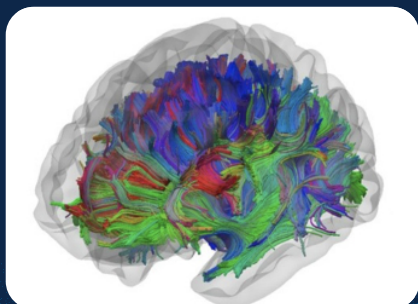


Cancer immunotherapy, artificial intelligence and precision medicine have the potential to address major obstacles to treating cancer and reshape the landscape of cancer medicine. At the Center for Precision Radiation Medicine (CPRM), our faculty make amazing strides toward the future of personalized cancer every day.



State-of-the-art imaging technologies visually represent neural tracts in the brain, allowing researchers to evaluate their architecture and function.



SCAN TO LEARN MORE

At UC San Diego, we believe that what we don't know today will forever change our tomorrows. Empowered by generosity and fueled by curiosity, we are unafraid to chase the unknown — to ask the questions no one has asked before and to push the boundaries of possibility. Together with your support of Radiation Medicine and Applied Sciences at UC San Diego School of Medicine, we will unite diverse people and unconventional perspectives to propel limitless impact. Because we know that when we come together, nothing is beyond us.

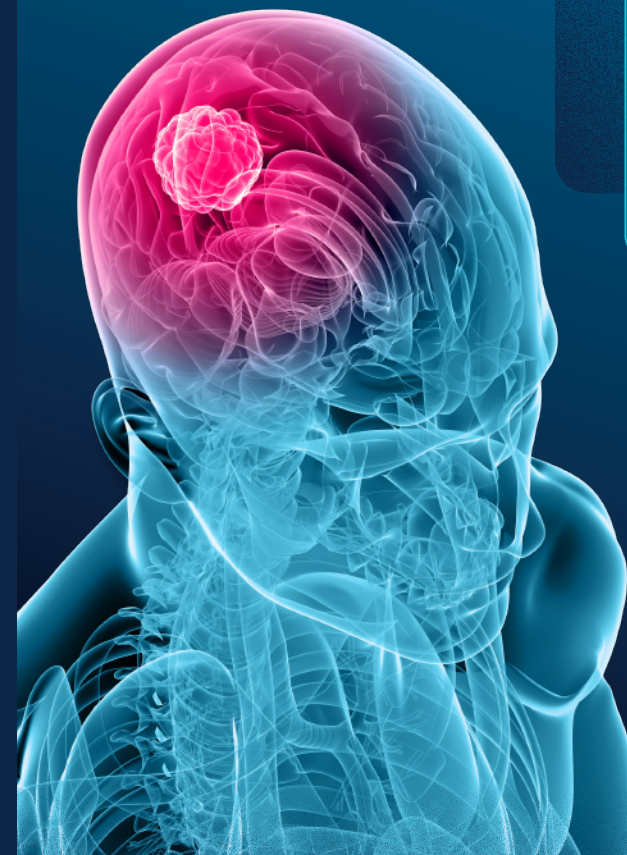
UC San Diego

SCHOOL OF MEDICINE  
Department of Radiation Medicine  
and Applied Sciences

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23024254

# CENTER FOR PRECISION RADIATION MEDICINE



HOW YOU CAN HELP ADVANCE PERSONALIZED  
MEDICINE TREATMENTS AND TECHNOLOGIES

Welcome to the Center for Precision Radiation Medicine (CPRM), where groundbreaking research is being translated to improve patient care. As director, I am honored to introduce you to our esteemed faculty and researchers who are at the forefront of



ANDREW SHARABI, DIRECTOR

revolutionizing cancer treatment through precision radiation medicine. Radiation Medicine is a specialty that uses therapeutic radiation to treat patients with a variety of health conditions and cancer types. However, certain aspects of the field have not advanced in decades and much additional work is needed. At CPRM our goal is to develop truly personalized radiation therapy and discover novel diagnostics and therapeutics that improve patient outcomes.

Our multidisciplinary team comprises a broad array of physician scientists and researchers who are developing the next generation of cancer treatments, imaging modalities, diagnostics and informatics. Our world-class group is also directly leading national and international clinical trials using novel therapeutic strategies. We pride ourselves on fostering a collaborative environment where innovation flourishes and this has resulted in six of our faculty members being R01 funded, the most prestigious grant awarded to independent investigators. With your support we can expand the breadth, depth and international impact of our program.

Through strategic partnerships and dedicated research, we are translating scientific discoveries into tangible advancements in cancer care, offering hope to patients and families worldwide. Join us in our mission to revolutionize radiation medicine and pave the way for a future where cancer is no longer a life-threatening diagnosis.

## WHAT WE DO

Our visionary physician-scientists are leading groundbreaking investigations and collaborating with colleagues from across campus to accelerate forward-looking approaches and innovative treatments that bring new hope to patients and families here in San Diego and around the world.

## TAILOR-MADE CANCER THERAPY

**Sunil Advani, MD**, in collaboration with the late Nobel Prize-winning scientist Roger Tsien, PhD, received National Institutes of Health funding to develop a nanotechnology system that uses small molecules that bind to the surface of tumor cells to deliver targeted cancer therapies. These molecules can be selectively activated to increase treatment specificity and minimize side effects.

## NEXT GENERATION IMMUNOTHERAPY COMBINATIONS

**Jyoti S. Mayadev, MD**, is leading national multicenter cooperative group clinical trials studying immunotherapy in combination with radiation therapy to treat cervical cancer and gynecologic malignancies.

**Loren K. Mell, MD**, is also a national and international leader of clinical trials studying immunotherapy in combination with or as alternatives to chemotherapy to treat cancers caused by the human papillomavirus.

In addition, **Andrew Sharabi, MD**, is discovering novel therapeutics to treat viral associated cancers and understanding the process by which radiation stimulates T-cell and B-cell immune responses that may play a role in long-term cancer remissions.

## CONNECTING AND IMAGING WITH PATIENTS

The research of CPRM Deputy Director **Jona Hattangadi-Gluth, MD, PhD**, and **Carrie McDonald, PhD**, focuses on use of advanced neuroimaging techniques and novel therapies to optimize treatment response, neuropsychological and emotional outcomes in patients with brain tumors, with the goal of achieving onco-functional balance.

**Tyler Seibert, MD, PhD**, leads an engineering team studying genetic personalization of decision-making for prostate cancer. He has also pioneered an advanced form of MRI that improves doctors' ability to find and more precisely treat aggressive prostate cancers. Both technologies are being evaluated in ongoing national and international trials.

## YOU CAN MAKE A DIFFERENCE

CPRM is leading the charge toward a cancer-free future, but philanthropic partnership is vital to continuing our momentum and reaching more patients. Your support can help advance visionary research initiatives, educate the next generation of cancer experts and accelerate excellent clinical care.

## LEARN MORE OR SUPPORT THE CENTER FOR PRECISION RADIATION MEDICINE:

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