## McMaster Cohort Studies

Chanchlani Research Centre August 2023

### ABC: An Indigenous Birth Cohort

Website: <a href="https://www.maelstrom-research.org/study/abc">https://www.maelstrom-research.org/study/abc</a>

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Deputy PI: Dr. Gita Wahi

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PI Location: Chanchlani Research Centre, McMaster University, 1280 Main Street West,

MDCL 3200. Hamilton, ON, L8S 4K1

**Years/dates:** 2012-2021

**Number of participants: 330** 

Number of participants with biological samples: 300

#### **Description of participants:**

• Mothers (n=150)

 Women of Indigenous ancestry between 24 and 28 weeks pregnant (2<sup>nd</sup> trimester) at the Six Nations Reserve near Brantford, Ontario

- Children (n=150)
  - Newborns of mothers
- Grandmothers (n=30)
  - o Mothers of participating pregnant mothers recruited from the Six Nations Reserve

Recruited through self-referral or to the study local health care providers (midwives, nurses, primary care physicians, obstetricians)

**Funding source:** Canadian Institutes of Health Research (CIHR), the Heart and Stroke Foundation of Ontario (HSFO)

#### Purpose/Aim:

This study aimed to enhance our understanding of the determinants of adiposity, type 2 diabetes and related cardio-metabolic factors in Indigenous people, with the ultimate goal of developing chronic disease prevention strategies for this high-risk group. The 3 primary objectives were to:

- 1. Determine the major antenatal maternal factors (e.g. pre-pregnancy weight, weight gain, dietary intake, physical activity, and smoking exposure), selected paternal factors (e.g. cigarette smoking), and pregnancy factors (e.g. maternal weight gain, smoking exposure, glucose intolerance, and pregnancy-induced hypertension) which are associated with the newborn's adiposity and cardio-metabolic factors at birth, and annually for the first three years of life.
- 2. Determine the association between early feeding practices (i.e. exclusivity of breastfeeding, formula feeding, type, frequency and duration of breast/bottle feeding, and growth after weaning), sleep patterns and activity on newborn's adiposity, and related cardio-metabolic factors annually for the first 3 years of life.
- 3. Determine the impact of the home environment, including socio-economic status, social support, and maternal psychosocial factors on newborn's adiposity at birth and annually for the first three years of life.

#### **Publications:**

• https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3702421/

<u>Data dictionary</u> - Requires a maelstrom account. Without a maelstrom account, users may be brought to the generic search screen.

## CAHHM: Canadian Alliance for Healthy Hearts and Minds Cohort Study

Website: <a href="https://cahhm.mcmaster.ca/">https://cahhm.mcmaster.ca/</a>

Co-PI: Dr. Sonia Anand Email: Matthias.friedrich@mcgill.ca

Co-PI: Dr. Matthias Friedrich Email: anands@mcmaster.ca

Co-PI: Dr. Douglas Lee Email: dlee@uhn.ca

**PI:** Dr. Jack Tu (1965-2018)

PI Location: Population Health Research Institute, 237 Barton Street East, Hamilton, ON L8L

2X2, Canada

Years/Dates: December 2013 - March 2018

Number of participants: 9559

Number of participants with biological samples: 3422

#### **Description of participants:**

Cohort is composed of men and women aged 30-69 years (or >17 years for First Nations participants), recruited from all participating cohorts of the Canadian Partnership for Tomorrow Project (CanPath), the Prospective Urban Rural Evaluation (PURE)-Canada cohort, and the Montreal Heart Institute (MHI) Biobank.

Participants were included if they were willing to undergo an MRI scan and all other required study procedures. To recruit most participants without existing CVD each cohort was asked to include participants of whom less than 20 % have known CVD, and about 50 % are women, all balanced across age strata 35–45, 46–55, 56–69 years.

