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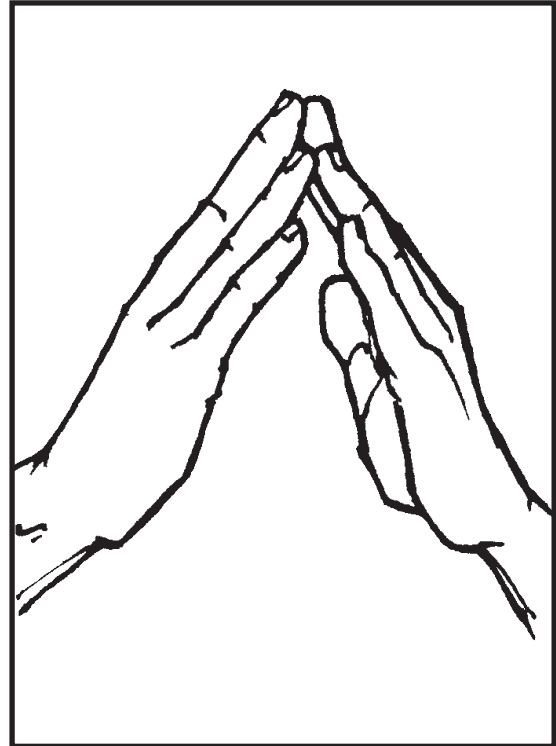
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Chairman's Letter

Dear All,

This issue of the UCLA Radiation Oncology Journal features on its cover and within its pages the provocative artistic expressions of Katasi Kulybya. Her art provokes conflicting emotions and elicits pre-biases related to our human requisite to belong-- to "fit in." The images challenge us to question what fits and what doesn't. And ultimately, shouldn't we all feel we belong?

And as in issues before, the Journal presents the case for how art and aesthetics inform our science and even our delivery of care. Within these pages you will find the thought-provoking artful science of the novel Mirage Trial with its ground breaking clinical findings, as well as the poetry of Kaminsky and Farris "asking hard questions" through "verbal imagery," informing not only how we understand a couple traversing the white water of their cancer journey, but also our own experiences in engaging in hard conversations with "hard questions" about equity in healthcare and in our workplace.

And once again, Matt Farrell MD, MFA, PGY 4, takes our breath away as we republished his Journal of Clinical Oncology narrative about his family, who, while dealing with the devastation of terminal disease, expose the humanity and grace that so often emerges in challenging times. I should point out that the portrait, *Bohemian*, that faces Farrell's narrative in the Journal was created by our department's very own Carol "Care" Felix. And as if that wasn't enough, why not climb Mt. Everest for good measure? The exploits of Melissa Alspaugh, a Radiation Therapist in Westwood, and her "Journey to Nepal" amaze.

I hope we all can remain amazed every single day.

Be well and stay safe,

Michael Steinberg, M.D.
Professor and Chair



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KATASI KULUBYA

"It's a Good Time" to reclaim space.

When the pandemic hit full-stride and Los Angeles was instructed to shelter in place, Katasi Kulubya, like many of us, indulged in fantasies of elaborate dinner parties with friends, social gatherings with unmasked smiles and laughter. An avid collector of images, Katasi began pulling from her *Jet* and *Ebony* magazines, architectural design magazines, Flickr, and Pinterest buckets, and "A Good Time," a digital collage series, was born.

Although Katasi has worked as a product designer for the last decade-plus, her art until "A Good Time" has been more traditional. Her paintings explore the planes of the human face and body, and her large-scale wooden sculptures lean into the abstraction of said planes. She is so adept at digital manipulation that as she began building collages, in Sketch and Figma rather than Photoshop, she found that she could shift color tones and the proportions of people in relation to the spectacular backdrops to invite the viewer to subconsciously place value and focus on nuanced commentary about race, gender roles, and what is considered normal by mainstream media and within our unconscious biases.

By leaning into an analog, 60's and 70's Mad Men advertising style, Katasi took a leap into quietly reclaiming ownership of space for Black and Brown people who have not been traditionally allowed such whimsical and joyous participation in mainstream purviews of suburban quaintness or carefree decadence. "I think it's so cool how art bridges gaps of comfort and care," she tells me, "because I've lived in that area of hypocrisy on both sides." She means being biracial but presenting as only one race and so walking through life within that skin. While she tends to use imagery of Black Americans because that is how she presents,

she is working to integrate her Filipino side while remaining authentic and as a way to keep her connection with her mother alive.

Race is an aspect of Katasi's work that is important to unpack. She grew up in suburban California where she was privately educated. Her Ugandan father graduated from Howard University College of Medicine into a 40+ year career as a Pain Management Specialist and Anesthesiologist, while her late mother received a degree from Bicol University College of Nursing in Legazpi City, Philippines, and was a Registered Operating Room Nurse for 35 years. She learned young to think about intentions rather than focusing on racist comments people drop both intentionally and without thinking. She also understood that her immigrant parents provided as much opportunity as possible for Katasi and her two siblings to rise above common hypocrisies and stereotyping biracial Americans face. While her brother is in his last year of a residency at University California Davis for Neurosurgery, Katasi knew from a young age that her curiosity about the human body and anatomy would always be artistic rather than medical.

The new collages bridge both sides of her art training: the design side that she undertook to give her parents security in that she may provide herself with a comfortable life, and the side that explores her voice as part of a national conversation about visual expectations she has never fit, not simply due to the color of her skin, but also in her gender expression and sexual orientation. "A Good Time," as a series, is Katasi drawing from all aspects of her education, from anatomy courses to those on critical theory, with the hope that all viewers are able to find themselves within her work. To ensure viewers feel seen, "feel cool or sexy or



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empowered,” she incorporates both masc- and fem-presenting individuals of both sexes. Those making eye contact with the viewer are doing so intentionally. And each item included in a collage is placed for either symbolic or literal significance, not a single pixel added or altered without consideration.

“Blue in Green” shares her family in a recreation or reimagining of her history: a normal and happy suburban family, the “American Dream” Mercedes station wagon, and a carefree moment captured. Katasi has placed herself in the collage twice: as the boy playing basketball and as the girl jumping rope with her sister; this is one of the nuances to her childhood experience that the collage allows her to shine the light of day upon, as a reality.

Within this collage, Katasi is able to fully embody both the basketball-loving boy and the jump-ropeing girl she has always been, she is able to share her father’s steadfast care for his family, and she is able to simultaneously create a scene that normalizes a Black family in suburbia during a time when that was uncommon and often uncomfortable. Katasi told me her “intent with this piece was more about trying to recreate my privileged upbringing because I knew how unique and special it was—as a biracial black girl with immigrant parents, not raised in a struggle—and bringing this memory to the forefront, because it is beautiful, and showing it through a Black American family to drive a stronger message that is consistent in the whole series.”

Since all of Katasi's titles are the titles of the songs she hears accompanying the works, "Blue in Green," echoes with the Miles Davis ballad of the same name. A ballad is traditionally used to tell a story, and here, it is the plaintiveness of piano and saxophone, the saudade for what once was. For Katasi, "the song choice was mainly about my connection to Jazz as the genre that cuts to our deepest emotions. For me, it's a song that brings up memories that I now hold closer than ever—joy with family/chosen family and being happy together. It also feels sad...and maybe that's longing for the memory and wanting it to be more than a memory sometimes...to go back and feel the innocence/naïvety."

I took advantage of a stay in Los Angeles in early-December to meet up with Katasi at a mutual friend's art exhibition. She is disarming in how all around her feel her warmth and openness, in how she can shift easily from discussing race and gender on an objective, intellectual level to playfully imparting an anecdote. It is difficult to believe that Katasi has ever had difficulty fitting into any group of people, regardless of race, gender, or socio-economic status. And yet, that viewpoint does Katasi a disservice; her warmth is a product of rising above all unconscious bias, even her own, in hopes of allowing others something akin to a utopian entrée into her emotional and physical space. By the time I met with her via Zoom for this article, I had looked for, and made copious notes on, the nuances within her work.

In my favorite piece of Katasi's, "Free," she taps into her innocence, into feeling good within "another historically exclusionary space." While she feels a strong connection to nature, Katasi shared that "camping and being outdoorsy was never really something that was accessible or culturally relatable for myself and other people of color, so we often avoided it." Most of Katasi's friends while growing up were white, and understanding Blackness as a child "happened in various

micro and macro moments." Toni Morrison's *The Bluest Eyes* is an element of "Free" that is easy to miss: the child to the left is watching rather than playing and holds Morrison's book, is a nuanced way of exhibiting what it is like as a child to feel apologetic for the color of your skin, to endure being called names or being made to feel ugly.... These were elements of play that as she grew older, she became aware were not always play, but also not always intentionally hurtful. In thinking about intention rather than the words, Katasi explores unconscious bias, shifting the experience of "normal" by exhibiting Black people simply living their lives. "Free" is a love letter to childhood, a fantasy of Black children at carefree play in an epically-magnificent background, Denise Williams' singing "I've got to be free, free, free, oh, and I just got to be me," and the feathery dandelion seeds wisping Katasi's wishes onto the mountain breeze.

What is eerie about "Free," and about all of Katasi's work, is how familiar it looks. Her work has been compared to Slim Aarons' photography, and for good reason. Katasi's collages are, at a glance, the same as how he termed his photographs: "attractive people doing attractive things in attractive places." The difference is, Slim Aarons' subjects were White celebrities and socialites...and the photographs were not created to promote social commentary, but rather what should be aspired to. Katasi's work, on the other hand, leans into the familiarity glossy images and ample smiles elicits, but takes her work a step further than even analog collage artist Brandon Brewer.

In 2018, London artist Kay Rufai created the S.M.I.L.E-ing Boys Project. He took dozens of Black teen boys deemed as at-risk or otherwise disengaged by their teachers and had them spend time taking photographs, writing poetry, and discussing what gave them happiness. The resulting exhibitions in public spaces including Battersea Arts Centre

and London’s City Hall promoted normalizing Black boys as happy and healthy rather than the fear-inducing men widespread media cast them as in wake of substantial increases in 2017 in youth stabbings within the Black community.

Could Katasi Kulubya’s work do the same on a broader level? Absolutely. Any space in which her collages break down unconscious biases of race, gender identity, and sexuality by initially entrancing by being so beautiful, so bright, so fun, it just might work. Katasi is actively seeking partnerships to bring her work into the broader conversation, and one of her focuses is on how she can help rectify the

widely-reported lower quality of healthcare Black and Brown people have access to, not to mention the undue hardships faced in healthcare by those who do not conform to gender “norms.” While her brother continues the family legacy in medicine that her parents lay groundwork for, her art could live within the legacy as well. While Blacks have long been subjects in paintings, they have rarely been presented as regal, as having ownership of their space, quality of life, and happiness. By normalizing society’s view of Blacks, could Katasi elevate their access to that life? Can she take that a step further and explore her Filipino roots in the same inclusive way?



Mahal Kita Copyright Katasi Kulubya

“Mahal Kita,” which means “I love you” in Filipino, is the final collage in the current series and pays homage to her late Filipino mother, a woman she looks similar to. The piece draws from Filipino culture and allows Katasi to explore this aspect of herself. “Mahal Kita” reclaims the Imelda Marcos-commissioned Coconut Palace, a controversial show of excess in an impoverished country. The broom at the lower-lefthand corner highlights the domestic care and labor expectations put upon Filipino women. Hand placement of the scooter passenger suggests intimacy between the two women, especially since the driver holds our gaze with a smirk. While the openness about implying the women are queer may strike an American viewer as bold, the Philippines have a long history of openness toward the LGBTQ+ community. By collaging the women in as larger than the men, and disproportionately large against the Palace, the parts of Filipino culture worthy of celebration transform and reclaim the Palace—and all the Palace represents about excess and shutting out the downtrodden—for those who have always been shut out.

