

# Training Biomedical and Health Informatics Professionals in Peru: Towards the Development of the First Graduate Diploma Program in the Country

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## ABSTRACT

*In Peru, there are no formal university graduate programs in biomedical and health informatics, and there is a lack of other health informatics programs. AMAUTA, a joint program between the Universidad Peruana Cayetano Heredia (UPCH) in Lima and the University of Washington (UW) in Seattle has been training Peruvian health professionals since 1999 regarding biomedical and health informatics. In 2007, UPCH is offering the first Graduate Diploma Program in Biomedical Informatics in the country.*

In developed countries, medical informatics has been taught over the last 25 years, and the successes and setbacks have been well-documented. In developing countries, however, training of health professionals in informatics remains one of the biggest challenges.

In Peru, there are no formal master's or doctoral-level programs in health informatics among universities, and there is a lack of other health informatics training programs. But Peru does offer the AMAUTA (Quechua word for master) Global Informatics Research and Training Program for professionals in the region. AMAUTA is a joint program between UPCH and UW. The program is funded by the Fogarty International Center, National Institutes of Health (NIH) and the National Library of Medicine.

The UW International Training in Health Informatics Program has twice offered a two-week intensive short course in Lima (2000 and 2001) in collaboration with UPCH. Those courses provided an introduction to medical informatics. The AMAUTA program then organized an advanced course entitled Informatics for Global Health: Advances in Public Health and Genomics, which was held in November 2005 and had two tracks: medical/public health informatics and bioinformatics. Evaluations of previous courses were successful. Gains in knowledge were consistent in the courses held in 2000, 2001, and 2005, and overall acceptance of these three courses was ranked as very good to excellent while usefulness of the course was rated as very good.

**Table 1. Percentage Correct for Participant's Performance on Their Knowledge Before (Pretest) and After (Posttest) the Three Courses**

Course Year	N	Pretest Mean %	Posttest Mean %
2000	25	53	71
2001	30	48	67
2005 MI	18	49.7	59.7
2005 BIO	21	33.6	51.2

\* N represents number of participants who completed both pre- and posttest.

In the seven years since the program began eight Peruvian fellows have been trained in biomedical informatics and public health at UW. Those fellows have returned to Peru and are now involved in developing informatics programs and furthering the development of library programs and the information infrastructure in Peru.

Based upon the successes of previous short programs in informatics, we are now offering the first Graduate Diploma Program in Biomedical Informatics at UPCH, the first such program in Peru. The diploma program, beginning in 2007, recognizes the need for inter-institutional collaboration with well-established health informatics training programs such as UW. It is hoped that these collaborations can be extended to neighboring countries in the very near future.

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