### Introduction to R for Public Health Investigations

Meet our R superstars!

Course co-lead, Facilitator, and Subject Matter Expert Biographies



### **BENJAMIN HETMAN, COURSE CO-LEAD**

#### WINNIPEG, MB | TRAINING AND DEVELOPMENT UNIT

Ben started his career in the lab back in 2010 working for the National Microbiology Laboratory (NML) in Lethbridge, AB and in 2016, moved to Guelph ON to pursue a PhD in Epidemiology. In 2019, Ben joined the Canadian Field Epidemiology Program where he was placed with the Outbreak Management Division, and is now an Epidemiologist with the Training and Development Unit. Ben has a range of experiences in public health – from basic and applied microbiology to surveillance and outbreak response; a consistent thread through it all, however, has been his love of working with data and using coding skills to solve practical challenges. When not reading R blogs or proving that R can be used to do virtually anything, Ben spends time with his dog Mila, and participates in a variety of totally cool role-playing adventures.



### CASSANDRA LYBECK, SUBJECT MATTER EXPERT

OTTAWA, ON | CENTRE FOR COMMUNICABLE DISEASES AND INFECTION CONTROL

Cassandra Lybeck works at PHAC in the STI and hepatitis section as an Epidemiologist. She focuses primarily on the enhanced surveillance of antimicrobial resistant gonorrhea (ESAG) project, and supports the enhanced surveillance of syphilis and other STIs. Aside from STI's, she is passionate about keeping up up-to-date in the world of respiratory viruses - as her MSc in Biochemistry focused on a common respiratory virus (Adenovirus) and how it interacts with its host cell during latent infection. She co-manages the PHAC R User group with Najmus Saqib and loves working in R!





#### **EMILIA KRZEMINSKA, FACILITATOR**

# MONTREAL, QC | CONTROLLED SUBSTANCES AND CANNABIS BRANCH OF HEALTH CANADA

Emilia is an epidemiologist in the Office of Drug Research and Surveillance in the Controlled Substances and Cannabis Branch of Health Canada. She completed the Master of Science in Public Health at McGill University in 2022 (with Lynn!) while working at PHAC on opioidand stimulant-related harms surveillance. In her current position at Health Canada, Emilia spends most of her time analysing complex survey data with the help of our good friend R! Together with Lynn, she is also working on creating R training sessions for their Health Canada colleagues. When she's not knee-deep in R's *survey* package, she enjoys spending time outdoors, making music, and reading.



#### **ERIN MCGILL, SUBJECT MATTER EXPERT**

## OTTAWA, ON | CANADIAN NOSOCOMIAL INFECTION SURVEILLANCE PROGRAM

Erin started her public health career in 2018 with the enteric Outbreak Management Division at the Public Health Agency of Canada (PHAC). During the pandemic she was recruited to the newly formed Outbreak Response Unit, and now she is an epidemiologist with the Canadian Nosocomial Infection Surveillance Program (CNISP). In her current role, Erin uses R to clean and manipulate data on C. auris, viral respiratory infections (VRIs) and carbapenemase producing organisms (CPOs) to calculate national rates for hospitals to use as benchmarks. Outside of work you can find her hanging out with her two Cane Corsos - Kilo & Odin.



#### JOANNE STARES, COURSE CO-LEAD

#### ST. JOHN'S, NL | TRAINING AND DEVELOPMENT UNIT

Joanne has worked in public health since 2008, starting first as an analyst at the Newfoundland and Labrador Centre for Health Information. In 2010 they joined the Public Health Agency of Canada as a Public Health Officer with the Canadian Public Health Service. Mid-way through their time with CPHS they "saw the light" and R has been their statistical software of choice ever since. In 2017, Joanne joined the Training and Development Unit as an epidemiologist where they put their passion for programming in statistical software, problem solving, and working with data to good use. At the TDU they enjoy creating and delivering technical training and supporting field staff in furthering the development of their talents, technical skills, and toolboxes. Outside of work you can usually find Joanne enjoying the outdoors, reading a book, chilling with their pets Laika and Squid, practicing a new artistic skill, or having a laugh over something silly.



#### JOELLE CAYEN, SUBJECT MATTER EXPERT

# OTTAWA, ON | CANADIAN NOSOCOMIAL INFECTION SURVEILLANCE PROGRAM

Joëlle Cayen is an Epidemiologist with the Canadian Nosocomial Infection Surveillance Program (CNISP) at the Public Health Agency of Canada. Since she first joined the Agency in 2018, she has led the development of many automated tasks, products, and reports using R. She helped support the Agency's response to the COVID-19 pandemic on several teams across the Agency and worked as an R Programmer on DISCOVER where she also assisted in maintaining the metabaser package. She authored the package canadianmaps in 2021 for her team to use internally, and then later published the package on CRAN in February 2022.



#### LYNN SUKKARIEH, FACILITATOR

# EDMONTON, AB | CONTROLLED SUBSTANCES AND CANNABIS BRANCH OF HEALTH CANADA

Lynn is an epidemiologist at the Office of Cannabis Science and Surveillance (OCSS) in the Controlled Substances and Cannabis Branch (CSCB) of Health Canada. Lynn started her R journey in 2020 when she began the Master of Science in Public Health program at McGill University (with Emilia!). After graduating, she worked as an epidemiologist at the Centre for Emerging and Respiratory Infections and Pandemic Preparedness in the Public Health Agency of Canada. There, she developed her "exp-R-tise" and is now applying her R coding skills in OCSS to automate redundant tasks. With the help of Emilia, and an amazing team of R-users they formed, Lynn plans to share her R knowledge with her colleagues in CSCB. When not staring at ambiguous R error messages for extended periods of time, Lynn spends her time exercising and growing her totally-cool island in Animal Crossing.



### NAJMUS SAQIB, SUBJECT MATTER EXPERT

# OTTAWA, ON | CENTRE FOR DATA MANAGEMENT, INNOVATION AND ANALYTICS

Naj is a Data Scientist at the PHAC Office of the Chief Data Officer. Most of his recent R work has been dedicated to utilizing the language on the cloud for robust data engineering and data science solutions. Naj also coleads the PHAC R Users Group, through which monthly lunch-and-learn sessions are held to exchange best practices and share some great work done in R by group members across the Agency and beyond.



### **NEVENA VELJANOVIC, COURSE CO-LEAD**

#### GRANBY, QC | TRAINING AND DEVELOPMENT UNIT

Nevena is currently a trainer-epidemiologist with the Training and Development Unit (TDU). She graduated from l'École de Santé Publique de l'Université de Montréal where she completed a Master of Science in Public Health with a concentration in Epidemiological Surveillance. She was placed at the Institut national de santé publique du Québec as a Student Public Health Officer working on Mutlisystem Inflammatory Syndrome surveillance for a few months before joining the TDU team in 2021. Ever since, Nevena has been promoting accessibility as well as bilingualism and working on multiple training files, including anything that allows her to play around in R.



#### PENELOPE GORTON, SUBJECT MATTER EXPERT

#### TORONTO, ON I CANADIAN FIELD EPIDEMIOLOGY PROGRAM

Penelope is currently in the Canadian Field Epidemiology Program, where she is placed with Toronto Public Health. She first joined PHAC as an epidemiologist in 2020, and has worked in surveillance, research, outbreak response, and risk assessment, largely in the area of zoonotic and vector-borne diseases. Prior to completing her MPH in Epidemiology, she completed an MSc in Ecology and Evolution, and worked at the University of Toronto in many roles, including as a researcher, educator, and science communicator. In her spare time, Penelope enjoys outdoorsy adventures, cooking, and reading books curled up with her cat Tess.