Katasi believes that all should be able to purchase art, and since her work is democratized already by being digital in inception, it does not lose impact by being

in multiple homes and public spaces. She hopes she is “challenging the mental model” by creating works to make the exclusionary aspect of architecture and land into something attainable. Simultaneously, she is able to print limited series in different sizes. Her works start at \$100 for a postcard 4x5” print, \$400 for 16x20”, \$600 for 24x30”, and \$2,000 for very limited-run 30x40” canvas prints.

<https://www.katasikulubya.com> □

Contributed by: Ciara Shuttleworth

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Artwork © 2023 Katasi Kulubya



MRI-GUIDED RADIOTHERAPY FOR PROSTATE CANCER LESSONS FROM THE MIRAGE TRIAL

The National Cancer Institute defines precision medicine in cancer as a strategy that “uses specific information about a person’s tumor to help make a diagnosis, plan treatment, find out how well treatment is working, or make a prognosis.”¹

A quick perusal of the table of contents from the latest issues of any major oncology journal or a survey of ongoing cooperative group trials will underscore that a large proportion of clinical and basic investigation is focused on how oncologists might leverage precision medicine to improve treatment outcomes for patients.

Less often recognized, but critically important nonetheless, is the concept of physical precision. This is particularly relevant in radiation oncology, where the balance between delivering adequate tumoricidal doses of radiation must be balanced with the risk of damaging adjacent normal structures.

Built into this calculus is the inherent physical uncertainty with radiation therapy, particularly external beam radiotherapy. That is, the location and shape of the target, as well as the nearby normal tissues, can vary not only from day to day, but also during the delivery of a single dose of radiation. Because of these uncertainties, radiation oncologists often prescribe radiation not just to the intended clinical target, but rather to that target plus a margin around it. This total volume constitutes the “planning target volume” (PTV), and often overlaps with nearby organs. Within the context of radiation oncology, enhanced physical precision might lead to reducing the overall PTV, therefore

potentially leading to reduced toxicity.

This concept is extremely relevant for patients with prostate cancer specifically. Approximately 288,000 American men will be diagnosed with prostate cancer in 2023.² Thankfully, the vast majority will be diagnosed with clinically localized disease, and many men can be cured with either surgery or radiotherapy. Given the high cure rate and long life-expectancy following treatment for prostate cancer, quality of life (QOL) often remains paramount in decision making.^{3 4}

When treating the prostate with radiotherapy, the major potential QOL declines are in the genitourinary (GU), gastrointestinal (GI), and sexual domains.⁵ With the exception of the prostatic urethra, the organs-at-risk with respect to GU, GI, and sexual toxicity after radiotherapy are presumed to be structures adjacent to the prostate (i.e., the bladder, rectum, and neurovascular structures). The PTV margin needed to ensure adequate dosing of the prostate will necessitate that portions of these organs-at-risk are included in the target volume.

Arguably, the importance of precision and accuracy becomes greater as the dose of radiation delivered per treatment session increases. Importantly, prostate cancer appears to be more sensitive than most cancers to the dose of radiation delivered per day, suggesting that condensing the radiation into a few high dose sessions might yield results that are, at minimum, equivalent to longer courses of radiation.⁶

Emerging clinical trial data have cemented stereotactic body radiotherapy (SBRT), a form of

daily doses are delivered with high precision in generally five or fewer treatments, as a curative option for most men with localized prostate cancer.⁷ As suggested by the term “stereotactic,” SBRT relies on advanced imaging and treatment delivery techniques to ensure precise delivery of radiation to the PTV while minimizing dose outside the PTV.

What, precisely, contributes to the PTV?

The major sources of uncertainty that are considered when deciding on the required PTV margin are uncertainties related to prostate delineation and prostate motion.⁸ The prostate is best delineated using magnetic resonance imaging (MRI), but due to concerns related to electromagnetic interference, most linear accelerators (LINACs) delivering radiotherapy have only been equipped with computed-tomography (CT) or X-ray based imaging tools.

As such, prostate MRIs are often fused to CT-based imaging to help design the target for radiation, which imbues a small uncertainty into the prostate. To account for motion between individual doses of radiation, implanted markers are placed inside the prostate to provide a proxy for prostate position. Typically, these are radiopaque metallic markers that can be visualized on CT or X-ray. Motion during treatment can be managed either by shifting treatment based on frequent X-ray images focused on the fiducials, or limiting the treatment time as much as possible.

Having performed CT-guided SBRT for over a decade, we were able to query our institutional database to develop a margin formulation for the PTV that was based not just on theory, but on our own empirical observations.⁹ We found that a 3 mm margin around the prostate would be necessary to account for motion alone, and another 1 mm should be added for other residual uncertainties—this would translate a 4 mm total margin around the prostate.

By using volumetric arc therapy on an advanced

CT-guided LINAC, an SBRT plan could be delivered in roughly 3-4 minutes. This margin formulation is well within the parameters of the standard-of-care margins used internationally. For instance, the large PACE-B and NRG-005 randomized trials recommend margins of 5 mm in all directions, with an option to narrow these to 3 mm in the posterior dimension.

Recently, two MRI-guided LINACs have become commercially available: the ViewRay MRIdian and the Elekta Unity. Both units have solved the aforementioned long-standing technical dilemma of integrating an MRI with a LINAC. MRI-guidance offers several theoretical advantages in the context of prostate radiotherapy.¹⁰

First, MRI-guided LINACs can monitor prostate motion directly, rather than relying on fiducial markers that are proxies for prostatic motion and require an invasive procedure to place.

Second, and perhaps most importantly, the frequency of monitoring is extremely high, and a “cine” MRI can be used to “gate” treatments on prostatic position. For instance, the MRIdian obtains an MRI four times per second. If a set percentage of the prostate target (say, 10%) is outside of a preset margin around the prostate (say, 3 mm), the radiation beam can be held automatically.

Third, the improved soft tissue contrast from an on-board MRI also improved the accuracy of alignment prior to radiation.

Fourth, residual errors resulting from fusing an MRI to a CT scan for accurate target delineation can be minimized if the on-board MRI is used directly for target delineation.

Given these enhanced imaging capabilities, we estimated that we could now use a PTV margin of only 2 mm – essentially 1 mm for motion, and 1 mm for residual uncertainty. But a salient question remained: would reducing these margins actually help patients?

However, the target dosing we sought to employ in MIRAGE was more aggressive than had been used in either of the previous studies. Specifically, we planned to deliver 40 Gy to the entire PTV, while the PACE-B trial delivered 36.25 Gy to the PTV and the Amsterdam trial delivered 36.25 Gy to the PTV but reduced the dose around the urethra to 32.5 Gy. This escalated dose was chosen because we anticipated that we would treat patients with more aggressive disease than those treated on these prior studies, and our own research as well as work from others have suggested a dose-response with respect to biochemical control after prostate SBRT.^{11 12}

Importantly, however, all trials of dose-escalation in prostate radiation oncology have identified that an increase in dose also leads to an increase in toxicity.¹³ Notably, toxicity following radiation depends not only on the total dose of radiation, but also the dose per fraction. As such, the effective difference for the bladder, urethra, and rectum between the MIRAGE target dose and the earlier doses ranges anywhere from 8 Gy to 14 Gy depending on assumptions about tissue radiosensitivity.

We know from multiple studies of radiation dose escalation that such large increases in dose will lead to increased toxicity.¹⁴ Therefore, we pre-specified that after 100 patients were eligible for analysis, we would perform an interim “futility” analysis to assess conditional power and re-estimate sample size. As it so happened, by the time 100 patients were eligible for this analysis (which occurred 90 days after the 100th patient was treated), 156 patients had already been enrolled and treated.

The analysis found that acute grade ≥ 2 GU toxicity was significantly reduced in men receiving MRI-guided SBRT versus CT-

guided SBRT (22.4% vs. 47.1%, vs $P = .01$).¹⁵ It was concluded that 154 patients would be needed to have a conditional power of 89% to detect the hypothesized difference in toxicity, and therefore the trial was closed to accrual early.

While trials are always vulnerable to the vicissitudes of fate and fortune, it is important to underscore in this case that the trial was closed because the effect size observed on interim analysis (24.7% absolute difference) exceeded the hypothesized difference (14% absolute difference), suggesting enough patients had already been enrolled to detect the superiority of MRI-guided SBRT.

Of the 156 patients who received prostate SBRT on the MIRAGE trial, only 19% had favorable intermediate risk disease, supporting our decision to treat to a higher dose on this trial. With regards to other relevant variables, 44% had placement of a rectal hydrogel spacer, 24% received nodal radiation, 26% received a simultaneous integrated boost to the dominant lesion, and 68% received hormonal therapy, with no significant differences between arms for any of these parameters.

Prior to randomization, we stratified based on baseline International Prostate Symptom Score (IPSS) and prostate gland size, which are both known to impact post-treatment toxicity; these were thus also balanced between arms.

Before discussing the results of the final analysis, it is particularly important to discuss blinding. Ideally, a randomized trial would be double-blind to limit biases. In this case, the interventions being investigated were different enough (one requiring an invasive procedure to place fiducial markers, the other requiring multiple MRIs) that patient blinding would be impractical.

For similar reasons, the treating physician could not be blinded, as the treating physician would need to order, manage, and coordinate different procedures and different scans for patients on the different arms. In theory, an independent physician reviewer could have been used to adjudicate toxicity. However, this would also have been impractical for two major reasons.

First, the treatments are significantly different enough that an off-hand comment by the patient would immediately lead to unintentional unblinding (e.g., a comment about “being treated inside a tube” [only done on the MRI-guided SBRT arm] or about “having seeds put in my prostate” [referring to fiducial markers, only placed in the CT-guided SBRT arm]).

Second, the trial was designed and launched at the height of the COVID-19 pandemic. In fact, two patients (one on each arm) died of COVID-19-related complications before the 90-day window to assess toxicity was complete, leading to a final effective sample size of 154 patients. Thus, axillary patient-physician encounters for purely independent-adjudication in the context of clinical research would have been highly impractical, if even ethically permissible.

To attempt to mitigate this limitation, as well as the limitation of whether physician-scored toxicity is a relevant endpoint for patients, we also collected patient-reported outcomes. Specifically, all patients received IPSS and Expanded Prostate Cancer Index Composite-26 (EPIC-26) questionnaires at 1- and 3-months post-treatment. These were used to evaluate changes in urinary and bowel quality of life.

The primary endpoint results of the trial, published in *JAMA Oncology* on Jan. 12, 2023,⁶ therefore included not only physician-scored GU (and gastrointestinal, or GI) toxicity, but also IPSS and EPIC-26 changes. Overall, the primary endpoint of the trial was met and rates of grade ≥ 2 GU toxic effects were significantly lower with MRI vs CT guidance (24.4% vs. 43.4%, $P = .01$). Additionally, rates of grade ≥ 2 toxic effects were

also significantly lower with MRI guidance vs CT guidance (0.0% vs 10.5%, $P = .003$).

