Transplants without lifelong regimen of anti-rejection drugs
Dr. Ann Raldow’s involvement with the transplant team and the role of radiation.

2022 Residents
The newest faces in the Department of Radiation Oncology at UCLA.

VALOR

At Sea
Reframing.
Keeping perspective.

Treating Prostate Cancer: Genetics and Technology
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Chairman’s Letter

Angela Duckworth, in her *New York Times* best seller *Grit*, wrote, “Grit has two components: passion and perseverance.” Over the last year, our faculty, trainees, and staff have embodied these components...embodied grit.

Despite the continued adversity the medical community and world faced with an evolving pandemic, our team persevered. They used their passion to care for their patients, educate our residents, and propel our many research endeavors forward.

Here are a few examples featured in this issue of the *UCLA Radiation Oncology Journal*. Dr. Ann Raldow became part of the kidney transplant team adding the benefit of radiation therapy to induce an immunologic chimera that will allow the patient to forgo the use of organ anti-rejection medicine, yielding a treatment approach that will seismically shift how we think about and perform many organ transplants in the future. Dr. Drew Moghanaki continued his work helming the VALOR Trial as well as his work in lung cancer prevention and detection, which will undoubtedly play an important role in getting us to “a time when no one dies from lung cancer.” Dr. Amar Kishan’s research continues to reshape our approach to the treatment of prostate cancer—with shorter treatment durations and optimal outcomes. Our residents and faculty brought their “A” game to ASTRO 2021. Dr. Diana Gage, a member of our VA Team, addressed growing adversity and violence within her local community through creating a campaign that not only assisted with COVID mitigation efforts, but also spread awareness about pandemic-sparked violence against Asians. And Dr. Michael Xiang skippered the official opening of our new center in Santa Clarita where ETHOS technology offers the Northern Los Angeles County adaptive millimeter accuracy—only a few miles from home.

I hope you enjoy this edition of the *Journal*. Wishing you a successful and healthy New Year.

Michael Steinberg, M.D.
Professor and Chair
@MSteinbergMD
REALITY AT UCLA HEALTH:
TRANSPLANTS WITHOUT LIFELONG REGIMEN OF ANTI-REJECTION DRUGS

RADIATION THERAPY PLAYS IMPORTANT ROLE

UCLA Radiation Oncologist Dr. Ann Raldow, a member of the UCLA Health's transplant-tolerance team, explains, “The patients come in before their transplant and we develop a radiation-therapy plan that is specific to their anatomy,” taking special care to avoid exposing the newly transplanted kidney to radiation.
Groundbreaking science and cross-specialty collaboration enable transplant recipients to thrive without immunosuppressive drugs

When he was a medical trainee, UCLA Health nephrologist Erik Lum, MD, was part of a team at Stanford University exploring how to create “tolerance” in kidney-transplant patients — a process that encourages the body to welcome the new organ without the necessity for a lifelong regimen of anti-rejection drugs.

Now, Dr. Lum is among the leaders of a multidisciplinary team making transplant tolerance a reality at UCLA Health. Two kidney transplants have been performed thus far under the advanced protocol, making UCLA Health one of only five medical centers in the world capable of the groundbreaking approach hailed as “the Holy Grail” of transplantation.

“It requires a lot of interplay between different divisions,” Dr. Lum says. “To me, it really demonstrates the strength of a place like UCLA. You can’t do this just anywhere. It’s a huge collaboration.”

The protocol, made possible by funding provided by the OneLegacy Foundation, brings together a broad range of specialties, including nephrology, urology, hematology, radiation oncology and others, for a series of treatments that prime the transplant recipient’s body to accept the new organ.

With traditional transplants, the body recognizes the new organ as a foreign invader, prompting the immune system to attack. A regimen of immunosuppressive anti-rejection drugs tamps down this natural response. The drugs, which themselves carry potentially significant risks, remain necessary throughout the patient’s life because the body continues to see the organ as foreign.

Teaching the body to tolerate transplanted organs

The tolerance approach calls for blending the donor’s and recipient’s immune systems through an infusion of the organ donor’s stem cells shortly after the organ transplant. Called “mixed chimerism,” this blending prompts the recipient’s body to recognize, rather than reject, the new organ.

“If you have introduced both the donor's stem cells and kidney, then the recipient's immune system recognizes that kidney as self,” says Jeffrey Veale, MD, who specializes in renal transplantation and was instrumental in developing the new tolerance protocol at UCLA Health.

The science that led to the development of organ-transplant tolerance approach has been evolving for decades.

"The recipient's immune system recognizes that kidney as self" -Jeffrey Veale, MD

Solid-organ transplants have been successfully performed since the 1950s, but they always have required powerful medications to prevent the recipient from rejecting the new organ. In addition to being expensive, these immunosuppressive drugs also carry with them a number of serious potential complications, including increased risk of cancer, infection, diabetes, hypertension and heart disease, and they must be carefully managed throughout the patient's life.

Because these powerful medicines are filtered through the kidneys — the very kidney that has been transplanted — they eventually overwhelm and overtax the new organ. A goal of the tolerance approach is to extend the survival of the transplanted kidney.
Eliminating the need for anti-rejection medication

Incorporating an infusion of stem cells from the donor’s blood as part of the organ-transplant process works to prevent the recipient’s body from rejecting the kidney without the need for immunosuppressive drugs. The immune systems of the host and donor live side by side.

“Stem-cell transplants and solid-organ transplants are usually conducted very independently of each other,” says bone-marrow transplant specialist Neil Kogut, MD, who worked closely with Dr. Veale to develop UCLA Health’s transplant-tolerance protocol. “These are very separate worlds that the doctors and researchers in these fields occupy,” Dr. Kogut says. “This protocol is a unique opportunity to bring stem-cell transplantation and solid-organ transplantation together to try to achieve something very positive for transplant recipients. It is a unique synergy of these two fields.”

Radiation therapy plays important role

Creating tolerance in an organ recipient also requires radiation treatment to prime the recipient’s immune system to accept the donor’s stem cells. Called “total lymphoid irradiation,” the approach was once employed to treat Hodgkin’s disease, but it now is used primarily to minimize the need for post-transplant immunosuppressive drugs, says radiation oncologist Ann Raldow, MD, MPH, another member of UCLA Health’s transplant-tolerance team.

Patients receive the treatment shortly after their transplant surgery to help prevent graft-versus-host disease, Dr. Raldow explains. “The patients come in before their transplant and we develop a radiation-therapy plan that is specific to their anatomy,” taking special care to avoid exposing the newly transplanted kidney to radiation, she says.

UCLA’s new protocol is based on a procedure successfully performed at Stanford, where kidney-transplant recipients have survived without immunosuppressive drugs for 15 years.

Taking the science further

While tolerance has been achieved in transplants with well-matched sibling donor-recipient pairs, UCLA Health physicians, in collaboration with OneLegacy, intend to expand the protocol to include deceased donors, the source for most of the organs transplanted in the U.S. Deceased donors accounted for more than 77% of the 22,800 kidney transplants performed nationally in 2020.

If that goal is achieved, “it will have a huge impact,” Dr. Kogut says. Extending tolerance transplants to include deceased donors would allow for other kinds of transplants — from solid organs to composite-tissue allografts for hand and faces—to be done without the necessity for lifelong immunosuppression-drug regimens.

“It opens up a whole new world,” says Dr. Veale.
"Once employed to treat Hodgkin’s disease, "total lymphoid irradiation" is now used primarily to minimize the need for post-transplant immunosuppressive drugs."

Ann Raldow, M.D., MPH
Dept. of Radiation Oncology
NEW MEDICAL RESIDENTS
BETH NEILSEN, M.D., PH.D., M.S.

Dr. Beth Neilsen is originally from Wamego, KS. She received her Bachelor’s degree in Computer Science with Honors from the Jeffrey Raikes School of Computer Science and Management within the University of Nebraska-Lincoln. She then completed her MD/PhD training at the University of Nebraska Medical Center. Her PhD research utilized bioinformatic approaches to evaluate and identify novel therapeutic targets in Ras-mutated cancers from a genome-wide siRNA screen, which was supported by an NIH/NCI F30 grant. For her research and overall excellence during her graduate studies, she was selected as the 2018 Praesto Award recipient, an award given to the most exceptional UNMC graduate each year. Dr. Neilsen then completed a year of Preliminary training in Internal Medicine at the University of Nebraska Medical Center where she was recognized and named Prelim of the Year. She is excited to be continuing her training as a resident within the Department of Radiation Oncology at UCLA.

CECIL BENITEZ, M.D., PH.D., M.S.

Dr. Benitez was born in Mexico and grew up in Los Angeles, CA. She received her Bachelors from UCLA and MD/PhD from Stanford University, where she also obtained a MS in Epidemiology and Clinical Research. She completed her internship at Highland Hospital, a UCSF affiliated county hospital. She is passionate about patient advocacy, promoting the advancement of medicine through clinical trials and biomedical research, and mentoring disadvantaged youth.
JOHN NIKITAS, M.D.

Dr. Nikitas grew up in the Chicago suburbs. He attended Washington University in St. Louis and graduated with a degree in Biochemistry. His experience studying pediatric leukemia solidified his interest in becoming a physician and specializing in oncology. Dr. Nikitas attended medical school at Washington University School of Medicine in St. Louis. He conducted research in patients undergoing lung stereotactic body radiation therapy in the setting of multiple primary lung cancers and oligometastatic disease involving the brain. He returned to Chicago for his transitional year of residency at the University of Chicago (Northshore). Afterwards, he moved to Los Angeles to join the Radiation Oncology Residency Program at UCLA.
NEW PHYSICS RESIDENTS
LAUREN SMITH, PH.D.

