# Summer Research Training Institute

Virtual 2023

# Sponsors

NIH National Institute of General Medical Sciences

### NW NATIVE AMERICAN RESEARCH CENTER FOR HEALTH





National Institute of General Medical Sciences Under Award Number 1S06GM141002 Native American Research Centers for Health Northwest Portland Area Indian Health Board

# Table of Contents



01 Introduction

02 Virtual Learning

03 Instructors

### 04

Course Descriptions

08 Class Schedule

09 Thank You

# Introduction

### Who Should Attend

The Summer Research Training Institute (SRTI) curriculum is designed to meet the needs of professionals and students who work in diverse areas of American Indian and Alaska Native (AI/AN) health.

Almost anyone who works in Native health can take advantage of this skillbuilding opportunity – from administrators, community health workers, physicians, nurses, researchers, to program managers. Professionals who seek training opportunities related to research will find relevant SRTI courses emphasizing research skills, program design, and implementation. We encourage AI/AN health professionals and health science students to attend. We also seek AI/AN students and participants from other professional areas who are strongly interested in Native health.

- All courses are virtual.
- All times are listed in Pacific Time (PT).
- All cost of participation is covered by an award from National Institutes of Health (NIH) to Northwest Portland Area Indian Health Board (NPAIHB).
- Certificates are awarded upon completion of each course.



### **Contact Information**



SUMMERINSTITUTE@NPAIHB.ORG



HTTPS://WWW.NPAIHB.ORG/SUMMER -RESEARCH-TRAINING-INSTITUTE/



# Virtual Learning

### System Requirements

You will need Internet access and a computer with a camera and microphone. Please make sure you have the latest web browser and Zoom downloaded on your computer. You will also need to set up Canvas once invited to enroll in courses; this will be facilitated by SRTI organizers. If you are planning on taking biostatistics or data science courses, instructors will contact you to make sure you have the software you need.

### About the Curriculum

SRTI curriculum is developed and designed by skilled instructors to meet the needs of AI/AN professionals and students interested in Native health. Courses are offered in the morning and afternoon of each week. They vary in length from one day to a week. You may register for as many courses as you would like, however some courses are scheduled at the same time. Please visit the schedule for details. Each week, we will offer Lunchtime Seminars, which include innovative presentations by guest speakers.



# Instructors

2023 Summer Research Training Institute instructors!



Cynthia-Lou Coleman, PhD Osage Nation



Linda Burhansstipanov, DrPh, MSPH Cherokee Nation



Marc Emerson, PhD, MPH Navajo



Mark Dignan, PhD, MPH



Rachel Dresbeck, PhD





Jessica Minnier, PhD



Nicole Smith, MPH



Emile Latour, MS



Alyssa Yang, MPH



Joshua L. Tootoo, MS, GISP





Ben Maxson, MS



### **EPIDEMIOLOGY BASICS**

Lead Instructor: Marc Emerson, PhD, MPH (Navajo) Schedule: June 12-16 at 9 AM-12 PM PT (occurs at the same time as Program Evaluation)

This course will involve content & exercises on basic principles of epidemiology: (1) epidemiology uses & thinking, (2) measures of disease frequency and association, (3) basic statistics, bias, and confounding relevant to these measures, and (4) commonly used study designs.

### **PROGRAM EVALUATION**

Lead Instructor: Mark Dignan, PhD, MPH Schedule: June 12–16 at 9 AM–12 PM PT (occurs same time as Epidemiology Basics)

Students will be introduced to the fundamental principles of program evaluation and their application. The course will cover a variety of theory-based evaluation designs and methods. Evaluation focusing on assessment of processes, impact, and outcomes associated with cancer-related health promotion and health education programs will be emphasized. By the end of the course, students will have developed a plan for evaluating a program and present to faculty and students.

#### **GRANT WRITING**

Lead Instructor: Rachel Dresbeck, PhD Schedule: June 12-16 at 1:30-4:30 PM PT (occurs at the same time as Data Science Skills)

Writing successful proposals is important for public health professionals, whether they are trying to secure funding for a research project or fund an important program. This workshop will cover the basics of grant writing, including how to write effectively and persuasively, the various components of proposals, basic budgeting, and strategies to increase success. We will cover several types of grants (depending on participant needs) as well as the secrets of grant review. We will spend time on your own writing process, discussing and practicing strategies for improving writing productivity and developing your writing style. You will be able to benefit from individual coaching, if desired.



### **R SKILLS**

Lead Instructors: Jessica Minnier, PhD and Emile Latour, MS Schedule: June 12 and June 14 at 1:30-4:30 PM PT (occurs at the same time as Grant Writing)

In this two-day course, we will introduce the freely available statistical software programs R and R Studio to trainees with no prior experience. We will cover how to use R Studio to write and run code, introduce data structure types, and demonstrate commands for working with data: loading, viewing, summarizing, plotting, cleaning, and saving. You will learn basic R data wrangling and plotting principles, and how to use them to create high-quality reproducible documents to present your work.

### DATA VISUALIZATION

Lead Instructors: Nicole Smith, MPH and Alyssa Yang, MPH Schedule: June 13 at 1:30-4:30 PM PT (occurs at the same time as Grant Writing)

This course will get you started in creating charts and graphs using Excel. We will discuss strategies for effective data visualizations, including choosing the right chart type, tailoring to your audience, and using data to create a story and focused message. We'll do some hands-on work together, constructing charts in Excel, and you'll leave with a few custom templates to use in your future data visualization work.