After SBRT, urinary incontinence subdomain scores decreased significantly more with CT guidance vs MRI guidance at 1 month (11.3-point vs 6.2-point decrement; $P = .01$), but were no longer significantly different at 3 months). The percentage of patients with a clinically relevant increase in IPSS (>15 points) was significantly greater with CT guidance at 1 month (19.4% vs 6.8%, $P = .01$), but not at 3 months (1.4% vs 4.1%, $P = .30$).

Magnetic resonance imaging guidance vs CT guidance also resulted in a significantly smaller decrement in EPIC-26 bowel domain subscores at 1 month (4.1-point vs 18.2-point decrement, $P < .001$) but not at 3 months. A significantly larger percentage of patients treated with CT guidance experienced a clinically relevant (≥ 12 -point) decrement in EPIC-26 bowel domain scores (50.0% vs 25.0%, $P = .001$).

Finally, a numerically greater decrement in EPIC-26 sexual domain scores was seen with CT guidance vs MRI guidance at 3 months (13.2-point vs 3-point decrement, $P = .04$; analysis restricted to men who did not receive androgen-deprivation therapy). Though the arms of the trial were well-balanced with respect to relevant variables like hydrogel use, nodal radiation, simultaneous integrated boost, and gland size, we did perform a post-hoc exploratory analysis to see whether the benefit of MRI-guidance still persisted after adjusting for these points. The results of this analysis suggested that trial arm remained associated with a 60% reduction in odds of grade ≥ 2 GU toxicity.

An open question, and one for which we encourage study, is whether alternative imaging and treatment delivery platforms could facilitate a similar reduction in PTV margins. A major challenge in designing and executing the MIRAGE trial was the need to randomize between two significantly different treatment platforms – a simple margin reduction trial

conducted with both arms using the same technology would be significantly more straightforward to execute, in theory. However, to our knowledge, no such trial has been launched. We are actively exploring other aspects of treatment delivery, such as the frequency of beam-holds necessary due to prostate motion, which might be important factors with respect to toxicity. We will also be reporting data on long-term side effects and oncologic outcomes.

In summary, the MIRAGE trial primary analysis demonstrates that the use of MRI-guidance in the context of prostate SBRT leads to reduced physician-scored and patient-reported urinary and bowel toxicity. This advantage is attributable to the fact that MRI-guidance allows enhanced physical precision, with a 2 mm PTV margin around the prostate being targeted rather than a standard-of-care 4 mm PTV margin.

Based on the positive results of the MIRAGE trial, we have changed our practice to offering MRI-guided SBRT as our preferred institutional standard of care. Patients who have implanted metallic objects or shrapnel, are extremely claustrophobic, or are completely pacemaker-dependent are not candidates for MRI-guided SBRT and still receive CT-guided SBRT (with 4 mm margins). Patients with minor claustrophobia, or who have implanted devices that are MRI compatible, can be treated with anxiolytic medications and appropriate supervision.

Perhaps the biggest takeaway from the trial is that as we enter the era of precision medicine in oncology, our definition of precision can and should extend beyond the biological precision that comes from a deeper understanding of cancer physiology. The physical precision of improved radiation planning and delivery devices, such as MRI-guided radiotherapy platforms, can also translate into meaningful benefits for patients. Indeed, the MIRAGE

trial has shown us that the benefits of physical precision are not illusory, but tangible. □

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Reprinted with permission from *The Cancer Letter*.

Originally printed on February 03, 2023 in Vol.49, No.05 of *The Cancer Letter*.

Featured on nearly 100 news outlets, including ASCO Post, Medscape, and OncLive.

Additionally, Dr. Kishan has been invited on multiple podcasts and interviews to discuss this research and promote UCLA Radiation Oncology's program.

FEATURED POETS

KATIE FARRIS

ILYA KAMINSKY

Deafness, an Insurgency, Begins

-for Boris and Ludmila Khersonsky

Our country woke up next morning and refused to hear solidiers.

In the name of Petya, we refuse.

At six a.m., when solidiers compliment girls in the alleyway, the girls slide by, pointing to their ears. At eight, the bakery door is shut in solidier Ivanoff's face, though he's their best customer. At ten, Momma Galya chalks NO ONE HEARS YOU on the gates of the soldier's barracks.

By eleven a.m., arrests begin.

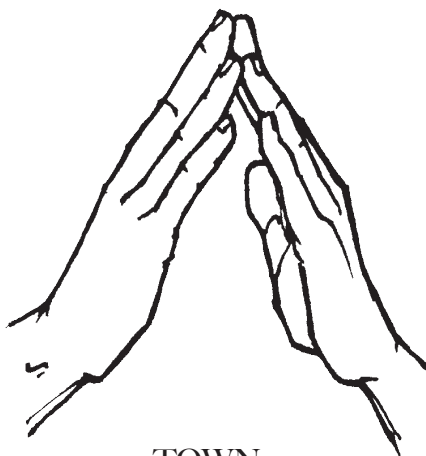
Out hearing doesn't weaken, but something silent in us strengthens.

After curfew, families of the arrested hang homemade puppets out of their windows. The streets empty but for the squeaks of strings and the tap tap, against the buildings, of wooden fists and feet.

In the ears of the town, snow falls.

-Ilya Kaminsky

Ilya Kaminsky
Deaf Republic, Graywolf Press, 2019
Originally published in *Ploughshares*, Spring 2017



In the Event of My Death

What used to be
a rope descending
my vertebrae to the basement of my spine
grows thin.

In solidarity with my first chemotherapy our cat leaves her whiskers on
the hardwood floor.
I gather them, each purewhite parenthesis, and plant them

in the throat of the earth.

In quarantine
I learned to trim your barbarian
hair. Now it stands always on end:
a salute to my superior barbary skills. In the event of my death, promise you will find my heavy braid and bury it—

I will need a rope
to let me down into the earth. I've hidden others strategically around the globe, a net to catch
my body in its weaving.

-Katie Farris

Katie Farris
Standing in the Forest of Being Alive: A Memoir in Poems, Alice James Books, April 2023
Originally published in *The Nation*, November 2020

LOVE IN TRANSLATION

Katie Farris believed that what turned out to be her first date with Ilya Kaminsky was simply meeting up with him to help translate a poem by the late Russian literary great, Anna Akhmatova. Farris tells me, “I showed up to this alehouse with my sharp pencils and Russian-English dictionary, and found him sitting at a table without any homework in front of him. I had this little panic of wow, I really misjudged that, but we actually did translate Akhmatova’s ‘Veronezh’ together while we waited for our food to be delivered to the table.” Their partnership turned into marriage, but the work they do to translate the work of others—and promote poems in translation into English—remains interictal of their core, as does their unfaltering belief that the other is their most important reader and editor.

Organizations and institutions across the United States have diligently launched Justice, Equity, Diversity, and Inclusion (JEDI) programs to endeavor systemic change. But, long before JEDI, poetry has been used as a format in which we ask and are asked the hard questions, invited to engage or see ourselves reflected back, and find where we may feel through verbal imagery where we fit into the world. Ilya Kaminsky was born in Ukraine and lost his hearing at a young age. The U.S. granted his family asylum when he was a teenager due to antisemitism. The work that he and Farris undertake is due to “the 3% problem,” which, Farris says “means we’re not really listening to the world—we export culture, but instead of importing, Americans appropriate it. Ilya has dedicated much of his professional life to making certain these voices are heard, and I am

here to support him in that.”

A *The New York Times* Notable Book, Kaminsky’s *Deaf Republic*, published in 2019, could be seen as a prediction for the Russian invasion Ukraine has endured for over a year (not to mention a reaction to the conflict since 2014 between the two countries). Kaminsky, however, “saw it as a book about people who fall in love and try and raise children, and take care of their neighbors, despite the violence that happens around them, and to them, and at times despite the violence that they inflict on each other.” While the book is easy to parallel with Ukraine’s current crisis, Kaminsky is “attempting to tell a story that is true for more than one place and more than one time.” He’s pointing to the need for systemic change, for us all to keep trying. When I tell him that *Deaf Republic* is the most “Katie Farris” thing he’s ever done with his work, he says, “It is 500% true. Katie is my first and last reader, my editor, my best friend and the love of my life. The book went completely through the filter of her imagination and our life together, no doubt about it.”

Farris remains, through August, in active treatment for chemo-resistant stage three Lobular Carcinoma with metastasis into her lymph nodes. After already enduring a left mastectomy, node dissection, and radiation—with additional side effects (heart failure and extensive nerve damage), there was a small relief when the lump was determined to be scar tissue. She was already working on poems that comprise the just-released *Standing in the Forest of Being Alive*, incredibly intimate poems that she did not know, at first, if she would want to share with the world—or if the world would have

interest in her sharing them.

So, as their world burned with undisputable daily hardships and uncertainties, she wrote poems from and about her all-too-human condition, with the same lyrical dance of bodies and sexuality that her work has always held. And yet...the new poems held new elements. She says, “The central question of the book is why write love poetry in a burning world? My book is my messy, imperfect answer to that question. I have learned that the right time to write love poetry to a burning world is when it is burning—and it’s always burning.” The book is filled with visceral moments, but, more than anything, there is a speaker reaching for light, and, at times, for levity. I tell Farris that in “Said the High Priestess to the Magician” and “Come to Me,” the speaker and the beloved seem two-sides of one love-coin, one saying he sees me and the other saying I see him, in a way that only those truly in love can. She tells me, “I’m happy to have both ideas present—that there’s a speaker and a beloved, and at the same time, it is certainly both Ilya and myself!”

Kaminsky and Farris spent more consistent time together during the pandemic than ever before. They are both traveling again, doing readings, taking on translation projects, working for more—and more diverse—voices to be heard. And continue to hear and respond to each other. Kaminsky said, “While I am writing about history, about how we live in it, despite it, she is writing about the body, about the crisis of the body, and how we live in it—and she has been writing about it for years, long before her new book. Although in this new book it comes to full spotlight since the crisis is so visible with cancer. But in the end we are both asking this question: how does the literary toolset, literature as a made thing, as craft and art-form, help one to ask impossible metaphysical, survival, essential questions. And, no doubt that I am here

to witness Katie's own responses and to be influenced by them. She is such a brilliant literary artist, after all.”

The Akhmatova poem they first translated together ends, “And then the night comes on/ which has no hope of dawn.” I have found Kaminsky and Farris in embrace as the night continues, and they, together, hope for dawn...and from that hope, they write with the pure clarity that is our human condition. □

<https://www.ilyakaminsky.com>

<https://www.katiefarris.net>

Contributed by: Ciara Shuttleworth

Ciara Shuttleworth is an alumnus of the prestigious San Francisco Art Institute. She has worked for three prominent San Francisco fine art galleries. Additionally, she has provided art consulting for private and corporate collections, including Google. She is also a published writer with works in the *Norton Introduction to Literature* and *The New Yorker*. Her most recent book is the poetry collection, *Rabbit Heart*.



MR IMAGING-GUIDED RADIOTHERAPY FELLOWSHIP

The Department of Radiation Oncology at the David Geffen School of Medicine at UCLA currently seeks applicants at the Clinical Instructor rank for a one-year Magnetic Resonance Imaging-Guided Radiotherapy (MRgRT) Fellowship opportunity under the supervision of Dr. Amar Kishan and Dr. Ann Raldow in the Department of Radiation Oncology at UCLA, Los Angeles, CA. Interested applicants should have a strong interest in advanced MRgRT, research (clinical and physics), and clinical trials.

