

# Alternative Approaches to Educating Medical Informationists

## Roundtable Discussion

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### FOCUS OF THE DISCUSSION

Because the information world of medical professionals is complex and ever-expanding, a new set of information professionals is needed to serve as a liaison between that world of information and the world of medicine. Davidoff and Florance [1] raised many of these issues when they proposed the concept of the “informationist” – someone who possesses both clinical knowledge and information retrieval skills and expertise. The Institute of Medicine [7] also underscored the need for evidence-based information in the reduction of errors and the delivery of quality care, and identified the need for more training of clinicians in informatics skills and knowledge.

Several alternative approaches to educating medical informationists have been proposed and/or field tested. One approach is to train librarians to become informationists. To illustrate this approach, Detlefsen [2] presented a case study of someone with an MLIS degree who uses Vanderbilt’s on-the-job training program to gain additional medical expertise and move into an informationist position in an academic setting. She also encourages medical librarians to consider augmenting their training with a degree or certificate in medical informatics [3]. This is also the approach used at the NIH Library [8]. A second approach is to educate informationists through biomedical informatics programs like the one at the Oregon Health Sciences University [4]. A third approach is the AMIA 10x10 combination of a single course plus a one-day face-to-face session, covering a range of topics in medical informatics and related areas [6]. A fourth approach has been implemented through a dual degree program offered at the University of North Carolina at Chapel Hill (UNC) and Duke University [5]. In this program, medical students from Duke use their third year to complete the master’s degree in information science at UNC.

During this roundtable discussion, proponents of these alternative approaches will be available to describe the advantages of the approach with which they’re most familiar, and discuss the strengths and weaknesses of each approach.

This roundtable will be of interest to all those involved in medical/health informatics education, or planning related programs. In this informal discussion setting, participants will be able to express their concerns and share their experiences.

### SAMPLE DISCUSSION QUESTIONS

- What are the workforce needs for medical informationists? Are we in danger of not being able to fulfill these needs?
- Are there any differences between a medical/health sciences librarian and a medical informationist? If so, what are the differences?
- Are there any differences between someone in medical informatics and a medical informationist? If so, what are the differences?
- There are several alternative approaches to educating medical informationists. Which of these alternative approaches is the strongest? For which purposes? Under what conditions? What are the challenges associated with the approach you think is the strongest?
- Are there education/training niches that are not being filled by any of the current approaches? What are they, and in what types of educational contexts could they be provided?
- What may or may not make an iSchool the most appropriate place for this type of training/education? Are there other schools/departments/disciplines that could also provide the necessary components of this type of education? With which departments could an iSchool partner in order to provide adequate training and resources?
- If an interdisciplinary approach is taken, what administrative issues may create barriers, and how can they be overcome? What cultural issues may create barriers, and how can they be overcome?
- Recruiting students may be a challenge. What recruiting methods have worked most effectively? What types of students have been attracted to the different types of programs?
- How many students have graduated from these programs? What career paths are they pursuing? In what fields? In what institutions?

## DISCUSSION LEADERS

**Ellen Detlefsen**, Associate Professor, School of Information Sciences, and Training Program Faculty, Department of Biomedical Informatics, School of Medicine, University of Pittsburgh

Pitt's program in Medical Librarianship and Medical Informatics, which Dr. Detlefsen directs, is ranked #1 in the nation by *U.S. News & World Report's Guide to Graduate Study*; the MLIS with a medical specialization is now available in both the on-campus format and in the University's FastTrack online program. She is an active member of the Medical Library Association, and was honored by the MLA with the Lucretia McClure Excellence in Education Award in 2002.

**William Hersh**, Professor and Chair, Department of Medical Informatics & Clinical Epidemiology, Oregon Health & Science University

Dr. Hersh has been at OHSU since 1990, where he has developed research and educational programs in biomedical and health informatics. He is a Fellow of the American College of Medical Informatics and a Fellow of the American College of Physicians (ACP). He was recently selected as the 2008 recipient of the American Medical Informatics Association's Donald A.B. Lindberg Award for Innovation in Informatics, in recognition of his contribution to the field and to AMIA through the innovative and successful "10x10" Program.

**Connie M. Schardt**, Associate Director, Education Services & Public Services, Duke University Medical Center Library

Ms. Schardt has been at Duke University Medical Center since 1997. She is co-director of "Teaching and Leading EBM: A Workshop for Teachers and Champions of Evidence Based Medicine," a national workshop for clinicians now in its 7th year. She has worked extensively with Duke clinician faculty to integrate EBM into the Medical School curriculum. As adjunct faculty at SILS-UNC, Connie teaches a distance education course that brings students and practicing librarians together to study EBM and its implications for the library. She is the in-coming President of the Medical Library Association and received the Lucretia McClure Excellence in Education Award in 2006.

Discussion to be moderated by: **Barbara M. Wildemuth**, Professor, School of Information & Library Science, University of North Carolina at Chapel Hill

Dr. Wildemuth joined the faculty of UNC in 1988, and has focused much of her research effort on the ways in which people seek and interact with health-related information. She is currently PI of the IMLS-funded project, "Recruiting Medical Students into Health Sciences Librarianship," a collaborative effort with Duke University, in which Duke medical students are recruited to participate in the Duke-UNC dual degree program.

## REFERENCES

- [1] Davidoff, F., & Florance, V. (2000). The informationist: A new health profession? *Annals of Internal Medicine*, 132(12), 996-998.
- [2] Detlefsen, E.G. (2002). The education of informationists, from the perspective of a library and information sciences educator. *Journal of the Medical Library Association*, 90(1), 59-67.
- [3] Detlefsen, E.G. (2008). Professional education for medical informatics: Another option for medical librarians. *MLA News*, September 2008.
- [4] Feldman, S.S., & Hersh, W. (2008). Evaluating the AMIA-OHSU 10x10 program to train healthcare professionals in medical informatics. *Proceedings of the AMIA 2008 Annual Symposium*, 182-186. Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.
- [5] Gollop, C., Schaeffer, P., Wildemuth, B.M., Schardt, C., & Thibodeau, P.L. (2009). A novel approach to educating medical informationists. Paper accepted for presentation at the Association for Library and Information Science Education annual meeting, Denver, January 20-23, 2009.
- [6] Hersh, W., & Williamson, J. (2007). Educating 10,000 informaticians by 2010: The AMIA 10x10 program. *International Journal of Medical Informatics*, 76, 377-382.
- [7] Institute of Medicine. (2001). *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*. Washington, DC: National Academy Press.
- [8] Robison, R.R. (2008). Informationist education. *Medical Reference Services Quarterly*, 27(3), 339-347.