Radiation Oncology Institute

The ROI is ASTRO’s Research Foundation, established to heighten the critical role of radiation oncology in the treatment of cancer through research.

ACCELERATING PRACTICE TRANSFORMATION

When you support the ROI, you are investing in research to help radiation oncology be a leader in the movement toward more patient-centered, quality health care. Together, we are fueling innovation that addresses the practical needs of radiation oncology in the changing health care landscape.

MAKING A DIFFERENCE FOR GROUND-BREAKING RESEARCHERS

You are supporting early career investigators seeking solutions to reduce toxicity and enhance quality of life for patients.

“You are helping to launch novel research pathways that will personalize care and improve outcomes for patients.”

The James D. Cox Research Award from the ROI will empower my research team to develop a virtual imaging biopsy for early detection of brain necrosis in recipients of brain radiation and immunotherapy. This way, I feel I am honoring Dr. Cox’s legacy of improving cancer patients’ longevity and quality of life via innovation.”

— Hesham Elhalawani, MD, MSc
2021 Biomarkers for Radiation Oncology Award Winner
James D. Cox Research Award Winner

Hesham Elhalawani, MD, MSc, and his team are leveraging the power of artificial intelligence to identify imaging biomarkers than can predict which patients are at greatest risk of developing radiation necrosis.

“We are very appreciative of support from the ROI - the funding will be transformative in initiating our study aiming to identify biomarkers of response to chemoradiation in anal cancer.”

— Nina Sanford, MD
2021 Biomarkers for Radiation Oncology Award Winner

Nina Sanford, MD, and Wen Jiang, MD, PhD, are Co-Principal Investigators on a project to develop a novel microscale biochip device to monitor disease progression and treatment response in anal cancer.
You are funding research to increase understanding and awareness of radiation therapy, personalize treatment and improve quality of life and outcomes for patients with cancer.

- **Sonal Noticewala, MD, MAS**, is leading a team working to improve outcomes for patients with pancreatic cancer by investigating the role of the microbiome—the bacteria that live in the digestive tract—in how the tumor responds to neoadjuvant chemoradiation.

- **David Miyamoto, MD, PhD**, and his team are developing a new blood test to detect and analyze circulating tumor cells in patients with muscle-invasive bladder cancer. This non-invasive liquid biopsy will help identify patients who can be effectively treated with bladder-preserving trimodality therapy, a combination of radiation therapy, chemotherapy, and limited surgery that avoids removing the entire bladder.

- **Stephanie Terezakis, MD**, and G. Nic Rider, PhD, are leading a team working to improve cancer care for the LGBTQ+ community by assessing current health care practices and the training needs of providers working in radiation oncology with LGBTQ+ patients.

- **Sara Alcorn, MD, PhD**, and Crystal Aguh, MD, are leading a team developing a web-based tool that will objectively assess acute skin toxicity in patients with a wide range of skin tones who are receiving radiotherapy to treat breast cancer.

### ROI Research is Yielding a Return on Investment

- **$3.7 million** Invested in radiation oncology research
- **29 Teams** of the best and brightest investigators
- **65 Scientific presentations and manuscripts**
- **1 MILLION** U.S. cancer patients treated with radiation therapy this year who could experience better outcomes
- **5,000+ Clinicians** using the RadOnc Toolbox app

### Forging a Path for the Future of Radiation Oncology

The ROI envisions a future when all cancer patients who could benefit from radiation therapy receive it, and every member of the profession is an integral part of the multidisciplinary team where they practice. Your investment in the ROI today will help drive practice transformation and ensure that radiation oncology is a leader in the cancer care of tomorrow.

Visit [www.roinstitute.org](http://www.roinstitute.org) to make your donation.