# Introduction to medical technology

Health & Medicine

Introduction WHAT IS A MEDICALTECHNOLOGY? Have you ever been to a play? When the audience comes to see the show, they see the actors and actresses perform. What they don't see are the many crew members who work backstage on lighting and sound and sets. These people don't get to take a bow at the end of the show, but they are very important to the success of the play. In the hospital, the medical technologists are like crew members in a play. Patients don't often see them, but they are vital members of the healthcare team.

Medical technologists (also known as clinical laboratory scientists) are professionals who work in the hospital laboratory, performing a wide range of tests. Doctors make many of their decisions about diagnosis and treatment of disease based on laboratory test results. It is theresponsibilityof the medical technologist to provide accurate and precise data. Because they may hold life and death in their hands, the medical technologist must know when results are incorrect and need to be rechecked.

Medical technologists do everything from simple pregnancy tests, to monitoring antibiotic drug therapy, to complex testing that uncovers disease likediabetes, AIDS, and cancer. They do all this testing by operating microscopes, complex electronic equipment, computers, and precision instruments costing millions of dollars. Medical technology has embedded itself in ourcultureand has been a positive and powerful force in the improvement of life for millions of people.

However, for every yin there is a yang, and with all things that are positive, there is also a negative component that must not be ignored. Most Americans are familiar with the benefits of technology, specifically medical

technologies; the media reports on these benefits every day. However, it is not often that physicians have the opportunity to discuss what has been given up or lost as a result of using these same technologies. This commentary is about those unintended consequences resulting from our use of technology, in particular, physicians' use of medical technologies.