

ASTRO *news*

FALL 2018

YOUR GUIDE TO THE
2018 ASTRO ANNUAL MEETING

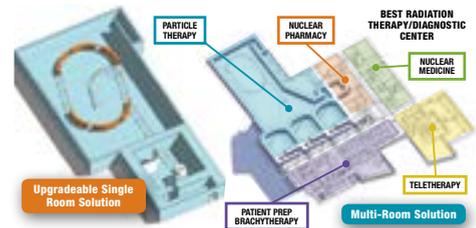


Welcome to
SAN ANTONIO

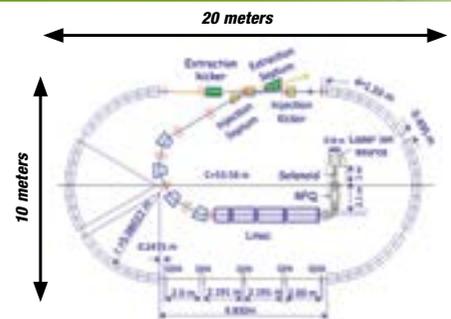
ION RAPID CYCLING MEDICAL SYNCHROTRON (IRCMS)

The iRCMS is a state-of-the-art synchrotron designed for future cancer therapy facilities that foresee the need to deliver clinical or pre-clinical beams heavier than typical protons. We have optimized an accelerator design under the CRADA funded by BMI specifically for the generation of carbon ions with a maximum energy of 400MeV/u in addition to protons of typical clinical energies. The accelerator is optimized to cycle with a frequency of 15 Hz to the top energy required to deliver treatment at a maximum depth of 27 cm. The iRCMS uniquely combines advanced spot scanning with rapid energy modulation thereby eliminating the contamination associated with patient specific hardware. Extremely small beam emittances are also associated with rapid cycling, which facilitates the generation of particle beams with unprecedented precision. The iRCMS was conceived to include highly efficient single turn injection and extraction and shall utilize a linac to inject carbon ions and protons at a kinetic energy of 8 MeV/u.

Single & Multi-Room Solutions



Racetrack Smaller Area Footprint

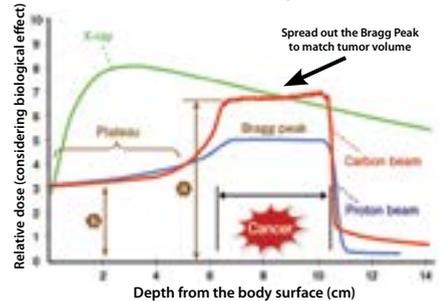


Accelerator Comparison Table				Maximum Credible Incidence (MCI)	
	Energy Maximum (MeV)	Avg. Current Delivered (nA)	Charge Accelerated (nC/s)	Risk Ratio MCI/ Delivered	Shielding (50 mSv/yr Concrete @10.00 m (m)
Protons (206 MeV)					
Isochronous Cyclotron (NC)	230	2	1250	625	2.89
Isochronous Cyclotron (SC)	250	2	313	156	2.44
Synchro Cyclotron (SC)	250	2	1	0.50	0.54
Slow Cycling Synchrotron	250	2	20	10	1.53
Best ion Rapid Cycling Medical Synchrotron (iRCMS)	1200	2	0.133	0.067	0.13

Best iRCMS is under development and not available for sale currently.

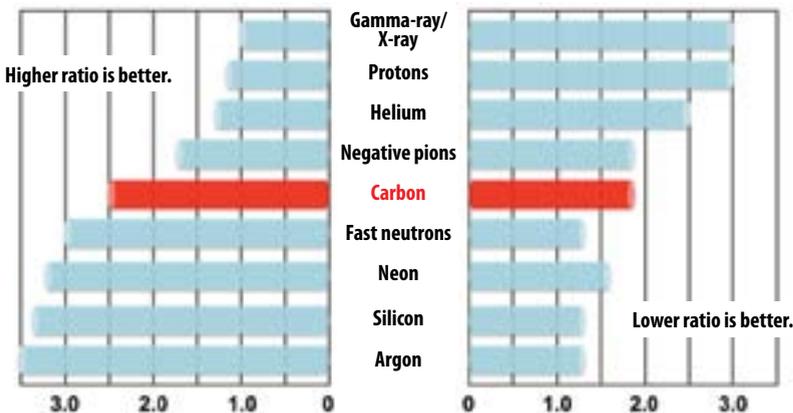
Clinical Comparison: X-rays, Protons & Carbon Ions

Peak-to-Plateau ratio of the RBE (a/b) is larger in carbon ion beams than for proton beams.



Protons - Base/Peak = 60% Carbon ions - Base/Peak = 45%

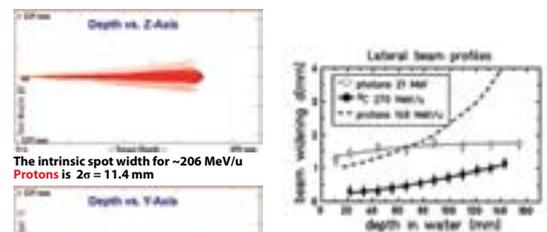
RBE: Relative Biological Effectiveness OER: Oxygen Enhancement Ratio



RBE represents the biological effectiveness of radiation in the living body. The larger the RBE, the greater the therapeutic effect on the cancer lesion.

OER represents the degree of sensitivity of hypoxic cancer cells to radiation. The smaller the OER, the more effective the therapy for intractable cancer cells with low oxygen concentration.

Carbon Ions more precise than Protons



The intrinsic spot width for ~206 MeV/u Protons is $2\sigma = 11.4$ mm

The intrinsic spot width for ~400 MeV/u Carbon ions is $2\sigma = 2.93$ mm

"Lines to guide the eye"
U. Weber GSI (1996)

Adapted from M. Subramanian, S.G. Peggs, J.P. Lidestri, J.K. Kandaswamy, K.Suthanthiran • PTCOG 55, Prague, CZ, May 2016.



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ABOUT THE COVER



The San Antonio River runs through the city's downtown, creating the San Antonio River Walk area. The River Walk stretches for more than 15 miles, and river taxis, like the one shown here, help visitors get from place to place.



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ASTRO news

AMERICAN SOCIETY FOR RADIATION ONCOLOGY

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FUTURE VISION

FUTUROLOGIST IAN PEARSON PREDICTS THAT, by 2050, human beings will keep adding external computing capability to their brains to the extent that dying will no longer mean an end to a long and healthy life. Yes, the body and brain may come to the end of their natural life, but “99 percent of your mind is still fine, running happily on IT, in the cloud.” You can then “connect to an android to use as your body, attend your funeral and then carry on as before” but “with a younger, highly upgraded body.”¹ All of this will cost a lot of money, it goes without saying, and, even then, the afterlife may not be quite what you bargained for, Pearson warns.

Futurologists are provocative; they force us to think deeply about the future. Mark Stevenson is one of those at the leading edge of his discipline—his new book, “We Do Things Differently,” makes for a fascinating read. I’m thrilled to see that he will be one of the keynote speakers at the 2018 Annual Meeting in San Antonio, which this issue of *ASTROnews* highlights. I’m looking

forward to hearing about Stevenson’s vision of medicine and how it relates to radiation oncology.

