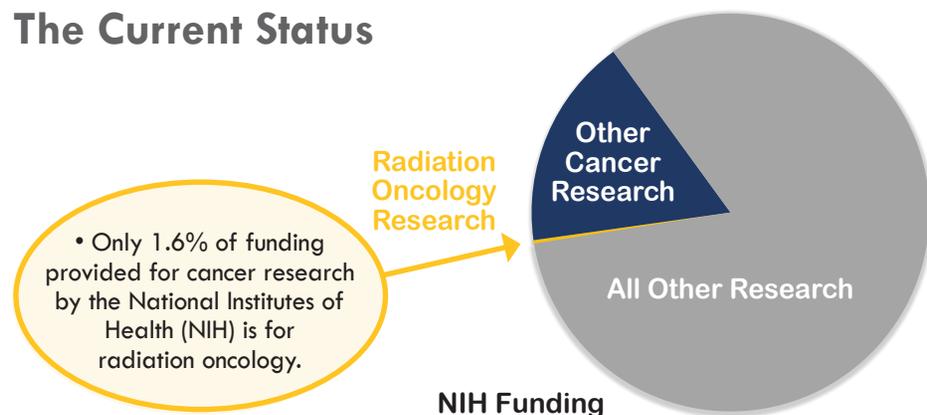


# Investing in Research to Improve Practice

The Radiation Oncology Institute (ROI) is a non-profit foundation dedicated to heightening the critical role of radiation oncology in the treatment of cancer through research and education.



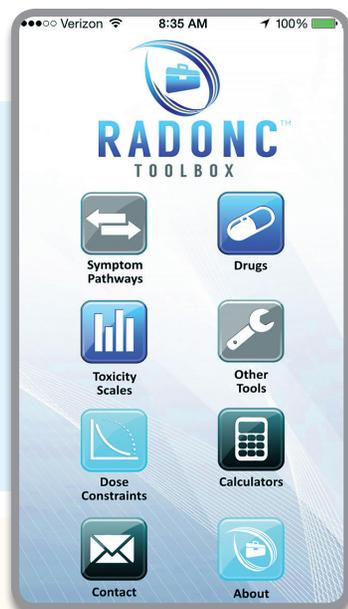
## The Current Status



• Radiation oncologists are woefully underrepresented in research advisory groups. Of the 123 research leaders named to the Cancer Moonshot Initiative's Blue Ribbon Panel and its working groups, **only one is a radiation oncologist**, which shows **we have a lot of work to do!**

## What ROI is Doing to Address the Need

	DEMONSTRATING VALUE		INFLUENCING POLICY AND PAYMENT		ENHANCING QUALITY AND SAFETY
NEED	Providers, policymakers and payers are seeking more evidence-based comparisons of outcomes to cost to determine the value of care being provided.	NEED	The Centers for Medicare and Medicaid Services (CMS) has requested alternative payment models for radiation therapy procedures.	NEED	Improved quality assurance efforts are necessary to ensure the safe delivery of radiotherapy.
RESPONSE	ROI is funding studies examining the value of radiotherapy compared to surgery and other treatments in two important areas, early-stage non-small cell lung cancer (NSCLC) and oropharynx cancer.	RESPONSE	ROI has funded the development of a bundled payment model for stereotactic body radiation (SBRT) for early stage NSCLC. A manuscript is being prepared for submission in spring 2017.	RESPONSE	ROI funded the first clinical demonstration of a new system that determines treatment delivery accuracy in real-time using electronic portal imaging devices (EPID), which can prevent mistreatment.
IMPACT	Results from these studies have the potential to help shift the standard of care toward radiation therapy.	IMPACT	Outcomes from the study will add to the national conversation on payment reform in oncology and could inform policy recommendations to CMS.	IMPACT	Results of the successful trial were published in the November 1, 2015 Red Journal and additional sites are now testing the system.



## RadOnc ToolBox

ROI funded the development of the RadOnc ToolBox app and website to provide clinicians with an easy-to-use digital resource at their fingertips. The ToolBox includes:

- Evidence-based interventions for managing and preventing eight of the most common radiation-related toxicities.
- Dose-Volume Histogram Constraints for various treatment sites.
- A dose conversion calculator.
- A reference for prescribing commonly used medications.
- Toxicity scales.
- Performance status scales.

See the RadOnc ToolBox at [www.rotoolbox.com](http://www.rotoolbox.com). Coming soon to the Apple App Store.

## An ROI Success Story

Investigator: Christopher Slatore, MD, MS  
 Institution: VA Portland Health Care System  
 Award: \$200,000 over three years

Dr. Christopher Slatore is leading a comparative, mixed-method study to better understand the patient-centered outcomes associated with different treatments for early stage NSCLC. Specifically, the study is comparing the quality of life, utility, respiratory symptoms and decision satisfaction of patients who choose SBRT versus surgery and is evaluating the communication between patients and clinicians about their treatment decisions.

Dr. Slatore's team recently published a paper on the baseline qualitative patient interviews in the *Annals of the American Thoracic Society*, and several more manuscripts are in development. This grant has also served as a springboard for Dr. Slatore to serve as co-investigator on an NCI-funded observational study that was patterned on his ROI-funded study and to be a co-investigator on a randomized controlled trial of surgical resection vs. SBRT for early stage NSCLC within the VA.



## The Bottom Line

ROI is filling an important niche in the field of radiation oncology by supporting research in areas that are essential in this age of competitive, evidence-based medicine with limited funding sources. **Continued investment in the ROI is necessary** to help address this disparity and secure radiation oncology's critical role in the future of cancer treatment.

**For more information or to donate, visit [www.roinstitute.org](http://www.roinstitute.org) or call 703-502-1550.**