Competencies for a Well-trained Biomedical and Health Informatics Workforce

P. Otero¹; F. González Bernaldo de Quirós¹; W. Hersh²

¹Department of Medical Informatics, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina; ²Department of Medical Informatics and Clinical Epidemiology, Oregon Health & Science University, Portland, OR, USA

Biomedical and health informatics (BMHI) is an evolving discipline that needs to accompany the progression of healthcare by constantly updating the curriculum of its workforce [1]. In developing countries, capacity building in BMHI can be used to address capacity shortfalls, by providing electronic information and training, especially in rural and underserved areas, with robust clinical data for informed decision making [2, 3].

In October 2008, the International Medical Informatics Association (IMIA) Health and Medical Informatics Education Working Group (WG1) held a meeting entitled "Building Worldwide Capacity for the Health Informatics Workforce". The meeting was hosted by the Department of Medical Informatics at Hospital Italiano de Buenos Aires, Argentina. In addition to this event, the IMIA Latin American Countries (IMIA-LAC) organized the 3rd Latin American Meeting of Medical Informatics, the 2nd Argentinean Meeting of Medical Informatics, and the 2nd Argentinean Meeting of Nursing Informatics.

As previous meetings organized by IMIA's WG1 that had addressed important issues related to BMHI education [4], the goals of the Buenos Aires meeting were to provide both an exposition for identifying and harmonizing competencies and cur-

Methods Inf Med 2010; 49: 297-298

Correspondence to: Paula Otero Department of Medical Informatics Hospital Italiano de Buenos Aires Gascón 450 1181 Buenos Aires Argentina E-mail: paula.otero@hospitalitaliano.org.ar ricula for health and biomedical informatics as well as provide a working meeting for IMIA WG1. There were more than 50 attendees from around the world and more than 20 papers were presented. There were several keynote presentations:

- Prof. Dr. Reinhold Haux, President of IMIA, and Dr. Peter Murray, Vice President for Strategic Planning Implementation for IMIA, described the past, present and future of IMIA WG1.
- Dr. Kendall Ho, Director of e-Health Strategy at the Faculty of Medicine at the University of British Columbia, described the Canadian perspective on the involving of academia in e-health capacity building.
- Dr. Don Detmer, President and CEO of AMIA, and Dr. Alvaro Margolis, Vice President for IMIA-LAC, summarized the main topics addressed at the Making the eHealth Connection: Health Informatics and eHealth Capacity Building workshop that was organized by the Rockefeller Foundation.
- Prof. Dr. John Mantas, Director of Health Informatics Laboratory at University of Athens in Greece and Co-Chair of the WG1, presented a prefinal version of the updated Recommendations of the International Medical Informatics Association (IMIA) on Education in Biomedical and Health Informatics [5].

A workshop on designing an international survey on curricular needs was organized by Dr. Harold Lehmann, Associate Professor of Health Sciences Informatics at Johns Hopkins University, Dr. Julio Facelli, Vice-Chair of the Department of Biomedical Informatics at the University of Utah, and Dr. William Hersh, Chair of the Department of Medical Informatics and Clinical Epidemiology at Oregon Health & Science University and Chair of the WG1.

The conference-organizing committee invited the authors to submit their papers for a special topic section of this journal. The papers submitted were evaluated by the members of the Scientific Committee of the meeting and guest editors for this special topic section (Dr. Fernan Quiros, Dr. William Hersh and Dr. Paula Otero). The peer review process of this journal evaluated the selected papers.

The paper by López-Campos et al. describes the experience throughout 10 years of training in bioinformatics for healthcare professionals by the Department of Medical Bioinformatics of the Institute of Health "Carlos III". The authors described the different approaches needed to educate professionals in this recent discipline so as to integrate it with the healthcare environment, since bioinformatics was initially oriented to basic biological research [6].

Haux and Murray provide a timeline of the different milestones achieved by IMIA activities regarding education and its dedicated working group. Since IMIA's creation, education was considered an important issue that is shown by the well-known recommendations on education in health and medical informatics that have been guidance for any institution interested in developing a curriculum for the field for any kind of healthcare profession [7].

Otero et al. describe the experience on adapting the "10 ×10" introductory course on medical informatics created by the American Medical Informatics Association (AMIA) and the Department of Medical Informatics and Clinical Epidemiology at Oregon Health & Science University for Latin America in Spanish. The authors described how after different versions using the students' opinions and requirements the introductory course currently reflects the needs of students planning to start a career in health informatics providing an initial overview of the field [8].

IMIA is deeply committed to stimulate education and training on health informatics and has shown throughout the years that has kept in pace with the advancements in BMHI worldwide [9]. We hope that this special topic on education for "IMIAWGED 2008: Building Worldwide Capacity for the Health Informatics Workforce" provides information that will be useful for readers involved in health informatics education.

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