• First Nations Participants: n=1301

o Age, years (mean [SD]): 45.5 [13.4]

o Female: 860 (66.1%) Male: 441 (33.9%)

• Non-First Nations Participants: n=8258

o Age, years (mean [SD]): 57.9 [8.9]

o Female: 4466 (54.1%) Male: 3792 (45.9%)

o Ethnicity:

• East and South East Asian: 12.4%

South Asian: 3.8%White: 81.6%Others: 2.3%

**Funding source:** Canadian Partnership Against Cancer (CPAC), Heart and Stroke Foundation of Canada (HSF-Canada), Canadian Institutes of Health Research (CIHR)

#### Purpose/Aim:

The CAHHM study seeks to:

1) To understand the role of socio-environmental and contextual factors (such as societal structure, activity, nutrition, social and tobacco environments, and access to health services) on CV risk factors, subclinical disease, and clinical CV events at the individual and population levels. This includes the impact of contextual factors on geographic

- variation in CVD (ie rural vs. urban, and east to west gradient), and their relative impact compared to individual level factors.
- 2) To characterize the unique patterns of contextual factors as well as acculturation, cultural continuity, and migration experience as related to individual CV risk factors, health service utilization (ie screening, access to diagnostics and treatments), and clinical outcomes among high risk ethnic groups including South Asian, Chinese, and African origin, as well as reserve-based First Nations people from across Canada.
- 3) To identify early subclinical dysfunction and tissue abnormalities in the brain, blood vessels and the heart, to characterize abdominal and pericardial fat distribution, and to investigate the association of dysfunction with contextual and individual determinants. Furthermore, the data will shed light on the predictive value of novel markers of subclinical abnormalities and dysfunction on the development of clinical events related to cardiac, vascular and cognitive dysfunction.

#### **Publications:**

- Evaluation of Adiposity and Cognitive Function in Adults https://pubmed.ncbi.nlm.nih.gov/35103790/
- Effect Of Cognitive Reserve On The Association Of Vascular Brain Injury With Cognition: Analysis Of The PURE And CAHHM Studies <a href="https://pubmed.ncbi.nlm.nih.gov/34504021/">https://pubmed.ncbi.nlm.nih.gov/34504021/</a>
- Diabetes, Brain Infarcts, Cognition, And Small Vessels In The Canadian Alliance For Healthy Hearts And Minds Study <a href="https://pubmed.ncbi.nlm.nih.gov/33165530/">https://pubmed.ncbi.nlm.nih.gov/33165530/</a>
- Cardiovascular Risk Scoring And Magnetic Resonance Imaging Detected Subclinical Cerebrovascular Disease https://pubmed.ncbi.nlm.nih.gov/31565735/
- Explaining The Variability In Cardiovascular Risk Factors Among First Nations Communities In Canada: A Population-Based Study <a href="https://pubmed.ncbi.nlm.nih.gov/31868600/">https://pubmed.ncbi.nlm.nih.gov/31868600/</a>
- Canadian Alliance For Healthy Hearts And Minds: First Nations Cohort Study Rationale And Design <a href="https://pubmed.ncbi.nlm.nih.gov/29606693/">https://pubmed.ncbi.nlm.nih.gov/29606693/</a>
- Rationale, Design, And Methods For Canadian Alliance For Healthy Hearts And Minds Cohort Study (CAHHM) - A Pan Canadian Cohort Study <a href="https://pubmed.ncbi.nlm.nih.gov/27464510/">https://pubmed.ncbi.nlm.nih.gov/27464510/</a>

Data dictionary: <a href="https://www.maelstrom-research.org/individual-search#lists?type=datasets&query=study(limit(0,20),and(in(Mica\_study.className,Study),in(Mica\_study.id,(cahhm)))),dataset(limit(0,20))</a>

## The Canadian Healthy Infant Longitudinal Development Study (CHILD)

Website: <a href="https://childstudy.ca/">https://childstudy.ca/</a>

PI: Dr. Padmaja Subbarao Email: padmaja.subbarao@sickkids.ca

PI: Dr. Malcolm Sears

Email: searsm@mcmaster.ca

PI: Dr. Stuart Turvey

Email: sturvey@cw.bc.ca

PI: Dr. Meghan Azad Email: meghan.azad@umanitoba.ca

PI Location: CHILD Cohort Study, McMaster University, 1280 Main Street West, HSC-4N49-

52

Hamilton, ON, L8S 4K1

**Years/Dates:** Recruited between 2008 and 2012

Number of families: 3624

Number of participants with biological samples: 3422

#### **Description of participants:**

Pregnant mothers in 2<sup>nd</sup> or 3<sup>rd</sup> trimester were recruited from the general population in four communities across Canada (Vancouver, Edmonton, Manitoba (Winnipeg, Morden, Winkler), and Toronto).

