:

Date: October 29, 2019
Time: 12 p.m. (ET)
Topic: LGBTQ+ aging in Canada: What can we learn from the CLSA? presented by Dr. Arne Stinchcombe, assistant professor in the Master of Applied Gerontology (MAG) program at Brock University, and Dr. Kimberley Wilson, assistant professor in Adult Development & Aging in the Department of Family Relations and Applied Nutrition at the University of Guelph.
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Seeing, hearing, and thinking: The cross-sectional relationship between sensory status and cognitive function in CLSA participants
Date: September 12, 2019
Speaker: Dr. Natalie Phillips & Dr. Paul Mick
Presentation slides

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Date: June 12, 2019
Speaker: Dr. Nancy Presse & Anne-Julie Tessier
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Trainee Spotlight: Q&A with Chloé Pierret

Tuesday, June 25, 2019

Chloé Pierret is a Junior Assistant at the CLSA’s Statistical Analysis Centre
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