

Medical Physics:

One of the Most Critical Jobs in Cancer Care that No One Knows About

Medical Physics is an unusual beast in the Physics world. Part medicine and part physics with a splash of IT and project management and business, it is one of a handful of applied physics fields that has a direct impact on the lives of others. In a nutshell, medical physicists manage the complex technical aspects of treating cancer patients with radiation. Every patient who receives radiation treatments will have a medical physicist on their care team, but most will never know it. We work behind the scenes to ensure the dose calculations are correct, the linear accelerators are functioning properly, the most current standards of care are being followed and the most current and appropriate treatment modalities are being employed. Every day, we are called to be creative, to problem solve, to be precise, to share our expertise and to always be the perpetual student. No two days are ever the same.

Together, we will explore the medical physicist's responsibilities, the amazing successes of the work and the some of the heartbreaking realities of medicine. We will discuss the pathways available to become a medical physicist, the career opportunities after training and the pitfalls to avoid along the way.

Bio

Michele Verst is the Director of Medical Physics at the Union Hospital, Hux Cancer Center. She completed a BS in Physics at Northern Kentucky University and an MS in Radiologic Physics at the University of Cincinnati. She has been a clinical Medical Physicist for 21 years, 18 of those in Terre Haute. In 2010, she assumed the role as Director of Medical Physics and in 2013 established a post-graduate medical physics residency in partnership with the University of Kentucky. The 5th resident will graduate from the program in June 2023. Over the last 20+ years, Michele has cared for nearly 10,000 cancer patients.

Michele is also the very proud mother to 5 boys, 2 of which are current ISU students. She is an active parent in all their sporting events which, over the years, have included football, wrestling, baseball, golf, tennis, swimming, cross country, track, mixed martial arts, and marching band. And because she's not busy enough, all 5 boys are Boy Scouts – 3 of them are Eagle Scouts.