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### **Medical Physics Education of Allied Health Professionals: Role of the American Association of Physicists in Medicine**

*Beth Ann Schueler, Ph.D.*

#### **Abstract**

The American Association of Physicists in Medicine (AAPM) seeks to advance medical physics education of allied health professionals involved in the radiologic sciences through the activities of the Medical Physics Education of Allied Health Professionals Committee. This committee organizes educational experiences for allied health professionals and strives to provide assistance to educators in technology education programs. In addition, the committee provides medical physicists who act as liaisons to various allied health organization and assist in the development of certification examinations.

### **Teaching the Physics of Medical Imaging**

*Perry Sprawls, Ph.D.*

#### **Abstract**

Physics is the foundation science of all medical imaging methods. Optimizing procedures with respect to image quality and patient risk management require professionals with a comprehensive knowledge of physics principles and their applications to all aspects of the imaging process. Educational activities should be based on learning objectives relating to the generally higher levels of learning such as concept formation and problem solving. The development of classroom teaching and other learning activities must take into consideration both the effectiveness and the efficiency of the process. The challenge is that the most effective learning experiences, for developing the higher levels of learning, are often the least efficient. A variety of computer technology applications make it possible to increase both the effectiveness and efficiency of classroom teaching and to provide alternative learning opportunities.

### **Medical Health Physics**

*Terry T. Yoshizumi, Ph.D.*

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#### **Abstract**

For decades, radiation has been beneficial to humans in terms of the diagnosis and treatment of human diseases. The use of ionizing radiation in medical applications is heavily regulated in the United States in order to protect members of the public and radiation workers. The health physics profession is diverse, ranging from research, industry, education, environmental protection, and compliance with and enforcement of government regulations. The role of health physicists as radiation protection specialists, educators, and scientists who ensure proper and safe working conditions for both patients and employees in medical settings is described.

### **Medical Physicist Educational Resources of Interest to Radiological Science Educators**

*Donald J. Peck, Ph.D.*

#### **Abstract**

The medical physicist is often asked to assist in the education of health care professionals in many areas. In order to be successful in teaching the medical physicist must have resources available to enhance their knowledge and guide the student. This review describes the many resources used by medical physicist to provide the educational needs in the health care industry.