Dr. Smith was born and raised in Canada where she completed her BSc at McMaster University and PhD at the University of Western Ontario. Her PhD research focused on using advanced MRI techniques, including hyperpolarized and diffusion weighted imaging, to study the impact of diet on physiology of the liver and placenta. During her time in graduate school, Dr. Smith developed an interest in clinical medical physics and is excited to be joining the Radiation Oncology team at UCLA Health. She is especially interested in MRI guided radiotherapy and aims to contribute to translational clinical research projects at UCLA.

QIHUI LYU, PH.D.

Dr. Lyu received her bachelor's degree in physics from Nanjing University in China and came to the United States to pursue her PhD in Medical Physics at UCLA. She has active research on CT reconstruction, dual-energy CT material decomposition, VMAT optimization, 4pi radiotherapy, FLASH radiotherapy, etc. Dr. Lyu developed treatment planning optimization algorithms that lift restrictions in clinical radiotherapy to improve tumor coverage and normal tissue sparing. She is a member of the American Association of Physicists in Medicine (AAPM), serving on the Science Council Associates Mentorship Program (SCAMP) and the task group for FLASH (ultra-high dose rate) radiation dosimetry.
DR. BETH NEILSEN:
CHOOSING A RESIDENCY PROGRAM

*Our Editor caught up with Dr. Neilsen, a PGY-2, to discuss her background, trajectory, and why she chose the UCLA Radiation Oncology Residency.*

Q: Where are you from?
B: I grew up in a small town in Kansas (Wameo, KS), but completed my undergraduate training in Computer Science at the University of Nebraska-Lincoln and completed my MD/PhD training at the University of Nebraska Medical Center.

Q: What influenced your trajectory?
B: Ever since I completed high school, I planned on going into medicine. I did choose to major in Computer Science due to an early introduction to the field from my father (a Computer Science Professor at K-State) and my older sister who majored in Computer Engineering.

Q: Why medicine? From medicine, how did you arrive at Radiation Oncology?
B: I fell in love with medicine and learning about how the human body works and how and why it breaks when taking a high school anatomy and physiology class. The mysteries in medicine drew me to the field. It was not until my last year of medical school that I truly committed to pursuing a career in Radiation Oncology. I had fallen into a cancer research lab for my PhD research after being enticed by a combined computational biology project that included wet lab research for validation. That was exactly the training I was hoping to undergo for my PhD research training. These experiences revealed to me how many unknowns remained and how much room for research existed in understanding cancer biology and how rapidly this can translate into real prognostic information and even novel treatment options for cancer patients. After being exposed to oncology subspecialties, I gravitated towards Radiation Oncology for several reasons including the academic collegial environment, the close and meaningful patient interactions, and the highly technically driven field.

Q: What was your road to the Radiation Oncology Residency at UCLA?
B: After deciding to apply for Radiation Oncology Residencies, I completed four radiation oncology rotations during my M4 year, including one at UNMC, UCSF, U of Chicago, and Stanford. These were amazing experiences and helped me to solidify what I was looking for in a residency program. UCLA stood out during my interviews due to the dedication of the faculty (and notably the Chair of the Department, Dr. Steinberg) engaging and teaching their residents in a safe and motivating environment, promoting overall wellness with a good work-life balance, completing meaningful and treatment-changing research, and providing unique and diverse training using multiple technologies and modalities.
Q: Although matching is a two-way street, there are many Radiation Oncology programs. Why did you pursue the UCLA Radiation Oncology Residency Program?

B: I specifically wanted to match at UCLA because of the commitment the faculty demonstrated to training the next generation of Radiation Oncologists and the diversity of training available at UCLA. With several different types of LINACs, you have the ability to select the best treatment machine for your patient, not to mention the strong brachytherapy program at UCLA that allows for unique training. Living in Los Angeles (and having the time to enjoy being in such an amazing city) has also been an added benefit!

Q: Did COVID-19 have an impact your first year as a resident?

B: Definitely. It has a strong influence on both my training and patient interactions. Like most interns last year, I was asked to care for inpatient COVID patients, which provided a unique opportunity to experience the implementation of public health measures, close integration of research to develop understanding and then how that impacted patient care, as well as how to care for patients under challenging circumstances. I felt this helped me to develop compassion and improved communication skills with patients and their families, particularly when they were only allowed minimal contact. As a resident, it also changed the training experience and the ability to develop relationships with my co-residents. It forced us to take precautions and have limited physical contact, but also helped us to bond over this shared challenging experience.

Q: What endeavors, beyond your rotations, do you hope to throw yourself behind while in the UCLA RO Residency Program.

B: I am excitedly looking to develop several research projects and hope to integrate my background in computer science and my medical experience into valuable projects. I also hope to have the opportunity to mentor younger medical students, particularly those interested in Radiation Oncology or integrating research and medicine.
When Dr. Amar Kishan and the Department of Radiation Oncology created the Medical Student Preceptorship, the goal was to help address the persistent underrepresentation of women and racial and ethnic minorities in the field of Radiation Oncology. The program, in its second year, provides a mentored clinical and translational research experience, exposure to clinical Radiation Oncology as it is practiced at a tertiary academic center, and career development advice and guidance. Designed for US Medical School Students with a commitment to efforts fostering workforce diversity in healthcare, the UCLA Radiation Oncology Medical Student Preceptorship provides a support stipend with the expectation that the recipient will devote at least thirty-five hours per week to activities related to the preceptorship. All students must identify an attending physician in the Department of Radiation Oncology who will serve as a primary mentor during their preceptorship. Though the student may work with other mentors, the primary mentor is responsible for ensuring that the student has identified an appropriate academic project (commensurate with the timeframe of the preceptorship) and is responsible for providing sufficient guidance and supervision to allow completion of the project. It is required that the mentor and the applicant draft a research proposal, outlining clinical and academic activities, as part of the application for this preceptorship. The mentor is also responsible for facilitating clinical exposure for the student. Finally, the mentor is encouraged to provide career guidance.

*Know a great candidate? Have them APPLY TODAY.*
Drew Moghanaki, MD, MPH, is on a mission to dismantle three major stereotypes about lung cancer: that it's a disease that only affects people who smoke, that it isn't curable, and that surgery offers the only chance for survival.

He describes lung cancer as “America’s silent epidemic”—a malignancy that kills more people than breast, prostate, and colorectal cancer combined. About 230,000 people are diagnosed every year.

“Our work is about trying to get to a time when no one dies of lung cancer,” says Dr. Moghanaki, a professor and chief of thoracic oncology in UCLA Health’s department of radiation oncology. “If we catch it early, we can save people’s lives. And by that, I mean we can cure four out of five people whenever lung cancer is caught early.”

Lung cancer affects all sorts of people. This includes people who smoked a lot, a little, or not at all. According to the Centers for Disease Control and Prevention, 10% to 20% of lung cancer cases—20,000 to 40,000 each year—occur in people who have never smoked.

Anti-smoking campaigns emphasize the connection between smoking and lung cancer, which has created social stigma against people with the disease, Dr. Moghanaki says.

“We teach kids that smoking is bad because smoking can cause lung cancer,” he says. “While this is an important thing to teach kids, the message has unintended consequences. It leads people to think that people who smoke, or used to smoke, are bad people, and therefore people with lung cancer are bad people.”

There are problems with this oversimplified approach, he says.

First, it inextricably connects lung cancer with smoking, which fails to account for the tens of thousands of diagnoses made in people who never smoked, or who used to smoke and quit a long time ago.

Second, it puts the onus for the disease on individuals who smoked, without acknowledging the deliberately addictive nature of cigarettes.

And third, it leads to a marginalization of people with lung cancer, that they somehow created their own circumstances and deserve the consequences, Dr. Moghanaki says.

“We physicians are also guilty for contributing to this stigma,” he says, “We have been labelling people who smoke as ‘smokers’ for years in almost all of our communications with each other.”

White Ribbon Project
A former UCLA Health medical resident and his wife launched an effort in 2020 to change perceptions about people with lung cancer. Pierre Onda, MD, an internist who completed his residency at UCLA, and his wife, Heidi Nafman-Onda, created the White Ribbon Project after she was diagnosed with lung cancer.

A health educator and fitness trainer who also graduated from UCLA, Nafman-Onda never smoked, yet was diagnosed with stage 3
adenocarcinoma of the lung in 2018. Frustrated that national campaigns implied lung cancer stems only from smoking, the Colorado couple made a white ribbon out of plywood in their garage to encourage greater awareness of the disease.

Dr. Moghanaki and UCLA Health were early supporters of the project, which has distributed more than 1,000 white ribbons to date across the U.S. and Canada, and as far away as Germany, the Netherlands and the Philippines.

Scores of UCLA Health patients with lung cancer, as well as physicians, have been photographed with the white ribbon this year to support the awareness-raising effort.

**Treating lung cancer**

Lung cancers aren't always caught early. For many patients, their tumors have already spread to the lymph nodes or other parts of the body. Fortunately, even when lung cancer is caught at a late stage, there is a lot more hope than ever before. This is because today's treatments have advanced significantly and people are living high-quality lives for many years.