Maternal parent: n=3424

• Age, years (mean [SD]): 32.3 [4.7]

• Ethnicity:

White Caucasian: 2532 (72.9%)
South East Asian: 428 (12.3%)
South Asian: 91 (2.6%)

o First Nations: 177 (5.1%)

Black: 77 (2.2%)Other: 161 (4.6%)Unknown: 6 (0.2%)

Paternal parent: n=3000

• Age, years (mean [SD]): 33.8 [5.6]

• Ethnicity:

White Caucasian: 2536 (73.7%)
 South East Asian: 343 (10.0%)
 South Asian: 106 (3.1%)

o First Nations: 145 (4.2%)
o Black: 110 (3.2%)

Other: 174 (5.1%)Unknown: 29 (0.8%)

**Funding source:** The Canadian Institutes of Health Research (CIHR; AEC85761) and the Allergy, Genes and Environment (AllerGen) Network of Centres of Excellence provided core funding for the CHILD Study. Support has also been provided by Health Canada, Environment Canada, Canada Mortgage and Housing Corporation, the Sick Children's Hospital Foundation, Don & Debbie Morrison, the Silver Thread Foundation and the Childhood Asthma Foundation.

#### **Purpose/Aim:**

The Canadian Healthy Infant Longitudinal Development Study (CHILD) is designed to address gaps in understanding complex gene-environment interactions during pregnancy and early childhood and provides a platform for study of the development of atopic diseases including asthma, and other non-communicable diseases with early life origins.

#### **Publications:**

• The Canadian Health Infant Longitudinal Development (CHILD) Study: examining developmental origins of allergy and asthma <a href="https://pubmed.ncbi.nlm.nih.gov/26069286/">https://pubmed.ncbi.nlm.nih.gov/26069286/</a>

- Gut microbiota of healthy Canadian infants: profiles by mode of delivery and infant diet at 4 months <a href="https://www.cmaj.ca/content/185/5/385">https://www.cmaj.ca/content/185/5/385</a>
- From Prescription Drugs to Natural Health Products: Medication Use in Canadian Infants <a href="https://pubmed.ncbi.nlm.nih.gov/36291411/">https://pubmed.ncbi.nlm.nih.gov/36291411/</a>
- Early Life Antimicrobial Exposure: Impact on Clostridioides difficile Colonization in Infants <a href="https://pubmed.ncbi.nlm.nih.gov/35884235/">https://pubmed.ncbi.nlm.nih.gov/35884235/</a>

Data dictionary: <a href="https://www.maelstrom-research.org/individual-search#lists?type=datasets&query=study(and(in(Mica\_study.className,Study),in(Mica\_study.id\_,child))),variable(limit(0,20)),dataset(limit(0,20))</a>

### Family Atherosclerosis Monitoring in Early Life (FAMILY)

Website: <a href="https://www.phri.ca/research/family/">https://www.phri.ca/research/family/</a>

PI: Dr. Koon Teo

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PI: Dr. Katherine Morrison

Email: morriso@mcmaster.ca

PI: Dr. Sonia Anand

Email: anands@mcmaster.ca

PI Location: Population Health Research Institute, 237 Barton Street East, Hamilton, ON L8L

2X2, Canada

**Years/Dates:** 2002-2020

Number of participants: 901 babies, 857 mothers, 530 fathers, 264 siblings

**Description of participants:** 

Women and fathers were recruited during pregnancy from 3 hospitals in Hamilton and Burlington, ON, Canada.

Age of the mother: 32.3 (5.0) Age of the father: 34.2 (5.9)

Mother's European ethnicity: 493 (86.0%) Other children in the family: 783 (55.4%)

**Funding source:** This study is funded by the Canadian Institutes of Health Research, the Population Health Research Institute, and the McMaster Children's Hospital Foundation. The authors are solely responsible for the design, conduct, and analyses for the study; the drafting; and editing of the article and its final contents.

