



Background

In 2015, Bloomberg Philanthropies launched the **Data for Health Initiative** to help governments build capacity and develop sustainable approaches in using scientific data to guide and support program decision making and policy development.

One part of the initiative, the **Data Impact Program**, aims to ensure policy makers use data to make informed health-related decisions. It includes training on scientific communication skills, which was developed and is being implemented by the U.S. Centers for Disease Control and Prevention (CDC).

Scientific communication training

The training comprises a 1-week training-of-trainers (TOT) workshop as well as a 2-week scientific communication course to enhance scientific communication skills for in-country public health officials.

The aim of the training is to develop a cadre of in-country experts who will periodically deliver the scientific communication course and serve as writing coaches and mentors for the course participants who are expected to disseminate and publish their reports and findings.

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

CDC, through the CDC Foundation, is recruiting several in-country experts to serve as mentors for the scientific communication training.

The training comprises three interconnected components, as described below.

Component 1: Training-of-trainers (TOT) course

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 scientific communication course that they will later facilitate.

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

Component 2: Scientific communication course

The next step is for the mentors to deliver the scientific communication course to qualified participants.

Course topics include writing styles, manuscript writing, abstract writing, literature review, data visualization, PowerPoint presentations, posters, and oral presentations (see next page for more details).

The delivery of this course typically occurs a few 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 2-week course, each mentor is paired with 2–4 mentees. Mentors work closely with their mentees, coaching them as they draft scientific manuscripts, abstracts, and posters and helping them submit these drafts 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 (8 hours per week) for a specified length of time (to be determined). They are expected to act as facilitators during the training and provide ongoing mentorship to course participants.

Mentor requirements

- PhD, Medical Degree or equivalent in a scientific field (biology, epidemiology, medicine, or comparable) from an accredited university in country or abroad
- Knowledgeable in the subject matter: scientific research, preferably in epidemiology
- At least 2 years' teaching experience
- Experienced mentor who has supervised students' writing projects such as theses, dissertations, etc.
- Published one or more scientific articles in peer-reviewed journals, and given two or more presentations (abstracts and posters) at scientific conferences
- Speaking, reading, and writing fluency in both the country's native language and English
- Resident of the country

For more information

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Overview of the scientific communication course



Lesson 1: Communicating scientific information

Characteristics of scientific communication; principles of effective communication



Lesson 2: Writing effectively

Principles of scientific writing; reader expectation theory; scientific vocabulary; grammar and syntax



Lesson 3: Writing scientific manuscripts for publication

Types of scientific manuscripts (analytical, descriptive); components of a scientific manuscript (IMRAD)



Lesson 4: Writing abstracts and ancillary materials

Abstract writing and abstract analysis; ancillary parts of a scientific manuscript (title, references, etc.)



Lesson 5: Publishing manuscripts

Literature review (search engines and databases); journal selection; boolean searches; manuscript submission process; plagiarism



Lesson 6: Data visualization: quantitative & qualitative data

Quantitative and qualitative data; effective visual display of data



Lesson 7: Creating effective posters

Principles of design for posters; poster presentations skills



Lesson 8: Designing effective slides

Principles of design for Powerpoint slides



Lesson 9: Delivering effective presentations

Principles of effective oral presentations; handling questions and answers