### **Benjamin Wong**

E-mail: <a href="mailto:ben.kcwong@gmail.com">ben.kcwong@gmail.com</a>

https://www.linkedin.com/in/benckcwong/

#### **EDUCATION**

DALLA LANA SCHOOL OF PUBLIC HEALTH, University of Toronto, Toronto, ON

Master of Public Health (MPH), Epidemiology

SCHULICH SCHOOL OF MEDICINE & DENTISTRY, Western University, London, ON
Bachelor of Medical Sciences (BMSc), Honours Specialization in Medical Sciences

#### **WORK EXPERIENCE**

# **CENTRE FOR GLOBAL HEALTH RESEARCH**, St. Michael's Hospital, Toronto, ON **Epidemiologist / Research Coordinator MPH Practicum Student**

2018-2020

Winter 2017

- Conducted statistical analyses assessing trends in cause-specific mortality to strengthen tobacco and alcohol
  policy in low- and middle-income countries using R
- Conducted an impact evaluation of mass vaccination campaigns on measles mortality among children in India
  using a nationally representative sample using R/Stata
- Conducted a multi-country analysis of COVID-19 mortality (Italy, China, Spain, South Korea)
- Generated workflows for data cleaning, record linkage, quality assurance checks, statistical analyses, and interpretation/visualization of results on large datasets (1M+ cases)
- Maintained and optimized data infrastructure for extraction, joining, and processing of data using R
- Provided technical support for various ongoing projects, including exploratory data analyses, grant proposal writing, workshop material development, literature reviews, and supervision of practicum students

# MAP CENTRE FOR URBAN HEALTH SOLUTIONS, St. Michael's Hospital, Toronto, ON Epidemiologist / Research Coordinator Junior Epidemiologist

2017-2018

Fall 2016

- Conducted two systematic reviews and meta-analyses assessing (1) current progress of the UNAIDS 90-90-90 HIV targets among men who have sex with men in sub-Saharan Africa and (2) syphilis re-infection among high- and upper-middle income countries
- Prepared literature reviews, reports, abstracts, posters, and manuscripts
- Coordinated research activities with various international collaborators and partners; organized and chaired internal and external meetings; supervised undergraduate summer students
- Designed survey questionnaires and prepared study documentation including data collection forms and REB
  applications in accordance with ICH GCP and TCPS2 guidelines; managed laboratory databases and protocols

### SUDBURY & DISTRICT HEALTH UNIT, Sudbury, ON

MPH Practicum Student Summer 2016

- Conducted literature reviews, critical appraisal of epidemiologic studies, ad-hoc data cleaning, and exploratory analyses using various Ontario health data sources (IntelliHealth, CCHS, RRFSS, etc.)
- Analyzed and developed a report on comparative trends in injury-related hospitalizations, deaths, and disabilityadjusted life years between the SDHU region and Ontario using administrative data

Presented and summarized the findings from my report to public health unit team leaders and staff

#### **UNIVERSITY OF TORONTO, Toronto, ON**

#### Microbiology Research Assistant, Faculty of Dentistry

2012-2015

- Laboratory of Dr. Anuradha Prakki, DDS, MSc, PhD
   Project: The effect of polyphenols and natural compounds on V-ATPase expression in osteoclast activity and osteocyte inflammatory processes
- Laboratory of Dr. Getulio Nogueira, DDS, MDent, PhD
   Project: The necessity of keratinized mucosa and gingival thickness on maintenance of gingival health and prevention of implant detachment in periodontitis
- Performed DNA and protein gel electrophoresis, and purification; supported team research activities through solution and buffer preparation
- Assisted preparation of manuscripts and laboratory reports, conducted literature reviews, and maintained reproducible laboratory protocols and methods

# **DR. GABRIEL WONG & DR. ALAN HOFFMAN FAMILY CLINIC**, Ajax, ON **Patient Database Manager**

Summer 2011

- Captured and digitized patient health records to an electronic database.
- Updated patient files and office records in order to allow patients more time with the physician and to ensure the efficiency and organization in the office
- Greeted and checked in patients; assisted administrative staff in guiding patients to examination rooms and handling follow-up