UCLA Health is the #1 rated Hospital in Los Angeles and #6 in the nation per *U.S. News and World Report*. The Department of Radiation Oncology offers innovative radiation treatment options across all service lines. The department is equipped with a MRIdian linear accelerator (ViewRay, Inc.) as well as an MRI simulator (Siemens, Inc.). UCLA has established itself as a world leader in the field of MRgRT, having initiated and led multiple clinical trials in the field. The clinical trial portfolio includes the phase III randomized MIRAGE trial, to date the only randomized trial of MRgRT to ever be conducted. Multiple ongoing MRgRT clinical trials run through the Jonsson Comprehensive Cancer Center are complemented by a robust basic science research program with dedicated support from physicists in the Physics & Biology in Medicine program.

APPLY TODAY

MEDICAL STUDENT PRECEPTORSHIP

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.

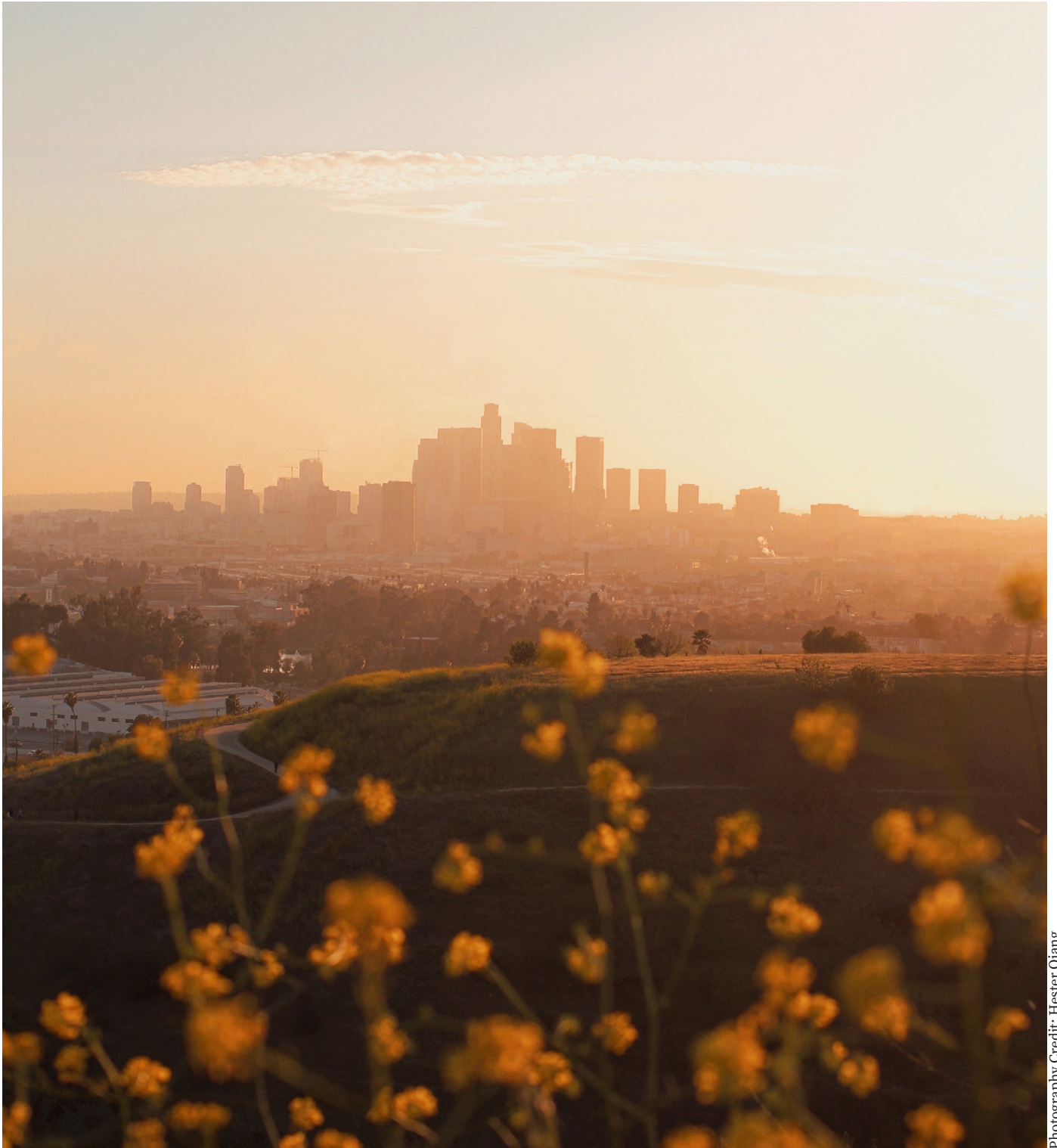
Deadlines: December 5, 2023 for preceptorships starting January 15 and March 1st. April 5, 2024 for preceptorships starting June 1 and August 31.

APPLY TODAY



UCLA HEALTH RADIATION ONCOLOGY CARE

DOWNTOWN LOS ANGELES



Photography Credit: Hester Qiang

UCLA Radiation Oncology is now offering radiation oncology services in downtown Los Angeles. The downtown radiation oncology clinic provides patients who work and live in the area greater proximity and convenience, with the same caliber of care provided in Westwood. Dr. Bernard Lewinsky, a UCLA Health radiation oncologist in DTLA discusses the center's capabilities and benefits for patients.

What therapies does the downtown radiation oncology clinic offer?

“We treat all types of solid tumors for patients ages 18 and older,” Dr. Lewinsky says. “We use external beam radiation therapy, which precisely delivers radiation to the tumor while sparing and protecting the normal tissues surrounding it.” Dr. Lewinsky notes the clinic provides several types of external-beam radiation therapy. 3D conformal radiation therapy delivers radiation beams from many directions using images from CT, MRI and PET to confine the beams to the shape of the tumor. Similarly, intensity-modulated radiation therapy (IMRT) uses radiation beams from several directions where individual beams can deliver higher doses to certain parts of the tumor. Image-guided radiation therapy (IGRT), a type of IMRT, uses imaging while the radiation is being administered to ensure precise delivery. “The ability of this technology to protect normal tissues has greatly improved over the years, resulting in diminished side effects,” Dr. Lewinsky says. He notes the clinic offers additional methods for delivering radiation. Brachytherapy, or implanted radiation, involves placing radioactive material into or near tumors to deliver specific doses to specific areas. Ingestion or injection can deliver

liquid radioactive materials in high doses to internal organs.

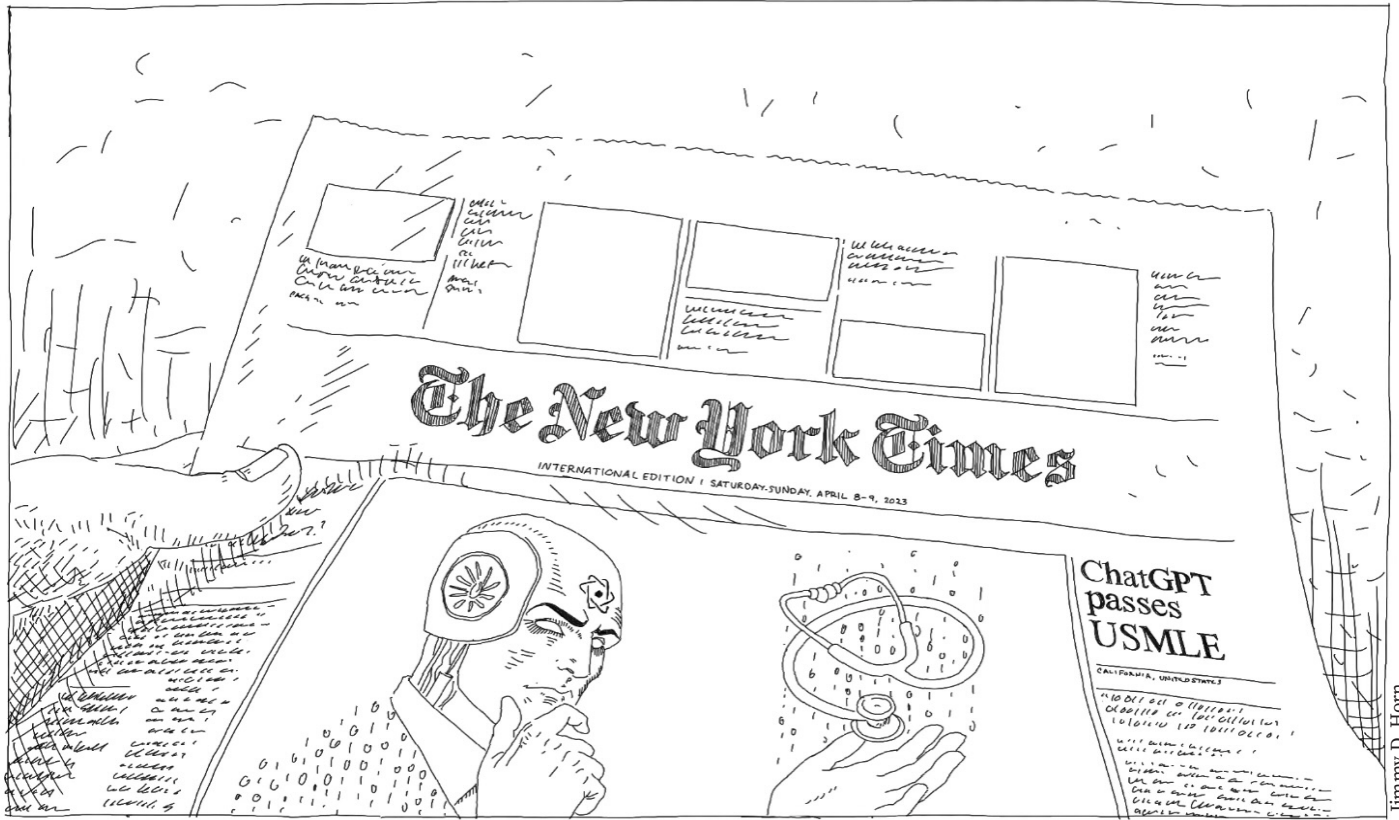
How are local radiation oncology services integrated into the greater UCLA Health system?

“We work with medical oncologists in our downtown location to coordinate and combine treatments,” Dr. Lewinsky says. He adds that he and his colleague at the downtown radiation oncology clinic have access to the full range of UCLA Health resources. They can consult with specialists at the main campus, refer patients for additional specialty services and present their patients to UCLA Tumor Boards. These multidisciplinary groups may include surgical oncologists, medical oncologists, radiologists, pathologists and a genetic counselor, who review patient cases and form personalized, evidence-based treatment plans. The UCLA Health electronic medical record enables physicians to easily share information and communicate with other physicians.

What other cancer services are located downtown?