For patients with early-stage lung cancer, there are now several promising treatments that offer a chance for cure, Dr. Moghanaki says. One is surgical resection and the other is radiation therapy. Scientists are learning which of these treatments is better for any given patient, he says, although surgery is generally preferred by most lung cancer specialists. This preference is largely because of tradition, he says, since radiation techniques weren't sophisticated enough to target the tumor with enough dose until recently.

To figure out when surgery or radiation therapy might be a better option today for a patient with early-stage lung cancer, Dr. Moghanaki is leading the Veterans Affairs Lung Cancer Surgery or Stereotactic Radiotherapy (VALOR) study — the largest clinical trial in the U.S. that is comparing these two treatments.

The VALOR study is sponsored by the VA Cooperative Studies program and enrolling 670 patients to study the effectiveness of radiation therapy as an alternative to surgery for early-stage lung cancer.

Radiation oncology research over the past 25 years has led to new approaches to treating early-stage lung cancer, Dr. Moghanaki says. Rather than providing daily low-dose treatments over four to six weeks, patients with early-stage disease now have the option to be treated in just a few consecutive days with high doses of targeted radiation therapy.

“No one could have predicted how well stereotactic radiation therapy would work,” Dr. Moghanaki says. “Clinical trials have shown that stereotactic radiotherapy is 95% to 97% effective at controlling the cancer from ever growing again in that area.”

The VALOR study compares this radiation therapy to video-assisted or robotic-assisted thoracic surgery in patients who have been diagnosed with early-stage non-small cell lung cancer that has not yet spread and would otherwise be offered a standard surgical resection for their tumor.

Dr. Moghanaki believes that the results of the randomized VALOR trial may show that stereotactic radiation therapy is a better treatment than state of the art thoracic surgery.”

Dr. Moghanaki believes that the results of the randomized VALOR trial may show that stereotactic radiation therapy is a better treatment than surgery. Yet, he states that we
can only know this after the scientific results are available.

This might be because the post-operative healing process leads to a lot of inflammation, Dr. Moghanaki says.

“Meanwhile, there is evidence that radiation therapy down-regulates inflammation that can delay or prevent metastatic tumors from growing. Although, we need more scientific data to know in which patients that is the case,” he says.

**Changing the future of lung cancer**

With increased awareness of how stigma around lung cancer impacts patients’ lives and promising research and treatment developments, Dr. Moghanaki is optimistic about a future in which lung cancer is caught early and most people with the disease go on to live long lives.

A lot has changed in recent years, he says.

“We really have to shine a light of hope on lung cancer,” he says. “This is because it wasn’t that long ago when we didn’t have good treatment options for patients.

“With poor survival rates, national campaigns such as those led by the American Cancer Society focused primarily on getting people to stop smoking,” he says. “While this was important and was highly effective in lowering the incidence of lung cancer, it shifted much-needed attention away from remembering that no one deserves to get lung cancer and that we need more research to better understand how to prevent and treat lung cancer in people who smoked a lot, a little, or none at all.”

But there was an inflection point in lung cancer therapies in recent years, Dr. Moghanaki says.

Doctors started to see their patients with lung cancer living longer, he says, which has brought much-needed optimism to the entire cancer community.
In May of 1920, my great-grandfather, Alfred Owen Morasso, returned home to Gibraltar following the wreck of his fifty-man steamer off the coast of Norway. He had been found nearly frozen to death clinging to the mast of the ship, the only piece that remained above water. He was the sole survivor. I felt like I had been brought into this world hearing about Alfred Owen and his heroics. The narrative seemed to get bigger, more exaggerated, each time it was told. “He survived by cooking fish with his cigarette lighter! Can you believe it?” my cousin said. “He was up there for WEEKS!” the other bragged. “How did he sleep?” “He's a pirate!” said the youngest to an audience of eye rolls. “He did it for us!” we all exclaimed proudly lying in the grass after a particularly vicious game of red rover. That's right, he did it for us.

A few months ago, while doing some procrastinating (not work-related – I wouldn't dare), I was searching for any pictures on the internet that may exist of this fantastical figure. For all the stories that were told, there wasn't much documentation on the event or even what my great-grandfather may have looked like at the time. However, I managed to find a picture of Alfred Owen looking dapper as can be as a young seaman leaning on the rails of a ship. Another incredible photo showed the mast that he clung to barely sticking out of the water. A third was an article that was written when he returned which featured a reporter asking him something to the effect of why/how he had managed to hold on. This was it! (Here came the part where he spoke of his incredibly successful great-grandchild who would go on to be the social worker for the Department of Radiation Oncology at UCLA Health!) His response was not about me, but that he found the highest point he could to be more easily identified for his family. It was a letdown. That couldn't be it! There had to be more. There had to be a burning desire to survive—something that kept him alive on The Baltic.

My great-grandfather did not cook fish with his cigarette lighter. He wasn't stranded for weeks; it was a day or two at the most. He probably would have died if he'd slept, and he wasn't a pirate (that I'm sure of). He focused on what he could and could not control at the time. He focused on the information he had at that moment which was nothing more than that he wanted someone to be able to identify him, as the chances of his survival were next to nothing. He didn't utilize the critical energy needed for keeping his physical body alive on worrying about anything but that. All of this quite literally lashed him to the mast to the point where he would simply not let go. It kept him holding on.

After yet another year of COVID, of all the -isms, political turmoil, etc., I'll be the first to admit that it's been challenging to find meaning, stay focused, motivated, and committed. I reflect on early-mid COVID Liz, scared but ready, feisty even, to get myself and our patients/families through this in the most graceful way—empowering even! “Look what we did,”
we’ll all say as we gather around for our celebratory pizza party—no masks in sight! I picture myself as how I used to picture my great-grandfather, freezing to death at the mast of the ship yelling something clever into the void about how he was holding on for me—Little Lizzy Grace – and our family, and Gibraltar, and White Castle (our family loves White Castle)...and the list goes on and on. Something changed in me recently, perhaps from feeling quite exhausted with how to change that which I don’t have control over, that made me wonder what it would feel like to channel the real Alfred Owen. That I was doing something simpler. Something without fanfare, something that won’t make any headlines or turn heads. No powerful quote for the reporters. How would I stay motivated? How can I get through, practice self-care, and take care of my family and loved ones? What would that look like for the support that I provide to our patients and families? Would I survive what feels like the freezing cold and, if so, how?

A gift to myself and those around me across contexts for 2022 is the permission to reframe and regroup. We have been flooded for almost two years with constant evolving information, emotion, and change – all while continuing the “normal” roles and responsibilities that exist outside of COVID and all the things it has brought to light for us – good and bad. I have found it unrealistic to frame all that I do in my personal and professional life as heroic, quite frankly. I’ve found it unrealistic to frame it as someone else—though perhaps for White Castle. Reframing my experience as for myself, in this present moment, and therefore, by default, for others has truly changed the way that I view this “wreck.” It allows me to focus on what is in front of me, what I know for sure to be true, and what I can or cannot do about it. It has helped me save energy that I need for basic functions at a time when I don’t have energy to spare. It is so refreshing! It is so refreshing to regroup with this mentality and feel like I finally have the strength to hold on – whatever that may look like – while presenting my most authentic self. I am recommitting in 2022 and am asking you all to do the same. I am recommitting under uncertain circumstances. I am recommitting at a time when I am cold, scared, tired, and hungry. I am happy and proudly recommitting to what matters the most this year, which is myself. I am recommitting to hold on and welcome you to do the same.  □ Dedicated to Alfred Owen Morasso and Alfred Morasso, Jr.

Contributed by: Liz Morasso, LCSW, OSW-C
Clinical Social Worker III, Department of Radiation Oncology
It's a part of the annual physical most men dread. But as unpleasant as it may be, the prostate examination is essential: Cancer of the walnut-size gland is one of the most prevalent forms of the disease, killing nearly 35,000 men in the United States each year.

Radiation therapy is an effective, standard of care option for prostate cancer both as an initial treatment and for recurrence after surgery. However, the treatment has historically involved a long course, with a standard regimen often requiring low doses per day over as many as 45 visits.

Though radiation therapy is considered safe overall, there is always a small chance of significant urinary or bowel side effects after radiation. These risks are thought to be related to technical nuances – the prostate is a moving target that can be difficult to see clearly with standard, X-ray-based imaging. There also are biological factors – whether a patient is sensitive to radiation.
Now, Amar U. Kishan, MD, and a team of his UCLA Health colleagues, are conducting clinical trials on a more effective and less burdensome treatment that uses genetics and advanced technology to determine if a patient can be cured with large doses of radiation given in short sequences, even for patients with recurrences after surgery.

So far the results of this precision medicine approach have been positive.

“We've learned that prostate cancer responds very well to a higher daily dose radiation delivered precisely and with expertise,” said Dr. Kishan, chief of genitourinary oncology and vice chair of clinical and translational research in the Department of Radiation Oncology at the David Geffen School of Medicine at UCLA and the UCLA Jonsson Comprehensive Cancer Center.

“There have been a lot of technological revolutions within radiation that will help us make the treatments safer and more effective,” he said. “There are many patients that can be cured by radiation, and there are many patients who might be meaningfully helped by radiation.”

**Optimism about the efforts comes out of the SCIMITAR and GARUDA clinical trials.**

"We're trying to push the envelope a little bit and innovate and use our sophisticated technologies to deliver more convenient, cost-effective and potentially better care for our patients," Dr. Kishan said.

