**HEART & STROKE BIOGRAPHICAL SKETCH (BIOSKETCH)**

Provide the following information for the senior/key personnel and other significant contributors to the research project. Follow this format for each person. **DO NOT EXCEED SIX PAGES.**

**No additional materials may be appended.**

**Please see BIOGRAPHICAL SKETCH INSTRUCTIONS GUIDE for formatting restrictions; all sections are considered required.**

**NAME:** John Smith

**DEGREES AND CURRENT ACADEMIC APPOINTMENT (if applicable):** B.Sc.; M.Sc.; Ph.D.; C.Ep.; Associate Professor

**CURRENT FULL-TIME POSITION/PRIMARY APPOINTMENT** 2023-07-01 **AND TITLE:** Associate Professor, Department of Health Sciences, Canadian University.

**DATE OF FIRST FULL-TIME FACULTY APPOINTMENT** 2019-07-01 **AND TITLE:** Assistant Professor

**LANGUAGE SKILLS** *(add/delete rows as necessary)*

| LANGUAGE | READ | WRITE | SPEAK | UNDERSTAND | PEER REVIEW |
|---|---|---|---|---|---|
| **English** | Yes | Yes | Yes | Yes | Yes |
| **French** | Yes | Yes | Partially | Yes | No |

**EDUCATION/TRAINING**

| INSTITUTION AND LOCATION | DEGREE *(if applicable)* | Completion Date *(MM/YYYY)* | FIELD OF STUDY |
|---|---|---|---|
| Canadian Research Hospital, City, Province, Country | Postdoctoral Fellowship | 06/2014 | Clinical & Translational Research |
| International University, City, Province, Country | Ph.D. | 11/2012 | Population Health |
| Canadian University, City, Province, Country | M.Sc. | 06/2006 | Epidemiology |
| Canadian University, City, Province, Country | B.Sc. | 06/2004 | Biological Sciences |

A. **Personal Statement** - please outline how your training and experience are relevant to the proposed application.

I am a mid-career investigator with interdisciplinary training in population health, epidemiology, and clinical research. I have over 15 years of experience conducting cardiovascular and chronic disease research across academic, clinical, and policy-relevant settings. My research program focuses on identifying modifiable risk factors and inequities that contribute to cardiovascular disease outcomes, and on translating evidence into interventions, policy, and practice.

I am well suited for my role in the proposed project based on my experience leading extensive observational studies, conducting mixed-methods research, and engaging in interdisciplinary collaborations with

clinicians, policymakers, and patient partners. I have served as principal investigator and co-investigator on numerous funded projects focusing on disease prevention, health service utilization, and outcomes among diverse populations. These initiatives have consistently emphasized equity, sex- and gender-based analysis, and demonstrated real-world impact.

My prior work includes serving as principal investigator on population-based cohort studies, leading knowledge translation initiatives that informed clinical guidance and public health programming, and mentoring trainees across undergraduate, graduate, and postdoctoral levels. I have extensive experience teaching and guiding individuals at across all stages of academic training (i.e., undergraduate, graduate, and postdoctoral trainees). My mentoring covers techniques for population-based cohort studies, best practices in translating knowledge into action, and methods from implementation science to drive changes in practice. Overall, these experiences have equipped me with the methodological expertise, collaborative skills, training, and leadership capacity required to successfully carry out the proposed research.

Of note, my research productivity over the past five years reflects two periods of reduced output related to caregiving responsibilities and COVID-19–related disruptions to data access and fieldwork. These contextual factors are important for interpreting publication and funding timelines during this period.

## B. Professional Experience, Leadership Activities, and Honors

### Academic and Scientific Appointments

| | |
|---|---|
| 2023 – Present | **Associate Professor (Full-time)** Department of Health Sciences, Canadian University |
| 2019 – 2023 | **Assistant Professor (Full-time)**, Department of Health Sciences, Canadian University |
| 2019 – Present | **Scientist (Affiliate, Part-time)**, University-Affiliated Research Institute |
| 2018 – Present | **Member**, Canadian Cardiovascular Society |

