



Message from the CLSA Research Team

It has been an exciting year for the Canadian Longitudinal Study on Aging (CLSA). As of September 2014, more than 42,000 participants have been recruited and have completed telephone interviews, in-home interviews and data collection site visits.

Baseline data collection for 21,241 CLSA participants who completed 60-minute telephone interviews is complete. The data from those interviews are now available for access by the research community. In June 2014, the CLSA DataPreview Portal was launched, providing researchers with the capability to search variables, review the data dictionary and to learn about the application process. Several

data requests have already been approved. To access the DataPreview Portal or to review approved projects, visit www.clsa-elcv.ca.

In the CLSA, major waves of data collection occur every three years. Preparations are currently underway for the first follow-up, expected to begin in the summer of 2015. Expert working groups have re-

viewed the CLSA scientific content and made recommendations concerning additions, deletions and modifications for the follow-up. This process will ensure the science of the platform is enhanced to keep pace with changing ideas and priorities of the research community.

The CLSA is building a strong reputation, both nationally and internationally. We are excited by the range of opportunities to collaborate with other studies, and by the many partnerships we are developing. This progress would not have been possible without the support of our funders and the commitment of researchers, collaborators and staff.



The CLSA investigators in Hamilton, Ontario.

Stakeholders Meet to Discuss the CLSA

A stakeholders meeting was held in Toronto in May 2014 to introduce the CLSA to key stakeholders as a valuable data source for the development of public policy. Attendees included ministry officials, representatives of seniors' and health-related interest groups, private industry, CLSA Advisory Council members and the CLSA investigators. Attendees gave information on stakeholder needs and recommendations on how to position the CLSA to achieve stakeholder engagement. Partnerships were further developed from this



The CLSA hosted a stakeholders meeting in May 2014 in Toronto to introduce the platform to potential knowledge users.

New & Noteworthy

meeting to support the CLSA as it moves into the first follow-up. A meeting report will be shared with stakeholders and posted on the CLSA website.

Vancouver Data Collection Site Launch



Official launch of the Vancouver CLSA site.

The grand opening of the CLSA's Vancouver Data Collection Site was held in May 2014, in conjunction with a public forum, "The Road Ahead for Older Canadians: Utilizing the Canadian Longitudinal Study on Aging to Advance Knowledge of Environmental Impacts on Healthy Aging."

CIHR Café Scientifique

Café Scientifique forums provide opportunities for informative discussion between the public and health researchers. "Living Longer, Living Better: Is there a secret to longevity?" was co-hosted by the CLSA and the CIHR Institute of Aging in October 2013 in Halifax.

The Hamilton CLSA site hosted "Putting your heart into it: The science of cardiovascular aging" in February 2014. Videos are available on the CLSA YouTube channel.



The Hamilton CLSA site hosted a CIHR Café Scientifique in February 2014.

Access data from Canada's most comprehensive research platform on health and aging

The first major data release from the Canadian Longitudinal Study on Aging (CLSA) is underway.

As the largest study of aging ever undertaken in Canada, the CLSA is following 50,000 individuals aged 45 to 85 for 20 years, collecting information about their physical, emotional and social health through telephone interviews, in-home interviews and physical assessments.

Researchers interested in accessing the CLSA platform are invited to visit the DataPreview Portal at www.clsa-elcv.ca for detailed information about the available data and the application process.

The CLSA platform will enable researchers to pursue projects investigating the biological, medical, psychological, social, lifestyle and economic changes that occur from mid-life to older age, allowing for specific analyses of the factors involved in maintaining health and in the development of disease and disability.

The baseline questionnaire data collected from the 21,241 participants who completed 60-minute telephone interviews are now available. Researchers interested in accessing the CLSA data should review the Data and Sample Access Policy and Guiding Principles, study protocol and pertinent questionnaires on the CLSA website before completing the application form.

Applications for access to data are reviewed by the CLSA Data and Sample Access Committee (DSAC). Access fees will be determined using a cost-recovery model that incorporates the costs of administration, data processing, data retrieval and delivery.

The process for accessing biospecimens and physical assessment data is currently being developed in anticipation of release in 2016.

For questions about data access, please contact access@clsa-elcv.ca.

Enabling Units Update

The **Biorepository and Bioanalysis (BBC)** laboratory is now complete with all equipment purchased and installed, including the Gallios Flow Cytometer and the Freedom EVO[®] robotic workstation, which has gone through extensive testing requiring intensive technical training. Processes to automate the execution of immunoassays on this platform are being generated via software. Pilot studies will follow.