In the SCIMITAR trial, Dr. Kishan is studying a high-dose targeted procedure — condensed to five treatments over two weeks — called SBRT, or stereotactic body radiotherapy. Dr. Kishan said 100 patients have been treated as part of the SCIMITAR clinical trial, which started in 2018 and completed enrollment earlier this year.

Regarding the results of the SCIMITAR trial, he said, “I don't want to overstep and make any claims that are inappropriate, because we just are finishing it, but I can say that clearly we’re pleased enough with our results that we want to immediately open up the follow-up trial.”

The UCLA Health research team is planning to launch the follow-up EXCALIBUR study before summer to include more than 100 new participants. Dr. Kishan is encouraging men with a rising PSA (prostate-specific antigen) count after prostate cancer surgery to contact Radiation Oncology if they are interested in participating.

The studies build on previous UCLA Health research showing that the majority of participants who underwent the high-dose treatment for low- and intermediate-risk prostate cancer were still disease free seven years later.

Dr. Kishan and his team decided to expand their research through the SCIMITAR trial to see if a shorter course of radiation treatment would benefit men with aggressive prostate cancer. Generally, the course of radiation treatment for prostate cancer requires eight to nine weeks of daily sessions.
“It can be quite long,” he said. “Imagine if you're a working person, or even if you're not a working individual, you have other responsibilities, other things to do.”

That could explain why radiation treatment for prostate cancer patients is generally underutilized in the United States, Dr. Kishan said.

“Patients are not referred for radiation or they're not interested in radiation or they're scared of the radiation. All kinds of reasons exist for that,” he said. “But even if they get a chance to hear about radiation, the length of the treatment course can disincentivize a lot of men. Overall, the underutilization is a big problem, because radiation is a major curative treatment in someone that has a rising PSA after surgery.”

One of the machines researchers are using is the MRIdian Linac, which has a built-in MRI to guide radiation treatment. UCLA Health is one of the few health systems in the country with this machine, which also is being used in clinical studies for treating pancreatic cancer and sarcomas.

For study participant John Babcock, who first was diagnosed with prostate cancer in 2004 at age 52, the intensive treatment at UCLA Health has given him hope.

Babcock’s PSA had been rising for years after his initial surgery. UCLA Health was not Babcock’s first stop for care, however, due to insurance contracting. Doctors at another health system told him he could not be cured and he would have to be on hormone therapy indefinitely. This caused problems, including “man-opause,” with hot flashes, Babcock said.

Babcock came to UCLA Health after a change in insurance and was referred to Dr. Kishan to discuss SCIMITAR. He was able to stop hormonal therapy and receive radiation.

“It’s been a little over a year now and my PSA is barely measurable,” Babcock said. “Dr. Kishan’s work and advanced research provided relief where there had been no hope before. His brilliant work is certainly going to help a great number of people. I am just one example.”

Another paradigm-changing study that Dr. Kishan and the UCLA Health research team is running is the GARUDA trial, which involves taking a cheek swab of a patient considering radiation (specifically, considering SBRT) to see if they have a genetic biomarker that predicts for a higher chance of late radiation toxicity to the genitourinary system after SBRT. If they do have this biomarker, they are encouraged to pursue an alternative, longer form of radiotherapy.

Patient Hiram McCall, 68, was one of the first patients enrolled in this study. He praised UCLA’s effort as “far more evolved.” Treatment doesn’t compare with what it was like even 30 years ago, he says, noting the seemingly non-personalized nature of some standard treatments.

McCall was one of the rare patients found to be more sensitive to radiation, so his treatment plan was altered, and he is doing well, with minimal side effects after radiation therapy. ☐
NEW YEAR...
WHAT'S NEW IN L.A.

The year is young...here's what to do in Los Angeles.

In a city that can feel like the discovery page of Instagram, it can be hard to know what to do or try next. What follows is a brief list of new experiences and go-to staples for 2022.
DALIA / CARA CARA
Downtown Los Angeles (DTLA) used to only be for the lionhearted, but Kelly Wearstler's latest project, an exquisite hotel in a reimagined 1926 Curlett & Beelman building in Downtown's South Park, has solidified the area's renaissance. With bites from James Beard Award–winning chef Suzanne Goin and sweeping views of the historic, booming Broadway corridor, Wearstler has solidified Downtown Los Angeles as a place to be in 2022.

GRIFFITH PARK
Okay, so this one isn't new, but it remains a must-do in Los Angeles. **Hike your favorite trails in Griffith Park**, including the hard-to-find, 'gram envy-inducing back of the Hollywood Sign hike.

THE BROAD
After a two year absence, Yayoi Kusama’s *Infinity Mirrored Room—The Souls of Millions of Light Years Away* at The Broad reopens in January.

ACADEMY MUSEUM OF MOTION PICTURES
If you didn't make it for the opening at the tail end of 2021, the Academy Museum of Motion Picture is a must visit for 2022. After, stop at Fanny's, the museum's restauran and cafe, for a bite. Fun fact: Our Chairman, Dr. Steinberg, is the only member of his family who didn't go into film and he spent a large portion of his childhood hanging out and working on legendary studio lots.
BEST OF: ASTRO 2021

The following three presentations from ASTRO showcase the research, hardwork, and collaboration efforts of our UCLA Radiation Oncology faculty and residents.

Identifying Unique Genetic Variants To Overcome Cancer Treatment Barriers

UCLA researchers add monoclonal antibody to target oropharyngeal cancer in HPV-positive patients with KRAS gene variant

FINDINGS

Dr. Robert Chin, a radiation oncologist with UCLA Jonsson Comprehensive Cancer Center, will describe recent research on personalized treatment for HPV-associated oropharyngeal cancer – particularly for patients with an inherited variant KRAS gene – during a panel discussion on radiation and cancer biology at ASTRO, the annual meeting of the American Society for Radiation Oncology. This research represents current and future efforts to identify patients uniquely sensitive to innovative targeted treatments.

The research builds on studies led by Dr. Joanne Weidhaas at UCLA Jonsson Comprehensive Cancer Center, who found that about 16% of head and neck cancer patients have inherited a variant KRAS gene. When these patients receive standard chemoradiation treatments for their HPV-positive squamous cell cancers of the oropharynx, they have both worse toxicity and worse rates of cancer control, Chin said. However, these poor outcomes may be reversed with the addition of a short course of cetuximab.

“In standard clinical practice, tumors are assumed to be different, but patients mostly uniform,” Chin said. “Thus, we spent a lot of energy analyzing tumors. However, we have since come to understand that our body’s own immune system is crucial in making treatments effective. Matching the right body to the right treatment may make our treatments less toxic and more effective.”

Chin said UCLA researchers are conducting a clinical trial in which patients with this unique combination – having both the KRAS-variant and HPV-positive squamous cell oropharyngeal cancer – are randomized to either standard of care treatment or standard of care plus cetuximab. “We think this approach of identifying unique clusters of patients may be a way for us to design new treatments that are more personalized and effective,” he said.

BACKGROUND

In 2006, researchers discovered the KRAS-variant, an inherited genetic mutation found in up to 25 percent of people with cancer. The variant, a biomarker that disrupts a class of important regulators called microRNAs, has been shown to predict response to cancer therapy for many cancers.

Chemotherapy and radiation therapy, the current standard-of-care modalities for HPV-positive squamous cell carcinoma of the oropharynx, typically have about a 5-10% treatment failure. The failure rate is much higher in KRAS-variant patients. However, the addition of a short course of the monoclonal antibody cetuximab has been found to reverse this effect. Weidhaas’ research team found that cetuximab may be working by helping the immune system
of people with the KRAS-variant better fight their cancer.

HPV, the most common sexually transmitted infection in the United States, is thought to cause about 70% of oropharyngeal cancers in the United States, according to the Centers for Disease Control and Prevention. This is increasingly becoming the most commonly diagnosed cancer of the head and neck. Chin's discussion will address current studies focusing on treatment for this specific patient population.

IMPACT

This and related research at UCLA Jonsson Comprehensive Cancer Center has provided evidence that patients with variant KRAS may have an altered immune system. This likely explains both elevated cancer risk as well as benefit from cetuximab for these individuals. Chin's discussion will describe how new insights are being exploited to identify people who respond differently to therapies that depend on the immune response. Additionally, the use of this and similar biomarkers may be used to design personalized radiation therapy and immune therapies for cancer.

SPEAKER/PRESENTER

Dr. Robert Chin is a radiation oncologist with UCLA Jonsson Comprehensive Cancer Center.

JOURNAL/MEETING

ASTRO, the annual meeting of the American Society for Radiation Oncologists, Chicago Oct. 24-27. Wednesday, October 27 at 11:35 AM

Panel 20 - Molecular Biomarkers and Tumor-Free DNA in HPV-Associated Oropharyngeal Cancer and Implications for Future Clinical Trials. Impact of KRAS variants on patients with HPV-associated oropharyngeal cancer

PRESENTING AUTHOR: ROBERT K. CHIN, M.D., PH.D.