### Leadership Activities

| | |
|---|---|
| 2024 – Present | **Member,** Editorial Board, Journal of Cardiovascular Epidemiology |
| 2023 – Present | **Chair,** Graduate Program Curriculum Committee, Department of Health Sciences, Canadian University |
| 2022 – 2025 | **Reviewer**, Heart & Stroke Scientific Review Committee, Committee V |
| 2022 – Present | **Co-Chair,** Organizing Committee, Annual Canadian Population Health Conference |
| 2021 – Present | **Scientific Lead,** Knowledge Translation Working Group, University-Affiliated Research Institute |
| 2020 – 2023 | **Member**, Equity, Diversity, and Inclusion Committee, Canadian Cardiovascular Society |
| 2019 – 2022 | **Mentor,** Early Career Investigator Program, National Health Research Organization |

### Credentials

Certified Epidemiologist (C.Ep.) (National Professional Body)

### Selected Honors

| | |
|---|---|
| 2023 | Institutional Research Excellence Award |
| 2016 | National New Investigator Award (Health Research) |

## C. Most Important Contributions to Science

### 1. Advancing Understanding of Social and Clinical Determinants of Cardiovascular Risk

My early independent research addressed gaps in understanding how social, behavioral, and clinical factors interact to influence cardiovascular risk across the life course. Using large population-based cohorts, this work demonstrated that combinations of social disadvantage and clinical risk factors are associated with substantially worse cardiovascular outcomes than either factor alone. These findings helped shift research and policy discussions toward more integrated models of prevention.

I led study design, analytic strategy, and manuscript development for this body of work.

Selected publications/research products:

a. **Smith, J.,** Author A., Author B. (2014). Publication Title. Journal A. PMID: ######.
b. **Smith, J.**, Author D., Author E. (2016). Publication Title. Journal E. PMID: ######.
c. Trainee Author C., **Smith, J.** (2019). Publication Title. Journal B. PMID: ######.
d. Author F., Author G., **Smith, J.** (2020). Publication Title. Journal F. PMID: ######.

### 2. Translating Population Health Evidence into Policy and Practice

Building on observational findings, my subsequent research focused on translating evidence into actionable guidance for health systems and public health programs. I co-developed risk stratification tools and policy briefs used by regional health authorities to inform prevention strategies and resource allocation. This work emphasized stakeholder engagement and knowledge translation from project inception.

I served as principal investigator or senior author and led stakeholder engagement and dissemination activities.

Selected publications/research products:

a. Trainee Author D., **Smith, J.** (2021). Publication Title. Journal C. PMID: ######.
b. Author I., **Smith, J.** (2021). Publication Title. Journal G. PMID: ######.
c. Policy Brief. (2022). Publication Title. Provincial Health Authority.
d. Technical Report. (2022). Publication Title. Regional Health System.

### 3. Integrating Equity, Sex, and Gender Perspectives into Cardiovascular Research

A central contribution of my research program has been the integration of sex-, gender-, and equity-informed analyses into cardiovascular research. My work demonstrated that risk prediction and intervention effectiveness differ across population subgroups, with implications for guideline development and program design. These findings have been cited in national guidance documents and incorporated into training materials for health professionals.

I led conceptual development, supervised trainees, and served as senior author.

Selected publications/research products:

a. **Smith, J**, Author E, Trainee Author F. (2022). Publication Title. Journal D. PMID: ######.
b. Author L, **Smith, J.** (2022). Publication Title. Journal H. PMID: ######.
c. Training Module for Health Professionals. (2023). Publication Title. National Organization.
d. **Smith, J.**, (Invited Review). (2023). Publication Title. Journal I. PMID: ######.

**4. Leveraging Real-World Data to Improve Cardiovascular Outcomes**

More recently, my research has focused on the use of administrative health data and real-world evidence to examine patterns of care, outcomes, and health system performance related to cardiovascular disease. This work identified gaps in access to evidence-based prevention and management, particularly among underserved populations, and highlighted opportunities for system-level improvement.

I led data acquisition, analytic planning, and interpretation, and mentored trainees in advanced methods for real-world data analysis.

Selected publications/research products:

a. **Smith, J**, Author M, Author N. (2023). Publication Title. Journal J. PMID: ######.
b. **Smith, J.** "Video Title." Website, uploaded by "Uploader", 16 Feb. 2023, https://youtu.be/CPQ95####.
c. Health System Performance Report. (2024). Publication Title. Provincial Agency.
d. Conference Proceedings. (2024). Publication Title. National Cardiovascular Meeting.

