

Title:	Epidemiology Project 2: Scientific paper and Conference
Module/Unit Coordinator(s):	Dr Jude Eze

Module/Unit Summary

This module is intended not only to provide opportunity to develop and enhance independent research skills and expertise but also for students to be able to acquire skills that professional scientists and researchers are expected to possess. It builds on the skills developed in project 1 and aimed to deepen the students' scientific writing, grant writing, presentation, and professional communication skills. The project offers the student the opportunity to work and suggest solutions to a real-world epidemiological problem which could also contribute to scientific knowledge.

Module/Unit Intended Learning Outcomes:

On successful completion of this module/unit, learners will be able to:

- 1) Design and justify an independent and original research project, managing and delivering it according to funding body parameters.
- 2) Formulate and investigate appropriate hypotheses related to epidemiological studies (must be different project area than in Project 1)
- 3) Gather, manage, and evaluate epidemiological data, implementing appropriate protocols.
- 4) Evaluate epidemiological studies and their design, incorporating applicable approaches and findings into their own research projects.
- 5) Choose, justify, and implement appropriate methodological and analytical skills to solve real world problems, and produce conclusions and/or recommendations based on these analyses.

- 6) Present and defend study findings and research ideas to a range of audiences, displaying professional and appropriate communication skills.
- 7) Write scientific papers and communicate scientific findings professionally to diverse audience.

Module/Unit Content:

Students will choose a topic from a list of project topics provided by the supervisors. In the first instance, the student will submit a grant style research proposal on the chosen topic detailing the aims, objectives, research questions, hypotheses and the statistical analyses plan covering materials and methods. Students will then proceed to collect data, analyse, and produce a scientific paper following the structure of a well-known scientific journal. The student will also deliver an oral presentation to staff and students in a conference environment, similarly students will also undergo a peer review exercise. Students will have the opportunity to select from a range of projects, some may include the opportunity for laboratory work, field work or surveys. Students will be immersed into a specific research team and guidance and support will be provided to the students by their supervisors throughout the entirety of the project.