Required Research Rotation for CA-1 Residents

Harriet W. Hopf, Kathleen C. Light, Nathan L. Pace, L. Lazarre Ogden, Michael K. Cahalan.
University of Utah School of Medicine, Department of Anesthesiology

Learner Audience: CA-1 Anesthesiology Residents at the University of Utah

Background: Problem based learning and improvement is a core competency of residency training. The Accreditation Council for Graduate Medical Education (ACGME) Program Requirements for Graduate Medical Education in Anesthesiology (July, 2008) include: "The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care" and "Residents should participate in scholarly activity."

Needs Assessment: Most current anesthesiology training programs provide optional research time late in residency. This delays developing a competency in problem based learning and limits resident interest in pursuing a career in research.

Hypothesis: We propose that research experience early in residency will increase resident competence in problem-based learning, increase the role of basic scientists in resident education, and may increase resident interest in a career in academic medicine.

Curriculum Design: CA-1 residents meet with the rotation directors in July to identify areas of interest. Residents then interview four potential mentors, including two basic scientists. Resident projects range from reviewing pertinent literature to participating in ongoing research or pursuing a limited project of their own. During the four-week rotation, residents pursue a formal statistical curriculum in addition to research experience. Formal presentations are required. Submission of abstracts is encouraged.

Outcome: The first resident began his rotation in January 2009. Residents and basic science faculty found the interview phase rewarding. Resident projects include a bench project, participation in data collection for an ongoing clinical study, writing a review article, creating a patient education video and evaluating its effectiveness, and analyzing data from a previously completed study. The impact of the rotation will be evaluated by the quality of written and oral presentations, surveys of residents and mentors, changes in evaluation of problem-based learning competency for CA-2 and CA-3 residents, and entrance of residents into further research training.