This year, we will converge on San Antonio to hear about exciting new research and discuss and debate the future of our discipline at the Annual Meeting, October 21–24. Since our last visit three years ago, the Henry B. González Convention Center has undergone a \$325 million renovation and redesign.

As chosen by ASTRO President Paul Harari, MD, FASTRO, this year’s theme is “Translating Discovery to Cure.” Paul, an uber physician-scientist who has spent a lifetime contributing to and facilitating the interaction of investigators involved in basic, translational and clinical cancer research activities, has put together a superstar roster to moderate and speak on this theme at the 2018 Presidential Symposium. (See the President’s Update on page 6 for more details.)

ASTRO is aware that many radiation oncologists, especially those in small community practices, cannot take the time to attend the Annual Meeting and hope to address this with the new two-day Practical Radiation Oncology (PRO) Program over the October 20–21 weekend. It is available both as an add-on to the full meeting registration or as a standalone event. The intent is to provide a quick but comprehensive knowledge update using interactive disease-site review sessions, case discussions and practice-changing data from this ASTRO Annual Meeting. PRO registrants can also

access Sunday Annual Meeting programming, such as the Presidential Symposium and the Clinical Trials session, in addition to visiting the Innovation and Solution Showcase (Exhibit Hall).

This year, 35 distinguished members will receive the ASTRO Fellow designation (see page 39). The Gold Medal goes to three outstanding professionals who have made pioneering contributions to the field of radiation oncology: Patricia Eifel, MD, FASTRO; David Jaffray, PhD; and Ralph Weichselbaum, MD (page 37). Sadly, we have also lost four Gold Medalists this year: Luther Brady, MD, FASTRO, Larry Kun, MD, FASTRO, (see tributes on pages 8–9) Gerald Hanks, MD, FASTRO, and Carl Mansfield, MD, ScD, FASTRO.

Finally, a big thank you to the Scientific Committee Chair Lisa Kachnic, MD, FASTRO, and the 2018 Annual Meeting Steering Committee volunteers who have put in more than a year of planning, coordinating and brainstorming to bring you the world’s premier radiation oncology conference. While the Annual Meeting is an amazing professional opportunity, you should also take the chance to sample some of Chul Ha’s top recommendations (page 20). But if you are Brian Kavanagh, you may want to kick back, re-read T.S. Eliot and look back on a truly inspirational year as Chair of ASTRO. 

References

1. <https://timeguide.wordpress.com/>



CHAIR'S *update*

BY BRIAN D. KAVANAGH, MD, MPH, FASTRO

CHAIR, BOARD OF DIRECTORS

[@BK_RADIATION](#)

FIVE HUNDRED, EIGHTY-FOUR MILLION MILES AT SIXTY-SEVEN THOUSAND MILES PER HOUR

"Do I dare
Disturb the universe?
In a minute there is time
For decisions and revisions
which a minute will reverse."

— T.S. ELIOT
"THE LOVE SONG OF J. ALFRED PRUFROCK"

WE HAVE ALL TRAVELED A LONG WAY

in the past year, and we have been going pretty fast. Of course, from those of you who by now might find my over-reliance on astronomical references tiresome,¹ the obvious question is this: *Sure, we earthlings have completed another heliocentric orbit, but does that mean we are just going in circles, or are we making any progress?*

I firmly believe that ASTRO, our entire field and the world of oncology are moving forward in good directions, and I am happy to explain why.

First, significant cancer treatment breakthroughs are happening right before our eyes. I am aware that the prices of many new interventions are not sustainable, and there are imperfections in the way that new systemic therapies are evaluated and approved for marketing.² Furthermore, not all cohorts of patients are yet benefitting from novel therapies. However, I am now routinely seeing five- and ten-year survivors of stage IV EGFR-mutant or ALK-rearranged non-small cell lung cancer in my clinic, spot-treating a couple

of sites of oligoprogressive disease stereotactically, and sending them on their way to continue with the latest generation tyrosine kinase inhibitor that keep them going a while longer, until I maybe see them again in another year or so. *This was not a reality-based clinical scenario when I was a resident.* And I haven't even mentioned immunotherapy for melanoma and numerous other malignancies and the potential for radiation therapy to play an important synergistic role.

Second, we have entered an era of enlightenment in our understanding of the full spectrum of patient-centric, high-quality care in radiation oncology. We have always known about mucositis and pneumonitis and all of the other radiation-itises associated with therapy, and we try our best to mitigate them. But in recent years, we have come to appreciate that the mental health of our patients is important to consider: depression is an especially common comorbidity that needs to be recognized and addressed.^{3,4} Financial toxicity can be a side effect of cancer treatment and we need to factor that into our complete care of the patient.⁵ Sexual health is yet another important aspect of post-treatment care.⁶

Finally, when I first bumped into *Prufrock* in school a long time ago, I found it impenetrable, as many do. Nevertheless, there were certain lines that stuck in my head and somehow resonated in ways that took me years

to appreciate. Eventually, I understood that the poem is about middle-aged angst and self-doubt and insecurity. The reason I cite it here is to point out explicitly that now is *not* the time for the field of radiation oncology to be like the narrator of that poem. We can't afford to hesitate and prevaricate. Now is the time to disturb the universe.

Fortunately, there is great energy and passion bursting out from the rising generation of young leaders in the field. It is truly rejuvenating to see the questioning of old dogma, the advocacy for diversity and inclusiveness, the fire in the belly. I am certain that the deep pool of talent among current residents and recent graduates will embrace the coming changes in the field and continue to revolutionize how we care for patients.

Serving as the ASTRO Chair for this past year has been a privilege for which I am sincerely grateful. 

References

1. Cf. "The Power of the Parallax", *ASTRONews*, Spring 2018.
2. Hey, I invited Vinay Prasad to be a keynote speaker, after all! That guy, BTW, is trying to do good things. He might not be liked by all, but we need voices like his to point out opportunities where we can all do better.
3. Domogauer JD, Colangelo N, Aggarwal R. Study of Total and Undiagnosed Depression in a Cancer Patient Population at an Urban Cancer Center. *Int J Radiat Oncol Biol Phys*. 2017 Oct 1;99(2):S10.
4. Anderson J, McDonagh PR, Burton W, et al. The Long-Lasting Relationship of Distress on Radiation Oncology Specific Clinical Outcomes. *Int J Radiat Oncol Biol Phys*. 2017 Oct 1;99(2):S10-1.
5. Please read this essay: Chino F. My Unfortunate Introduction Into the Financial Toxicity of Cancer Care in America—March Forth. *JAMA Oncol*. 4(5):628-9, 2018.
6. Wo JY, Drapek LC, Niemierko A, et al. Clinical needs assessment for sexual health among cancer patients receiving pelvic radiation: Implications for development of a radiation oncology sexual health clinic. *Practical radiation oncology*. 8(3):206-12, 2018.



PRESIDENT'S *update*

BY PAUL M. HARARI, MD, FASTRO,
PRESIDENT, BOARD OF DIRECTORS

TRANSLATING DISCOVERY TO CURE

ASTRO'S 60TH ANNUAL ASTRO MEETING will take place October 21-24, 2018, in San Antonio, the seventh largest city in the United States, with a population of nearly 1.5 million. The River Walk and Alamo Mission offer unique and highly popular attractions for visitors and locals alike. The rich cultural history of the region sits in beautiful juxtaposition to San Antonio being one of the fastest-growing major cities in the nation. Deep traditions combined with profound recent growth parallel the changes occurring in the discipline of radiation oncology.