#### **VOLUNTEER EXPERIENCE**

## **COVID-19 DISPERSED VOLUNTEER RESEARCH NETWORK**, Harvard University, Cambridge, MA **Researcher**

2020-Present

- Studied the network effects of xenophobia using social media platforms such as Twitter
- Exploring the intersection of privacy and public health in the context of the COVID-19 response
- Provided data analytics expertise to a group dedicated to addressing the COVID-19 outbreak projects vary from traditional epidemiology to computational biology (including applications to related fields such as health policy)
- Assisted in various tasks including data curation from public sources; literature review; model development and implementation; data visualization; and manuscript drafting

## **DISTRESS CENTRES OF GREATER TORONTO,** Canadian Suicide Prevention Service, Toronto, ON **Crisis Line Responder**

2019-Present

- Trained in suicide risk assessment, crisis response, safety planning for suicide prevention, and mentoring/orienting new volunteers
- Provided emotional support to individuals experiencing suicidal ideation or crisis
- Supported callers in managing suicide crises, navigating ongoing mental health concerns, identifying resources for support and care, and developing skills for coping with situational crises

#### BOPOMA VILLAGES (NPO), Masvingo, Zimbabwe

#### **Consultant, Analytics and Program Evaluation**

2019-Present

- Designed and implemented an annual survey evaluating the impact of sanitation, sustainable farming, and orphan care interventions in thirteen villages
- Developed training materials and conducted training sessions on survey interviewer training, data collection, and data entry
- Designed and maintained data collection, data cleaning, and quality assurance procedures

#### DALLA LANA SCHOOL OF PUBLIC HEALTH, University of Toronto, Toronto, ON

#### Founding Member, Students for Indigenous Health Equity

2016-2017

- Led the ratification of a graduate student network alongside a team of graduate students devoted to addressing indigenous health equity in collaboration with indigenous communities and school leadership
- Contributed to drafting the group's constitution and standard operating protocols, chaired executive committee
  meetings, organized and facilitated general meetings, presided over general elections and transition of the
  executive team

### UNIVERSITIES ALLIED FOR ESSENTIAL MEDICINES, Toronto, ON Volunteer

2015-2017

- Contributed to data collection and synthesis for the Canadian University Report Card, an evaluation of Canadian universities' contributions to global health research and efforts to improve global access to treatments
- Drafted a policy brief advocating for the Canadian government's adoption of UAEM's Global Campaign for Alternative Biomedical R&D Agreement at the 2017 World Health Assembly.
- Coordinated initiatives at local university chapters (Western University and University of Toronto) with UAEM's national and international campaigns

#### INTERVARSITY CHRISTIAN FELLOWSHIP OF CANADA, London, ON

#### **Executive Leadership Committee Member**

2011-2015

- Planned and facilitated weekly programming for a faith-based group of over thirty undergraduate and graduate students with an emphasis on group mentorship and community-building
- Providing academic and social support to youth navigating their roles as members of both Asian and Canadian communities
- Collaborated with leadership to book on-campus venues; organize outreach, social media, and promotions; and facilitate programs
- Coordinated activities with Ontario university chapters (Queen's University and McMaster University)

### **WESTERN UNDERGRADUATE RESEARCH JOURNAL**, Western University, London, ON **Editor-in-Chief**

2014-2015

- Managed the journal's day-to-day operations, supervising a team of reviewers in peer review, copy-editing, manuscript publication
- Oversaw editorial direction, outreach initiatives, and online publication of journal issues.
- Organized seminars to orient students toward finding research experiences and connecting with interested principal investigators
- Collaborated with the Western Scholar's Research Community to connect undergraduate students with a community of researchers
- Implemented a two-year plan to improve student engagement in research, connect principal investigators with interested students, and create opportunities for students to participate in the peer review process
- Led a new initiative to introduce faculty profiles in future journal issues which aim to highlight various researchers and fields of inquiry in the Faculty of Science