#### **Purpose/Aim:**

The FAMILY Study is a McMaster University/Population Health Research Institute-based longitudinal birth cohort established in 2005, and designed to examine early-life determinants in chronic disease development, with a primary emphasis on nutritional, metabolic and cardiovascular variables and their relationship with the development of childhood obesity and cardiovascular disease risk factors, as well as childhood allergy and asthma

#### **Publications:**

- The Family Atherosclerosis Monitoring In earLY life (FAMILY) study: Rationale, design, and baseline data of a study examining the early determinants of atherosclerosis <a href="https://www.sciencedirect.com/science/article/pii/S0002870309005328?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S0002870309005328?via%3Dihub</a>
- Prenatal and early-life predictors of atopy and allergic disease in Canadian children: results of the Family Atherosclerosis Monitoring In earLY life (FAMILY) Study https://doi.org/10.1017/S2040174416000386
- Maternal and pregnancy related predictors of cardiometabolic traits in newborns <a href="https://pubmed.ncbi.nlm.nih.gov/23418462/">https://pubmed.ncbi.nlm.nih.gov/23418462/</a>
- What accounts for ethnic differences in newborn skinfold thickness comparing South Asians and White Caucasians? Findings from the START and FAMILY Birth Cohorts https://pubmed.ncbi.nlm.nih.gov/26315840/
- Associations of cardiometabolic outcomes with indices of obesity in children aged 5 years and younger <a href="https://pubmed.ncbi.nlm.nih.gov/31276512/">https://pubmed.ncbi.nlm.nih.gov/31276512/</a>

• The association of maternal sugary beverage consumption during pregnancy and the early years with childhood sugary beverage consumption <a href="https://pubmed.ncbi.nlm.nih.gov/36175645/">https://pubmed.ncbi.nlm.nih.gov/36175645/</a>

Data dictionary: <a href="https://www.maelstrom-research.org/individual-search#lists?type=datasets&query=study(and(in(Mica\_study.className,Study),in(Mica\_study.id\_namily))),variable(limit(0,20)),dataset(limit(0,20))</a>

## Strengthening Community Roots: Anchoring Newcomers in Wellness & Sustainability (SCORE!) Household Survey

Website: <a href="https://okanagan.mcmaster.ca/initiatives/score/">https://okanagan.mcmaster.ca/initiatives/score/</a>

PI: Dr. Sonia Anand Email: anands@mcmaster.ca

Co-I's: Dr. Gita Wahi, Dr. Russ DeSouza, Dr. Sujane Kandasamy

Project Manager: Patricia Montague Email: pmontag@mcmaster.ca

PI Location: Chanchlani Research Centre, McMaster University, 1280 Main St. West, Hamilton,

ON

Years/Dates: April 2022-March 2024

Number of participants: April 22, 2023: 605 completed census; 777 completed eligibility

**Description of participants:** Participants with postal codes within the Riverdale, Hamilton region over the age were eligible, with a limit of 1 participant per household.

• Ethnicity and race (594)

White European: 265 (44.6%)

o South Asian: 137 (23.1%)

O West Asian or Middle Eastern: 62 (10.4%)

o Black: 43 (7.24%)

o Southeast Asian: 19 (3.2%)

o Central South Latin American: 14 (2.36%)

o Indigenous: 14 (2.36%)

o East Asian: 9 (1.52%)

o Other: 31 (5.22%)

**Funding source:** Public Health Agency of Canada's Healthy Canadians and Communities Fund (HCCF)

**Purpose/Aim:** The purpose of SCORE! (Strengthening Community Roots: Anchoring Newcomers & Sustainability) Household Survey is to determine the household member composition, the number, sex, and ages of children living in the household, and to characterize key social and demographic factors which may be associated with present and future health conditions.

#### **Publications:**

• Strengthening Community Roots: Anchoring Newcomers in Wellness and Sustainability (SCORE!): A protocol for the co-design and evaluation of a healthy active living program among a newcomer community in Canada <a href="https://www.medrxiv.org/content/10.1101/2023.07.06.23292304v1.full-text">https://www.medrxiv.org/content/10.1101/2023.07.06.23292304v1.full-text</a>

Data dictionary: Not publicly available – contact PI for data dictionary

### South Asian Birth Cohort (START)

Website:

PI: Dr. Sonia Anand

Email: anands@mcmaster.ca

Co-PI's: Dr. Gita Wahi

Email: wahig@mcmaster.ca

Location: Population Health Research Institute, 237 Barton Street East, Hamilton, ON L8L 2X2,

Canada

**Years/Dates:** 2011-2021

Number of participants: 3544 Description of participants:

- South Asian mothers and babies were recruited from urban Canada, urban India, and rural India
- Urban India: Recruited from St. John's Medical College Hospital (n=484)
- Rural India: Snehalaya Hospital in Solur Karnataka State (n=288)
- Urban Canada: Peel Ontario Region where South Asians account for 18% of the population through referrals from primary care and specialist physicians (n=1001)

#### Baseline age:

• Canada (SD): 30.2 (3.9)

• Urban India: 23.7 (3.4)

• Rural India: 20.9 (2.4)

**Funding source:** The work is funded by Canadian Institutes of Health Research (#227851), Indian Council of Medical Research (58/4/31/ ICMR-CIHR/2009-NCD II) and the Heart and Stroke Foundation of Ontario (NA 7283).

#### Purpose/Aim:

The START study aims to understand the environmental and genetic determinants of adiposity and related metabolic abnormalities among South Asians living in India and Canada.

The main objectives of the START study are:

- to characterize the in-utero environment by assessing the influence of antenatal maternal, paternal factors (e.g. medical history, dietary intake, smoking exposure, and psychosocial stress), and pregnancy factors (e.g. abnormal gestational glucose tolerance, pregnancy-induced hypertension, preterm births, and newborn small and large-for-gestational age birth weight) across diverse environments on newborn's body composition, birth weight and length;
- to study the association between early feeding practices (i.e. breastfeeding, weaning and complimentary feeding pattern) and post-natal growth and adiposity at 1 and 3 years after birth across diverse environments; and
- to study the association between specific micronutrient (vitamin B12, homocysteine and folate) status and gestational weight gain with body composition and birth weight across diverse environments.

#### **Publications:**

- Rationale and design of South Asian Birth Cohort (START): a Canada-India collaborative study <a href="https://doi.org/10.1186/1471-2458-13-79">https://doi.org/10.1186/1471-2458-13-79</a>
- Integrative multiomics analysis of infant gut microbiome and serum metabolome reveals key molecular biomarkers of early onset childhood obesity <a href="https://doi.org/10.1016/j.heliyon.2023.e16651">https://doi.org/10.1016/j.heliyon.2023.e16651</a>
- Causes and consequences of gestational diabetes in South Asians living in Canada: results from a prospective cohort study <a href="https://doi.org/10.9778/cmajo.20170027">https://doi.org/10.9778/cmajo.20170027</a>
- The association of maternal sugary beverage consumption during pregnancy and the early years with childhood sugary beverage consumption <a href="https://doi.org/10.17269/s41997-022-00681-1">https://doi.org/10.17269/s41997-022-00681-1</a>
- DNA methylation changes in cord blood and the developmental origins of health and disease - a systematic review and replication study <a href="https://doi.org/10.1186/s12864-022-08451-6">https://doi.org/10.1186/s12864-022-08451-6</a>
- Fine-tuning of Genome-Wide Polygenic Risk Scores and Prediction of Gestational Diabetes in South Asian Women https://doi.org/10.1038/s41598-020-65360-y
- A qualitative investigation of optimal perinatal health: the perspectives of south Asian grandmothers living in southern Ontario, Canada <a href="https://doi.org/10.1186/s12884-020-2762-0">https://doi.org/10.1186/s12884-020-2762-0</a>
- Socio-economic, environmental and nutritional characteristics of urban and rural South Indian women in early pregnancy: findings from the South Asian Birth Cohort (START) <a href="https://doi.org/10.1017/s1368980017004025">https://doi.org/10.1017/s1368980017004025</a>
- What accounts for ethnic differences in newborn skinfold thickness comparing South Asians and White Caucasians? Findings from the START and FAMILY Birth Cohorts <a href="https://doi.org/10.1038/ijo.2015.171">https://doi.org/10.1038/ijo.2015.171</a>

Data dictionary: <a href="https://www.maelstrom-research.org/individual-search#lists?type=datasets&query=study(and(in(Mica\_study.className,Study),in(Mica\_study.id\_start))),variable(limit(0,20)),dataset(limit(0,20))</a>

# Epidemiological Study of Screens for Diabetes Reduction Assessment with Ramipril and Rosiglitazone Medication (EpiDREAM)

#### **Principal Investigator(s):**

Dr. Sonia Anand – <u>anands@mcmaster.ca</u> (905) 525-9140 ext. 21523 Jackie Bosch – <u>boschj@mcmaster.ca</u> (905) 525-9140 ext. 27542