More than 2,800 scientific abstracts were submitted for the 2018 Annual Meeting, and slightly more than 2,300 were accepted. The meeting theme of "Translating Discovery to Cure" reflects the fact that many thousands of cancer patients are cured each year with radiation therapy. Radiation certainly provides highly effective palliation and hope for cancer patients around the world, and this 60th anniversary affords an opportunity to showcase the ever-increasing curative potential of radiation oncology.

Discovery science takes center stage in the Annual Meeting Presidential Symposium on Sunday, October 21. Four major themes are explored in this year's symposium that have the potential to dramatically impact

cancer care and radiation oncology in the future. These include Immunotherapy, Viral-induced Cancers, Artificial Intelligence and Liquid Biopsies. A powerful lineup of exceptionally talented speakers will illuminate the science and potential clinical applications in each of these exciting areas. See story on page 11 for more.

Brand new to the ASTRO 2018 Annual Meeting is the Practical Radiation Oncology (PRO) Program, a two-day program specifically designed for community practice radiation oncologists. This program will be held Saturday and Sunday to allow community physicians and staff to attend this premier clinical and scientific radiation oncology event. Program content emphasizes clinical practice recommendations and will include disease site reviews, interactive case-based discussions, a coding update and a scientific overview.

Preparation for Annual Meetings is a year-round endeavor for medical societies, and ASTRO is fortunate to have cultivated a first-class staff to deliver a vibrant, state-of-the-art meeting each year. Complementing the remarkable ASTRO staff, hats off to our 2018 Annual Meeting Steering Committee volunteers (Lisa Kachnic, MD, FASTRO, Scientific Committee Chair, Andrea Ng, MD, MPH, Scientific Committee Vice-chair, Catherine Park, MD, FASTRO, George Rodrigues, MD,

PhD, FASTRO, Brian Marples, PhD, Christina Tsien, MD, Deborah Citrin, MD, Steve Hahn, MD, FASTRO, Ted DeWeese, MD, FASTRO, Harald Paganetti, PhD, Søren Bentzen, DSc, PhD, FASTRO, and Chen Hu, PhD) who have choreographed a truly outstanding scientific event.

Speaking of impactful discovery science in radiation oncology, it is an honor to be among the first to congratulate our three 2018 ASTRO Gold Medalists, Patricia Eifel, MD, FASTRO, David Jaffray, PhD, and Ralph Weichselbaum, MD. The collective impact of these Gold Medal recipients on the discipline of radiation oncology has been truly exceptional and you will enjoy the tribute event honoring their careers and discovery contributions on Tuesday morning, October 23, in the Stars at Night Ballroom.

The 2018 meeting will be a beacon for discovery science. Register now to attend and participate in ASTRO's 60th Annual Meeting, October 21-24 in San Antonio. I look forward to seeing you there. 

Dr. Harari is the Jack Fowler Professor and Chairman of the Department of Human Oncology at the University of Wisconsin School of Medicine and Public Health, where he directs the National Institutes of Health Head and Neck Cancer SPORE Grant. He welcomes comments on this column at astronews@astro.org.

SOCIETY NEWS

ASTRO ELECTS NEW LEADERSHIP

Four new officers have been elected to serve on ASTRO's Board of Directors. The new officers' terms will begin at the Annual Business Meeting at ASTRO's 60th Annual Meeting in San Antonio. For more information, visit www.astro.org/elections.

The new Board of Directors members are:



PRESIDENT-ELECT

Thomas Eichler, MD, FASTRO

Sarah Cannon Cancer Institute, Richmond, Virginia

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- **EDUCATION COUNCIL VICE-CHAIR**

Benjamin Movsas, MD, FASTRO

Henry Ford Hospital, Detroit

- **GOVERNMENT RELATIONS COUNCIL VICE-CHAIR**

Howard Sandler, MD, MS, FASTRO

Cedars-Sinai Medical Center, Los Angeles

The new Nominating Committee members are:

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- **COMMUNITY PRACTICE PHYSICIAN**

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Lowell General Hospital, Lowell, Massachusetts

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- **RADIOBIOLOGIST**

George Wilson, PhD

William Beaumont Hospital, Royal Oak, Michigan

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Online Only:

- May Abdel-Wahab, MD, PhD, FASTRO, director of the Division of Human Health in the Department of Nuclear Sciences and Applications in the International Atomic Energy Agency, writes about **the cancer epidemic and how the IAEA helps countries with nuclear techniques**. Important Note: Director General of the IAEA Yukiya Amano will be one of the keynoters for the 2018 ASTRO Annual Meeting in San Antonio, presenting on October 24.
- Videos that provide more information about **new features at the 2018 Annual Meeting**.

Expanded Stories:

- Full stories and more photos with the tributes to ASTRO past presidents **Luther Brady, MD, FASTRO**, and **Larry Kun, MD, FASTRO**.
- Bios of 2018 ASTRO **Annual Meeting keynote speakers**.
- **Full Annual Report** for ASTRO's fiscal year 2017 from Treasurer Geraldine Jacobson, MD, MBA, MPH, FASTRO.



TRIBUTE

BY LYDIA KOMARNICKY, MD

LUTHER W. BRADY, MD, FASTRO



LUTHER BRADY, MD, PASSED AWAY AT THE AGE

OF 92 on Friday, July 13, at Hahnemann University Hospital, where he practiced for more than half a century. Dr. Brady was a physician with an extraordinary range of interests, a pioneer in his field, an extraordinary clinician and

researcher and an educator. I am personally grateful we were able to dedicate the Radiation Oncology Department at Hahnemann to Dr. Brady this past year.

Dr. Brady was born in Rocky Mount, North Carolina, and received his bachelor's degree in zoology and his medical degree from the George Washington University. His internship and internal medicine training were at Thomas Jefferson University Hospital; he considered the time spent at Jefferson an important hallmark in his career. He subsequently served in the United States Navy during the Korean War, where he spent time at the United States Naval Hospital in Bethesda, Maryland.

After the war, Dr. Brady returned to Thomas Jefferson University Hospital to train in radiology, but radiation oncology sparked his interest. He changed institutions, landing a residency and later faculty appointment in radiation oncology at the University of Pennsylvania. Ultimately, he came to Hahnemann Hospital in 1959 as associate professor of radiology and, in 1970, was appointed Chair of Radiation Oncology and Nuclear Medicine. In 1975, he was named the Hilda Cohn/American Cancer Society Professor of Clinical Oncology. Dr. Brady was named director of medical research at Philadelphia Cyber Knife in Havertown, Pennsylvania, and was the original founder of the center.

During his career, he served in esteemed positions of every major professional society related to the field, including American College of Radiology (founding president), American Cancer Society—

Philadelphia division, American Radium Society, American College of Radiation Oncology (founding president) and the American Board of Radiology. He was president of ASTRO in 1971-1972 and a founding member of the Society.

He has been awarded 24 medals nationally and internationally, receiving the AMA Distinguished Service Award Gold Medal from the American Medical Association in 1999, Strittmatter Award from the Philadelphia County Medical Society in 1999, a Lifetime of Service award from the American Board of Radiology in 2010, the Cristol Award from the Philadelphia County Medical Society in 2011 and the President's Medal from the George Washington University in 2015. He received the ASTRO Gold Medal in 1987.

