

Abstract ID: 17325 Title: The Future of Medical Physics: Challenges and

Opportunities Medical physics is experiencing profound changes, including some with an unpredictable impact on the professional, educational, and scientific aspects of the profession. Impending requirements for professional certification, increased sub-specialization, and greater emphasis on the monetary benefits of a clinical career are among the changes that place future medical physics research in jeopardy, with a potential diminution in the innovation and creativity that have been the hallmark of progress leading to improvements in patient care over the past 50 years.

The President's Symposium focuses on the research challenges and opportunities confronting the medical physics profession. A historical review shows how research has been a key factor in the evolution, expansion, and enhanced stature of medical physics in health care delivery. For young investigators contemplating a research career, challenges include the increasingly competitive environment for research funding, difficulties in balancing research versus clinical training in order to be eligible for professional certification, the lure of more stable employment with higher remuneration in the clinical setting, and an uncertain market for medical physicists desiring research careers. Research opportunities in medical physics are presented as a desirable component of medical physics educational programs. The balance of research, didactic education and clinical training in a medical physicist's education needs careful delineation. The assimilation of Ph.D. graduate and post-doctoral students into educational programs and the practice of medical physics are explored in terms of possible pathways, such as combined clinical and research degree programs and residencies. Finally, the challenge of sustaining research amidst the challenges of clinical and professional duties is discussed. Brief presentations by the speakers will be followed by audience discussion.