

The MPTC Report

We Are Strong, We Fight On

June is National Cancer Survivor Month

There are approximately 16.9 million cancer survivors across the country, and every June, we recognize each and every one of them for their bravery and resilience. No matter where you are in your survivorship, from beginning treatment to winning the battle, National Cancer Survivor Month is an opportunity for us to celebrate YOU.



Thanks to advancements in medical technology and research, including clinical trials happening right at the Maryland Proton Treatment Center, cancer survivor rates continue to increase. In addition to honoring survivors and those who have supported them, National Cancer Survivor Month is also a great time to educate those who may not have been affected by the disease on preventive measures and the importance of screening and early detection. Together, we can continue to improve survivor rates.

At MPTC, we've treated over 3,600 cancer survivors to date. A few of them have graciously [shared their stories](#) with us. Here is one:



American Cancer Society Studies Show Increase in Proton Beam Therapy

Two new studies led by American Cancer Society (ACS) researchers show an increase in the use of proton beam therapy (PBT) for patients with cancer in the U.S. during the past decade. However, Black patients were less likely to receive PBT than white patients, and this racial disparity increased over time. Compared to the results of the ACS studies, [MPTC treats a higher proportion of minority patients](#), with approximately 40% of patients during this time period being minority and 23% Black. This is significantly higher than the national average.

Dr. Elizabeth Nichols, along with other University of Maryland School of Medicine experts, is actively conducting research to uncover why more patients of color have access to proton treatment through the Maryland Proton Treatment Center compared with the national average, and what can be done to address these disparities and increase access at other proton centers.



"Further analysis of this patient population led us to find that many of our patient-focused support initiatives contribute to this high rate of receipt of treatment for this population. Our study showed that while access to proton therapy is impacted by race and socio-economic status, mitigation of transportation needs can significantly improve access to care for key patient populations."

Elizabeth Nichols, MD

Associate Professor of Radiation Oncology, UM School of Medicine
Vice Chair of Clinical Operations, Maryland Proton Treatment Center

[Read More](#)

Ron Rivera, Other Cancer Patients Forced to Fight for Insurance Coverage of Proton Therapy

Ron Rivera, head coach of the Washington Commanders football team, credits proton therapy as a big part of saving his life. Like many others, cancer was the fight of Rivera's life. But he faced another fight he didn't expect: getting treatment covered by insurance. [Read more.](#)



Cancer Survivor with 1 Lung Finishes 5th Marathon

Greg Gerardy just completed the Oklahoma City Memorial Marathon for the fifth time. As if that isn't a big enough accomplishment, he did it with only one functional lung. [Read more.](#)



History of Proton Therapy

Though proton therapy is the most advanced form of radiation available today, it's been around for quite a while. Here is a look at the history of the technology:

- The proton was discovered by Ernest Rutherford in the early 1900s.
- In 1930, the American physicist Ernest O. Lawrence and his associates were the first to invent the cyclotron to accelerate protons to an energy high enough for cancer treatment applications.
- In 1946, Robert R. Wilson, PhD, wrote a seminal paper proposing the idea that proton beams could be used for cancer treatment while he was in the Department of Physics at Harvard University. He is considered to be the father of proton therapy.



- The first attempts to use proton radiation to treat patients began in the 1950s in nuclear physics research facilities, but applications were limited to few areas of the body.
- In the late 1970s, imaging advancements, coupled with the development of sophisticated computers and improved accelerator and treatment delivery technology, made proton therapy a viable treatment option for more types of cancers.
- In 2016, the Maryland Proton Treatment Center (MPTC) opened its doors and began treating patients with proton therapy.
- Today, MPTC remains the only proton therapy center in the state of Maryland and is the most experienced center in the region. With radiation oncologists dedicated to continuously advancing the technology, [the center has been named #2 in the United States for accruals to NRG trials.](#)

Staff Spotlight:

Jason Molitoris, MD, PhD
Assistant Professor of Radiation Oncology
University of Maryland School of Medicine



Dr. Molitoris' primary areas of clinical and research interest include genitourinary, gastrointestinal, and head and neck cancers. He has multiple peer-reviewed publications from both his basic science and clinical research, and has given national and international presentations on his research. His research throughout the years has resulted in an overall improvement in outcomes for cancer patients with some of the hardest-to-treat cancers.

Named a Top Radiation Oncologist by *Baltimore magazine*, he has increased the availability of cutting-edge treatments available by founding the high dose rate brachytherapy prostate program at UMMC, bringing a new option for the treatment of prostate cancer. He also leads the thermal therapy program at UMMC. Both of these advanced treatment options can be combined in a multidisciplinary approach to treat challenging cancers.

Clinical Trial Spotlight

[Evaluation Tracking Project: A Prospective Chart Review of Patients Treated with Radiation Therapy.](#)
Sponsor: Proton Collaborative Group (PCG)]
PI: Mark V. Mishra, MD

The purpose of this research study is to collect and analyze information from patients with solid tumors being treated with various forms of radiation therapy, including proton therapy, photon therapy, SRS and brachytherapy.

For more information on the study, please call 410.369.5351.