In the past year, the Brady-Shields Endowed Chair at Wills Eye Hospital in Philadelphia was established in recognition of the national and international impact this team has made on ocular oncology. Their collective contributions in research and treatment of ocular cancers have brought transformational advances in eye preservation and restoration of vision to countless individuals.

Dr. Brady has more than 800 publications to his credit and was co-editor of his landmark textbook, *Principles and Practices of Radiation Oncology*, now in its sixth edition. Dr. Brady was editor-in-chief of *American Journal of Clinical Oncology* and senior editor of *International Journal of Radiation Oncology•Biology•Physics*.

It is impossible to cover every aspect of this great man's career spanning more than 50 years. We will remember Dr. Brady's many contributions with a mixture of awe and admiration. At Hahnemann, he will always be remembered as "Uncle Luther" and we will be the "Brady Bunch." Rest in peace, dear friend.

Dr. Brady is survived by his nephew, Theodore Yaeger, MD, a radiation oncologist in Daytona Beach, Florida; a niece, Chris Trimble, and four grandnephews and one grandniece.  

TRIBUTE

LARRY E. KUN, MD, FASTRO

BY J. FRANK WILSON, MD, FASTRO
AND SARAH S. DONALDSON, MD, FASTRO



LARRY E. KUN WAS BORN MARCH 10, 1946, in Philadelphia. After a remarkably productive career, Dr. Kun passed away prematurely on May 27, 2018, in Dallas. Genuinely humble, he surely would have deflected the many tributes that honor his memory.

Dr. Kun attended Pennsylvania State University, graduating with a bachelor's of science degree in 1966. After completing a five-year program at Penn State and Jefferson Medical College, he received his MD in 1968. Accelerated achievement above the norm characterized his entire professional career. His early interest in radiation oncology, encouraged by Simon Kramer, led to elective rotations at both Jefferson Medical College and Penrose Cancer Hospital in Colorado Springs, Colorado. Following internship at the University of Rochester hospitals, he returned to Penrose to complete residency training in 1972 under Juan del Regato. He then served for two years as Clinical Associate in Radiotherapy in the Radiation Branch, National Cancer Institute, where his interest in clinical investigation of childhood cancer expanded. In 1974, he served as Assistant Radiotherapist at the Rotterdam Radiotherapy Institute under the direction of Brigit van der Werf-Messing.

Dr. Kun served briefly at the University of Vermont prior to joining the faculty of the Medical College of Wisconsin in Milwaukee from 1976–1984. There, he was instrumental in the development of the Midwest Children's Cancer Center at Children's Hospital of Wisconsin. The remainder of his career was spent at St. Jude Children's Research Hospital in Memphis, Tennessee. At St. Jude, he served as chair not only of radiation oncology, but also, at intervals, as chair of the Departments of Diagnostic Imaging and of Bone Marrow Transplantation and Cellular Therapy. At the time of his retirement in 2016, he was the Clinical Director and Executive Vice President, Chief Medical Officer at St. Jude.

After two decades of leadership service to ASTRO, Dr. Kun served with distinction as ASTRO's Board of Director's President and Chair from 1997–1999. During his tenure, he provided leadership through a series of critical issues, including organizational independence, board structure and a new administrative leadership. He later also chaired the Strategic Planning Committee, was the founding Chair of the Conflict of Interest Review Committee and served as Vice-chair of the Maintenance of Certification Oversight Committee. Dr. Kun also served on the Board of Trustees of the American Board of Radiology (ABR), holding major responsibilities for the annual examinations and the Maintenance of Certification program.

Dr. Kun was honored for his many contributions during his lifetime. He received the ASTRO Gold Medal in 2007, the Janeway Medal, the AARP Educator of the Year Award, the Children's Brain Tumor Foundation Pioneer Award and the American Society of Clinical Oncology's Pediatric Oncology Award and Lecture, among others.

Dr. Kun was a generous and inspiring teacher, mentor and role model to his many students. The positive impact of nearly 50 chapters and texts; hundreds of invited lectures, visits and advisories; and nearly 450 significant publications with many collaborators, will long reverberate through the work of the countless individuals he influenced.

Larry Kun is remembered as kind and compassionate, traits he unreservedly extended to all, especially to his patients and their families. Dr. Kun is survived by Donna, his devoted and loving wife of forty-seven years. Together they enjoyed travel, hiking and family life, with two daughters and their families, including five grandchildren, who were all special sources of great joy to him. Dr. Kun also is survived by the countless children with cancer whose lives were saved or eased by his efforts, and by the many caregivers he trained and inspired.  

In Memoriam

ASTRO has learned that the following members have passed away. Our thoughts go out to their family and friends.

Luther W. Brady, MD, FASTRO, Philadelphia

Albert R. Frank, MD, Tucson, Arizona

Larry E. Kun, MD, FASTRO, Dallas

Carl M. Mansfield, MD, ScD, FASTRO, Philadelphia

Joseph H. Rose, MD, Pasadena, California

Moody D. Wharam Jr., MD, FASTRO, Baltimore

Richard Whittington, MD, MBe, Media, Pennsylvania

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CIVCO
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2018 ANNUAL MEETING HIGHLIGHTS AND KEY SESSIONS

THIS YEAR'S OUTSTANDING KEYNOTE SPEAKERS



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SHARPLESS, MD**
*director of the National
Cancer Institute*



**MARK
STEVENSON**
*futurologist, author and
broadcaster*



YUKIYA AMANO
*director general of the
International Atomic
Energy Agency*

ASTRO'S 60TH ANNUAL MEETING will take place October 21-24 at the Henry B. González Convention Center in San Antonio. This year's meeting will focus on discovery science, translating discovery to cure.

The 2018 Presidential Symposium will highlight the opportunities for radiation oncology to translate discovery to cure. The Symposium will discuss four primary themes, starting with the interface of radiation oncology with immunology, moderated by Silvia Formenti, MD, FASTRO. In the second session, moderated by David Jaffray, PhD, we will hear more about how artificial intelligence (AI) and radiation oncology can come together to further the field and improve outcomes. Viral Oncology will be the topic of the third session, moderated by Paul Lambert, PhD, and will focus on the fact that one in six human cancers is caused by a virus. The final session, Liquid Biopsies, will be moderated by Catherine Park, MD, FASTRO, and will teach us about biopsies that are essentially a test of the serum for circulating tumor DNA. Jennifer Wargo, MD, Zachary Morris, MD, PhD, Erich Sturgis, MD, Brian O'Sullivan, MD, FASTRO, Kristy Brock, PhD, Andre Dekker, PhD, Nitzan Rosenfeld, PhD, and Max Diehn, MD, PhD, are scheduled speakers for the symposium.

World-class Keynote speakers will engage Annual Meeting attendees, starting with Ned Sharpless, MD,

director of the National Cancer Institute (NCI), on Monday, October 22. Dr. Sharpless will share his vision for the NCI to advance cancer research and cancer cures for the future. Mark Stevenson, a London-based author and futurologist, will speak Tuesday, October 23, and share his ideas on how we might solve social, economic and health care problems more effectively in the future. Finally, Yukiya Amano, director general of the International Atomic Energy Agency (IAEA), will speak on Wednesday, October 24, to share his perspectives and ideas for the IAEA with respect to health care opportunities worldwide.