### **ARCGIS SKILLS**

Lead Instructors: Joshua Tootoo, MS, GISP and Ben Maxson, MS Schedule: June 15, June 16 and June 19 at 1:30–4:30 PM PT (occurs at the same time as Grant Writing and Grant Management & Budgeting)

This course will provide a gentle introduction to the software program ArcGIS, a tool for visualizing spatial data and creating maps. You will learn how to create a map that conveys information clearly, and will have the opportunity to create a map of your own with a dataset provided. No previous experience with creating maps or with ArcGIS is necessary to take this course. *Software will be provided to registered students. Please install software before June 15, 2023.* 



### INTERMEDIATE EPIDEMIOLOGY

Lead Instructor: Marc Emerson, PhD, MPH (Navajo) Schedule: June 19-23 at 9 AM-12 PM PT (occurs at the same time as Research Storytelling)

This course involves a more detailed exploration of epidemiologic study designs, primarily crosssectional, case-control, and cohort studies addressing questions related to chronic diseases and cancer control. We will include discussions of some of the cultural considerations in the design and implementation of these studies. This course will also examine in more detail topics of importance to the design, implementation, and evaluations of observational epidemiology studies: (1) systematic error (selection and information biases); (2) confounding; and (3) effect modification. Prerequisite: Epidemiology Basics (or equivalent).

### **RESEARCH STORYTELLING**

Lead Instructor: Cynthia-Lou Coleman, PhD (Osage Nation) Schedule: June 19-23 at 9 AM-12 PM PT (occurs at the same time as Intermediate Epidemiology)

Communication and research are the focal points of this course, which is designed to help you communicate your own research as well as research that buttresses your work and your organization's goals. The context for this course is American Indian/Alaska Native (AI/AN) communities and the framework is health campaign management. Health campaigns promote health improvement and disease prevention. Elements of campaign management to be covered include: (1) Translating program goals into outcomes, (2) Unpacking outcomes—are they designed to offer audiences information? Awareness? Knowledge? Attitude change? Behavior change?, (3) Identifying and targeting audiences, (4) Framing messages, (5) Discovering channels of communication such as social media, videos, print and broadcast messages, interpersonal communication, etc., and (6) Assessing program outcomes. Participants will also learn skills for allied communication settings, such as public speaking for lay and specialized audiences (particularly AI/AN communities), presenting data visually, presenting statistics, and the role of storytelling narratives.

### **GRANT MANAGEMENT & BUDGETING**

Lead Instructor: Linda Burhansstipanov, DrPH, MSPH (Cherokee Nation) Schedule: June 19-23 at 1:30-4:30 PM PT (occurs at the same time as Technical Writing)

Students will learn more about development of grant budgets for NIH and other grant funding agencies, techniques for monitoring grant spending, and methods for tracking grant benchmarks/achievements in an efficient manner. We will make extensive use of Excel software. Each day will include hands-on exercises, short quizzes, and problem-solving for real-life grant-related challenges. The instructor has many decades of experience with grant management and is delighted to share her expertise. No pre-requisites, although some familiarity with Excel will help make the learning process more efficient.

### **TECHNICAL WRITING**

#### Lead Instructor: Rachel Dresbeck, PhD

Schedule (occurs at the same time as Grant Management & Budgeting)

- June 20-21 at 1:30-4:30 PM PT: Intensive class sessions
- June 22–23 at 1:30–4:30 PM PT: Opportunity to practice and collaborate with others in Writing Circles facilitated by Grazia Cunningham, MPH
- June 30-August 11: We will meet together for the following *six weeks* for one hour per week for a guided peer feedback session.

Professional writing is a near-daily activity for many of us. Whether we're writing research abstracts and papers, reports, newsletters, websites or other pieces, we may struggle with getting it right—or even knowing what "right" really means. The good news is that you can get better at writing with practice and some dedicated attention. This professional writing course will help attendees become more proficient at professional and technical writing through focusing on elements such as clarity, persuasiveness, and structure. Depending on the needs of the participants, we will focus on research papers, position papers, and other aspects of professional writing of interest. Since professional writing also considers audience as a major factor, part of the course will involve peer feedback over a number of weeks to help you finish a project and develop a sense of how your writing is being received by others.

### **Register here**

# Virtual Class Schedule



https://cvent.me/YwVN8d

Week 1	Monday 6/12	Tuesday 6/13	Wednesday 6/14	Thursday 6/15	Friday 6/16		
9 AM - 12 PM Pacific Time		Opening Ceremo AM-12 PM: Epider	ony* miology Basics <b>O</b>	<b>R</b> Program Evalua	ation		
12-1:30 PM	Lunchtime Seminars						
1:30-4:30 PM	R Skills OR	Data Visualization OR	R Skills OR Grant Writing	ArcGIS Skills OR	ArcGIS Skills OR		

Week 2	Monday 6/19	Tuesday 6/20	Wednesday 6/21	Thursday 6/22	Friday 6/23		
9 AM - 12 PM Pacific Time	In	termediate Epid	emiology <b>OR</b> Res	earch Storytellin	g		
12-1:30 PM	Lunchtime Seminars						
1:30-4:30 PM	ArcGIS Skills OR	Technical Writing OR Gran	Technical Writing OR t Management &	Technical Writing: Writing Circle OR Budgeting	Technical Writing: Writing Circle OR		

\*Please note there is an Opening Ceremony on the first day of class. Attendance is highly recommended.

## Thank you for your ongoing support of Summer Research Training Institute



NW NATIVE AMERICAN RESEARCH CENTER FOR HEALTH



#### NORTHWEST PORTLAND AREA INDIAN HEALTH BOARD

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