The biorepository will reach the 1-million milestone in biospecimen aliquot storage later this year. The addition of a dedicated expert for development of the LabWare software system to manage biospecimens has led to an improvement in its function. A quality system is in development, which will provide a structured approach to ensure consistencies, efficiencies and focus for the generation of reliable data. This system encompasses all aspects related to biospecimen collection, processing, storage and for biomarker analysis.



The BBC's Freedom EVO[®] robotic workstation.

While awaiting biospecimens for analysis, the **Genetics and Epigenetics Centre (GEC)** research team continues to utilize the centre's infrastructure to identify DNA methylation signatures correlated with aging across different human tissues. The GEC's access to some of the best available technology for high-throughput genomics and epigenomics will aid the CLSA in ultimately developing a better understanding of the epigenetic underpinnings of aging.

Over the past year, the **Statistical Analysis Centre (SAC)** activities included cleaning and preparing data for release from the 21,241 baseline telephone interviews. These data were examined for errors, skip patterns verified, coding for open-text variables implemented and derived variables prepared. To facilitate data release, the SAC staff developed the DataPreview Portal as part of the CLSA website. This concise resource gives researchers the opportunity to preview the data and search study variables, and provides information on the study design of the CLSA and procedures for accessing the data. A French interface for the portal is in development. The SAC is currently preparing alphanumeric data for release for three projects approved by the CLSA Data and Sample Access Committee. The SAC's next major milestone will be completing data preparation for baseline assessments of the 30,000 participants who complete in-home interviews and Data Collection Site visits.

Team News



Dr. Kathy Pichora-Fuller

Kathy Pichora-Fuller, an expert involved with the CLSA Psychological Health Working Group, is the 2014 recipient of the American Academy of Audiology International Award in Hearing. The award is presented to individuals who have made significant contributions to the audiology profession.



Dr. Susan Kirkland

Susan Kirkland, co-principal investigator of the CLSA, has been appointed to the CIHR Institute of Aging Advisory Board. Dr. Kirkland is a professor in the Departments of Community Health and Epidemiology and Medicine at Dalhousie University and an affiliate scientist at Capital District Health Authority (CDHA).



Dr. Mark Oremus

Mark Oremus, CLSA associate scientific director, has accepted a position as associate professor in the University of Waterloo's School of Public Health and Health Systems. Dr. Oremus remains a part-time faculty member at McMaster University and he will continue to serve as a CLSA associate scientific director.



Dr. Max Cynader

Max Cynader, CLSA lead site investigator at the University of British Columbia (UBC), has been inducted into the Canadian Medical Hall of Fame. Dr. Cynader, a neuroscientist and professor in UBC's Department of Ophthalmology and Visual Sciences, is the founding director of the Djavad Mowfaghian Centre for Brain Health.



Dr. Hélène Payette

Hélène Payette, CLSA lead site investigator at the Université de Sherbrooke, is the recipient of the 2013 Betty Havens Award in Longitudinal Research from the Canadian Association on Gerontology. The award was presented to Dr. Payette in recognition of her work as a lead investigator of the Quebec Longitudinal Study on Nutrition and Aging (NuAge).



Dr. Andrew Wister

Andrew Wister, the CLSA lead site investigator at Simon Fraser University (SFU), has been appointed chair of the National Seniors Council (NSC). The NSC advises the Government of Canada on all matters related to the well-being and quality of life of seniors. Dr. Wister is also the recipient of the 2014 Distinguished Member Award from the Canadian Association on Gerontology.

CLSA Webinar Series

The CLSA has launched a webinar series that features regular online lectures from researchers with an interest in aging.

The CLSA webinars provide a forum to discuss the latest health and aging research in Canada.

Who should attend: Trainees, researchers and research staff

Registration: <http://bit.ly/clsawebinars>

More information and past webinar videos:

www.clsa-elcv.ca/clsawebinar-series



The Income Distribution of Canada's Seniors: The Top End and Everyone Else

Speaker: Michael Veall, PhD

Date: November 5, 2014

Time: 2-3 p.m. ET



Older Canadians, food intake and nutritional status: How the CLSA will advance knowledge

Speaker: Heather Keller, RD, PhD

Date: December 4, 2014

Time: 2-3 p.m. ET

Data Collection: By the Numbers

As of October 3, 2014



Recent Publications

Mapping Connections: An understanding of neurological conditions in Canada

Drs. Christina Wolfson and Parminder Raina are principal investigators of the Canadian Longitudinal Study on Aging: Neurological Conditions Initiative (CLSA-NCI), which will provide a long-term assessment of risk and predictive lifestyle factors for epilepsy, dementia, Parkinson's disease and brain injury.