#### BAPTIST MEDICAL AND DENTAL MISSION INTERNATIONAL, Guaimaca, Honduras

Assisted a mobile clinic team in providing medical treatment to patients

Summer 2011

- Conducted patient interviews, obtained medical histories, measured vital signs, maintained patient registry
- Interacted with patients and listened to needs and concerns; provided emotional support and reassurance
- Observed minor surgical procedures and clinical interactions

**NORTH YORK GENERAL HOSPITAL**, North York, ON **Day Surgery Volunteer** 

**Medical Volunteer** 

- Volunteered in the outpatient surgery unit interacting with patients and nursing staff to provide outpatient services prior to discharge
- Escorted visitors to patient beds and located family and friends throughout the waiting area
- Transported patients to and from the hospital entrance, changed bed linens, and restocked supplies
- Observed bedside doctor-patient interactions to better understand healthcare delivery and coordination of care with nurses, physicians, and staff in a tertiary hospital

#### **TEACHING & OUTREACH EXPERIENCE**

#### RYERSON UNIVERSITY, Toronto, ON

**Lecturer**, R for Clinicians \* Cancelled due to COVID-19

2020

 Gave an introductory lecture on R for statistical analysis and reporting geared towards physicians as part of Ryerson University's Internationally Trained Medical Doctors (ITMD) Bridging Program

#### ST. MICHAEL'S HOSPITAL, Toronto, ON

Workshop Facilitator, R Workshop Series

2019

• Organized and led hospital-wide seminars on Introduction to Data Manipulation and Analysis Using R, R in the Life of a Researcher, Using R for Statistical Analysis

#### ST. MICHAEL'S HOSPITAL, Toronto, ON

Workshop Facilitator, Data Analytic Methods Seminars

2017

 Organized and led summer workshops for a group of 10-15 undergraduate and medical students on Introduction to Data Analysis using R, Introduction to Systematic Reviews and Meta-analysis, Introduction to Epidemiologic Study Designs, Introduction to GIS using R

#### DALLA LANA SCHOOL OF PUBLIC HEALTH, University of Toronto, Toronto, ON

#### **Graduate Teaching Assistant**

Coordinator

2017

- Prepared a graduate course curriculum for "CHL7001H S6 International Health Development" taught by Professor Shafi U. Bhuiyan
- Presented on health systems performance and current progress in achieving Sustainable Development Goals among low- and middle-income countries

#### WESTERN STUDENT RESEARCH CONFERENCE, Western University, London, ON

Organized an undergraduate science conference as part of a planning committee

2014–2015

- Developed conference programming while managing time and budget constraints, and facilitated workshops and ensuring smooth and timely transition through activities
- Coordinated logistics, including call for abstracts, procuring and scheduling keynote speakers and panelists,
- Assisted in organizing event outreach, promotions, event site booking, food and drinks

### **DIVISION OF HOUSING & ANCILLARY SERVICES**, Western University, London, ON

**Residence Orientation Leader** 

2012-2013

- Assisted new students in residence transitioning to university
- Promoted student engagement and provided mentorship, peer support, and academic planning sessions
- Led the publication of a student life magazine as Head Commissioner of Delaware Hall Residence Council

#### **PUBLICATIONS, ABSTRACTS, AND REPORTS**

Wong BKC, Fadel SA, Awasthi S, Khera A, Kumar R, Menon G, Jha P. 2019. The impact of measles immunization

campaigns in India using a nationally representative sample of 27,000 child deaths. *eLife* 8:e43290. <a href="https://doi.org/10.7554/eLife.43290">https://doi.org/10.7554/eLife.43290</a>

King M, Wong BKC, Malaviarachchi D, Palangio A, Dowdall-Smith S, Lefebvre M. Sudbury & District Health Unit. **2018**. SDHU Population Health Profile: Injuries and poisonings. Sudbury, ON. <a href="https://www.phsd.ca/resources/research-statistics/health-statistics/public-health-sudbury-districts-population-health-profile/injuries-and-poisonings">https://www.phsd.ca/resources/research-statistics/health-statistics/public-health-sudbury-districts-population-health-profile/injuries-and-poisonings</a>

