

*I*n the last half-century
we have seen dramatic
improvements in our ability
to treat Cancer. Understanding
the nature of the disease and
research in diagnosis and
treatment have given hope
and health to thousands of
patients. Diagnosis and
treatment using radiation are
among the most important
advances in cancer care.

**To verify the certification of a
Medical Physicist certified by the
American Board of Radiology:**

American Board of Medical Specialties
1007 Church Street., Suite 404, Evanston, IL 60201
Phone: (847) 491-9091
www.abms.org

**To verify the certification of a
Medical Physicist certified by the
American Board of Medical Physics:**

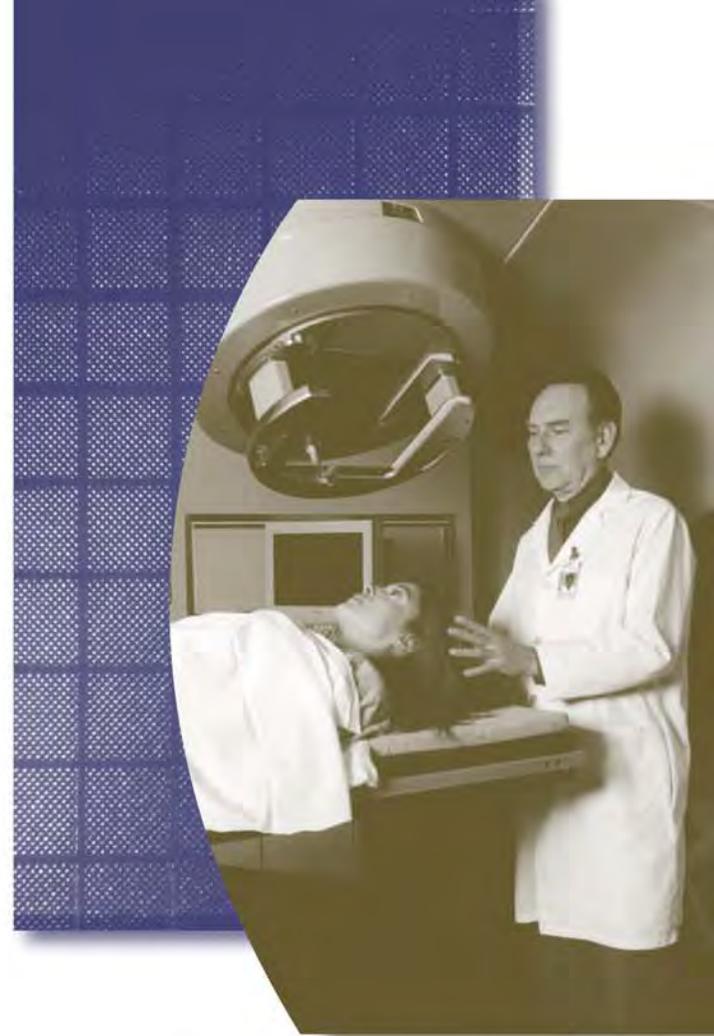
P.O. Box 487, Barker, TX 77413
Phone: (281) 944-9482 • Fax: (866) 861-8280
www.abmpexam.com



*American Association
of Physicists in Medicine*

One Physics Ellipse, College Park, MD 20740-3846
Phone: (301) 209-3350 • web: www.aapm.org
e-mail: aapm@aapm.org

Professional Brochure A-1



The Medical Physicist



*American Association of
Physicists in Medicine*

TREATMENT



As the sophistication of cancer care has increased, the makeup of the treatment team has changed. In addition to the Doctor (Radiation Oncologist) and Nurse, your caregivers will also likely include professionals with unfamiliar names such as Radiation Therapist, Medical Dosimetrist and Medical Physicist.

Medical Physicists have the overall responsibility for the technical aspects of your treatment in the Radiation Oncology Department. The Medical Physicist will consult with your physician regarding the prescription for your treatment, supervise the computerized planning of the radiation beams and their placement and work with the other members of the treatment team to make certain that your treatment is exactly “what the doctor ordered”.

You will see firsthand the modern machines that produce the radiation used for your treatments. Some worry or apprehension is natural, but you can be sure the treatment machines will do just the right thing each day you come in for your treatment. Before the machine (usually a “Linear Accelerator”) is ever used for treatment, the Medical Physicist carefully tests and measures the radiation from it. These tests can take one to two months. At the end of the testing, he or she enters all the information about the machine into a sophisticated computer system that will be used to make pictures of the radiation distribution for your doctor to review. The Medical Physicist oversees (or performs) the daily, weekly and monthly testing and quality assurance of the treatment machines and planning computers. You may have the opportunity to meet your Medical Physicist; on occasion he or she will work with your radiation therapist during one of your treatment sessions. You may see your Medical Physicist if you have therapy with radioactive materials since the Medical Physicist is also responsible for the dose calculation and handling of the material used in this type of therapy.

RESEARCH

Many Medical Physicists are involved in research leading to better cancer diagnosis and treatment. CT Scanners, MRI scanners,

Linear

Accelerators, Nuclear

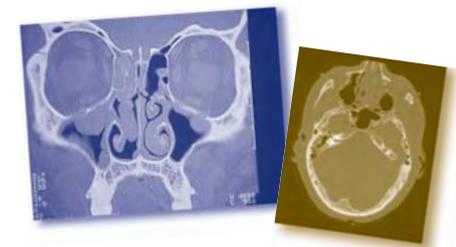
Medicine cameras—all these

were developed by or with Medical

Physicists. In fact, the Nobel Prize for

Medicine has twice been awarded to

Medical Physicists!



CERTIFICATION

Medical Physicists have either a Masters or Doctoral degree and clinical training in an academic medical center. In addition, the American Board of Radiology, the American Board of Medical Physics and the Canadian College of Medical Physicists certify qualified Medical Physicists. The high standards of these organizations make board certification an important indicator of qualification for a Medical Physicist.

Whether or not you have an opportunity to meet the Medical Physicist who is involved in your care, you can be assured that he or she brings skills, knowledge and commitment that you can rely on during your cancer therapy.