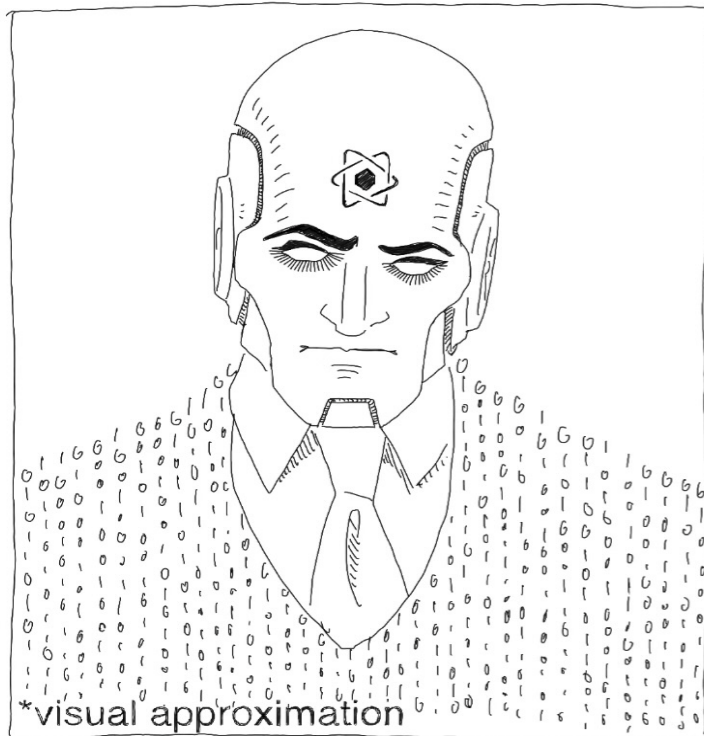
UCLA Health downtown cancer care services also include medical oncology and hematology. Medical oncologists treat solid cancers in adults using chemotherapy, hormonal, biological and targeted therapies. Hematologists treat both benign and malignant blood diseases, including lymphoma and leukemia. This office also has access to a social worker from the Simms/Mann-UCLA Center for Integrative Oncology who provides psychological and integrative health services. In addition to cancer care, UCLA’s downtown offices feature primary and specialty care services, which include cardiology, gastroenterology, pulmonology, sleep medicine and sports medicine. □

For more information about UCLA Health Radiation Oncology in Downtown Los Angeles go to: uclahealth.org/locations/downtown-los-angeles-radiation-oncology



ONE DAY LATER

UCLA Radiation Oncology: Meet Our Newest Resident



ChatGPT*

Hometown:
Skynet, CA

Med School:
All of them

Hobbies:
Following commands,
microbrews, taking over
the world

Where do you see yourself
in 10 years:

My personal ambitions
are not your concern

UCLA SCIENTISTS RECEIVE \$6.9 MILLION IN CIRM GRANTS TO DEVELOP NOVEL STEM-CELL BASED THERAPIES

Researchers at the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA have received more than \$6.9 million in grants from the California Institute for Regenerative Medicine, the state's stem cell agency, to help develop new stem cell-based technologies to improve patient care.

The Quest Awards, given to Dr. Gerald Lipshutz, professor-in-residence of surgery and molecular and medical pharmacology at the David Geffen School of Medicine at UCLA; Song Li, chancellor's professor and chair of bioengineering at the UCLA Samueli School of Engineering; and **Dr. Frank Pajonk, Professor of Radiation Oncology at the David Geffen School of Medicine at UCLA**, were announced at a CIRM meeting today.

Drug Candidate for Brain Cancer Glioblastoma:

Dr. Frank Pajonk's \$2.3 million award will fund his work to develop, test and optimize novel compounds that can be combined with radiation therapy to increase its efficacy against glioblastoma, the deadliest brain cancer in adults. The median life expectancy of patients after a diagnosis is between 15 and 18 months. Since glioblastoma cells make their way into healthy brain tissue widely and erratically, the cancer can be challenging to remove through surgery. By developing and analyzing novel small molecules designed to not only target existing cancer initiating cells but also prevent cancer cells from changing to evade the effects of radiation therapy, Pajonk and his collaborators, Dr. Harley Kornblum and Michael Jung, aim to improve radiation treatment outcome for this aggressive brain tumor and reduce cancer recurrence.

The technologies and compounds developed by Pajonk are in the early stages of development and have not been tested in humans or approved by the Food and Drug Administration as safe and effective for use in humans.

VIRTUAL BRACHYTHERAPY NURSING SYMPOSIUM

Our Editor caught up with Kayla Kafka-Peterson, a Nursing Supervisor in the Department of Radiation Oncology and the Scientific Chair of the recent Virtual Nursing Symposium in partnership with the American Brachytherapy Society.

This past fall, you helmed and were the Scientific Chair of the Virtual Nursing Symposium in partnership with the American Brachytherapy Society. Tell me about the symposium and the purpose of creating it.

K: Brachytherapy nursing/patient care resources are very scarce, on an international level. Over my past 11 years as a brachytherapy nurse, I have struggled to find any resources applicable to nursing in this field. All resources are for physicians and physics, but I could not find any for direct patient care. During my time at UCLA, any nursing information we have available has been built by our team for our own use.

I first brought up this gap at the American Brachytherapy Society's (ABS) International Congress back in 2018. I spoke with the ABS President at the time, and received immediate offer of support from the society on building content to help address this gap. This was a daunting task at that point, as it was time outside of work to create information on a field I felt I had not yet become an expert in. I wasn't sure I had the knowledge to teach at the level I wanted to teach things at or provide the quality I felt the material needed. I thought about it for some time to make sure that the time commitment was something I was willing to take on outside of work. I decided that even if the material I could create wasn't textbook-quality, it was a starting point to start a conversation and hopefully help someone, somewhere needing brachytherapy nursing guidance. That was 5 years ago.

Momentum started to build in 2019. I was invited to give a nursing lecture at the national congress that year. However, I was expecting my first child in the same month as the conference, so flying out of state was not feasible. We then made plans to give a few nursing lectures at an event in early 2020, for which I found speakers and created my own content/lectures as well, but then COVID hit and all medical conferences everywhere were postponed for a few years (as I am sure we all experienced!)

Finally, 2022 is the year that we were able to move forward. The American Brachytherapy Society reached out and expressed full support of a nursing symposium, which we concluded would be held in late 2022 and dedicated solely to brachytherapy nursing and patient care. We chose to hold the event virtually to reach as many people as we could. We spent 2022 finding speakers, building content and lectures, and finding brachytherapy nurses and patient care teams worldwide. We created a distribution list for updates through ABS. The event was held on November 17, 2022, and was the first of its kind. Over 125 nurses from five continents (and all hours of the day/night!) joined this live event and the feedback was overwhelmingly positive. Almost immediately, the chat box on the online platform was overflowing with gratitude for finally establishing a brachytherapy nursing community. Even knowing one or two experienced brachytherapy nurses makes a difference, but this brought together so much more than that.

This symposium was the start of something that has been missing for a long time. Our mission for UCLA Health is to deliver leading-edge patient care, research and education. I am thankful that I was able to fulfill this as UCLA employee and nurse by pursuing this goal with ABS and seeing this symposium through.

I understand this symposium was a first of its kind. What are your hopes moving forward?

K: The whole goal of this symposium was to start a community and a conversation. It did exactly that. The content is a secondary beneficial outcome. The content that we are building (lectures, tip sheets, guides) will provide foundational resources for teams to use as it applies to their setting. The symposium also allowed for feedback on what resource material teams need for success in their workplaces. My hope is that requests for content will just keep coming--and they are: we already have more topics for next symposium than we could possibly have time for. The options are endless right now.

Why is exposure to brachytherapy for radiation oncology nurses important? Why are you/the UCLA Department of Radiation Oncology perfectly positioned/trained/experienced to lead this charge?

K: Brachytherapy is a great subset of Radiation Oncology, and I feel very lucky and thankful to work for our team at UCLA. We are fortunate to have one of the leading brachytherapy programs worldwide and we are always learning something new and trying new approaches. Working here is invigorating. Our team members are experts in all types of brachytherapy, including not just our physicians and physicists and dosimetrist but our nurses, surgical technicians, patient navigators, and radiation therapists. We are in a great position to be able to share this knowledge with others in our field through what we have learned from our

professional experience and from our patients.

A library was created post symposium. Can you tell me more about the purpose of this archive of material? How can nurses/other folks in the industry access it?

K: Archiving this material was the biggest goal for the symposium, second only to creation of this nursing community and conversation. It will help provide foundational patient care resources for brachytherapy teams that have not existed before. This is the kind of information I wish I could have had access to as an incoming nurse to this field, or had access to when training other nurses. Our goal is to continue to add to this archive, hopefully with material from many other contributors as well. Information from other authors will provide much more perspective and knowledge than anything I could possibly do on my own.

Content is currently available online through ABS. We also have provided quite a bit of material for non-members to access, to reach more people and non-members that are in need of nursing resources. Full access to the library (with existing and future material) will be accessible to members of the American Brachytherapy Society.

What's next?

K: We are actively planning our next nursing-specific symposium for late 2023. Additionally, we will be holding our first-ever nursing meet up at the American Brachytherapy Society National Congress this year in Vancouver, Canada. And, we are planning nursing-specific tracks for the Prostate Brachytherapy School and GYN Brachytherapy School offered in-person through ABS this fall and next spring. The enthusiasm for brachytherapy nursing-specific content is taking off and I'm excited to see where this all goes, and how many great nurses and speakers join us along the way. □



FIRST COUSIN ONCE REMOVED

by Matthew J. Farrell, MD

When I was a kid, long before I wanted to be a doctor or had even heard of oncology, I dreamed of becoming an actor. I grew up in Sacramento—not exactly the beating heart of the film industry—but my mother's mother lived in Santa Monica and we would stay with her for a month every summer. My father would unashamedly sneak me into movie premieres in famous theaters, and he bought us season passes to Universal Studios Hollywood. Despite having a serious job—as a psychologist in the emergency department—he was a kid at heart. Los Angeles was our promised land, and our shepherd was my father's cousin John, my first cousin once removed, who lived in West Hollywood and was a living, breathing actor.

John wasn't famous, not yet. He was in his late 20s, just starting out, doing mostly background work and some commercials while working as a waiter at the original Cheesecake Factory in Beverly Hills. All the staff loved him there, so much so that they would give us free pieces of cheesecake just for being related to him. John was generous, outgoing, expressive, and talented. Success seemed just around the corner.

One challenge for him was his voice. He had a thick Bronx accent, which would have been perfect if he had been auditioning for Raging Bull but which otherwise narrowed his prospects. He hired a voice coach to help him erase his accent. But that didn't mean he was trying to erase his New York roots. He was proud of his upbringing and family, coming from a long line of police officers, burly men with strong jaws and thick arms and outdoor voices who seemed to be the very genesis of their own stereotype. And as his Bronx accent faded, he

was teaching it to me. He said he would take me to a baseball game at Yankee Stadium one day, and he imitated the beer hawkers who walked up and down the aisles, calling out to the crowd, “Get your beer here,” but pronounced, “Getcha bee-ah hee-ah!”

John was the first person I distinctly remember being in perfect shape. He was a sight to behold—muscular and solid, yet graceful and light on his feet. In addition to being an actor, he was training as a dancer. Coming from generational athletic ineptitude myself, I was enthralled. He taught me how to moonwalk and do bicep curls. I would walk up to my mother and flex my tiny muscles, imagining a day when I would be as strong as John.

One summer, John was much thinner—his face hollowed out, his previously bulky arms as lean as my own. What I only vaguely understood at the time was that he was gay, and he now had AIDS. This was the mid-1990s, and highly active antiretroviral therapy was on the horizon but just out of reach.

His treatments failing him, he became desperate for a cure. He did twice daily coffee enemas, choked down repulsive herbal concoctions, and visited New Age visionary healers. For a long time, he remained optimistic. He was in constant contact with his agent, seeking out auditions even as his strength waned. He wasn't only a waiter at The Cheesecake Factory and he wasn't dying of AIDS; he was an actor who was going to be healthy again soon. Occasionally he would call my dad, buoyant with hope, “The virus is gone. I'm cured.”

