

YEAR IN REVIEW

Head and Neck Cancer Center
Moore's Cancer Center at UC San Diego Health



UC San Diego Health

Thank you.



A Health Care Leader

UC San Diego Health is ranked seventh in California for 2017 – 2018 in *U.S. News & World Report's "Best Hospitals"* report, and is among the best in the nation in eight specialty areas.

Top Cancer Innovator

As the only National Cancer Institute-designated Comprehensive Cancer Center in the San Diego region, Moores Cancer Center at UC San Diego Health is prominent among the leading institutions in the nation dedicated to scientific innovation and clinical excellence.

One of 100

UC San Diego Health System as ranked by "Great Hospitals in America" (*Becker's Hospital Review*).

Dear Friends,

It is a pleasure to share the 2016 – 2017 annual report for the Head and Neck Cancer Center within Moores Cancer Center at UC San Diego Health with you. In the pages ahead, you will see highlights on the innovative physician-scientists, incredible exploration and forward-thinking philanthropic partners contributing to our ability to improve care and redefine how we understand and treat head and neck cancer.

I am particularly proud to share how much our team has grown in the past year. Our focus is not just on hiring outstanding physicians, but on building a comprehensive, interdisciplinary team that facilitates the very best patient experience and outcomes. With an exemplary group of doctors, patient navigators, speech therapists, nutritionists, and basic and translational science researchers, we address every care aspect critical to supporting our patients and their loved ones.

The center has also had an outstanding year translating research ideas into novel and viable treatment options for our patients, resulting in more than \$26 million in committed funding to head and neck cancer research. For example, [Tina Sacco, MD](#), is leading the first-ever multi-center clinical trial combining immunotherapy and targeted molecular therapy for recurrent and metastatic head and neck cancers using pembolizumab with cetuximab. This is just one of the more than 20 active trials we have in operation. Also in the research realm, I want to take a moment to recognize Mark and Susan Mulzet, who are dear friends of our team and visionary philanthropic partners to our exploratory efforts. Through a generous contribution to launch the Mulzet Cure for the Cure Initiative, Mark and Susan have empowered us to pursue collaborative, groundbreaking research that will help deepen our understanding of the potentially unpleasant side effects of head and neck cancer therapy, and improve quality of life for the many patients we are helping to fight this disease.

We — our faculty, our staff and friends like you — are truly a united front in the fight against cancer. In just two short years, we have experienced exponential growth, and are only continuing our upward trajectory. I am excited to share a year of wins and discoveries with you, and look forward to many more. Thank you.

Sincerely,

Joseph A. Califano III, MD
Director, Head and Neck Cancer Center
Professor and Vice Chief,
Division of Otolaryngology-Head and Neck Surgery

Our Faculty

Medical Oncology

Anjali Bharne, MD
Ezra Cohen, MD*
Gregory Daniels, MD, PhD
Kate Gold, MD
Scott Lippman, MD
Assuntina Sacco, MD
Fareeha Siddiqui, MD

Radiation Oncology

Loren Mell, MD*
Doug Rahn, MD
Parag Sanghvi, MD, MSPH
Andrew Sharabi, MD, PhD
James Urbanic, MD