**5. Building Interdisciplinary and Trainee-Led Capacity in Cardiovascular Research**

An important contribution of my program has been the development of interdisciplinary research teams and the mentorship of trainees conducting cardiovascular and population health research. Through trainee-led projects embedded within larger studies, this work has generated novel findings while building sustainable research capacity across epidemiology, clinical sciences, and health policy.

I served as senior author and primary supervisor, providing methodological guidance and career mentorship.

Selected publications/research products:

a. Trainee Author A, **Smith, J.** (2021). Publication Title. Journal L. PMID: ######.
b. Trainee Author B, Trainee Author C, **Smith, J.** (2022). Publication Title. Journal M. PMID: ######.
c. **Smith, J**, Trainee Author D. (2023). Publication Title. Journal N. PMID: ######.
d. Trainee Author L, Trainee Author M, Author T, Author Y, **Smith J.** (2024). Publication Title. Journal F. PMID: ######.

## D. Prior Funding History

Total grant funding as a Principal Investigator: **$7,534,765.**

**Ongoing**

| | |
|---|---|
| 2024 – 2027 | **Principal Investigator**, Project Title, National Health Research Agency, Project Grant, $325,000 |
| 2023 – 2025 | **Co-Principal Investigator**, Project Title, Provincial Health Research Fund, Operating Grant, $180,000 |
| 2022 – 2024 | **Co-Investigator**, Project Title, National Health Research Fund, Operating Grant, $180,000 |

**Completed**

| | |
|---|---|
| 2021 – 2024 | **Co-Principal Investigator,** Project Title, Heart & Stroke Foundation, Team Grant, $250,000 |

| | |
|---|---|
| 2020 – 2023 | **Principal Investigator**, Project Title, National Foundation Grant, Population Health Program Grant, $210,000 |
| 2020 – 2022 | **Co-Applicant,** Project Title, Canadian Institutes of Health Research, Knowledge Translation Grant, $100,000 |
| 2019 – 2022 | **Principal Investigator,** National Health Research Agency, New Investigator Salary Award, $140,000 |
| 2019 – 2021 | **Principal Investigator,** Project Title, University Research Development Fund, Seed Grant, $35,000 |

## E. Activities

### Knowledge Translation

- **Translation to Policy**: Development of evidence summaries and policy briefs for regional and provincial health agencies
- **Media engagement**: to support public understanding of cardiovascular risk and prevention
- **Media Events**:
  - **TV Interview**: Featured in a segment on CBC News, discussing the impact of digital health innovations and the recently patented Cardiovascular Risk Score Tool on preventive healthcare.
  - **Radio Interview**: Participated in a live interview on Health Matters Radio, explaining the translation of research into policy and its real-world benefits for population health management.

### Technology Transfer

- **Patent**: "Cardiovascular Risk Score Tool and Method", Canadian Patent No. CA1234567, granted 2021. This patent covers an innovative algorithm for assessing individual cardiovascular risk using clinical and demographic factors.
- **Spin-off Company**: CardioSense Innovations Inc., founded in 2022, commercializes wearable devices and digital health solutions that leverage the patented Cardiovascular Risk Score Tool. The company develops user-friendly monitoring platforms for patients and clinicians to support proactive cardiovascular risk management.

### Supervisory Activities (Total Trainees: 15)

| | |
|---|---|
| 2023 – Present | MSc, **Co-supervisor**, *Trainee Name*. |
| 2019 – 2024 | PhD, **Principal Supervisor**, *Trainee Name*. Currently: Postdoctoral Fellow, School of Public Health, Canadian University |
| 2016 – 2021 | PhD, **Principal Supervisor**, *Trainee Name*. Currently: Scientist / Research Associate, Provincial Public Health Agency |
| 2014 – 2019 | MSc, **Co-supervisor**, *Trainee Name*. Currently: Policy Analyst, Health Systems and Population Health, Government of Canada |

