# Publication Workshop Research Methods and Publication Workshop

# Publication Workshop

Research Committee

In this workshop, we intend to empower researchers to prepare their manuscripts for publication. Very often, finished projects are archived instead of disseminated. Participants will be assigned to a small group and present their work in a closed forum. Feedback will be given from peers and an expert panel as to whether or not the content has merit, is accurate, clear, meets the standard for scientific writing, could be improved in time and/or is ready for publication. The manuscripts will be reviewed and edited in real time and prepared for submission in an appropriate journal.

# Quantitative Research in Medicine: On Involving People in Directing their own Health Needs

C George

In research, there is often bias favouring the results from quantitative over qualitative studies. There is often a failure to appreciate the value and potential scope of qualitative research studies. While quantitative research is based on the likely representativeness of a phenomenon within a population, we often fall-short of knowing why or how something is happening. Qualitative research allows the researcher to understand social/behavioural related phenomena in greater depth, based on people understanding (meaning) and lived experience (context) related to the concept. In this session, we will discuss types of qualitative research, the importance of objectivity and rigour in qualitative research and how the researcher can learn from research participants to enhance their research and use this knowledge in clinical decisions and policy-making. We will also discuss the principles of community-based (qualitative) research and the use of these.

## Variable Personnel Research Team Management M Frankson

The effective execution of a research project is an exercise in project management and doing so with a clear understanding of appropriate types of teamwork is vital to upholding scientific integrity throughout. This presentation seeks to provide health professionals and related students insights into effectively dealing with what is involved in holistically initiating and completing university-based health research. The overall objective here is to increase conference attendees' appreciation of necessary and sufficient components of stable role-variable personnel teams that conduct much of the health-related research done in Caribbean territories. Among other matters, light will be shone on the value of principal investigators, co-investigators, study coordinators and research assistants as well as risks and benefits of involvement of volunteers. Throughout, ethical principles will be interwoven with the intention of strengthening sustained healthy collaboration among those involved in proposal development, research conduct, dissemination of study findings and the facilitating of evidence-based decision-making as well as high-quality health-policy development.

### **Optimizing the Teaching of Statistics and Research Methods for Medical Trainees** *G Jones*

**Objectives:** Contemporary pedagogy and advancing educational technologies suggest better ways to teach clinical epidemiology and research to students, registrars, fellows and junior staff. **Methods:** A review included recent pedagogy (knowledge creation, intuitive approaches, emotions and anxieties, and sociology) and technologies (print including main textbooks, electronic methods for data handling and research training, interactive options and simulations). Pilot courses and classes included: Senegal (2006), Ethiopia (2010–2012), pre-ESTRO course (2015), and University of Health Science in Antigua (2017–2018). One-to-one and 1-to-n mentoring included over 100 research trainees in Canada (1994–2014). Highly visual and intuitive methods of presentation were tested in investigator research meetings for multicentre international clinical trials (International Atomic Energy Agency, 44 investigators from 36 lower and middle income countries, 2002–2016).

**Results:** Education can be improved through electronic access to modular course material relevant to clinical context, analytics and research. Course material includes information about research, data handling, statistics and writing and incorporates multiple computer simulations, plus realistic problems and sensible data-sets. Students learn professional statistical software (*eg* STATA, College Stn TX) during the interactive course. Tests and examinations mirror learning exercises to demonstrate realistic scenario replication, mirroring typical analytical studies and research protocols. Either concurrently or subsequently, applications in real data-sets, or within research projects where new data are captured, demonstrate effective integration plus transfer of skills into the clinical environment (*eg* DM theses, outcome QA, system improvements).

**Conclusions:** The teaching of statistics and research methods to medical trainees can be optimized within a more contemporary, partly-virtual and partly-collaborative, inter-

### You Can't Always Blame the Journal: Common Mistakes in Scientific Manuscripts *G Mery*

Publishing in reputable Scientific Journals remains challenging for most early career or inexperienced researchers. Unsuccessful scholars often argue that the scientific review process is biased and unreliable, which is indeed supported by evidence. However, although much of this criticism is founded, the large majority of articles submitted to Scientific Journals lack the basic requirements to merit publication.

In this exposition, I review some of the basic mistakes commonly seen in manuscript preparation and submissions to peer-reviewed publication. Although, some of these problems can be remedied at the stage of manuscript production or revision, it is often the case that, despite good intentions, the articles have been ill conceived from early stages and would require major redesign to be worth consideration. Through this presentation, I highlight key issues that can guide new researchers in improving their chances of highquality publication.