Surgical Oncology

Kevin Brumund, MD
Joseph A. Califano III, MD
Charles Coffey, MD
Ryan Orosco, MD

Research Director

J. Silvio Gutkind, PhD*

Clinical Informatics

Specialist
Celia Ramsey

Pathology

Grace Lin, MD
Alfredo Molinolo, MD, PhD

The Lynn and Richard Gordon Family Patient Navigator

Montserrat Noboa

Program Administrator

Jayna Athas

Social Worker

Yuko Abbott, DSW, LCSW,
OSW-C

Speech Language Pathology

Liza Blumenfeld, CCC-SLP,
BCS-S*
Kristen Linnemeyer, CCC-SLP

Nutrition

Patricia Rubio, RD, CNSC

Survivorship Nurse

Katrina Clynch, NP

*denotes center co-directors

Building our Legacy Two Years of Innovation and Growth

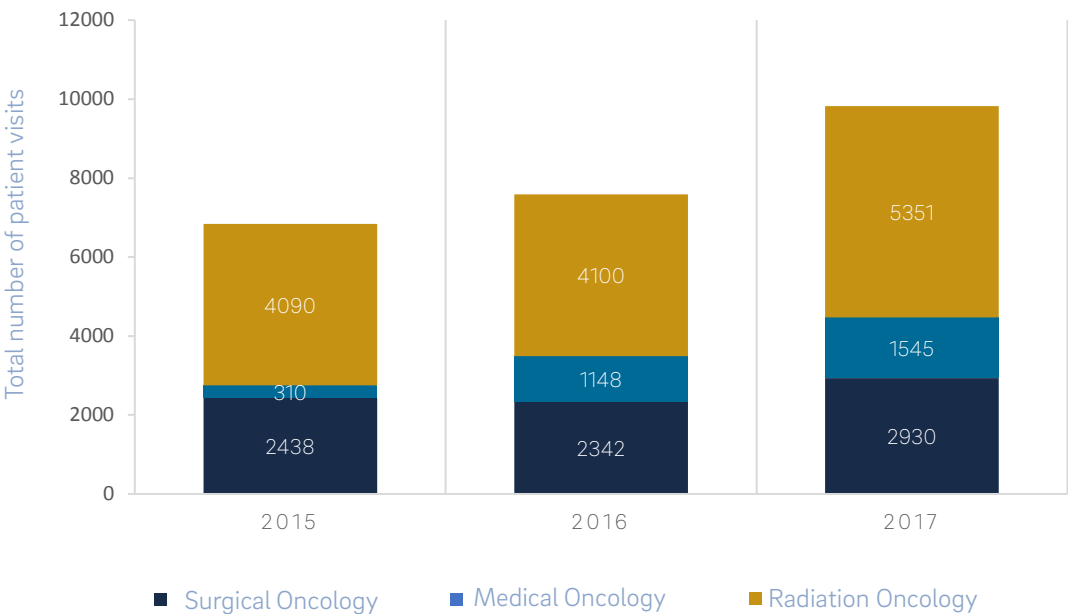
At the Head and Neck Cancer Center, ensuring patient quality of life is paramount, and every member of our team passionately contributes to care. We are a living lab and a hub for advanced research, and are uniquely positioned to recruit exceptional students, residents and fellows to bring fresh ideas and novel solutions into our research and patient care initiatives.

Despite being founded just two years ago, we have already developed a strong foundation of excellence and experienced a high degree of growth — most importantly, in our ability to

provide an ever-increasing number of patients with access to leading-edge care. In 2015, we saw 2,991 patients. In 2016, that number rose to 3,699 and increased further in 2017, serving 4,684 patients. That is a 57 percent increase in patient visits since our beginning, with a leap of 27 percent from 2016 to 2017 alone.

With exciting research, education and clinical efforts underway and in development, we eagerly anticipate continued progress in this area, and we project offering comprehensive care to even more patients from San Diego, across the United States and around the world in the coming year.

Head and Neck Cancer Center Visits by year and sub-specialty



Promising Initiatives at the Head and Neck Cancer Center

Moore's Cancer Center and the Head and Neck Cancer Center are the nucleus of many exciting developments and programs shaping the future of cancer care. Key discoveries and advances happening right now include the following:

Combining Radiation Therapy and Immunotherapy

[Andrew Sharabi, MD, PhD](#), is a physician-scientist and board-certified radiation oncologist at Moore's Cancer Center and a member of the radiation oncology team at the Head and Neck Cancer Center. He was recently recruited from Johns Hopkins University, where he published one of the first studies combining focused radiation therapy with a new Food and Drug Administration-approved immunotherapy. This work led to a new method of treating cancer, which he terms "immuno-radiation," and he has successfully translated his findings into the clinical setting. He is currently the principal investigator for two clinical trials focusing on immuno-radiation, and is also developing novel immunotherapies and combination strategies to apply across the Head and Neck Cancer Center and beyond.

Shorter Radiation Treatment Times

Along with Dr. Sharabi, [Loren Mell, MD](#), and [Parag Sanghvi, MD](#), are some of the first UC San Diego Health physicians to use a next-generation radiation therapy technology that reduces treatment time by approximately 20 percent and significantly improves accuracy. The Halcyon™ system is only available at two health institutions in the world, and its multiple forms of therapy empower physicians to personalize patients' care and choose the most efficient approach for their exact needs. Because of its unique equipment, the system's radiation beams sync with the exact size, shape and position of the targeted tumor, offering more precise treatment and reducing effects on healthy tissues.