### Invited Talks (Total invited talks: 30)

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|---|---|
| February 2025 | **Invited Speaker**, *Addressing Inequities in Cardiovascular Disease Prevention: Evidence and Policy Implications,* Provincial Public Health Rounds, Ontario Ministry of Health |
| October 2024 | **Invited Speaker**, *Population-Based Approaches to Cardiovascular Risk Reduction,* Department of Cardiology Grand Rounds, Canadian University-Affiliated Teaching Hospital |
| June 2024 | **Invited Speaker**, *Using Real-World Data to Inform Cardiovascular Health Policy*, Heart & Stroke Foundation Research Webinar Series |

| | |
|---|---|
| May 2023 | **Invited Speaker**, *Socioeconomic and Environmental Determinants of Heart Health*, National Population Health Conference, Canada |
| October 2022 | **Invited Speaker**, *Integrating Equity into Cardiovascular Epidemiology Research*, Canadian Cardiovascular Society Annual Meeting (Knowledge Translation Session) |
| March 2021 | **Invited Speaker**, *COVID-19, Chronic Disease, and Health System Pressures*, Regional Public Health Academic-Practice Partnership Seminar |

**Selected Relevant Publications (Total Publications: 65)**

1. **Smith J**, Author A. (2025). The impact of urbanization on cardiovascular disease incidence: a Canadian cohort study. *Canadian Journal of Public Health*.. PMID: ########.
2. Lee A, Trainee Author M, **Smith J**. (2025). Temporal trends in diabetes prevalence among Indigenous populations in Manitoba. *International Journal of Epidemiology*.PMID: #########.
3. Trainee Author L, **Smith J**. (2024). COVID-19 vaccine uptake and socioeconomic disparities in Ontario. *BMJ Open*. PMID: #########.
4. **Smith J**, Author Y, Author T. (2024). Air pollution and respiratory health: a longitudinal study in Toronto. *Environmental Health Perspectives.* PMID: #########.
5. Trainee Author A, **Smith J**. (2024). The role of physical activity in cancer prevention: A systematic review. *Journal of Epidemiology & Community Health*. PMID: #########.
6. **Smith J**, Author M. (2023). Socioeconomic determinants of mental health service utilization in Nova Scotia. *Social Science & Medicine*. PMID: #########.
7. **Smith J**, Author L. (2023). Dietary sodium intake and hypertension risk: insights from the Canadian Health Measures Survey. *Hypertension Research*. PMID: #########.
8. Patel M, Author T, Author K, **Smith J**. (2023). Childhood obesity and school-based interventions: a population-based analysis. *Pediatric Obesity*. PMID: #########.
9. **Smith J**, Author A, W Author H. (2023). Trends in antimicrobial resistance in community-acquired infections, 2018–2023. *Infection Control & Hospital Epidemiology*. PMID: #########.
10. **Smith J**. (2023). The epidemiology of Lyme disease in Eastern Canada: A retrospective analysis. *Vector-Borne and Zoonotic Diseases*. PMID: #########.
11. Author A, **Smith J**, Author P. (2022). Health disparities in rural and urban communities: lessons from the Canadian Community Health Survey. *BMC Public Health.* PMID: #########.
12. **Smith J**, Author T. (2022). The effect of climate change on vector-borne diseases in Canada. *Canadian Medical Association Journal*. PMID: #########.
13. Trainee Author L, Trainee Author M, Author T, Author Y, **Smith J**. (2022). COVID-19 outcomes and comorbidity burden among older adults. *Age and Ageing*. PMID: #########.
14. **Smith J**, Author L. (2022). Food insecurity and child health: a national survey analysis. *Canadian Journal of Dietetic Practice and Research*. PMID: #########.
15. **Smith J**, Author A. (2021). Smoking cessation programs and cardiovascular outcomes: a population-based study. *Preventive Medicine*. PMID: #########.
16. **Smith J**, Author Y. (2021). Seasonal influenza vaccination coverage among pregnant individuals in Canada. *Vaccine*. PMID: #########.
17. Trainee Author M, **Smith J**. (2021). Socioeconomic influences on COVID-19 transmission in urban settings. *International Journal of Infectious Diseases*. PMID: #########.
18. **Smith J**, Author M. (2021). Barriers to cancer screening among immigrants: a systematic review. *Journal of Immigrant and Minority Health*. PMID: #########.

## F. Additional Information: Scholastic Performance

Not applicable for this applicant category.