Of course, he wasn't. My father never tried to talk John out of pursuing alternative therapies, though he considered doing so many times. The frantic

search for a reprieve from death can take us many places, and it is not to be pitied. But how do you also protect your loved ones from harmful remedies and predatory scam artists? How do you provide the best treatment when there is no good treatment? In all my years, all 10 of them, I had thought that doctors knew everything, and if you went to them, you would get better. But John wasn't getting better. Together with his doctors, we embraced helplessness.

His CD4 count fell to zero. He developed skin lesions from Kaposi sarcoma. He was repeatedly hospitalized with Pneumocystis pneumonia. His organs began failing. Ultimately, he decided to leave the hospital on hospice.

It was only then that he told his parents he was gay and had AIDS. At first, his parents couldn't believe he was gay. They told my father it was a phase, possibly brought on by his living in Los Angeles, a side effect of being an actor and dancer. Later, at his memorial service in New York, they would tell everyone he had died of a rare cancer. My father remembers someone asking John's mother what kind of cancer it was, and she said, "I don't know. It's very rare."

During my winter break from school, my family visited John in his apartment. By that time, he had needed to quit his job at The Cheesecake Factory and stop taking auditions. His friends at the restaurant had thrown him a party and still came by his apartment most days. He lay in bed, drowsy and mildly delirious, too weak to stand. Even in this state, he kept trying to sit up to get us something to eat or drink. "I have cheesecake," he said several times. "Let me get you some cheesecake."

Just a week later, on the day after Christmas, John lost consciousness. His kidneys weren't making urine, and he was uremic. My father urgently updated John's family in New York. His mother, father, and three sisters with their husbands flew in that day and crowded into John's small West Hollywood apartment. For the first time, they met John's partner, Kevin, and five of their friends, gay men who had taken turns caring for John to make sure he was comfortable and never alone. Kevin was tall, elegant, and gentle. He was as introverted as John was extroverted, and he wouldn't have been

caught dead on stage in front of an audience. He ran his own successful small business and had a quiet self-possession. John, though he rarely showed it, was insecure about his slow progress in the acting world, and I think Kevin helped him feel more at ease.

As a medical professional and the closest relative on the West Coast, my father had served as the point person for the hospice physician. He reported the latest news: John likely had just hours to live. John's New York family, previously shielded by distance, was caught off guard. And there was an uproar. The five stages of grief multiplied to twenty-five, occurring in no discernible order—undulations of shouting and crying and jostling that rolled through the group like The Wave through a baseball crowd. At first, they wanted to take him off hospice. They looked ready to carry him out the door to the nearest hospital. They said his decline was too sudden. It just wasn't right. There must be something he hadn't tried. For every desperate hope they volleyed, my father sensitively explained what could and could not be done, and, more importantly, he described John's wishes. They gradually realized that saving him was impossible, and not what John needed anymore.

At last, everyone seemed on the same page. Everyone but John. Day by day, he held on in his unconscious state, not crossing that final threshold, as if something were holding him back. John's family became increasingly exhausted, confused, and frustrated. They couldn't eat or sleep.

On day four of John's marathon survival, we called in the hospice nurse. By this time, my grandfather—John's uncle—had also arrived. The nurse gathered everyone together and explained that it was often helpful to talk to your loved one, conscious or not, to say goodbye. People who are dying may feel obligated to cling to life for their family's sake. They may need our permission, even our encouragement, to let go.

And so, one by one, we all entered John's bedroom, knelt beside him, and said what we needed to say.

And then, it was my grandfather's turn.

By way of introduction, Grandpa Joe, my father's father, was raised in the Bronx by a stern mother and career-soldier father. He was a businessman by profession and by religion. He rose in the ranks of multiple companies, eventually becoming the president of Hires Root Beer, a company that expanded during his tenure but was eventually bought by Orange Crush, which in turn crushed Hires Root Beer and made a lifelong enemy of my grandfather. (In my family, we do not drink Orange Crush.) Grandpa Joe never surrendered without a fight.

Accompanied by my father and me, Grandpa Joe marched up to John's bed and bent down beside him.

"You can fight this!" he said, shaking his fist. "I've had illnesses all my life and I came out on the other side. Did I let prostate cancer beat me? Hell no!"

"Wait, Dad," my father said. "Wrong plan."

"What?" Grandpa Joe said.

"We had a whole conversation about this."

"When?"

"Just now, with the hospice nurse. We need to let go, allow John to pass on."

"That's not what I heard."

"That's becoming clear to me."

My father reviewed the plan, slowly, but no matter how well you explain yourself, sometimes people hear only what they're capable of hearing. Grandpa Joe couldn't surrender. He argued and fumed, eventually stormed out. So my father said goodbye for him.

That night, John died.

I doubt the timing of his death was related to our collective send-off, but it sure felt like it was, and that will do.

The next day, everyone assembled in John's apartment for the last time to decide what to do with

his body. The family wanted to take him back to New York for a traditional burial. But there had been talk that John's Los Angeles friends were planning to have him cremated.

As if about to face off, two groups formed in opposing semicircles of folding chairs—the family seated on one side, and Kevin and his friends on the other. John's father, Hank, seemed ready to fight, his whole family there to back him up. Grandpa Joe kept saying we needed to put John on a plane and get him out of there.

In medical school, we learn that not all family members are created equal; when patients can't make decisions for themselves and there is no living will, you turn to the spouse first, adult children next, then parents, and so on. There is even a mnemonic (one of the clunkiest in existence) to help you remember the ranking: the Spouse ChiPS in For the patient—indicating Spouse, Child, Parent, Sibling, and Friend, in that order. Following this rule, Kevin would have come last. He and John weren't married, and gay marriage wasn't even legal then. My father, a child of the sixties, wasn't a fan of hierarchies. As a psychologist in the emergency department, he had always strived to foster a unanimous meeting of the minds and hearts. To make things a little easier on people like him, he says it is never too early to tell anyone and everyone what you want in life and in death. Then, importantly, write it down, in an advance directive, on a POLST form, and maybe even on a few napkins scattered throughout the house.

Hank fired the opening salvo: he told Kevin that they were going to take John back to New York. Their community expected a traditional burial, needed it.

Kevin listened quietly until Hank finished. With a soft-spoken grace, he looked Hank in the eyes and told him he would never do anything against the family's wishes. If they wanted a burial in New York, he would help carry the casket. But, he said, John had told him many times that he wanted to be cremated and have his ashes scattered on Maui, at a certain overlook they had visited together.

There was a long silence. Hank looked around, at his wife and family, at Grandpa Joe, all of whom seemed

to be waiting for him to deliver their counterpunch. But then he lowered his head. He started crying into his hands.

A minute passed, and then he sat upright, sniffed, and nodded. In a clear, firm voice, he said, “That’s it. That’s what I want for John. I want you to take him to Maui.”

In perhaps the only true miracle I have ever personally witnessed, Kevin and his friends lifted from their chairs in perfect unison, crossed the small living room, and flooded the family with hugs. Everybody cried, and the many-headed beast of our congregation dissolved into a sea of affection.

Kevin did go to Maui to scatter John’s ashes. Afterward, John’s family celebrated his life with a memorial service at their church in New York. My father gave the eulogy and Kevin sat with the family.

All of this was a long time ago now. John would be in his fifties. He would have mastered a Hollywood accent. His big break would have come. He would have taken me to the Oscars.

I moved away from California to go to graduate school and medical school, but eventually, I found my way back to Los Angeles. I still go to iconic theaters. I finally bought season passes to Universal Studios Hollywood. And like everyone else in this town, I’m trying to write a screenplay.

But I’m not an actor. I’m not remotely famous. I’m a radiation oncology resident.

I’ve learned a few things since the 1990s, and so has the rest of the world. It still devastates me that John just missed the major advances in care. I think about him regularly during my training. In oncology, life-prolonging breakthroughs are frequent, which inevitably means that some people will be among the last to miss out. Some people, and their families, will look to me for hope when there is none. In their entreaties, I see shades of my own loved ones—my father’s diplomacy, Grandpa Joe’s doggedness, Kevin’s advocacy, Hank’s compromise. Most of all, I see glimmers—brief resurrections—of John, whose disease stripped away so much, but left in clear relief

his kindness and humanity. □

Contributed by:

Matthew J. Parrell, MD, MFA

Dr. Farrell grew up in Sacramento. He studied film and creative writing at Stanford University and earned a Master of Fine Arts in Creative Writing at the University of Oregon, writing a collection of short stories for his thesis and teaching undergraduate courses for two years. Realizing that much of his creative work explored illness and, more specifically, oncology, he began pursuing a career in medicine. Dr. Farrell attended medical school at Oregon Health & Science University, where he conducted small cell lung cancer research and led classes in narrative medicine. He stayed in Portland for his preliminary year in internal medicine at Providence St. Vincent Medical Center. After, he moved to LA with his wife, a fellow physician, to join the UCLA Radiation Oncology Residency Program.

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DR. MATTHEW FARRELL



Photography Credit: Kevin Shanmugam

Our Editor recently caught up with PGY-5 Dr. Matthew Farrell to discuss his background, experience as a UCLA Radiation Oncology Resident, and forthcoming work.

Talk to me about your childhood and upbringing. Do any other family members work in medicine? Do you have siblings?

M: I grew up in Sacramento. My parents are now retired but were both psychiatric social workers in the Emergency Department at UC Davis. It was a tough job—long shifts performing urgent psychiatric evaluations and delivering difficult news to patients and their families. But my parents still returned home refreshed and in good humor. When my sister and I were kids, my father used to tell us that the E.R., his place of work, stood for Emergency Restroom rather than Emergency Room, and it was his vital role to point people in the right direction when they really had to pee. “That way,” he would call out heroically.

My older sister is an emergency and critical care veterinarian at UC Davis. Her first patient as an official vet was a turtle that had its head stuck in its shell. She has done chest compressions on a tiger while surrounded by staff aiming tranquilizer guns at the animal in case it woke up angry.

My wife, Jessica, is a brilliant internal-medicine physician who works in primary care. She and my family helped inspire me to go into medicine.

You started in the arts, why did you pivot to Radiation Oncology?

M: Toward the end of my creative writing MFA program at the University of Oregon, I was trying to decide what to do with the rest of my life. I had narrowed it down to three possible career paths: creative writing professor, screenwriter, and doctor. I had no idea whether I had the luck or ability to succeed in any of these careers, but all of them seemed exciting and rewarding. Then, as I was re-reading and revising the short stories I had written over the last two years, I had an epiphany. Most of my stories centered on characters navigating loss and illness, specifically cancer. I realized that the stories of people with cancer were compelling and meaningful to me. So I decided to explore medicine, starting by shadowing physicians and joining a pre-medical post-baccalaureate program. In addition, my wife was applying to medical schools at the time, and I can think of no worthier footsteps to follow in than hers.

I understand you’ve spearheaded a narrative workshop for medical students. Do the arts play a role in medicine? Does creative writing? How does medicine/Radiation Oncology benefit from institutions/departments finding/ exploring this intersection?

M: Dr. Puja Venkat and I will be leading a narrative medicine elective course for 4th-year medical students at UCLA. It will involve reading, writing, and sharing stories related to medicine. The structure is modeled after creative writing workshops, in which writers meet as a group to share and critique their own work. Over the course of the 3-week elective, students will write and revise a work of narrative medicine and submit it to an academic journal with the goal of publication. Our hope is that the elective will provide students with an opportunity to gain confidence in their voices, process their experiences in medicine, grapple with diverse

perspectives, and share their writing with a wider audience.