Targeting Neoantigens with Precision Immunotherapy

[Ezra Cohen, MD](#), is leading a bench-to-bedside effort in collaboration with La Jolla Institute colleagues [Bjoern Peters, PhD](#), and [Stephen Schoenberger, PhD](#), that has resulted in the development of a unique technology platform based on genomic sequencing, bioinformatic analysis and functional immunology. The platform is able to identify neoantigens, mutations only expressed in a patient's tumor and not in normal tissues, to boost the power of individual patients' T cells to combat cancer cells, and will be targeted in clinical trials focused on advancing novel immunotherapeutics.

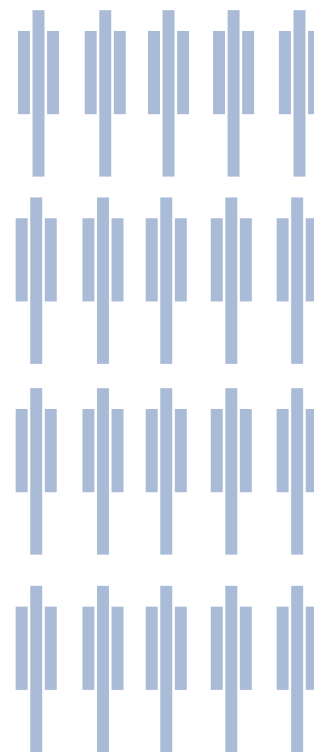


Leading the Way in Oral Cancer Prevention and Detection

There is an urgent need to develop a way to prevent oral premalignant lesions from progressing into oral squamous cell carcinoma, a disease that results in more than 250,000 deaths each year worldwide. [J. Silvio Gutkind, PhD](#), made a fundamental discovery that the activation of the mTOR signaling network is the most frequently dysregulated molecular mechanism in oral cancer and oral premalignancy. His team also found that by repurposing metformin, which is safely used by millions of patients with type 2 diabetes, we could inhibit mTOR signaling, and that metformin displays potent chemopreventive activity in oral cancer models. Based on these findings, [Scott Lippman, MD](#), director of Moores Cancer Center, recently launched a National Institutes of Health (NIH)-supported Phase 2a clinical trial to explore the potential use of metformin for oral cancer prevention.

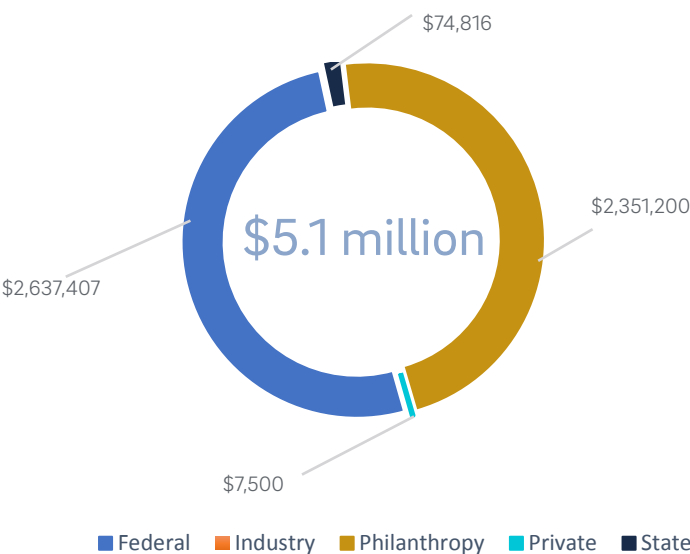
In addition, a team of experts led by Dr. Gutkind received an NIH R01 grant to elucidate the molecular mechanisms by which metformin acts on oral premalignancy and cancer. This effort is expected to help identify biomarkers for predicting and monitoring clinical response, provide a rationale for new precision chemoprevention strategies, and find methods to prevent or overcome drug resistance.

Dr. Califano is also leading a multi-center NIH-sponsored trial to evaluate a spit test for oral and throat cancer in collaboration with Vigilant Biosciences. The test requires only a small amount of saliva, can give results within ten minutes, and is designed for early diagnosis and detection. This is a promising and viable option for a simple test for head and neck cancer. If proven effective, it will be applicable for use in the U.S. as well as in developing countries without the resources to conduct early diagnostic testing.