Shakeri A\*, **Wong B\***, Burchell A, Tan DHS, Al-Salman A, Gesink D, Allen V, Aral S, Mishra S. **2017**. Syphilis re-infection amid a global resurgence: a systematic review and meta-analysis. *AMMI Canada – CACMID Annual Conference (p. 51)*. Toronto: Journal of the Association of Medical Microbiology and Infectious Disease Canada. https://doi.org/10.3138/jammi.2.suppl-1.1

Brito C, Tenenbaum HC, **Wong BKC**, Schmitt C, Nogueira-Filho G. **2014**. Is keratinized mucosa indispensable to maintain peri-implant health? A systematic review of the literature. *J Biomed Mater Res Part B* 102B:643–650. <a href="https://doi.org/10.1002/jbm.b.33042">https://doi.org/10.1002/jbm.b.33042</a>

#### **POSTERS AND PRESENTATIONS**

"Trends in Tobacco- and Alcohol-attributable Mortality in India". Clinical and Population Research Rounds at St. Michael's Hospital on April 11, 2019. Presentation.

Zahid S, **Wong B**, Srivastav S, Lightfoot D, Ziegler C, Mishra S. 2017. The HIV care continuum among men who have sex with men in Sub-Saharan Africa: a systematic review and meta-analysis. St. Michael's Hospital Research Day: Toronto, ON. Poster.

"Impact of measles immunization campaigns on 1-to-59-month measles mortality in India". St. Michael's Hospital on April 24, 2017. Presentation.

"Trends and prevalence of injuries and poisonings in the SDHU area". Sudbury & District Health Unit on August 11, 2016. Presentation.

Sutherland SC, **Wong B**, Ma J, Bhuiyan SU. 2016. Maternal & Child Health Handbook: Reducing Mortality and Improving Health System Efficacy in Guatemala. 10th Annual MCH Handbook Conference. Tokyo, Japan. Poster.

"Cytotoxicity Assays and Assessment Methodology". Biological Basis Seminar Series, University of Toronto on July 17, 2013. Presentation.

#### **PROFESSIONAL SERVICE**

**Peer Review:** Journal of Pediatric Infectious Diseases Society (2020-Present), International Journal of Indigenous Health (2019-Present), BMC Infectious Diseases (2017)

Hiring Committees: Centre for Global Health Research (2018), MAP Centre for Urban Health Solutions (2017) Memberships: Society for Epidemiologic Research (2019), Canadian Coalition for Global Health Research (2016), Canadian Public Health Association (2016)

#### **HONOURS & AWARDS**

2019 STAT Wunderkind Nominee, Stat News	2019
Robert Remis Award, Dalla Lana School of Public Health, University of Toronto	2019
LEP Certificate in Individual & Group Leadership, Western University	2013
Platinum Award for Excellence in Leadership, Western University	2012

#### **ADDITIONAL TRAINING**

#### SciNet UNIVERSITY OF TORONTO, Toronto, ON

Certificate in Data Science 2018

Completed coursework in: Introduction to Computational Biostatistics with R, Introduction to Programming with Python, Neural Network Programming, Introduction to Linux Shell, Advanced Shell Programming, Relational Database Basics

#### PROVINCIAL HEALTH SERVICES AUTHORITY OF BRITISH COLUMBIA

San'yas Indigenous Cultural Safety Training Certification

2018

#### **CITI PROGRAM**

**CITI-GCP (Good Clinical Practice) Certification** 

2017

#### **GOVERNMENT OF CANADA PANEL ON RESEARCH ETHICS**

Tri-Council Policy Statement Course on Research Ethics (TCPS2 CORE) Certification

2017

#### **TECHNICAL SKILLS**

- Statistical Programming: R (advanced), Stata, Python, QGIS
- Database Management: SQL/PostgreSQL, Git (Bash)
- Markup: Markdown, LaTeX