The Annual Meeting Scientific Committee has put together an impressive program with many speakers, moderators and topics. This year, there are 23 panel sessions, 43 educational sessions, 44 scientific sessions and 19 poster discussion sessions scheduled. The program also includes a number of joint sessions and workshops. The Plenary Session and Clinical Trials Session will offer highlights from the highest impact studies.

This year's educational sessions, special sessions and scientific panels will cover a variety of topics, several of which directly connect with the 2018 meeting theme. A number are joint sessions, which are submitted from an outside organization in collaboration with an ASTRO member.

These sessions include:

Joint Sessions:

- **Joint Session One:** *Riding the Tsunami: The Role and Practice of Radiation Therapy for Hematological Malignancies in the New Era of Biologicals, Immunotherapies (Checkpoint Inhibitors and CAR-T Cells).* This session will address the new biological agents with emphasis on immunotherapy's role in the spectrum of hematological malignancies, particularly Hodgkin lymphoma and non-Hodgkin lymphoma. The status of FDA approval and effects on clinical practice will also be discussed, as well as the options and caveats of integrating radiotherapy. New research ideas, experimental models and current clinical protocols testing augmentation of immunotherapy effects (including CAR-T cells), abscopal and “vaccine” effects of RT will also be highlighted. Joint session with the International Lymphoma Radiation Oncology Group.
- **Joint Session Two:** *Achieving Gender Equity in Radiation Oncology.* This session will provide an evidence-based review of trends in gender representation, barriers to diversification in training, interventions to mitigate bias, harassment and other deterrents to professional productivity and leadership lessons and imperatives. Joint session with the American Association for Women Radiologists.
- **Joint Session Three:** *Genomics to Personalize Breast Cancer Treatment: On the Evolving Road to Minimize Overtreatment.* This panel session will provide updates on the ever-evolving genomic profiling data in breast cancer and its application to the therapeutic management of the breast cancer patient in terms of the three subspecialties of breast oncology: medical, surgical and radiation oncology. Joint session with American Society of Clinical Oncology.
- **Joint Session Four:** *Conference on the North American and European Approaches to Rhabdomyosarcoma and Hodgkin Lymphoma.* Two speakers will discuss the North American approach to Rhabdomyosarcoma and Hodgkin lymphoma and two speakers will discuss the European approach to these pediatric malignancies. The approaches differ, specifically the use of radiotherapy. The trials leading up to the current approaches and the outcomes of prior trials will be reviewed. Joint session with Paediatric Radiation Oncology Society.

- **International Session Three:** *Emerging Developments in Head and Neck Cancer Therapy.* This session will provide attendees with an overview of the emerging developments in head and neck cancer therapy. The session will highlight advancements in head and neck cancer by both U.S. and European experts, including an overview of milestones from the Danish Head and Neck Cancer Group and future paradigms to consider. The benefits and how best to accomplish re-irradiation will also be discussed. The session will cover multimodal imaging in treatment planning, as well as combination radiation and immunotherapy in head and neck cancer. Joint session with European Society for Radiotherapy and Oncology.

Immunotherapy Educational Sessions:

Attendees can attend sessions as part of the Immunotherapy track.

- **Educational Session 27:** *Clinical Safety, Toxicity and Efficacy of Immunotherapies in Combination with Radiation Therapy.*
- **Educational Session 35:** *New Combinations of Radiation and Systemic Therapies in Lung Cancer: Chemotherapy, Targeted Agents and Immunotherapy.*
- **Panel Session 19:** *Integrating Immunotherapy in the Definitive Setting in Radiation Oncology.*

Other Sessions of General Interest:

- **Educational Session 2:** *Social Media 101 for the Practicing #RadOnc.*
- **Panel Session 11:** *The Good, the Bad and the Ugly: The Quality Payment Program.*
- **Panel Session 4:** *Integrating Health Care Technology to Prevent Error: Experiences from RO-ILS and IHE-RO.*
- **Educational Session 14:** *RO-ILS and Safety Culture: Physician's Role in Communication, Collaboration and Commitment.*

Search for details on these and other sessions, abstracts and exhibitors and build your own individual schedule online at www.astro.org/conferenceplanner. The Conference Planner will be fully integrated with the MyASTROApp (the official meeting app), scheduled to launch by late September, so you will have access to your schedule on either platform. 

VIEW THE 2018 ANNUAL MEETING HIGHLIGHTS VIDEO AT
WWW.ASTRO.ORG/ANNUALMEETING

NEW THIS YEAR: THE PRACTICAL RADIATION ONCOLOGY (PRO) PROGRAM

A weekend option for community-practice docs

This year's ASTRO Annual Meeting includes a new Practical Radiation Oncology (PRO) program. This two-day program, taking place Saturday and Sunday, October 20–21, is available as an add-on to your full conference registration, or—for those of you who can't be away from your practice for that long—as a stand-alone registration option.

Highlights of the PRO program include:

- Practical reviews of the latest treatment options for breast, head and neck, prostate, lung, central nervous system and palliative care.
- A session on practice-changing oncology research from this year's meeting that may impact future treatment options.
- A socioeconomic update, and a look to the future of Alternative Payment Models in radiation oncology.
- The chance to earn 11.5 *AMA PRA Category 1 Credits*[™] and Live SA-CME credit for the Saturday head and neck session.
- A networking reception on Saturday night, where attendees can share perspectives and strategies with colleagues.
- The option to attend regular Annual Meeting sessions on Sunday, including the Clinical Trials Session.
- Access to the Innovation and Solution Showcase (Exhibit Hall) on Sunday to view the latest products and services in cancer care. 



For more information on this program, visit:

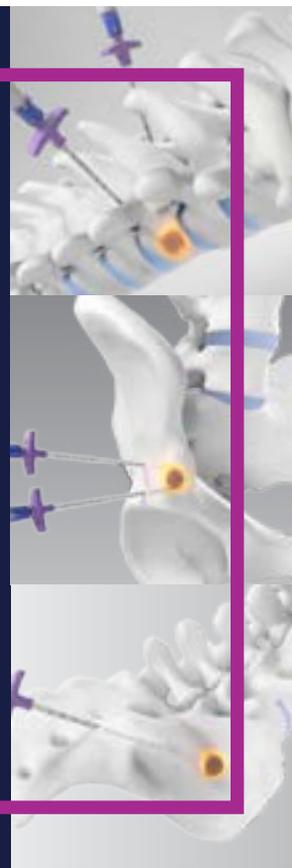
www.astro.org/PROprogram

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SCIENTIFIC SESSIONS AT THE 60TH ANNUAL MEETING FEATURE TOP-RATED ABSTRACTS

BY LISA A. KACHNIC, MD, FASTRO, ANNUAL MEETING SCIENTIFIC COMMITTEE CHAIR

THIS YEAR'S 60TH ANNUAL MEETING in San Antonio will offer attendees a wide variety of sessions with cutting-edge clinical and research-based scientific presentations. The sessions are offered in several formats ranging from interactive digital posters to oral presentations, and new this year is an “all-digital” poster hall.

Returning this year are the popular Science Highlights sessions that summarize some of the top-scoring abstracts by disease site. All sessions are designed to encourage networking with colleagues from around the world.