DISCLOSURE

Dr. Chin is the principal investigator of an active prospective clinical trial sponsored by Eli Lilly: Randomized Phase II Trial of Radiotherapy with Concurrent Cisplatin +/- Concurrent Cetuximab for HPV-positive Oropharyngeal Squamous Cell Carcinoma (OPSCC) in KRAS-variant Patients.
International Meta-Analysis Quantifies Impact of Three Prostate Cancer Therapy Intensification Strategies

Individual patient data analysis from the Meta-Analysis of Randomized Trials in Cancer of the Prostate (MARCAP) Consortium may be the strongest evidence to date on androgen deprivation therapy use and duration

FINDINGS

An individual patient data (IPD) meta-analysis of randomized, controlled clinical trials provides strong evidence for the addition of androgen deprivation therapy (ADT) to definitive radiotherapy (RT) for the treatment of prostate cancer, with the projection that adding ADT to the treatment of 10-15 men would prevent the development of distant metastasis in one man. Similarly, if ADT has been added, prolonging the portion of it that follows the radiation (called “adjuvant ADT”) to 18-36 months provides a similar benefit in terms of preventing metastatic disease. The benefits of adding ADT and of prolonging adjuvant ADT were identified regardless of patient age, RT dose (high vs. low), or prostate cancer risk group (high vs. intermediate risk). In contrast, prolongation of ADT that begins before radiation (called “neoadjuvant ADT”) beyond two to three months did not improve any cancer outcome, according to the study, prompting researchers to conclude that the latter treatment should not routinely be employed.

The analysis was conducted through the MARCAP Consortium, a group formed in 2020 to serve as a data repository from international trial groups. The MARCAP consortium was co-founded by Dr. Amar Kishan, associate professor and vice chair of clinical and translational research in the department of Radiation Oncology at UCLA and researcher at the UCLA Jonsson Comprehensive Cancer Center, and Dr. Daniel Spratt, the chairman of the Department of Radiation Oncology at University Hospitals Seidman Cancer Center. The MARCAP consortium has data from multiple trials across the world and is the first consortium group of its kind for prostate cancer. Kishan will be presenting the results at ASTRO 2021, the annual meeting of the American Society for Radiation Oncology.

“Individual patient data meta-analyses provide the highest levels of evidence in oncology, allowing us to quantify treatment effects,” said Kishan, Chief of the Genitourinary Oncology Service for the Department of Radiation Oncology at the David Geffen School of Medicine at UCLA and the UCLA Jonsson Comprehensive Cancer Center. “The approach has been used to assess therapies in breast cancer and head and neck cancers, but this is the first such effort for prostate cancer.”

According to Spratt, "MARCAP represents the first international collaboration of all radiotherapy clinical trial groups to assess the true impact of the many treatment strategies we have to offer in prostate cancer. The results from MARCAP will be practice-changing and benefit patients around the world."

Prostate cancer is the most common cancer in men other than skin cancer, and it’s the second-leading cause of cancer death in men, according to the American Cancer Society. Each year, about 248,000 new cases are diagnosed, but most men diagnosed with the disease survive.

BACKGROUND

Because the male hormone testosterone is a known contributor to prostate cancer development, androgen deprivation is a strategy often considered among treatment options – especially for patients at high risk of recurrence and/or metastasis – as an adjunct to radiation therapy (RT). ADT can be given for short courses of four to six months or long courses of 18-36 months. Since the
duration of a course of radiation, part of the hormone therapy will extend before radiation begins (called neoadjuvant), and part of it extends after the radiation has completed (called adjuvant).

This analysis was conducted with data from 10,853 patients enrolled in 12 radiation therapy trials to evaluate three aspects of treatment:

- Addition of androgen deprivation therapy (ADT) to radiation therapy.
- Prolongation of the adjuvant component of ADT.
- Prolongation of the neoadjuvant component of ADT.

The primary objectives of the meta-analyses were to evaluate the impact of these interventions on metastasis-free survival (MFS) and on overall survival (OS).

RESULTS

After a median follow-up of 12 years, the addition of ADT to RT improved both 12-year MFS and 12-year OS by 8% and 7%, respectively. After a median follow-up of 10.9 years, prolongation of adjuvant ADT improved both 12-year MFS and 12-year OS by 7%. After a median follow-up of 10.3 years, prolongation of neoadjuvant ADT was not associated with a significant benefit in any endpoint.

Additional findings from subgroup analyses: There was no evidence of a treatment effect interaction between RT dose and the benefit of ADT use or adjuvant ADT prolongation. Thus, the benefit of adding either ADT or prolonging adjuvant ADT persists even if high dose radiation is used, and even for patients who have intermediate risk (rather than high risk) disease.

CONCLUSIONS AND IMPACT

This study is believed to provide the strongest evidence to date supporting use of ADT as well as the prolongation of adjuvant ADT to at least 18 months in conjunction with definitive radiation therapy for the treatment of localized prostate cancer. The relative benefit of ADT use and adjuvant ADT prolongation was consistent irrespective of radiation dose escalation. In contrast, prolonging neoadjuvant ADT beyond two months did not improve survival outcomes.

MORE INFORMATION

For more information and to learn about contributing data, please go to https://marcap.one/.

AUTHORS

The first author and presenter is Dr. Amar Kishan, associate professor and vice chair of clinical and translational research at UCLA. He also is chief of the Genitourinary Oncology Service for the Department of Radiation Oncology at the David Geffen School of Medicine at UCLA and a member of the UCLA Jonsson Comprehensive Cancer Center. The co-founder of the MARCAP consortium is Dr. Dan Spratt from University Hospitals Seidman Cancer Center. Additional authors represent UCLA, University Hospitals, and other domestic and international organizations and institutions.

JOURNAL/MEETING

Study results were presented at ASTRO 2021, the annual meeting of the American Society for Radiation Oncology, in Chicago. The session title is 8 Individual Patient Data Meta-Analysis of Randomized Trials in Cancer of the Prostate (MARCAP) Consortium: Impact of Androgen Deprivation Therapy Use and Duration With Definitive Radiotherapy for Localized Prostate Cancer.
Optimizing Preoperative Radiation Therapy in High Risk Sarcoma

With five-day preoperative treatment instead of five-week course, UCLA researchers find similar results with less burden on patients

FINDINGS

In updated results of a phase 2 single-institution study of over 100 patients, researchers from the UCLA Jonsson Comprehensive Cancer Center Sarcoma Program found that preoperative radiation therapy for soft tissue sarcoma delivered in five days rather than the conventional five weeks continues to produce excellent patient outcomes.

Dr. Ricky R. Savjani, a resident physician in the Radiation Oncology Residency Program at UCLA and a researcher at UCLA Jonsson Comprehensive Cancer Center, presented updated findings at ASTRO, the annual meeting of the American Society for Radiation Oncology. Dr. Anusha Kalbasi, assistant professor in the Division of Molecular and Cellular Oncology of the Department of Radiation Oncology, and a UCLA Jonsson Comprehensive Cancer Center researcher, is the abstract's senior author.

“Preoperative radiation therapy is a key component of treatment for soft tissue sarcoma. It enables the treatment team to provide good local disease control, and the radiation side effects – fibrosis, lymphedema or joint stiffness – are generally manageable and well tolerated. But the standard five-week preoperative radiation course is a burden affecting patient quality of life,” Savjani said. “We’ve found that a five-day course provides excellent local control, and the rates of side effects and wound complications remain acceptable, with 52 patients followed for at least two years.”

BACKGROUND

Results from the initial cohort of 52 patients were published in Clinical Cancer Research in April 2020.

Here, Savjani presents updated findings with longer follow-up and additional patients from an expansion cohort.

MATERIALS AND METHODS

The initial cohort accrued between April 2016 and May 2018 and included 52 patients with histologically confirmed extremity or trunk soft tissue sarcoma (STS) planning to undergo preoperative radiation therapy (RT) followed by surgery. The primary endpoint of the initial cohort was the rate of grade ≥2 radiation morbidity (fibrosis, lymphedema, or joint stiffness) at two years.

An expansion cohort opened in October 2018 to compare wound complication rates between patients with preoperative RT alone versus chemoRT and has enrolled an additional 47 patients. Patients received 30 Gy (RT alone) or 25 Gy (chemoRT) over five daily fractions to the primary tumor with standard margins.

Here we report on patients with primary localized STS who completed preoperative RT and surgery in the initial and expansion cohorts (N=79; chemoRT excluded). We assessed disease outcomes (local control and distant metastasis) and toxicity (grade ≥2 fibrosis, lymphedema, or joint stiffness) after two-year follow-up (N=93). Fibrosis and joint stiffness were graded using RTOG/EORTC criteria, and lymphedema by Stern's scale. We also updated the major wound complication rate (defined per established criteria) after one-year follow-up.

CONCLUSIONS AND IMPACT

Of the 52 patients with minimum two-year follow-up, predominant histologic subtypes included undifferentiated pleomorphic sarcoma, spindle cell sarcoma or sarcoma NOS (N=24), myxofibrosarcoma (N=8), and myxoid liposarcoma (N=12). Median tumor size was 6.9 cm, and 15 pts had tumors ≥10 cm. At a median follow-up of two years, the local recurrence and distant metastasis rates were 6.4% and 24.7%, respectively. The rate
of overall grade ≥2 radiation morbidity in this same group was 12.9%. Major wound complications were observed in 22 out of 91 (24.2%) evaluable patients.

Overall, these results show excellent local control rates with acceptable toxicities and wound complications.