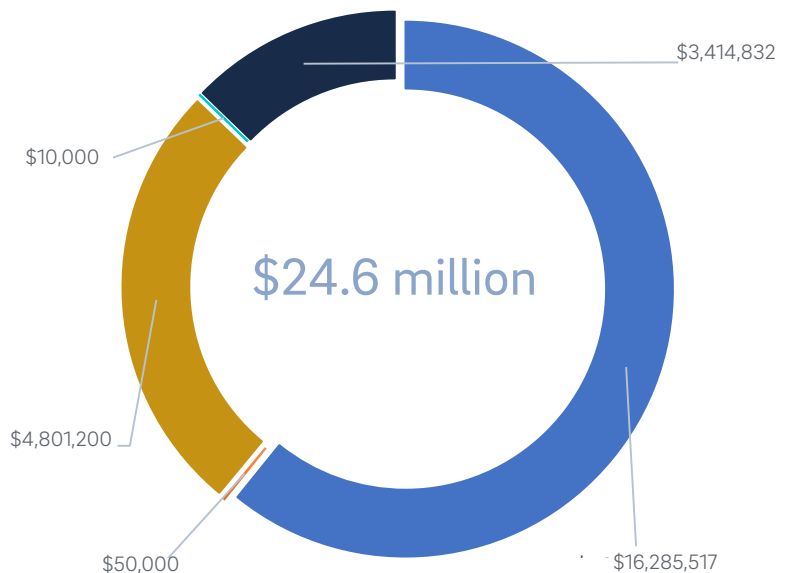


x21 Active clinical trials currently underway in Head and Neck Cancer

TOTAL AWARDED FUNDS
in Fiscal Year 2018



TOTAL COMMITTED FUNDING
for the Next Five Years





Finding a “Cure for the Cure” How Mark and Susan Mulzet Used Philanthropy to Inspire a Revolution

Although saving lives is the chief goal for us at the Head and Neck Cancer Center, improving our patients’ quality of life is also critical. There is a clear need to mitigate side effects and improve the day-to-day for patients with long-term head and neck cancer treatment toxicity.

Mark and Susan Mulzet recognized this need for a solution — a “cure for the cure,” as they called it — and expressed their vision to create a dedicated research fund to Dr. Califano and the center team. After collective strategizing, brainstorming and assembling an interdisciplinary team of experts, the Mulzets’ forward-thinking generosity accelerated the new **Mulzet Cure for the Cure Initiative**, which will find progressive therapies that drive greater survival and healing and deliver the highest caliber of patient-centered care.

A commitment of \$3.15 million is fueling three initial projects over four years. Led by Dr. Califano; Dr. Gutkind; **Liza Blumenfeld, MA, CCC-SLP, BCS-S**; and **Catriona Jamieson, PhD, MD**, the projects function independently but contribute to collaborative goals. Each will culminate in a clinical trial phase that centers on better analyzing patients’ perceived quality of life, developing novel precision therapies or exploring options for stem cell treatments. This initiative will help ensure that when the ultimate solution for head and neck cancer is discovered, it will fully eradicate the disease and the unpleasant side effects current treatments can present.

The Mulzet Cure for the Cure Initiative is a prime example of how philanthropic partnerships can shape, innovate and redefine the future of cancer care, and we are incredibly grateful to Mark and Susan for their integral role in bringing concept to reality.

Continuing Excellence in Innovation and Patient-Centered Care

Introducing Ryan K. Orosco, MD

The Head and Neck Cancer Center is pleased to welcome **Ryan K. Orosco, MD**, as the newest member of our faculty. Dr. Orosco brings with him a blend of research talent and ingenuity and a passionate dedication to comprehensive, individualized care that will serve our patients in the immediate and long terms.

Dr. Orosco completed fellowship training in head and neck cancer and microvascular reconstruction at Stanford University School of Medicine, following residency training in otolaryngology at UC San Diego School of Medicine. He received his medical degree from Johns Hopkins School of Medicine. Dr. Orosco

is a board-certified head and neck surgeon who specializes in the surgical treatment of benign and malignant tumors and complex reconstruction of the head and neck using advanced and minimally invasive reconstruction techniques.

Presently, Dr. Orosco is co-leading a translational research laboratory devoted to advancing the field of robotic surgery. In addition, his work at the UC San Diego Contextual Robotics Institute within UC San Diego Jacobs School of Engineering focuses on melding engineering and medicine. Dr. Orosco’s research has been featured in numerous peer-reviewed publications.



