

Designing a Student Clinical Workstation: Challenges and Opportunities

James J. Cimino, M.D.;¹ Vimla L. Patel, Ph.D.;² Jochen R. Moehr, M.D., Ph.D.;³
G. Octo Barnett, M.D.;⁴ Christopher Cimino, M.D.⁵

¹ Department of Medical Informatics, Columbia University

² Centre for Medical Education, McGill University

³ School of Health Information Science, University of Victoria

⁴ Laboratory of Computer Science, Massachusetts General Hospital

⁵ Office of Computer-Based Education, Albert Einstein College of Medicine

Students in clinical training are often confronted with new types of information found in clinical information systems. The same computer which provides data about their patients may also provide access to information sources which can answer questions raised by those data. Opportunities exist for developing clinical workstations which provide students "just-in-time" access to educational materials relevant to the clinical cases they are seeing.

This panel will explore some ways in which such workstations can be developed. We will review the opportunities for training which occur in the clinical setting and available resources which can be exploited. Next we will examine the cognitive issues which must be considered when attempting to address the clinical questions of novices. Finally, we will discuss methodologies for integrating clinical and resource systems in ways that recognize the complex issues of windows of opportunity for training. Of

particular interest are ways in which clinical information can be used to identify relevant information sources and guide the retrieval process. Audience participation will be encouraged to add to the inventory of possible information resources and share ideas about creative and appropriate ways for integrating them with clinical systems.

The goals of the panel are:

- to understand what resources are available for students in clinical settings and how they can be applied,
- to understand some of the cognitive issues relevant to training in this setting, and
- to examine different techniques for supporting integration.