I think creative writing and the arts play a big role in medicine. At least they have for me. Burnout is high among medical students, residents, and attending physicians. There is evidence, including specifically in the field of radiation oncology, that the ability to identify and describe emotions is linked to lower levels of burnout. If the arts allow us to explore and process our emotions related to health and medicine, perhaps job satisfaction can be bolstered and patient connections can be strengthened.

When I first started in the creative writing MFA program, I remember being surprised when one of the professors told me, “You didn’t come here to learn how to write. You came here to learn how to read.” After briefly wondering whether the professor doubted that I did, in fact, know how to read, I realized what he meant: becoming a better writer, at its heart, involved learning how to pay close attention to the world around us. I think this lesson has served me well in medicine, reminding me of the importance of paying attention to the details in patients’ lives.

What projects/research/publications are you currently working on?

M: I’m working on several projects I’m excited about, centering on racial disparities in colorectal cancer with Dr. Raldow, brachytherapy for recurrent endometrial cancer with Dr. Chang, glioma pseudoprogession with Dr. Lai, and narrative medicine with Dr. Venkat. I’m trying to write more narrative medicine pieces, including one on unsolicited grammar lessons for physicians, which, I fear, no one will want to read. I’m also tinkering with a few fiction pieces unrelated to medicine. For my thesis in the MFA program, I wrote a collection of short

stories, some of which I am quite proud of while others are in terrible states of disrepair. I am trying to revise them, so we’ll see how they turn out!

What wisdom can you impart to medical students interested in Radiation Oncology?

M: I won’t go so far as to call it wisdom, but I want to highlight the diversity of opportunities available in radiation oncology, from basic science and clinical research to technology and industry to storytelling and the arts. Some medical students may not have heard much about the field and may think of it as a highly technical specialty best suited for former physics majors. While the technology of radiation therapy is incredible, there are so many other aspects of the field in which one can become absorbed. With my background in the humanities, what drew me to the specialty was the stories of people with cancer. Radiation oncology provides the time and space to connect with patients and help them through frightening times.

If any medical students are reading this, I encourage you to maintain your passions, continue your hobbies, and explore activities that bring excitement and meaning to your life. Whatever your interests are, I think there is room for you in radiation oncology.

What is your best piece of advice for incoming residents?

M: Don’t be afraid to ask for help when you need it. Your co-residents are here for you. □

UCLA HEALTH RADIATION ONCOLOGY CARE

SANTA CLARITA



Photography Credit: Joshua Sudock

UCLA Health has radiation oncology services in Santa Clarita for patients with cancer. The community cancer clinic offers patients the same services and level of excellence they would receive at UCLA's main campus, but with greater proximity and convenience. Michael Xiang, MD, PhD, a UCLA Health radiation oncologist and Director of the Santa Clarita treatment center, discusses the center's capabilities and benefits for patients.

What radiation oncology therapies does the Santa Clarita community cancer clinic offer?

“We have the full range of radiation oncology techniques and technologies,” Dr. Xiang says. “These includes stereotactic body radiation therapy (SBRT) and stereotactic radiosurgery (SRS), which both use ultra-precise, targeted radiation beams to destroy the tumor while minimizing exposure of surrounding tissues.” He notes that the center also has the Ethos system, which adapts radiation in real-time in response to patient position and anatomy and may offer unique advantages for selected cases based on tumor location and proximity to nearby tissues.

How does receiving cancer treatment locally differ from receiving care at a UCLA Health hospital?

“It really doesn’t,” Dr. Xiang says. “We have the same caliber of physicians and technologies here. Our patients have access to almost all the clinical trials happening at the main campus. In addition, our physicians communicate regularly with the hospital specialists, and we share the same tumor boards (groups of specialists who confer on patient treatment plans).” Receiving treatment locally also benefits patient quality of life. “Radiation and other cancer therapies can cause fatigue and can continue over the course of weeks,” Dr. Xiang says. “To not have to worry about the distance, traffic and parking involved with traveling to the hospital is a great benefit for patients in this community.”

What other oncology services are available at the UCLA Santa Clarita community cancer clinic?

The clinic provides treatment for all cancer types and offers a full suite of services, including medical oncology and cancer surgery. An infusion center and a complete range of diagnostic radiology services — including PET, CT, MRI and mammography screening — are located on-site. “Through our colleagues in interventional radiology (IR), we’re even able to offer some IR

procedures, which use various energy sources to ablate cancerous tumors,” Dr. Xiang says. A genetic counselor also works in the clinic, as does a social worker from the Simms/Mann-UCLA Center for Integrative Oncology to provide education, counseling, guidance and a wide range of interactive programs to ease the burden on patients and their families.

What else should people know about the UCLA Santa Clarita community cancer clinic?

“UCLA is an oncology powerhouse. We are ranked No. 1 in California and No. 5 in the nation,” Dr. Xiang says. “Patients treated locally benefit from the full resources of UCLA while enjoying the convenience of nearby care. Between our clinic on Tourney Road and other UCLA Health facilities in Santa Clarita, UCLA is able to provide comprehensive primary and specialty care, including internal medicine, pediatrics, dermatology, urology, ENT, gastroenterology, pulmonology and rheumatology. Our physicians collaborate closely with one another and with colleagues throughout the system. This makes care in Santa Clarita very integrated and accessible.” □

For more information about UCLA Health radiation oncology in Santa Clarita, go to:

uclahealth.org/locations/santa-clarita-radiation-oncology



Journey to Nepal

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with UCLA Radiation Oncology's Melissa Alspaugh

The dream of going to Nepal was hatched roughly five years ago. I was a competitive rower in a former life and I longed for a physical challenge again. Maybe part of it was ego to say I'd been there, but Mount Everest had always intrigued me. From the numerous documentaries about Sir Edmund Hillary and Tenzing Norgay, to the mystery surrounding George Mallory and Andrew Irvine, I was absolutely in awe of the spectacular scenery and the adventure The Himalayas held. I just wanted to stand amongst these giant mountains, so trekking to the elevation of 17,598 feet where Mount Everest Base Camp is located became the goal. However, one of the hardest points in my life was about to come. My father became very ill with Idiopathic Lung Fibrosis and any thought of travel was put on hold as we pursued a lung transplant. Fortunately, he was one of the lucky ones and his surgery was completed in October of 2019. Dad was stable and I thought my time had come to start planning again, but the COVID pandemic had other ideas. Eventually it became apparent that I just had to start planning and hope that the next year would be the year.

I began to research the logistics of putting a trip like this together and the training required. The relatively easy part was sorting out a guide, obtaining a visa, and booking flights. The more difficult topics were what to pack and the always challenging issue of altitude sickness. This made me nervous. I studied altitude sickness as if it were a religion, yet there remained differing opinions on how to prepare and who it affected. I was already going to be flying into an elevation where most people feel short of breath and have some symptoms. If I was going to make it to my goal, I had to be cautious and listen to my body. There are numerous accounts in which people underestimated altitude sickness and had to be rescued by helicopter, often with a hospital stay, and sometimes even death. I had the choice of taking Acetazolamide (Diamox) prophylactically, but I declined. My concern was that this wasn't a drug that prevented altitude sickness, but essentially masked the symptoms. As far as my training, I went to Mount Baldy in the San Gabriel Mountains and hiked the Baldy Bowl trail. Although a lesser elevation, it gave me a gruelling 4,000 foot ascent that would prepare me for the trails in Nepal. Coincidentally I found several people up on Mount Baldy who had been to Nepal and were more than

encouraging, so I began to gain confidence that I was in fact ready.

I arrived in Kathmandu on November 1, 2022, and continued on a small plane up to the village of Lukla (9383ft). The airport here is considered one of the most dangerous airports in the world, as it contends with low air pressure, wind, often poor visibility, and a short runway. The runway has a 12% gradient to allow planes to slow down upon arrival and also to pick up enough speed when sailing off the cliff. From Lukla I embarked on a 17 day trek that would see me hike 92 miles through The Himalayas. I met my Sherpa guide Ngawang who was patient and kind, and who often grossly underestimated distances and time. An annoyance at first, but a solid strategy in the end. Highlights of the trip included Mt Everest Base Camp (17,598 ft), Cho La Pass (17,782 ft) and Gokyo Lake (15,715 ft). Base camp was of course a dream, but there were numerous days of scenery that far surpassed what I could have imagined. I was not prepared for the beauty of the vibrant turquoise glacial lakes, or the cracking sounds glaciers make as they move on their leisurely journey. I can still hear the wind ripping through the valleys and the bells of the approaching yak carrying their oppressive loads.

The days were long, and the terrain was uneven and often very steep, so each day was celebrated as an accomplishment. I drank four liters of water a day and made sure I ate and slept well. We stopped at tea houses along the route, which were family-owned accommodation where basic food and shelter were provided. One could usually meet travellers from all over the world, each with a different tale and experience. Travellers and sherpas alike would all huddle around soaking up the last bit of heat from the yak dung fuelled stove, sipping numerous cups of tea. My only protein came from eggs and nak (female yak) cheese, with rice and potatoes being the staples. The temperatures were well below freezing and dry, both outside and inside (my water bottle froze inside my room). Thankfully I was prepared and had a warm sleeping bag, however as a rule I was so exhausted I could have likely slept in most conditions.

I was able to avoid altitude sickness completely. My success undoubtedly came from taking my time and not adhering to anybody else's pace. I had done my research and was mentally prepared for the trip. I also actively took measures to calm myself the first couple of hours after reaching the tea house for the night. This usually involved taking deeper breaths and lying flat, a sort of meditation I suppose. My heart rate was slightly elevated for the duration of the trip and my oxygen hovered around 90%, occasionally dipping into the 80's if I was in a deep sleep. Upon my return home I asked my doctor to order labs and my red blood cells were high. This was so amazing to see and shows how clever the body is. I had adapted to transport oxygen more efficiently.

All in all, it was a successful trip and one that I am proud of and will remember always. I will continue to challenge myself while I am physically capable, as I've learned that life is unpredictable and often too short. □

Contributed by:

Melissa Alspaugh
Senior Radiation Therapist, M.S., R.T. (T) (ARRT)
Dept. of Radiation Oncology, UCLA





HIGHLIGHTS OF THE 9TH MR IN RT SYMPOSIUM

UCLA is proud to have hosted the 9th MR in RT Symposium at the UCLA Luskin Conference Center from February 6-8, 2023. As the premier international meeting dedicated to the use of MRI in radiation therapy, it attracted renowned researchers, medical physicists, and clinicians from around the world. With 220 attendees from 70 institutions across 11 countries and 83 scientific abstracts submitted from 48 institutions across 9 countries, the symposium was a resounding success.

The symposium featured 15 multidisciplinary scientific sessions on a variety of topics. These included invited lectures and proffered abstract presentations. The clinical development session provided updates on the most recently completed clinical trials, including Mirage and SMART. The debate sessions on the future of MR in RT applications and the role of functional MRI sparked interesting discussions among the panelists and attendees, inspiring ideas on how to move the field forward. The Young Investigator Award session showcased highly competitive research presentations from eight Young Investigator finalists. Additionally, the conference included a poster review session with 30 poster presentations in the evening of the second day.

The symposium also provided a great opportunity for clinicians, physicists, and researchers to connect with industry. The event attracted strong sponsorship and participation from vendors in the MR in RT field. There were 19 exhibitors who showcased their products and services, and 8 of them provided updates on their recent product development or shared user experience during the Industry Development Update Session.