AUTHORS
The first author and presenter is Ricky R. Savjani, a resident physician in the Radiation Oncology Residency Program at UCLA and a researcher at UCLA Jonsson Comprehensive Cancer Center. The Principal Investigator for the clinical trial is A. Kalbasi. Additional UCLA Jonsson Comprehensive Cancer Center co-authors are Scott D. Nelson, Sarah M. Dry, Jackie Hernandez, Natalie Chong, Bartosz Chmielowski, Arun S. Singh, Joseph G. Crompton, Brooke Crawford, Susan V. Bukata, Brian Kadera, Nicholas M. Bernthal, Joanne B. Weidhaas, Michael L. Steinberg, Fritz C. Eilber, Anusha Kalbasi. Co-author Mitchell Kamrava is from Cedars-Sinai Medical Center.

JOURNAL/MEETING
Study results were presented at ASTRO 2021, the Annual Meeting of the American Society for Radiation Oncology, held in Chicago from October 24-27, 2021.
UCLA Health brings world-class cancer care to Santa Clarita

Adaptive, millimeter accuracy...

Only a few miles from home

UCLA Health is the No. 1-ranked cancer center in California and the No. 3 health center in the nation in the latest U.S. News & World Report listing of Best Hospitals. For residents of Santa Clarita Valley, there’s no competition when it comes to accessing the best in health care and treatment. All of UCLA Health’s resources — the state-of-the-art technology, access to leading-edge clinical trials and an unsurpassed level of patient care — are now all available in one center, and it’s in their backyard.
The U.S. News & World Report rankings looked at each hospital's patient outcomes, along with other factors such as “the quality of their experience and whether the hospital is adequately staffed.” UCLA Health’s ranking was no surprise to those who’ve worked to build and maintain its reputation as a world leader in research and care.

Bringing World-Renowned Care to the SCV

“That’s the unique benefit for the community and the unique benefit to the patient and the patient’s family—getting that care close to home,” said Dr. Michael Steinberg, Chair of UCLA Health’s Department of Radiation Oncology and Director of Clinical Affairs for the UCLA Jonsson Comprehensive Cancer Center. “Another particularly important part of cancer care is that we run hundreds of clinical trials, which are associated with state-of-the-art care — not only in terms of what’s being offered to the patient, but in how a patient’s care and outcomes are monitored as part of the rigors of running a trial.”

One of the true difference makers for UCLA in terms of the rankings, Dr. Steinberg noted, was in patient care, where year after year the medical staff earns top marks for treatment, attention to detail and patient-first policies. That means anytime a staff member enters the room, whether it’s a physician or a member of the environmental services staff, a patient’s needs are addressed.

A Patient-First Philosophy

The Santa Clarita Radiation Oncology facility for the UCLA Jonsson Comprehensive Cancer Center has been fully operational in Santa Clarita for several months, under the guidance of Dr. Michael Xiang. It was UCLA Health's collaborative culture and prioritization of patient care that attracted Dr. Xiang, who did his undergraduate studies at MIT and graduate education at Harvard Medical School before completing his residency at Stanford. Dr. Xiang was drawn to the opportunity to create new resources for Santa Clarita Valley residents. His team now provides leading-edge cancer care, drawing on resources from one of the nation’s leading cancer programs. Dr. Xiang prides himself on being involved with every patient who’s treated at the Santa Clarita facility.

“What really drew me to the field was seeing oncology patients during my training, caring for them, and really appreciating the fact that cancer is such a significant, life-changing diagnosis. Patients feel so vulnerable, and they have so many questions — it can be a very scary time for a lot of people,” Dr. Xiang explained. “But being able to help guide patients through this period, and to be able to cure or palliate — that’s really an honor and a privilege.”

Growing Resources in the SCV

With a fully operational center in the Santa Clarita Valley, Dr. Xiang and his team are capable of treating every type of cancer – breast, prostate, lung, head and neck, gastrointestinal and digestive tract, gynecological, lymphoma, brain and CNS, bladder, skin, sarcoma, (oligo)metastatic and palliative.

Because the Santa Clarita facility is part of the UCLA Jonsson Comprehensive Cancer Center, it provides all the services and treatment that might be required, Dr. Steinberg noted, meaning residents no longer have to leave the area to receive any component of their care. These services include medical oncology, genetic counseling, integrative care through the Simms/Mann Center, breast cancer surgery, interventional imaging care, transfusions, radiation oncology and access to clinical trials.

The Benefits of Being Closer to Home

Treatment of cancer can take weeks of daily radiation appointments and, in rarer cases, even months. Since the Santa Clarita facility’s opening over the summer, Dr. Xiang has seen the incredible impact that having these resources locally has meant to his patients. A mom who was battling breast cancer was also taking care of family members with special needs, Dr. Xiang mentioned, and twice-daily, hours-long trips away from her home for treatment at another center would have been a huge burden on her family. When the team at the UCLA Santa Clarita Radiation Oncology facility was able to offer a once-daily state-of-the-art treatment approach and a much closer drive, she was extremely grateful for the impact it had on her and her...
her family's quality of life, Dr. Xiang said.

Another patient who resides in Santa Clarita, and was undergoing treatment for prostate cancer at the UCLA office in West Los Angeles prior to the opening of the SCV facility, was incredibly appreciative that Dr. Xiang and his team were able to seamlessly transfer his treatment to his hometown. It shaved more than two hours from his commute time and made it much easier on his family and his support system.

Making A Difference

In only a few months of operation in the Santa Clarita location, Dr. Xiang has experienced dozens of stories on the positive impact the facility has had on the quality of life for patients throughout North Los Angeles County, a coverage area that extends into the Antelope Valley and Conejo Valley. And Dr. Xiang knows these recent advances are just the beginning. He expects the treatment offerings to grow as UCLA Health's leading-edge research and clinical trials uncover new ways to treat and cure oncology patients. For example, the ETHOS Machine at the Santa Clarita Radiation Oncology facility provides adaptive radiotherapy that can minimize the powerful impacts that radiation can have on healthy cells, as well as provide more focused treatment, using artificial intelligence and the latest in imaging. It is one of only 11 such machines in the country and represents a huge breakthrough in how cancer is treated.

Patient Patty Rowdon of Canyon Country wanted to share her story, to spread the word about what a fantastic resource is now in the Santa Clarita Valley. She couldn't thank Dr. Xiang and his team enough for not only making her feel like family while she was receiving their care, but also how effective the treatment was and how the location made the process so much easier on her and her family at one of the most difficult times of their lives.

“I couldn't have gotten through it without UCLA Health,” Rowdon said. “Having that radiation center here now, it's going to mean so much to so many women — the convenience of having that here. If I can make one or 20 women feel as comfortable and as secure in a place that (the team at UCLA Health's Santa Clarita Radiation Oncology medical office) made me feel ... just to let people know that they're here.

About the UCLA Health Santa Clarita Radiation Oncology medical office

The UCLA Health Santa Clarita Radiation Oncology medical office offers in-person and telemedicine appointments, as well as same-day availability for urgent concerns. Dr. Michael Xiang, who leads the center, is comprehensively trained to treat all cancer types and sites of disease. The offices are located at 27235 Tourney Road, Suite 1400, Santa Clarita, and can be reached at 661-287-0010.

Contributed by:
Perry Smith
Managing Editor, The Signal
Santa Clarita Valley's #1 Local News Source
When you are born into working-class Baltimore, the most valuable art is the ephemeral works owned by no one and everyone: murals, graffiti, billboards. What you know is that labor—mostly age-you-early, physical labor—is what puts food on the table and a rented roof over your head. If you are a kid who wants to make art, you use whatever materials you can get your hands on and paint on walls when there is no...
When you are old enough to work, you follow your parents into the labor industry because you know it will teach you the work ethic you need to someday only make art.

This is a snapshot of Marcine Franckowiak’s early years, and when hired in 2013 as Brooklyn-based Colossal Media’s first female apprentice “wall dog,” Marcine not only began living her dream, but she tore through the razor-wire fencing surrounding that industry so other young women might follow her through. This sounds impressive even before understanding what a wall dog is. But let’s rewind. Let’s return to Baltimore in the early-aughts when Marcine was still dreaming away the mental and muscle fatigue of service jobs.

In 2002, San Francisco had an internationally envied art scene. What had been termed “new genres” had redefined itself as several genres: performance art, virtual art, and new media art, to name a few. San Francisco Art Institute was still the art school to attend in the Bay Area, and Brett Reichman was newly leading the painting program with the tight-reined control he uses in his photo-realist watercolors painted entirely with hatch and cross-hatch marks. SFAI was Marcine’s new goal, and by the time she earned her BFA in 2006, not only had Reichman’s mentorship strengthened her realism painting skills, she had also discovered critical theory and a fascination with Lisa Yuskavage’s feminist paintings and Laura Mulvey’s 1975 essay, “Visual Pleasure and Narrative Cinema.” This essay alone would have been enough to cause her to rethink her own artistic objectives, but her foray into selling art in San Francisco fine art galleries left her questioning whether she wanted to dedicate her life to making work for the wealthy to hang above their sofas. Could she be like Marilyn Minter and make a living while still making a political statement, while making work that would cross the gallery threshold into public art?

Marcine explored these questions further while at Pratt, in Brooklyn. She also encountered her first wall dogs, men who hand-painted photo-realistic advertisements on the sides of buildings, each painting completed in a week or less. They told her they worked for Colossal Media. This was Marcine’s epiphany moment, the game-changer, the turning point. Here was a job that seamlessly combined physical labor and photo-realist painting, meshed public art with aesthetic pleasure, and would pay her while she added even more tools to her painting toolkit.