There are multiple workshops, panel and educational sessions, but to see the latest science, you'll want to attend the scientific sessions, which will feature more than 1,700 posters and 170 poster discussions with 345 oral abstract presentations covering all the major disease sites, physics and biology. We'll also have late-breaking abstracts that will be collected just before the meeting to enhance the highest-level Plenary and Clinical Trials sessions, and a special late-breaking oral scientific session.

Across all presentation types, here are some of the top-scoring abstract presentations:

- “Eliminating Post-operative Radiation to the Pathologically Node Negative Neck: Long-term Results of a Prospective Phase II Study” from Jessika Contreras, MD, of Washington University in Saint Louis.
- “Impact of Prostate Cancer Hypofractionation on Patient-reported Outcomes: Baseline to Five Years Change in the CHHIP Trial” from John Starffuth, MD, MB, of Cardiff University in Cardiff, Wales, United Kingdom.
- “Patient-reported Outcomes of NRG Oncology/RTOG 0232: A Phase III Study Comparing Combined External Beam Radiation and Transperineal Interstitial Permanent Brachytherapy with Brachytherapy Alone in Intermediate Risk Prostate Cancer” from Deborah Bruner, PhD, RN, of Emory University in Atlanta.
- “Androgen Receptor Activity and Radiotherapeutic Sensitivity in African-American Men with Prostate Cancer: A Large Scale Gene Expression Analysis and Meta-analysis of RTOG Trials” from Daniel Spratt, MD, of the University of Michigan in Ann Arbor, Michigan.
- “Stereotactic Ablative Radiation Therapy for the Comprehensive Treatment of Oligometastatic Tumors (SABR-COMET): Results of A Randomized Trial” from David Palma, MD, PhD, of the London Health Sciences Centre in London, Ontario, Canada.

Please note that abstracts are embargoed until the date and time of presentation.

We encourage you to build your schedule online using the Conference Planner before you arrive in San Antonio in order to get the maximum benefit of attending the meeting, online at www.astro.org/conferenceplanner or download the MyASTROApp available for iOS and Droid. See page 27 for more on the MyASTROApp. 

“To see the latest science, you'll want to attend the scientific sessions, which will feature more than **1,700 posters** and **170 poster discussions** with **345 oral abstract presentations** covering all the major disease sites, physics and biology.”

ASTRO'S "QUESTION OF THE YEAR" RETURNS TO THE 2018 ANNUAL MEETING

 **Want to join the conversation early?**
Tag us on Twitter [@ASTRO_org](https://twitter.com/ASTRO_org) and use the hashtag [#ASTRO18](https://twitter.com/ASTRO18).

AT THE 2017 ASTRO ANNUAL MEETING

in San Diego, attendees were asked, "What is the most

important research question that needs to be answered in the next three to five years?"

From the more than 100 responses during the meeting, the wide-ranging answers included ideas like,

"What is the exact role of radiation in stage IV

disease in combination with immunotherapy or targeted agents to combat resistance development?" and "How can personalized care be

better integrated into the oncology and radiation oncology clinical space?" Another 456 responses were recorded to this question through the end-of-meeting survey sent to all attendees, and these responses included 136 mentions of immunotherapy or combinations of immunotherapy and radiotherapy, and 131 related to genomic influences and targeted/personalized cancer care.

A short manuscript describing these results has recently been published in the Red Journal, and it highlights the excitement around immunotherapy, precision medicine and other important topics that affect the field of radiation oncology research right now.

The success from last year has spurred ASTRO to pose the "Question of the Year" and ask: **"What is the biggest research discovery that needs to be translated to the clinic right now?"**

Attendees of the 2018 Annual Meeting in San Antonio will have the opportunity to answer this question through the Annual Meeting app, MyASTROapp, and at kiosks throughout the meeting space.

We expect this year's question to jump-start discussions about exciting new technologies and treatment modalities that have yet to move into the clinical space but are poised to go that way over the next several years. 

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LIVE SA-CME OFFERINGS AT THE ANNUAL MEETING

TO HELP PHYSICIAN AND PHYSICIST ATTENDEES

meet the requirements of the American Board of Radiology's (ABR) Part II Maintenance of Certification (MOC) program, ASTRO will again be offering Live Self-Assessment CME (SA-CME) with select sessions at this year's Annual Meeting. This year, participants will access their Live SA-CME assessment in the ASTRO Academy (academy.astro.org) to receive immediate feedback, peer comparison and their SA-CME certificates. Live SA-CME sessions are available for purchase during your registration or on-site for \$50 each.

Various Education, Panel and Joint sessions have been selected, including (but not limited to):

- **EDU 05:** Esophagus and Gastric Cancer: Contemporary Treatment Approaches
- **EDU 09:** Management of Adult Sarcoma
- **EDU 22:** Clinical and Planning Approaches for Re-irradiation
- **Panel 14:** The New ILROG Guidelines
- **Joint Session 03:** ASTRO-ASCO Joint Session: Genomics to Personalize Breast Cancer Treatment
- **Panel 22:** Translating Needs into Action: Adolescent and Young Adult Cancer Care for the Radiation Oncologist

The Practical Radiation Oncology (PRO) program will include SA-CME credits for the Head and Neck Cancer (HPV+ve) session, taking place Saturday, October 20, from 10:30 a.m. – 12:00 p.m. This SA-CME session is only available to those who register for the PRO program.

Additionally, two *e*Contouring sessions (Gynecological Cancers on Sunday at 4:45 p.m. and CNS/SBRT Spine on Monday at 4:15 p.m.) will offer SA-CME. SA-CME are included as part of the *e*Contouring registration fees.

All Live SA-CME sessions at the Annual Meeting will also be recorded and converted to online SA-CME. The online SA-CME activity will be part of the ASTRO Academy (academy.astro.org) and be made available after the meeting. Online SA-CME activities allow ASTRO members who are unable to attend the meeting the opportunity to obtain SA-CME credits that are required for the ABR's MOC program.

For more information about Annual Meeting SA-CME sessions please go online to www.astro.org/AMLiveSACME or contact education@astro.org. 

ARRO SEMINAR TO HIGHLIGHT INTERESTS AND CAREER GOALS FOR RADIATION ONCOLOGY RESIDENTS

BY JENNA KAHN, MD, ARRO EXECUTIVE COMMITTEE CHAIR, ON BEHALF OF THE ARRO EXECUTIVE COMMITTEE

THE ASSOCIATION OF RESIDENTS IN RADIATION ONCOLOGY (ARRO) EXECUTIVE COMMITTEE is excited about the upcoming events at the ASTRO Annual Meeting in San Antonio. The ARRO Executive Committee has worked hard to develop a program that will enrich the resident experience while providing practical information that can guide residents as they decide their next steps after training.

The ARRO Annual Seminar will take place on Saturday, October 20, from 10:00 a.m. to 5:00 p.m. The morning will begin with presentations from our Global Health Scholars, Serguei Castaneda, MD, Adam Olson, MD, and Sherry Zhao, MD, who will share their experiences abroad and their perspectives on how radiation therapy and cancer care are delivered internationally.