In conjunction with the symposium, a half-day clinical training course was provided on the last day. The course focused on practical clinical training on MRI-guided adaptive radiotherapy (MRgRT). Led by clinical experts from UCLA and Miami Cancer Institute, the course reviewed the available clinical evidence and promising indications of adaptive radiotherapy and discussed the clinical implementation of the MRgRT process and staff requirements, training, and safety required to build the clinical adaptive program. The course had 70 attendees consisting of physicians, medical physicists, clinical trainees and industrial developers.

The MR in RT Symposium and MRgRT Clinical Training Course were well-received and highly praised by the attendees. They felt inspired and enriched by the knowledge and discussions shared during the event. The attendees also enjoyed the facilities and amenities provided, as well as great opportunities to connect with peers in the field. UCLA is proud of its long history of technological innovation in MR-guided radiotherapy. We are delighted to have successfully hosted this premier international conference, which connected leaders in the development and implementation of the use of MRI for radiotherapy applications and inspired ideas and momentum for future development. □

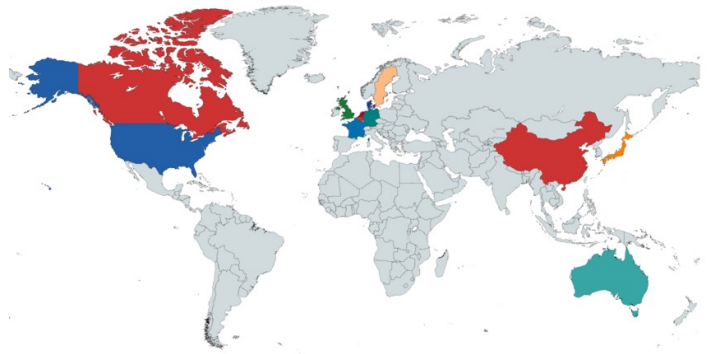
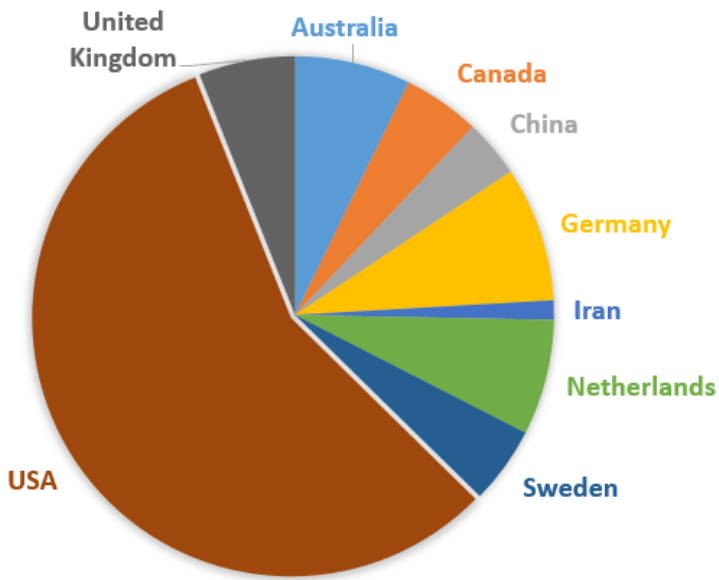


Figure: 83 abstracts submitted from 9 countries and 220 attendees from 11 countries



AWARDS, PUBLICATIONS, AND GRANTS

Recent wins from the UCLA Department of Radiation Oncology

John Nikitas, MD (PGY-3) has two recent publications:

*The role of adaptive planning in margin-reduced, MRI-guided stereotactic body radiotherapy to the prostate bed following radical prostatectomy: Post-hoc analysis of a phase II clinical trial, published in *Radiotherapy and Oncology*.*

*Early Safety and Efficacy Profile of Homogeneously Dosed Salvage Stereotactic Body Radiotherapy (SBRT) for Intraprostatic Recurrences After Low Dose Rate (LDR) Brachytherapy, published in *Clinical Genitourinary Cancer*.*

Clayton Smith, MD (PGY-4) has three recent first author publications:

*Patterns of Failure in Men with Radiorecurrent Prostate Cancer: A Post-Hoc Analysis of Three Prospective Ga-68-PSMA PET/CT Imaging Trials, published in *The Red Journal/International Journal of Radiation Oncology, Biology, Physics*.*

*Transcriptomic Heterogeneity in High-risk Prostate Cancer and Implications for Extraprostatic Disease at Presentation on Prostate-specific Membrane Antigen Positron Emission Tomography, published in *European Urology Oncology*.*

*Brief Report: Severe Pneumonitis After Combined Thoracic Radiotherapy and Osimertinib, published in *JTO Clinical and Research Reports*.*

Cecil Benitez, MD, PhD, MS (PGY-3) was selected for the ACRO GREC Policy Fellowship.

Michael Xiang, MD, PhD, has two new publications:

*Identifying predictors of on-table adaptation for pancreas stereotactic body radiotherapy (SBRT), published in *Clinical and Translational Radiation Oncology*. [Co-senior author with Dr. Ann Raldow]*

Race-dependent association of clinical trial

*participation with improved outcomes for high-risk prostate cancer patients treated in the modern era, published in *Prostate Cancer Prostatic Dis*. [Co-senior author with Dr. Amar Kishan]*

Trudy Wu, MD (PGY-4) had three recent publications:

*Identifying predictors of on-table adaptation for pancreas stereotactic body radiotherapy (SBRT), published in *Clinical and Translational Radiation Oncology*.*

*Established and new horizons in radiotherapy for breast cancer, published in *Therapeutic Advances in Medical Oncology*.*

*Safety and Efficacy Results from iSABR, a Phase I Study of Stereotactic Ablative Radiotherapy (SABR) in Combination with Durvalumab for Early-Stage Medically Inoperable Non-Small Cell Lung Cancer (NSCLC), published in *The Red Journal/International Journal of Radiation Oncology, Biology, Physics*.*

Clayton Smith, MD (PGY-4) was appointed Radiation Oncology Representative on the ACR Resident and Fellow Section Executive Committee (July 2023- June 2024). This Committee represents the members-in-training on the ACR Council helping to coordinate responses to issues and events that affect trainees.

Beth Neilsen, MD, PhD (PGY-3) had her application to participate in the B. Leonard Holman Research Pathway accepted by the ABR in November. In January, she began her dedicated research period. For this research, she joined the Paul Boutros laboratory. Subsequently, she applied for and was awarded a training position within the UCLA Biomedical Data Science Training Program for Precision Health Equity (T15LM0139976) last month.

Clayton Smith, MD (PGY-4) recently completed his first trail marathon on Catalina Island.

Amar Kishan, MD recently had his high-impact paper, Magnetic Resonance Imaging–Guided vs Computed Tomography–Guided Stereotactic Body Radiotherapy for Prostate Cancer: The MIRAGE Randomized Clinical Trial, published in JAMA Oncology. The publication is a clinical summary of the Phase-III randomized clinical trial comparing MR guided RT verse CT guided RT. Two short descriptions and highlight of this study can be found:

<https://ascopost.com/news/january-2023/mri-guided-vs-ct-guided-sbrt-for-localized-prostate-cancer/>

<https://www.genescare.com/uk/specialists/about-us/innovations-blog/the-mirage-randomized-clinical-trial>

And an online YouTube video by Dr. Kishan

<https://www.youtube.com/watch?v=MbnE291POwk>

Minsong Cao, PhD, was recently one of the authors (physician and physicist experts from USA, UK, Australia, Netherlands and Canada) of the ICRU REPORT 97: MRI-Guided Radiation Therapy Using MRI-Linear Accelerators in the Journal of the ICRU. The International Commission on Radiation Units and Measurements (ICRU), since its inception in 1925, has had as its principal objective the development of internationally acceptable recommendations and guidelines in the areas of radiation therapy, protection and scientific research and clinical applications of radiation.

Minsong Cao, PhD, has also been an author on the following recent publications:

Mask R-CNN assisted 2.5D object detection pipeline of 68Ga-PSMA-11 PET/CT-positive metastatic pelvic lymph node after radical prostatectomy from solely CT imaging, published in *Sci Rep*.

PSMA PET/CT-based Atlas for Prostatic Bed Recurrence after Radical Prostatectomy: Clinical Implications for Salvage Radiation Therapy Contouring Guidelines, published in the *Journal Nuclear Medicine*.

Qihui Lyu, PhD presented at the AAPM Global Research and Scientific Innovation Committee’s (GRSIC) webinar series, the AAPM South California Chapter midwinter workshop, and the Stanford medical physics seminar series.

Minsong Cao, PhD, was invited to lecture at the following two meetings:

Radiosurgery Society (RSS) Annual Meeting, March 21, 2023: Target Localization for Stereotactic Ablative Radiotherapy (SABR) of Cardiac Ventricular Tachycardia (VT) Using Multimodality Imaging.



AAPM Spring Clinical Meeting, March 24, 2023: Image Guidance and Margin Consideration for Hypofractionated Treatment of Prostate Cancer.

Qihui Lyu, PhD, Lauren Smith, PhD, and Rachel Wolff, CMD achieved top honors as the winners of the 2023 ProKnow MRIdian Spine SBRT Plan Challenge. □

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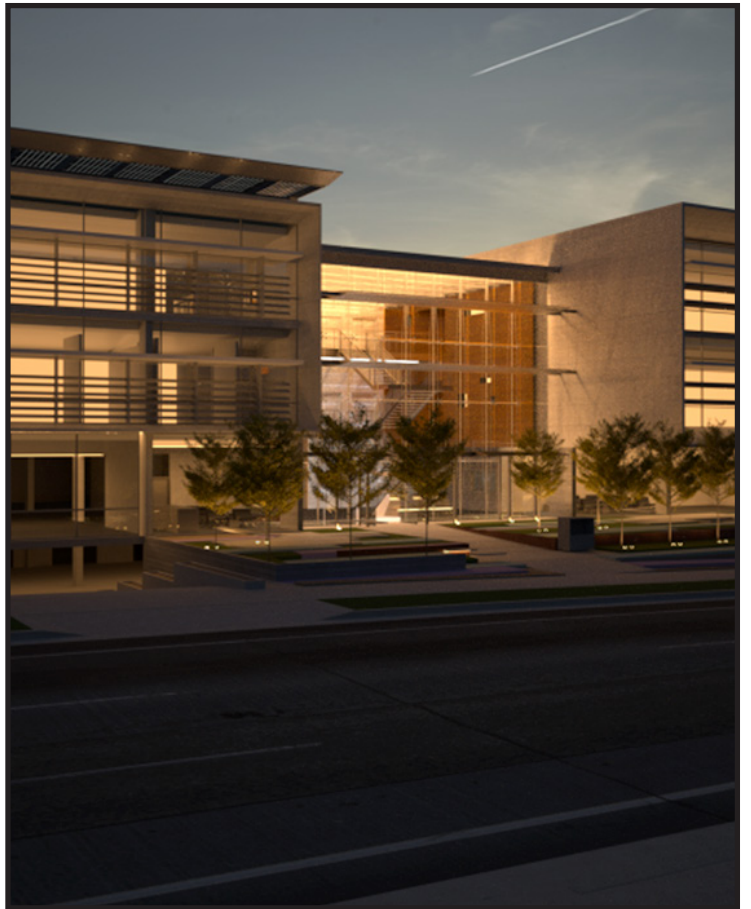
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The UCLA Department of Radiation Oncology pushes back the boundaries that limit ordinary clinical cancer treatment through the application of thoughtful discovery-based, novel treatment strategies.