Rocking Toward a Cure with Clinical Trials

Inside Rikki Rockett's Triumph Over Cancer

Two years ago, **Rikki Rockett**, drummer for the legendary rock band Poison, was struggling to overcome what he thought was a long-term sinus infection. However, when he sought medical care, Rockett received devastating news. He had squamous cell carcinoma of the tongue. His doctors in Los Angeles placed him on a chemotherapy-radiation regimen, and Rockett strove to lead a normal life and stay strong for his two young children, Jude and Lucy. But a PET CT scan in February 2016 revealed that despite treatment, his cancer was spreading.

In the midst of discussing surgical removal of the tongue as a potential next step, one of Rockett's doctors suggested an alternative. Moores Cancer Center physician-scientists **Ezra Cohen, MD**, and **Sandip Patel, MD**, were conducting a clinical trial for an experimental combination immunotherapy treatment, only available at a few institutions in the country. Although the mix of Keytruda and epacadostat was an uncertain option, Rockett sprang into action and underwent testing to determine his viability as a candidate, and was soon accepted into the trial. Even after his first treatment,

results were promising, and in July 2016, Dr. Cohen told Rockett the best possible news — his cancer was gone.

While immunotherapeutics are showing great potential across a growing array of cancer forms, it may take years before they can truly replace existing standards of care. But for Rockett and the many other patients who have immunotherapy as a part of their treatment plan, that potential is pointing toward a vibrant and cancer-free future.



Rikki Rockett and Dr. Ezra Cohen

As Rockett continues his treatment through the end of the two-year trial, he serves as a passionate and valued advocate for investigative efforts into emerging immunotherapy possibilities — many of which are happening right here at the Head and Neck Cancer Center. “My hope going forward is that by talking to other cancer patients, I might be able to lessen their pain and suffering,” he comments. “If I can help anyone else, it would help give reason to what I went through.”

Our Hands-on Approach to Patient Navigation

Helping Guide The Way

We are proud to be one of three Moores Cancer Center programs piloting **The Lynn and Richard Gordon Family Patient Navigation Program**. The Head and Neck Cancer Center program, guided by Patient Navigator **Montserrat Noboa**, offers dedicated advocacy, information and solutions services to help patients and their loved ones more easily cope with the many complexities of a cancer diagnosis.

The pilot program emphasizes tailored support from before the first appointment and along the continuum of care, and creates a patient experience

that drives proactive, rather than reactive, care. Services include education and research related to diagnosis or treatment options; translating medical terminology; serving as a communications liaison with patients' care teams; obtaining referrals to community and support services; arranging palliative care, hospice and home care; and providing emotional and psychological support.

We are thrilled to bring this comprehensive solution to our patients, and are thankful to **Lynn and Richard Gordon** and their family for their dedication to redefining personalized cancer care.

Moving Forward

What the Future Holds for the Head and Neck Cancer Center

The past year has been exciting and exceptionally productive, and we look to our next steps with optimism and an entrepreneurial spirit. It is because of your support that we have been able to make such great strides in such a short timeframe.

As we continue to evolve, program priorities include establishing a head and neck surgical oncology fellowship, which will provide up-and-coming cancer care leaders with the opportunity to work side-by-side with our experts; contribute to novel discoveries, treatments and technologies; and hone their skills in an innovative, science-driven clinical setting. We also aim to create startup funds and pilot funds for research faculty and younger faculty members. These will fuel investigative endeavors not typically supported through grant and government funding and create a powerful foundation for the game-changers of tomorrow to begin forward-thinking work *today*.



Learn more.

Pilar Gose | Director of Development
UC San Diego Health Advancement
T: 858-246-1328 | E: pgose@ucsd.edu

9500 Gilman Drive #0937
La Jolla, CA 92093-0937
health.ucsd.edu

At the University of California San Diego, challenging convention is our most cherished tradition. The Campaign for UC San Diego is a university-wide comprehensive fundraising effort to empower the next generation of innovators to blaze a new path toward revolutionary ideas, unexpected answers, lifesaving discoveries, and planet-changing impact. All gifts since July 1, 2012, have already contributed to the momentum and success of the Campaign.

UC San Diego respects your privacy. If you would like to be removed from future UC San Diego Health fundraising communications, please contact us at optout-hsdev@ucsd.edu or 800-588-2734.

**The Campaign For
UC San Diego**