After receiving her MFA in 2009 for both painting and aesthetic philosophy, she applied with Colossal to become an apprentice wall dog. She was turned down, as she would be for the next four years. Undeterred, Marcine took an extra step with each rejection, learning how to paint murals with the Philadelphia Mural Organization and volunteering with Groundswell and other city mural projects. When she was finally hired by Colossal in 2013, she learned that apprentices don’t get days off, and that even a petite woman needed to help build the riggings and haul the materials (and herself) up said riggings, sometimes 30-stories high, if she was going to earn respect and keep her apprenticeship. She became physically stronger. Whenever she was lacking in one area, she made herself invaluable in another. Her mantra became, “You are only as good as your last wall.”

Fast-forward to December 2021, and Marcine, a recently named ArtNews Los Angeles artist to watch, is thriving in Frogtown with her husband, Jimmy, a graphic designer and creative director for Dice Magazine. Part of the elite wall dog crew for Overallmurals and Walldogs, Marcine flies all over the country scaling and painting walls.

Marcine doesn’t harbor regret for the hours she is unable to work on canvas. When she does paint her own works, they are as thoughtful and thought-provoking as they were when Laura Mulvey’s essay and Katy Grannan’s “Poughkeepsie” sequence...
propelled her into a series of paintings about female bravado. Now, however, they address how female beauty intertwines with and is just as delicate as the ecosystem, media expectations, and the underlying health issues caused by overconsumption of both.

Both pieces featured in this issue, *Neon Roosters* and *The West Is Dead*, are intellectual bombshells...timely statements with eye catching women. The purpose is focused not on the “bombshell” but rather what she is asking. Questions about the climate—the beauty of California that we take for granted—as well as bucking long held beliefs about women in society.

When Marcine was a young girl in Baltimore, she believed her opportunities were limitless if she worked hard enough. Her curiosity and tenacity have yet to ebb, and each time she nears a goal, she’s already set a new one. The only question is always: “How do I forge my path there?”
THE COMBATIVE LANGUAGE OF CANCER: A PLEA FOR AN ARMISTICE

"Listen to your patients. You are not as important or interesting as they are."

Cancer is talked about like few other diseases, often framed from the beginning as a fight to the death. Cancer cells are enemy invaders, which we destroy using weapons in an oncologist’s arsenal. We mark our progress in terms of military sophistication, from the carpet bombs of chemotherapy to the smart bombs of targeted therapy. We rally the troops, soldier on, hope for a magic bullet. Some beat cancer and become survivors. Others lose the battle.

How does this aggressive language affect a patient’s experience with cancer?

Confession: I’m an intern, and this topic has been written about by people far brighter and more experienced than me, but I want to discuss it through a different lens, using the help of someone I view as an expert on language, someone who changed my understanding of the power of words.

Before going to medical school, I studied fiction writing from 2010 to 2012 in the University of Oregon Creative Writing Master of Fine Arts Program, which is where I met Ehud Havazelet, a writing professor, pillar of the department, and, eventually, my thesis advisor and mentor. Ehud had a reputation for being as intimidating as he was brilliant. He did not tolerate hollow writing. He would start our regular meetings by asking, “What’s the most painful thing happening in your life?” He wasn’t one for small talk.

I never turned his question back on him. I’m not sure how he would have responded. Possibly with a joke—Ehud had a dark sense of humor. After reading my first short story, he said, “This is actually good. When we met, I thought you were an idiot.”

Ehud rarely talked about his cancer. I found out about it from other students, and I didn't learn until later that he had leukemia and was in remission after a bone marrow transplant. The first time I heard him mention it out loud was in workshop, a class in which we critiqued the short stories we had written. My fellow students and I would give generous and gentle and sometimes misguided feedback, which sooner or later would trigger Ehud to swoop in with his own far superior reading of our work, analyzing the strengths but also enumerating the many flaws we hoped no one would notice or hadn't noticed ourselves. On this day, Ehud was so disappointed in the quality of the stories that he said they weren’t worth our time to discuss.

“I don’t have time for this,” he said. “I have cancer.”

He did not say this out of malice, but out of urgency. Ehud took writing, and us, more seriously than I had thought possible. In his view, a story could save someone’s soul. He referred to his favorite authors as God, a word he didn’t throw around lightly. The son of a rabbi, Ehud was born in Jerusalem and raised in an Orthodox Jewish household in New York City. He studied literature like sacred texts. Characters on the page, if written about with insight and honesty, became real; they drove the plot, not the other way around. During one class, Ehud shared his humbly titled list of “The 10 Most Important Things You’ll Ever Hear About Writing.” Rule 1: “Get out of the way. You are not as important or interesting as your characters.” (Because no story is complete without an ending, here is his tenth and final rule: “Never use the word chuckle. Ever.”)
Ehud believed in finding the right word, which was usually a simple one. (Rule 6: “Simplicity is a virtue. Do not gaze when you can look, be atop when you’re on, be ajar when you’re open.”) The right word could make a sentence transcendent; the wrong one could make a reader put down the book, leave the bookstore, drive home, and ask for a divorce. I remember an essay I wrote about Flannery O’Connor in which I used the word “morph.” Ehud circled it, crossed it out, and wrote in all capital letters in the margin, “NEVER.”

“Why?” I asked, as we reviewed the essay together, thinking he might have an eloquent explanation involving etymology.

“Because it sounds stupid. Just say it out loud three times.”

I started to do so, but he held up his hand.

“Please,” he said. “Not in my presence.

In my second year in the program, Ehud became sicker. He was bone thin. He bore little resemblance to the man in the author photo from his book published 10 years earlier. In another workshop, while he was talking about a story, one of his teeth fell out into his hand. Afterward, he told me he felt terribly embarrassed about it. I don’t remember what I said to him, but I was thinking that embarrassment was the last thing he should be feeling. He was sick and yet still commuting an hour to work every day, still reading and rereading our stories, still passing on his devotion to literature.

Ehud’s path was never going to be easy, but for him, it was made even more draining because of the way cancer is viewed in our society, as an enemy that can be vanquished if only you fight hard enough. He said in a 2007 interview, “This expectation that you can beat it is self-destructive. It’s a taunt, and that heroic attitude is a burden.” Calling patients with cancer heroes and reducing the complexity of the patient experience to victories and losses in battle—a tactic well suited to catchy slogans and fundraising campaigns—ran counter to Ehud’s sensibilities, which favored nuance, depth, and ambiguity. He believed in negative capability, a literary concept describing the capacity to hold opposing ideas in your head without the need to resolve the conflict or, more simply, being at peace with uncertainty. In Ehud’s view, a good story didn’t provide easy answers—Rule 7: “From Chekhov, who is God: ‘You confuse two things: solving a problem and stating a problem correctly. It is only the second that is obligatory for the artist.’

Ehud and I never directly discussed his views on the language of cancer, so what follows are my own opinions, although they are based on what I learned from him, as well as ideas I have since gathered from colleagues and medical literature. In the spirit of Ehud’s list about writing, here are my suggestions for discussing cancer with patients.

The 10 Most Important Things You’ll Ever Hear From an Intern About the Language of Cancer

1. Listen to your patients. You are not as important or interesting as they are.

2. Individualize your language to fit your patient, just as you individualize your treatment plan.

3. Think carefully before using war metaphors. It becomes difficult to bring up palliative care in the midst of total war. Likewise, patients may feel pressured to live up to the image of a heroic warrior who exhibits enough grace under pressure to make a Hemingway protagonist blush.

4. Be prepared when patients and their families use combative terminology. “He’s a fighter,” they might say. Without dismissing this expression of faith in the patient’s mettle, consider reframing the fight: “There are many goals someone can work toward, such as freedom from pain or more time at home with family.”

5. Patients and families may think of palliative care as surrendering. Start by defining palliative care, comfort care, and hospice—they are not synonyms, and misperceptions are common. And try introducing palliative care early, both the concept and the team. If you wait until the end, you take the advance out of advance care planning.
6. Be careful discussing cancer in terms of winning and losing (eg, she “beat cancer” or “lost the battle”). Patients may feel agency and pride when treatment is going well, but when it isn’t, they can feel blamed.


8. Simplicity is a virtue. For any jargon, act like a good dictionary.

9. Be precise and direct. Sometimes metaphors help convey an idea; other times they obscure the point. Some patients will find it a relief to have frank discussions about cancer, suffering, death, and dying—using that exact language.


My friend Ehud died in 2015 at age 60, survived by his wife and two sons. He continued to teach until soon before his death. I wish I could share more about his views on cancer—his list would have been much better than mine—but I never asked him about his experience with leukemia. Maybe I was intimidated, maybe I was hesitant to bring up a topic so personal. I don’t have any illusions that I would have offered him profound wisdom—that was his specialty—but I might have let him know I was there to listen. He would have had meaningful things to say. Thank God he left behind a record of his inner world: his writing.

Ehud sent me one of his last short stories when I was starting medical school, with the following instructions: “Read this when you need a break from memorizing the 347 bones of the foot.” The story was about a boy whose father was dying of cancer, and the parallels with his own sons were impossible to miss. The boy lives the full life of a fifth-grader—a school play, a crush, rival suitors, basketball—while his dad is sidelined, too weak to get out of bed. When his dad asks him about a new basketball move he’s learning with his coach, the boy falls silent, because an image is swimming across his vision: instead of being in his parents’ house, the boy is going home with his coach, playing basketball in the driveway, having dinner with his coach’s family. It is a heartbreaking depiction of a father unable to be there for his child, of the simultaneous hope and fear that someone else will fill the void.