We will hear from the Radiation Oncology Institute (ROI) with a presentation from Gita Suneja, MD, MS, current chair of the ROI research committee, on the research being funded by the organization. Then Nikhil Thaker, MD, will present an insightful talk on the business of radiation oncology, incorporating his formal knowledge of medical economics and his personal experience as a new attending. He will address navigating contracts, coding and billing issues and the best way to approach important business decisions. We will be incorporating breakout sessions during the lunch hour, with groups focused on physician-scientists; women in radiation oncology; negotiating contracts, led by Terry Wall, MD, JD, FASTRO; and coding and billing, led by Dr. Thaker.

The keynote address will be given by Tracy Balboni, MD, MPH, of the Department of Radiation Oncology at the Dana-Farber Cancer Institute and Brigham and Women's Hospital. She hopes to provide a perspective on careers in radiation oncology interwoven with her academic work in palliative care and spirituality in oncology.

Back again this year is the jobs panel, which has always been a highlight of the ARRO Annual Seminar. Lisa A. Kachnic, MD, FASTRO, will moderate in the hopes of answering the pressing questions that trainees face as they seek employment after residency.

The panel will feature an excellent group of early-career physicians, including:

- **Leah Katz, MD**, Professional Radiation Oncology Services, Poughkeepsie, New York
- **Lindsay Burt, MD**, University of Utah, Salt Lake City
- **Guy Jones, MD**, Tri-Cities Cancer Center, Kennewick, Washington
- **Aparna Kesarwala, MD, PhD**, National Institutes of Health, Bethesda, Maryland

After the jobs panel, an educational session will explore the innovative side of radiation oncology. We will have Erin Gillespie, MD, a recent graduate of University of California San Diego and now an attending at Memorial Sloan Kettering Cancer Center, discussing “eContouring: From an Idea in the Resident Room to 10,000 Users.” We will also hear from Nadine Housri, MD, co-founder of theMednet and an attending physician at Yale. TheMednet is an online network that was created as a forum to share knowledge between physicians through questions and expert opinions.

Following this session, Dr. Wall will end the day with the ever-popular Practice Entry Survey Results session. The ARRO seminar will be followed with the annual ARRO reception at The Vault from 6:00 p.m. to 8:00 p.m. This is open to all residents and medical students and is a great opportunity to connect with residents and medical students around the country.

The ARRO annual luncheon will be on Sunday, October 21, from 12:15 p.m. to 1:15 p.m., with a presentation by Brian Kavanagh, MD, MPH, FASTRO, chair of ASTRO. The Meet the Professor reception will occur on Sunday, October 21, from 4:45 p.m. to 5:45 p.m. Residents will have the opportunity to informally meet with several leaders from the field of radiation oncology. The ARRO poster viewing with a professor will be on Monday, October 21, from 12:15 p.m. to 1:30 p.m., to discuss relevant abstracts with an expert in the field.

We are incredibly excited for ASTRO's 60th Annual Meeting and look forward to an outstanding program of ARRO events. 

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HITTING THE STREETS IN SUPPORT OF RESEARCH

Scenic 5K benefits the ROI

THE ANNUAL 5K RUN FOR THE FUTURE to benefit the Radiation Oncology Institute (ROI) will be held at the 2018 ASTRO Annual Meeting. On Monday, October 22, individuals, academic teams and corporate teams will take to the streets of San Antonio for an early morning run or walk. The course goes along the world-renowned River Walk, along the San Antonio River.

By participating in the run, you will be helping to support ROI research, which improves outcomes for patients by providing solutions for some of radiation oncology's most pressing and practical needs.

The registration fees and the sponsorships for the race go directly to the ROI, as the race host, Radiation Business Solutions (RBS), covers all costs of the event. "Since we started this race nine years ago, we have really seen the ROI deliver and move their research forward," says Dan Moore, chief executive officer of RBS. "We are grateful to support our specialty and the patients it serves."

The ROI has awarded five grants totaling more than \$200,000 in its Innovative Projects in Radiation Oncology program this year. These grants were the

result of a process that began at last year's Annual Meeting when attendees were asked, "How do we improve our ability to get radiation to the patients who need it?" Financial toxicity, access, awareness

and stereotactic body radiation therapy emerged as critical topics facing radiation oncology.

"We appreciate RBS's generous support of the ROI through the Annual 5K Race for the Future, along with the support of all of those who will run. The funds raised through the race are an investment in the success and growth of our practice-changing and life-saving research. Through these efforts, we are awarding grants to some of the best and brightest researchers in our field and are making a difference in the future care of cancer patients," says ROI President Deborah A.

Kuban, MD, FASTRO. "I invite all of the 5K participants to visit the ROI booth #1540 to learn more about the ROI and meet the researchers they are supporting."

For more information and to register for the 9th Annual 5K Run for the Future, visit www.roi5K.com. Race registration will also be available on-site on Sunday, October 21, at the RBS booth #1110. 

“
By participating
in the run, you
will be helping
to support
ROI research,
which improves
outcomes for
patients...”



WELCOME TO

THE TOP FIVE THINGS TO DO IN SAN ANTONIO

BY CHUL HA, MD, FASTRO

The City of San Antonio just celebrated its 300th birthday on May 5 and it is with great excitement that I present the City's top 5 attractions.

1 **The Alamo**
This top attraction is, of course, the five Catholic mission complex including the Alamo. The Alamo was the first mission that Spanish settlers built along the San Antonio River in the 18th century. Later it served as a residential area and then a military fortress at the time of the Texas Revolution. The complex is now a UNESCO World Heritage Site and every mission is open for a Sunday mass. All the missions are along the Mission Reach area of the River Walk.

2 **The River Walk**
Speaking of the River Walk, it stretches more than 15 miles and is hailed as the largest urban ecosystem restoration project in the United States. It is lined with many historical landmarks, restaurants, shops and live entertainment. The River Walk Museum Reach area includes the San Antonio Museum of Art and the Pearl Brewery, a landmark established in 1883, now with lots of restaurants including Nao of the Culinary Institute of America.

Historic Main Plaza
A short walking distance from the Henry B. González Convention Center, the Historic Main Plaza is also known as the heart of the city. It has been named as one of the "10 Great Public Spaces in the United States." At the Main Plaza is the San Fernando Cathedral. Founded in 1731, it is the oldest cathedral sanctuary in the nation and still holds masses. A few minutes away from the Main Plaza on foot is the Market Square, the largest traditional Mexican market in the nation.

3



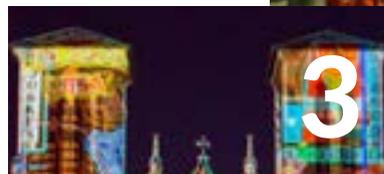
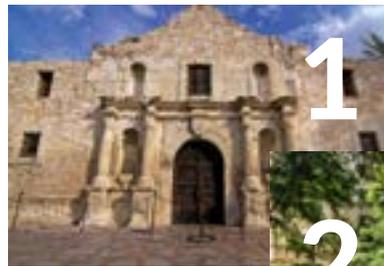
I hope you have a chance to enjoy any of the top 5 here. If not, please make sure you at least grab a table at the River Walk, sit back and relax over a plate of sizzling fajitas with a frozen margarita. Welcome to San Antonio and join us for the tricentennial celebration!