Website Link: <a href="https://www.phri.ca/research/epidream/">https://www.phri.ca/research/epidream/</a>

**Study period**: 2001-2008

#### **Participants:**

18,990 men and women from 21 countries; multiethnic cohort

#### **Funding Source:**

Population Health Research Institute (PHRI)

#### **Purpose**:

This prospective cohort study investigated the relationship between glucose levels and the incidence of cardiovascular events and deaths in 18,990 men and women from 21 different countries. In the DREAM clinical trial, these participants were prospectively followed over a median of 3.5 years for incident cardiovascular events, including coronary artery disease, stroke, congestive heart failure requiring hospitalization, and death. It was found that the risk of cardiovascular events or death increased progressively among individuals who were normoglycaemic, IFG or IGT, and newly diagnoses diabetics.

#### **Exemplar publications:**

https://pubmed.ncbi.nlm.nih.gov/21551215/ https://pubmed.ncbi.nlm.nih.gov/23603917/

#### **Data Dictionary:**

### Prospective Urban and Rural Epidemiological Study (PURE)

#### **Principal Investigator(s):**

Dr. Salim Yusuf - Salim. Yusuf @phri.ca

Website Link: <a href="https://www.phri.ca/research/pure/">https://www.phri.ca/research/pure/</a>

**Study period**: 2002-2030

#### **Participants:**

225,000 participants from over 1,000 urban and rural communities in 27 high, middle, and low-income countries

#### **Funding Source:**

Population Health Research Institute (PHRI)

#### Purpose:

The purpose of this prospective cohort study is to investigate the impact of modernization, urbanization, and globalization on health behaviours and how risk factors develop and influence cardiovascular disease, diabetes, lung diseases, cancers, kidney disease, brain health, and injuries.

#### **Exemplar publications:**

https://pubmed.ncbi.nlm.nih.gov/36088949/

https://pubmed.ncbi.nlm.nih.gov/35807751/

https://pubmed.ncbi.nlm.nih.gov/35704349/

https://pubmed.ncbi.nlm.nih.gov/35526584/

https://pubmed.ncbi.nlm.nih.gov/34939099/

https://pubmed.ncbi.nlm.nih.gov/34261638/

https://pubmed.ncbi.nlm.nih.gov/34190997/

https://pubmed.ncbi.nlm.nih.gov/33683310/

https://pubmed.ncbi.nlm.nih.gov/33626252/

#### **Data Dictionary:**

## Canadian Longitudinal Study on Aging (CLSA)

#### **Principal Investigator(s):**

Dr. Parminder Raina – praina@mcmaster.ca

Dr. Christina Wolfson – christina.wolfson@mcgill.ca

Dr. Susan Kirkland – Susan.Kirkland@dal.ca

Website Link: https://www.clsa-elcv.ca/

**Study Period**: 2010-2033

• Recruitment period: 2010-2015

Follow-up 1: 2015-2018Follow-up 2: 2018-2021Follow-up 3: 2021-2024

• Participants will be followed until 2033 or death

#### **Participants:**

Over 51,000 Canadian men and women between 45 and 85 years of age at recruitment

#### **Funding Source**:

Canadian Institutes of Health Research (CIHR)
Canada Foundation for Innovation

#### **Purpose:**

This longitudinal study aims to identify modifiable factors related to adult development and aging to develop interventions to improve the health of populations as they age. It investigates the interrelationships among intrinsic and extrinsic factors influencing health from mid-life to older age to capture transitions and trajectories of aging, elucidate the concept of successful aging, and identify modifiable risk factors that could be used to develop interventions to improve the health of senior populations. This research will provide infrastructure and build capacity for high quality research on aging in Canada and other countries.