Recent Presentations

Oremus M. *An Overview of the Canadian Longitudinal Study on Aging*. The Canadian Society for Epidemiology and Biostatistics. Webinar. September 29, 2014.

Raina P., Wolfson C., Kirkland S. *Canadian Longitudinal Study on Aging as a Platform for Studying Disease and Disability in an Aging Population*. CIHR University Delegates Meeting. Webinar. September 4, 2014.

To view the latest presentations, visit: www.clsa-elcv.ca/presentation-archive

Upcoming Events

CIHR-IA Special Event at the Canadian Association on Gerontology's 43rd Annual Scientific and Educational Meeting (CAG2014): Towards the implementation of the CIHR Institute of Aging's Yearly Action Plan: 2014-15 – Mining a unique Canadian resource – The Canadian Longitudinal Study on Aging. 11:15 a.m. October 17, 2014. Fallsview Studio A, Sheraton on the Falls, Niagara Falls, Ontario. For more information, visit: <http://cag2014.ca/>

In the News

- The secrets to aging well (CBC Radio) http://bit.ly/clsa_agingwell
- The Golden Years: The Science of Healthy Aging (IQ: McMaster University's Research Magazine) http://bit.ly/clsa_healthyaging
- Étude longitudinale sur le vieillissement (Radio-Canada) <http://bit.ly/étude-vieillessement>
- Own our health: A change of attitude can lead to healthier aging (Vancouver Sun) <http://bit.ly/OwnYourHealth>

Partners & Supporters

The CLSA continues to focus on partnership development nationally through a wide range of outreach and promotional activities. The CLSA has been successful in securing partners and supporters for the baseline data collection phase, as well as additional partnerships in support of the study's first follow-up.

In 2014, the CLSA entered into a partnership with CARP, a national, non-profit organization with a focus on aging. The collaboration will provide benefits to the CLSA, including reaching a large network of members and potential stakeholders through promotional activities, as well as through support of the CLSA's research efforts.

The CLSA has also partnered with the Alzheimer Society of Canada for national and regional outreach activities and connecting researchers in the field of Alzheimer's disease to the CLSA and the CLSA platform.

The CLSA wishes to thank the following organizations for their support of the study:

Canadian Institutes of Health Research, Canada Foundation for Innovation, Provinces of Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Saskatchewan, Quebec, Health PEI, Dalhousie University, Bruyère Research Institute, McGill University, McMaster University, Memorial University, Simon Fraser University, The Research Institute of the McGill University Health Centre, Université de Sherbrooke, University of British Columbia, University of Calgary, University of Manitoba, University of Ottawa, University of Victoria, Public Health Agency of Canada, Veterans Affairs Canada, Ontario Ministry of Transportation, Calgary Laboratory Services, Health Canada, Canadian Consortium on Neurodegeneration in Aging (CCNA), National Institute for the Care of the Elderly (NICE), Health Charities Coalition of Canada (HCCC), CIHR Institute of Aging (CIHR-IA), Alzheimer Society of Canada, CARP, Air Liquide Healthcare, BD Canada, Christie InnoMed, Dell Canada, GE Healthcare Canada, IntegenX Inc., JTECH Medical, LabWare, Leger Marketing, McMaster Innovation Park, Perfect Sphere Productions, Vocantas Inc., Thermo Fisher Scientific, VWR International, Maelstrom, Siemens, Beckman Coulter, Rx&D, Parkinson Society Canada, Canadian Institute for Military and Veteran Health Research, Quebec Network for Research on Aging, National Alliance of Provincial Health Research Organizations (NAPHRO), Neurological Health Charities Canada, Ontario Seniors' Secretariat, Bayer Inc., Canada Mortgage and Housing Corporation, Affymetrix, McGill University and Génome Québec Innovation Centre, The Centre for Applied Genomics, The Hospital for Sick Children, Centre for Molecular Medicine and Therapeutics, Quebec Longitudinal Study on Nutrition and Aging (NuAge).