When Ehud kept asking us that favorite question of his—What’s the most painful thing happening in your life?—he was pushing us to face our deepest fears, so that we could feel them, learn from them, and write about them. He wanted us to look directly at pain, at loss and death, and call them by their names.

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Contributed by:
Matthew J. Farrell, M.D.
PGY-3
Prior to going to medical school and subsequently entering the Radiation Oncology Residency at UCLA, Dr. Matthew J. Farrell received an MFA for Creative Writing at the University of Oregon.
In 2019, at the beginning of the pandemic, the cancer center at the VA Greater Los Angeles HCS lacked COVID-19 screening processes and personal protective equipment (PPE). Dr. Diana Gage, a Radiation Oncologist and member of our team, recognized that the risk of COVID-19 exposure, especially among immunocompromised cancer patients, was imminent.

She knew that in addition to proper PPE, procedures for screening, testing, and operational processes for various clinical scenarios were critical. She reached out to multiple points of contact until the center had appropriate equipment, established procedures, and even retrofitted the clinical layout and equipment to ensure safety for all patients and staff members.

Thanks to Dr. Gage’s early action, the VA Greater Los Angeles Radiation Oncology team was equipped with the appropriate tools and trained on how to operate safely amid COVID-19—improving VHA’s quality of care.

Dr. Gage’s work during the pandemic did not stop when she removed her white coat. When she noticed a rise in Asian hate crime in her community and across the country, she once again spoke up. With the help of community members, family, friends, an Asian-French musician, and iMovie, she created an awareness video entitled, *Stop AAPI Hate*. At its core, the video encourages people to speak up—to stand up and say something when they witness racism and hate within their community.

Since its creation, Dr. Gage’s video has been used by the VA Executive Team at an anti-racism panel discussion with the Equity and Diversity Division at the VA, Psychology in their “Race Based Stress and Trauma Group,” as well as the Campus Police Chief who used it to train officers to be more sensitive to the Asian community. Most recently, Dr. Gage donated the video to the official Stop AAPI campaign.

When asked about her work over the past two years, Dr. Gage is modest. Instead of boasting, she offers a challenge: “If you see something that concerns you...find the courage to address it.” □
Anusha Kalbasi, M.D., recently received the AACR Next Gen Star Award for his work engineering T cells with an orthogonal IL-9 receptor, which gives them superior anti-cancer properties that obviate the need for conditioning chemotherapy—otherwise required for T-cell therapy of cancer.

Ann Raldow, M.D., MPH, was a 2021 Teacher of the Year, a 2021 Los Angeles Top Doctor, and received the Healthcare Hugs from Our Community Award from the UCLA Office of CICARE Service Excellence.

Amar Kishan, M.D., was recently named as the 2021 recipient of the prestigious Leonard Tow Award for Humanism in Medicine. Originally launched in 1991 at Columbia University, it recognizes faculty who demonstrate both clinical excellence and outstanding compassion.

Sang-June Park, Ph.D., DABR, was awarded the Judith Stitt Award (Best Abstract in Physics) for, “High dose rate interstitial spine brachytherapy using an intraoperative mobile CT guided surgical navigation system compared with stereotactic radiosurgery,” at the 2021 American Brachytherapy Society (ABS) Conference.

Michael Xiang, M.D., Ph.D., was a first author on a publication in Clinical Genitourinary Cancer entitled, Trends and Predictors of Hypofractionated and Intensity-Modulated Radiotherapy for Organ Preservation in Bladder Cancer.

Surgical Outcomes for Early-Stage Non-Small Cell Lung Cancer at Facilities with Stereotactic Body Radiation Therapy.

Ann Raldow, M.D., was a first author on a publication entitled, Unsolicited patient complaints among radiation, medical, and surgical oncologists, published in Cancer.

Afshin Safa, Ph.D., was recently awarded fellowship honor, Fellow of the American College of Radiology (FACR)—the most distinguished honor that the American College of Radiology bestows upon its members for exemplary service.

Daniel Low, Ph.D., passed the one hundred patient mark with the UCLA Department of Radiation Oncology's 5DCT scanning protocol.

Drew Moghanaki, M.D., MPH, received a five-year award for the Greater Los Angeles VA Lung Precision Oncology Program (LPOP) as a multi-PI with Dr. Steve Duinett.

Ke Sheng, Ph.D., DABR, FAAPM, was recently awarded two NIH Grants for Development of a High Throughput Image Guided Small Animal IMRT Platform ($3.26M / Role PI) and Development of an ultra-high dose rate rotational linac for FLASH Radiotherapy ($2.5M / Role PI).

Nzhde Agazaryan, Ph.D., DABR, FAAPM, was a first author on a publication in BCM Radiation Oncology entitled, Simultaneous Radiosurgery for Multiple Brain Metastases: Technical Overview of the UCLA Experience.

Amar Kishan, M.D., had a successful accrual of the randomized MIRAGE clinical trial--UCLA Radiation Oncology's first randomized trial and the first and only randomized trial of MRI-guided therapy.

Minsong Cao, Ph.D., DABR, FAAPM, is currently serving as a Departmental Editor for the Medical Physics Journal.
Beth Neilsen, M.D., Ph.D., had three recent publications:

*A Preliminary Report of Gonadal-Sparing TBI Using a VMAT Technique* (Practical Radiation Oncology)

*Diffuse lesions secondary to sarcoidosis mimicking widespread metastatic breast cancer: A case report* (Clinical Case Reports)

*Percentage of Hormone Receptor Positivity in Breast Cancer Provides Prognostic Value: A Single-Institute Study* (Journal of Clinical Medicine Research)

Ricky Savjani, M.D., Ph.D., received two grants:

**2021-2024**

Applied Research Accelerator Program (ARAP)

**NVIDIA**

“Advancing deployment of GPU-accelerated approaches from research to product”

Mentors: Stefan Scheib, PhD (Varian) and Pascal Paysan, PhD (Varian)

Role: PI

**2021-2022**

Institute for Digital Research and Education (IDRE)

**UCLA**

“Motion modeling for radiotherapy”

Mentors: Anand Santhanam, PhD (UCLA)

Role: PI

Matthew J. Farrell, M.D., presented a poster at ASTRO 2021 entitled, "Impact of Prediagnosis Risk of Major Depressive Disorder and Health-Related Quality of Life on Treatment Choice for Stage II-III Rectal Cancer," which springs from research that found patients at risk for major depressive disorder were significantly less likely to undergo standard-of-care treatment with surgery. Co-authors on the project were Dr. Ann Raldow and Tristan Grogan.

Martin Ma, M.D., Ph.D., received the Best Clinical Abstract Resident Challenge Award from The Radiosurgery Society.

Minsong Cao, Ph.D., DABR, FAAPM, recently served as a task force member and co-author of the *ASTRO Clinical Practice Guidelines on External Beam Radiation Therapy for Primary Liver Cancers*, which published in October.

Martin Ma, M.D., Ph.D., had five publications:

*Refining the Definition of Biochemical Failure in the Era of Stereotactic Body Radiation Therapy for Prostate Cancer: the Phoenix Definition and Beyond* (Radiotherapy & Oncology)

*Response to Definitive Radiotherapy for Localized Prostate Cancer in Black vs White Men: A Meta-Analysis* (JAMA Network Open)

*Prognostic Significance and Comparative Performance of a Novel PSMA PET/CT-Derived Risk-Stratification Tool for High- and Very High-Risk Prostate Cancer* (JAMA Network Open) **Co-first author

*Resonance Imaging-Guided Stereotactic Body Radiotherapy for Prostate Cancer (MIRAGE): A Phase III Randomized Trial* (BMC Cancer)

*Identifying the Best Candidates for Prostate-specific Membrane Antigen Positron Emission Tomography/Computed Tomography as the Primary Staging Approach Among Men with High-risk Prostate Cancer and Negative Conventional Imaging* (European Urology Oncology)

Cecil Benitez, M.D., Ph.D., M.S., had a recent publication in *Cureus* entitled, *Stereotactic Radiotherapy for Recurrent Post-Transplant Primary Central Nervous System Lymphoma.*
Jie Deng, M.D., Ph.D., under the mentorship of Dr. Anusha Kalbasi, won a JCCC Fellowship Award for her Holman Project entitled, "Intercepting the Immune-suppressive Myeloid Axis in Sarcoma with Intratumoral BO-112 and Radiation."

Qihui Lyu, Ph.D., was awarded the AAPM Research Seed Funding Grant as well as the UCLA Jonsson Comprehensive Cancer Center (JCCC) Research Grant.

Eric Morris, Ph.D., published a manuscript entitled, *Quantifying inter-fraction cardiac substructure displacement during radiotherapy via magnetic resonance imaging guidance*, in Physics and Imaging in Radiation Oncology.

Qihui Lyu, Ph.D., recently published a manuscript entitled, *Pair Production Tomography Imaging*, in Nature Biomedical Engineering.
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The UCLA Department of Radiation Oncology pushes back the boundaries that limit ordinary clinical cancer treatment through the application of thoughtful discovery-based, novel treatment strategies.