Annotated bibliography and additional resources:

Teaching at the Bedside

C. Christopher Smith, MD
Anjala Tess, MD
Richard Schwartzstein, MD

Aagaard, et al. Effectiveness of the one-minute preceptor model for diagnosing the patient and the learner: proof of concepts. *Acad Med* 2004;79:42-9.

This study used videotapes of teaching sessions to assess the effectiveness of the microskills model. Faculty rated the microskills method as more efficient; faculty were more likely to make the correct diagnosis with the model as well. In addition, faculty were more confident in their ability to evaluate the learner's presentation skills, clinical reasoning skills, and fund of knoweledge.

Ende J. What if Osler were one of us? Inpatient Teaching Today. *JGIM* 1997;12:s41-48.

A classic article from the medical education literature, this piece acknowledges the challenges to effective bedside teaching but then pushes past these challenges effectively. He connects basic principles of adult learning with recommendations for teaching and outlines strategies and options for the clinician educator who is struggling to teach in the current inpatient setting.

Irby D. How attending physicians make instructional decisions when conducting teaching rounds. *Acad Med* 1992 (67):630-638.

This paper is a qualitative study of six distinguished educators and how they make instructional decisions i.e. decide how and what to teach. After analyzing interviews, transcripts, a structured task, and observations, the author presents a model that encompasses a planning phase before the encounter, a phase of thinking interactively where the teacher is diagnosing the patient and the learners needs as well as teaching during the encounter, and then a reflecting phase after the teaching encounter. He also highlighted the use of teaching scripts and need for enthusiasm for teaching. The model is an interesting one as teachers begin to plan and reflect on their own teaching styles.

Kaufman D. ABC of learning and teaching: Applying educational theory in practice. *BMJ* 2003;326;213-216

The author summarizes five major educational approaches or theories (adult learning theory, self directed learning, constructivism, reflective practice, and self efficacy) and distills them into seven guiding principles for teaching. These principles provide a practical framework within which faculty can design learning experiences in the clinical setting, regardless of specific content. The principles also help emphasize the importance of self assessment and feedback as part of the learning process.

Kroenke K. Attending rounds: Guidelines for teaching on the wards. *JGIM* 1992;7:68-75.

> *A classic paper from the medical education literature, this author presents guidelines for teaching on the wards in a clear, concise and remarkably specific piece. The challenges to the teacher trying to run rounds are realistic and his suggestions are useful and practical. He also includes an algorithmic approach to different settings that would be easy to pilot in your own teaching. A must read for the novice teacher.*

Lehmann L, et al. The effect of bedside case presentations on patient's perceptions of their medical care. *N Engl J Med* 1997;336:1150-5.

> *This is a randomized control study that compared the opinions of patients whose teams presented at the bedside versus in a conference room. Authors conclude that bedside presentations are at least as good as conference room presentations with a trend towards perhaps being better. This paper helps begin to address the concern that presentations at the bedside uniformly make patients uncomfortable.*

Lake FR, et al. Teaching on the run tips 7: Effective use of questions. *MJA 2004;182(3):126-7.*

> *As questioning is such a large part of how we assess both our learners needs and their understanding, this is a useful, concise piece that walks the reader through different levels of questioning. The authors explain the hierarchy of questioning from basic knowledge to higher order understanding and evaluation, and provide a series of "good habits" for the teacher to follow when questioning the learner.*

Neher JO, et al. A five-step "microskills" model of clinical teaching. *J Am Board Fam Prac* 1992;5:419-24.

> *This is the original article that describes the microskills model and "one minute preceptor." The authors describe the model and how they trained faculty to use it. They also report on the integration of the model into routine teaching habits of faculty members (based on observations of teaching.)*

Parrot S, et al. Evidence-based office teaching: The five-step microskills model of clinical teaching. *Fam Med* 2006;38(3):164-7.

> *This paper is a concise review of the evidence of the effectiveness of the One Minute Preceptor.*

Ramani S. Twelve tips to improve bedside teaching. *Med Teach* 2003;25(2):112-115.

> *Part of the "twelve tips series" in Medical Teacher, this piece concisely outlines pearls for the bedside teacher with supportive evidence and examples along the way.*

Weng-Cheng R, et al. Bedside case presentations: Why patients like them but learners don't. *J Gen Intern Med* 1989;4:284-287.

> *Authors performed a survey of faculty, learners, and patients as to preference of the location of rounds. Patients were more in favor of bedside rounds and learners were generally in favor of conference room rounds. Attending physicians were split between the two. The authors did not detail in depth the reasons for each of these opinions. They conclude the paper with suggestions for how an attending physician can make learners feel more comfortable at the bedside.*

Wright S, et al. Attributes of excellent attending physician role models. *N Engl J Med* 1998;339:1986-93.

> *This paper reports on a case–control study where attendings identified as excellent by houseofficers were compared with other attending physicians. Five attributes were independently associated with being named excellent: spending more than 25% time teaching, spending more than 25 hours teaching weekly, stressing the importance of the doctor-patient relationship, teaching the psychosocial aspects of medicine, and having been a chief resident. The authors suggest that with attention to those attributes that are modifiable, physicians can become better role models.*

Web resources:
http://depts.washington.edu/physdx/index.html

http://sgim.org/clinexam.cfm

http://medicine.ucsd.edu/clinicalmed/