



## Background

Bloomberg Philanthropies' **Data for Health** initiative helps countries collect better public health data, which leads to sound policymaking and improved public health outcomes.

**Data for Health** provides financial and technical assistance to more than 40 countries reaching nearly 5 billion people.

One part of the initiative, the **Data Impact Program**, focuses on scientific communication (SC) training, which is led by the U.S. Centers for Disease Control and Prevention (CDC).

## Scientific communication training

The SC training is a 1-week training-of-trainers (TOT) workshop, followed by a 2-week scientific communication course. The aim of the training is to enhance the scientific communication skills of in-country public health officials, allowing them to disseminate and publish their findings more effectively and more clearly.

The ultimate goal of the SC training is to assemble a team of in-country experts who can regularly deliver the SC course and serve as writing coaches and mentors for course participants who are writing manuscripts or developing other presentations.

Primary course participants are Field Epidemiology Training Program trainees but may also include staff from the Ministry of Health, universities, and non-governmental organizations.

The training comprises three interconnected components, as described below.

### Component 1: Training-of-trainers workshop

In the first phase, CDC selects potential candidates to attend a 1-week TOT workshop where they learn the concepts of adult learning, instructional strategies, and review the content of the 2-week SC course that they will later facilitate.

At the end of the TOT, qualified candidates are selected as mentors.

### Component 2: SC course delivery

The next step is for the mentors to deliver the 2-week SC course to qualified participants.

Course topics include writing styles, manuscript and abstract writing, literature review, and data visualization (see the back page for an overview of the course).

The delivery of this course typically occurs one or two months after the TOT. A CDC expert will be on hand to help with the training and coach the mentors.

### Component 3: Mentorship

At the conclusion of the course, each mentor is paired with 2–3 mentees. Mentors work closely with their mentees, coaching them as they draft scientific manuscripts, abstracts, and posters. Mentors also provide guidance on manuscript submission to peer-reviewed national and international scientific journals, national or regional public health bulletins, and scientific conferences.

### Role and responsibilities of mentors

Mentors are hired as part-time consultants (typically 8 hours per week) for a specified length of time (to be determined) and are compensated on a monthly basis.

### Mentor education requirements

- PhD, Medical Degree, or equivalent in a scientific field (biology, epidemiology, medicine, or comparable) from an accredited university in country or abroad
- At least 2 years' teaching experience

### Skills and qualifications

- Fluent in English
- Knowledgeable in the subject matter: scientific research, preferably in epidemiology
- Experienced teacher, who has taught in a classroom environment
- Experienced mentor, who has supervised students' writing projects such as dissertations, etc.
- Published author (two or more first-authored scientific articles in English in peer-reviewed journals) and given at least 2 presentations (abstracts and posters) at scientific conferences
- Resident of the country

### For more information

Contact Pascale KRUMM at [pkrumm@cdc.gov](mailto:pkrumm@cdc.gov).



## Overview of the scientific communication course



### **Module 1: Communicating scientific information**

Attributes and principles of scientific communication



### **Module 2: Writing effectively**

Communicating science effectively using plain language principles; using correct words; crafting sentences and paragraphs



### **Module 3: Writing scientific manuscripts for publication**

Types of scientific manuscripts (analytic and descriptive); components of a scientific manuscript (IMRAD)



### **Module 4: Writing abstracts and ancillary materials**

Abstract writing and analysis; ancillary materials (title, references, etc.)



### **Module 5: Publishing manuscripts**

Literature review (search engines and databases); journal selection; submission process



### **Module 6: Scientific misconduct**

Understand and avoid fabrication, falsification, fraud, and plagiarism



### **Module 7: Data visualization**

Quantitative and qualitative data; effective visual display of data



### **Module 8: Designing effective slides**

Principles of design for PowerPoint slides



### **Module 9: Creating effective posters**

Principles of design for posters; poster presentation skills



### **Module 10: Delivering effective presentations**

Principles of oral presentations; creating an “elevator speech”; handling questions and answers at conferences