#### **Exemplar publications:**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10327959/

https://pubmed.ncbi.nlm.nih.gov/37350151/

https://pubmed.ncbi.nlm.nih.gov/37372645/

https://link.springer.com/article/10.17269/s41997-021-00524-5

https://pubmed.ncbi.nlm.nih.gov/37279588/

#### **Data Dictionary**:

https://datapreview.clsa-

<u>elcv.ca/mica/repository#/search?type=variable&query=dataset(in(Mica\_dataset.id,(com,trm,cof1,trf1,cstatus,tstatus)))&display=list</u>

## COVID CommUNITY: Investigating Vaccine Access, Immunogenicity, Effectiveness and Safety among High-Risk Populations (First Nations)

#### **Principal Investigator(s):**

Dr. Russell de Souza – <u>rdesouz@mcmaster.ca</u> (905) 525-9140 ext. 22109

Dr. Sonia Anand – <u>anands@mcmaster.ca</u> (905) 525-9140 ext. 21523

Site Investigators: Ms Sara Smith (Six Nations); Ms Lisa Mayotte (Lac LaRonge), Ms Manon Picard (Wendake)

Website Link: https://covidcommunity.mcmaster.ca

**Study Period**: 2021-2024

#### **Participants:**

3,000 individuals aged 18 years and older from First Nations communities in Canada (Quebec, Ontario, Saskatchewan)

#### **Funding Source:**

Population Health Research Institute (PHRI)

#### **Purpose**:

The objective of this prospective cohort study is to understand the immune response and safety of the COVID-19 vaccine in First Nations people. It further aims to understand why some First Nations people are not as confident in the COVID-19 vaccine as others, and to document the overall impact of COVID-19 in First Nations communities. Finally, this study aims to provide insight into how a pandemic of the scale of COVID-19 can be prevented in these communities and other vulnerable populations.

**Exemplar publications**: None

#### **Data Dictionary:**

## COVID CommUNITY: Investigating Vaccine Access, Immunogenicity, Effectiveness and Safety among High-Risk Populations (South Asian)

#### **Principal Investigator(s):**

Dr. Sonia Anand

Dr. Rahul Chanchlani

Dr. Sujane Kandasamy

Dr. Scott Lear

Contact Project Manager: Ms Dipika Desai; E-mail: dipika.desai@phri.ca

Website Link: <a href="https://covidcommunity.mcmaster.ca">https://covidcommunity.mcmaster.ca</a>

**Study Period**: 2021-2024

#### **Participants:**

3,000 individuals aged 18 years and older from British Columbia and Ontario who identify as South Asian

#### **Funding Source:**

Population Health Research Institute (PHRI)

#### **Purpose**:

The purpose of this prospective cohort study is to understand the immune response to the COVID-19 vaccine and its safety in South Asians (people from India, Sri Lanka, Pakistan, Nepal, and Bangladesh). This study further aims to understand why some South Asian people may be less confident in getting the COVID-19 vaccine, and to document the overall impact of COVID-19 in this community. Finally, this study aims to provide insight into how a pandemic of the scale of COVID-19 can be prevented in these communities and other vulnerable populations.

#### **Exemplar publications:**

https://pubmed.ncbi.nlm.nih.gov/37015794/

#### **Data Dictionary**:

### Genetics of Opioid Addiction (GENOA)

#### **Principal Investigator(s):**

Dr. Zena Samaan

Website Link: <a href="https://samaanlab.healthsci.mcmaster.ca/our-projects/genoa/">https://samaanlab.healthsci.mcmaster.ca/our-projects/genoa/</a>

**Data Collection Period**: 2011-2017

#### **Participants:**

1,390 men and women 18 years of age and older diagnosed with and receiving treatment for opioid-use disorder across 20 out-patient clinics in Ontario, Canada

#### **Funding Source:**

Canadian Institutes of Health Research (CIHR)
Drug Safety and Effectiveness Network (DSEN)
Department of Psychiatry and Behavioural Neurosciences, McMaster University

#### **Purpose:**

The purpose of this cross-sectional study is to characterize the demographics and health characteristics of individuals with opioid addiction attending opioid substitution treatment. This study also aims to assess the occurrence of opioid addiction in families, test for associations between genes and behavioural phenotypes and drug metabolism within the opioid use disorder population. It also seeks to answer questions pertaining to the impact of genetic variants on response to methadone for patients seeking treatment for opioid addiction.

#### **Exemplar publications:**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4149396/

https://pubmed.ncbi.nlm.nih.gov/30508993/

https://pubmed.ncbi.nlm.nih.gov/26437921/

https://pubmed.ncbi.nlm.nih.gov/31910933/

https://pubmed.ncbi.nlm.nih.gov/37494403/

https://pubmed.ncbi.nlm.nih.gov/34910759/

#### **Data Dictionary:**