

Neal Flomenbaum, MD  
EDITOR-IN-CHIEF



## Emergency Medicine's Research Agenda

**T**he *Immortal Life of Henrietta Lacks* is a current non-fiction bestseller by Rebecca Skloot that poignantly recounts the story of a poor black woman in 1950s Baltimore whose cancer cells gave rise to HeLa cells, the first human cell line successfully cultured outside the body. Without her knowledge or permission, Henrietta Lacks' cells were harvested, studied, and shared with scientists throughout the world. The great scientific advances (and, in some cases, mistakes and astounding ethical lapses) that resulted from the use of HeLa cells is contrasted sharply with the poverty and hardship suffered by the Lacks family, though the medical care Henrietta Lacks received before her death appears consistent with the best care available at the time.

The book's account made me think about the evolution of research activities in the emergency department over the past several decades. Until recently, the ED was considered an undesirable or inappropriate venue in which to conduct clinical research. Now the ED and ED patients are increasingly sought after for inclusion in protocols submitted to IRBs for approval. Reasons for this recent surge in ED research activity range from appropriate and necessary to inappropriate and dangerous.

Some appropriate reasons: many of the pharmaceuticals that emergency physicians have relied on for decades have never been subjected to the scientific analysis now required of new medications. Also, few medications have ever been studied in patients at the extremes of age; most are just assumed to have effects similar to those seen in young and middle-aged adults. Emergency practice enables more uniform enrollment of subjects—24/7 instead of 9 to 5 on weekdays. And what better place to identify and track the true incidence of adverse effects of newly approved medications (phase IV clinical trials) than the ED? Properly designed, reviewed and monitored studies that take into account potential benefits and risks of adverse effects, along with considerations of the patients' needs and the urgency of their conditions, are not incompatible with other ED activities. Nor is it impossible to obtain meaningful informed consent from patients or relatives in the ED. An acceptable, but less important, reason for conducting clinical research in the ED is to allow emergency medicine to take its rightful place among other academic clinical specialties in our medical schools.

What are less appropriate reasons for conducting experimental trials

in the ED? One is the large number of clinical staff in the ED who interact with patients throughout the day for varying lengths of time. And then there is the lack of inpatient beds. Most medications must be administered or infused within a particular time frame; so, as more and more admitted patients end up waiting longer and longer in EDs for inpatient beds, investigators often have to choose between enrolling them and at least starting the protocols in the ED, or losing them from the studies. But lack of beds upstairs also almost always means ED overcrowding—hardly the most conducive environment for accurate scientific investigations with all of its necessary safeguards. Adding to the problems resulting from lack of space and other resources in the ED are the difficulties experienced by trained investigators administering meds and monitoring patients in the ED until the protocol is completed. Many of the investigators may simultaneously be responsible for patients upstairs who require attention.

The quality of clinical care, research, patient safety, and medical ethics have all advanced significantly since Henrietta Lacks' cancer cells were harvested. Emergency medicine is and belongs at the intersection of all of these activities. **EM**