**Nigeria (September 14-15 and September 20-21)**

Two 2-day workshops were offered as part of the 4th Annual Nigerian Implementation Science Alliance (NISA) Conference their 2018 theme was Evidence-based approach to enhance quality of care.

Pre-conference workshops were held for workshop participants at the University of Nigeria (UNN) in Enugu, Nigeria while post-conference workshops were held in Abuja, Nigeria. Professor Xan Goodman was the instructor for both workshops. In Enugu Dr. Itanyi assisted Professor Goodman with the workshops.

Local arrangements were coordinated by NISA conference staff. Workshop participants registered for the pre and post conference workshops through the NISA conference website. Professor Goodman spent the first three days in Abuja, Nigeria at the Transcorp Hilton where a four-day workshop on grant writing was held. During the grant workshop, some of these participants learned about the training being offered by Professor Goodman, and they lobbied to attend the post-conference Research4Life workshops. The initial Research4Life workshop registration was capped at 20 participants. This cap was exceeded for the post-conference workshops participants attended.

For the pre-conference workshops, Professor Goodman and NISA conference organizers traveled together by local airline to Enugu, Nigeria. While in Enugu transportation to and from the University of Nigeria (UNN) was provided daily by drivers who transported the NISA conference organizers and Professor Goodman to UNN. The Enugu workshops were held on Friday and Saturday. UNN is usually not open on Saturday, so having a workshop day on a Saturday required outside of the norm use of electricity, staff, and other resources to run the workshop.

Both 2-day workshops, aims were to provide a comprehensive introduction to Hinari resources to build research capacity. Professor Goodman scheduled one-on-one research meetings with workshop participants at the end of each day to discuss individual research projects. Workshops were also supplemented with instruction on systematic review methodology plus Mendeley training. The workshop agenda included the following Hinari modules: Summon Search, Hinari Portal, PubMed, and Advanced PubMed, Cochrane, EBM Journals, Public Health resources, Grey Literature, Internet Search Tools, Free e-journals, and Open Access. Other material covered: Constructing a research question, using PICO and an introduction to boolean searching.

University of Nigeria workshop participants were required to supply their own internet. This proved to be challenging for the workshop participants, as there were varying levels of internet speeds and reliability that affected the ability of workshop participants to keep-up with the hands-on activities. In Nigeria the language of instruction is English so workshop participants were able to understand the hands-on activities.

There were eighteen workshop participants at the University of Nigeria who ranged from physicians, public health practitioners and some health sciences students from varying fields. The number of workshop participants fluctuated during on day two with some needing to leave early or arriving later due to family and work responsibilities.

On the 1st day at University of Nigeria Professor Goodman learned that the participants really wanted more training on systematic reviews. As a result she reorganized the workshop content for day two to accommodate this request. At the end of day one Professor Goodman had workshop participants complete a formative assessment by answering these three questions: What did you learn today? How can I improve? Any questions?

On day 2 we focused on creating a question using PICO. Groups were formed based on research interests, we attempted to have a range of skills represented in each group. Each group has a research question for which they plan to write a systematic review. Groups worked on their PICO questions and we shared them out as a group. Next we returned back to the Hinari content and worked on advanced PubMed, and searching based on their topics. We also worked on Mendeley towards the end of the day.

The range of skills of the University of Nigeria workshop participants varied greatly with some physicians requiring assistance with navigating their computers. Overall the feedback was positive, “The workshop was very useful in refining my searching skills.” “The workshop was helpful and learnet skills to help me with my personal research among others.”

There were challenges with the workshops. Even though Professor Goodman provided both Dropbox access to all content prior to the workshop and supplied USB materials with the workshop materials some workshop participants still did not check their mail prior to the workshop nor did they complete the requested homework, which was to create an PubMed MyNCBI account beforehand.

**Abuja, Nigeria Workshops**

The NISA conference was held at the NAF (National Air Force) Conference Center. The two-day post conference workshops had participants who were health care practitioners from Uganda, Kenya, Zambia, Ghana, and Nigeria.

Based on feedback from the pre-conference workshops Professor Goodman re-worked the entire workshop to emphasize constructing a research question using PICO, systematic review steps, Summon Search, Hinari Portal, PubMed, and Advanced PubMed, Cochrane, Grey Literature, Internet Search Tools, Free e-journals and Mendeley.

The Abuja workshop participants too had varying levels of skill as some had attended a Mendeley training previously offered by their employer. Professor Goodman was able to take advantage of the skills of those who had experience with Mendeley to assist as resource persons with the Mendeley exercises.

Evaluations of  University of Nigeria Workshops (September 14-15) and Abuja Workshops (September 20-21) were conducted and are attached.

**Post Conference Follow-up**

Professor Goodman will work with the research groups formed for six months after the workshops to provide assistance with developing systematic review protocols and providing additional guidance with searching. An impact survey will be conducted.