SAN ANTONIO

4

HemisFair Park

Right behind the Convention Center, this park features the Tower of the Americas. It offers a panoramic view of the city from an observation deck and the Chart House Restaurant at the top. It also houses the Skies over Texas 4-D Theater Ride. Across the street from the park is La Villita, the oldest neighborhood in San Antonio that features many art galleries, interesting shops and restaurants.



The King William District

A few minutes from La Villita is this district, named in honor of King Wilhelm I of Prussia of the mid-19th century. This was the first designated historic district in Texas. This area was settled by German immigrants in the mid-19th century and is known for its impressive houses designed in the Greek revival, Victorian and Italianate styles.

5

Three houses are open to the public: the Guenther House, Steves Homestead and Villa Finale. They serve as a restaurant, shop and/or museum. Brunch in the garden of the Guenther House Restaurant is known for its long line but is well worth the wait.

General Information

All information is correct as of August 8, and is subject to change.



HENRY B. GONZÁLEZ CONVENTION CENTER

900 E Market Street
San Antonio, Texas 78205
www.sahbgcc.com

All activities take place at the Henry B. González Convention Center unless otherwise stated.

ATTENDEE REGISTRATION

Hall 1, Street Level

Attendee registration hours:

Saturday, October 20	8:00 a.m. – 5:00 p.m.
Sunday, October 21	6:30 a.m. – 5:00 p.m.
Monday, October 22	7:00 a.m. – 6:00 p.m.
Tuesday, October 23	7:00 a.m. – 5:00 p.m.
Wednesday, October 24	7:00 a.m. – 2:00 p.m.

EXHIBITOR REGISTRATION

Hall 1, Street Level

Exhibitor registration hours:

Thursday, October 18	8:00 a.m. – 5:00 p.m.
Friday, October 19	8:00 a.m. – 5:00 p.m.
Saturday, October 20	8:00 a.m. – 5:00 p.m.
Sunday, October 21	6:30 a.m. – 5:00 p.m.
Monday, October 22	7:00 a.m. – 6:00 p.m.
Tuesday, October 23	7:00 a.m. – 5:00 p.m.

AFFILIATED MEETINGS

42ND AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ASRT) RADIATION THERAPY CONFERENCE

October 21–23, 2018

San Antonio Marriott Rivercenter San Antonio

The 42nd American Society of Radiologic Technologists (ASRT) Radiation Therapy Conference will take place at the Marriott Rivercenter San Antonio. ASTRO registered attendees may attend ASRT sessions by paying a reduced registration fee of \$195. Proof of ASTRO Annual Meeting registration (registration confirmation or badge) is required to receive this reduced rate. If you have not registered to attend the ASRT conference and would like to do so, visit www.asrt.org or register on-site at the Marriott Rivercenter San Antonio.

35TH SOCIETY FOR RADIATION ONCOLOGY ADMINISTRATORS (SROA) ANNUAL MEETING

October 21–24, 2018

Hyatt Regency San Antonio Riverwalk

The 35th Society for Radiation Oncology Administrators (SROA) Annual Meeting will take place at the Hyatt Regency San Antonio. ASTRO registered attendees may attend the SROA general sessions by paying a reduced registration fee of \$240. Proof of ASTRO Annual Meeting registration (registration confirmation or badge) is required to receive this reduced rate. If you have not registered to attend the SROA conference and would like to do so, visit www.sroa.org or register on-site at the Hyatt Regency San Antonio Riverwalk.

ABSTRACTS AND EMBARGO POLICY

All abstracts to be presented at ASTRO's 60th Annual Meeting are embargoed until the date and time of scientific presentation or presentation at an ASTRO news briefing, whichever occurs first. The embargo policy applies to all abstracts regardless of whether information is obtained from another source.

Embargo violations by media professionals may result in suspension of credentials at ASTRO's 60th Annual Meeting as well as future meetings and may also impact access to advance media materials for future meetings. Embargo violations by abstract authors and/or sponsors may result in removal of the abstract from the scientific program. Abstract authors are responsible for notifying financial and other sponsors about this embargo policy. Questions about the embargo policy may be directed to press@astro.org.



ASTRO *Bistro*

Innovation and Solution Showcase, rear of Hall 4B, Street Level

We are pleased to offer the ASTRO Bistro as a dining option for attendees in the Innovation and Solution Showcase (Exhibit Hall). The ASTRO Bistro will provide buffet-style meals with different cuisine options offered each day. The ASTRO Bistro provides a comfortable place to eat, meet and network with colleagues and exhibitors. Menus are subject to change.

Hours of operation:

Sunday, October 21	11:00 a.m. – 2:30 p.m.
Monday, October 22	11:00 a.m. – 2:30 p.m.
Tuesday, October 23	11:00 a.m. – 2:30 p.m.

Price

Individual attendee lunch ticket (per person/day): \$25
Individual attendee three-day lunch ticket package*: \$75

**This ticket package provides an individual with a lunch ticket for Sunday, Monday and Tuesday for the ASTRO Bistro.*

ASTRO Bistro Tickets

Attendees and exhibitors may purchase ASTRO Bistro tickets online via the registration websites. ASTRO Bistro tickets are valid only for lunch on the day requested. ASTRO Bistro tickets that are not redeemed cannot be used for the following day and are nonrefundable.

ASTRO Bistro tickets are only redeemable at the ASTRO Bistro and cannot be used at other concessions within the Henry B. González Convention Center. Purchased tickets will be included in your registration materials. Additional tickets may be purchased on-site at the ASTRO Bistro in the Innovation and Solution Showcase (Exhibit Hall), located in the rear of Hall 4B in the Henry B. González Convention Center.

CORPORATE AMBASSADORS

ASTRO PROUDLY RECOGNIZES THE ONGOING COMMITMENT OF OUR CORPORATE AMBASSADORS FOR THEIR OUTSTANDING YEAR-ROUND LEADERSHIP AND PROMOTIONAL SUPPORT OF RADIATION ONCOLOGY.





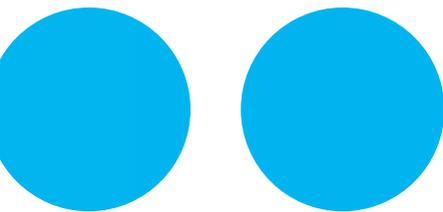
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ASK ASTRO INFORMATION AND MEMBER SERVICES BOOTH

Main Lobby, Street Level

ASTRO representatives are available to answer questions about the Annual Meeting and membership in ASTRO and provide information on any of ASTRO's products and services. They can also offer assistance with MyASTROApp, the Conference Planner and setting up a social media account.

Hours of operation:

Saturday, October 20	8:00 a.m. – 5:00 p.m.
Sunday, October 21	6:30 a.m. – 5:00 p.m.
Monday, October 22	7:00 a.m. – 6:00 p.m.
Tuesday, October 23	7:00 a.m. – 5:00 p.m.
Wednesday, October 24	7:00 a.m. – 4:00 p.m.

ASTRO CONNECT

Exhibit Hall, Halls 1-4, Street Level

Each ASTRO Connect location will have a different focus—breast, central nervous system, genitourinary, head and neck or physics—and offer attendees a comfortable spot for networking with colleagues with similar interests, as well as a place to recharge electronic devices and check email. Top posters will be on display electronically and experts will be available during designated hours to answer your questions. Visit www.astro.org/conferenceplanner for a schedule of Meet the Experts that will take place in the ASTRO Connect areas.

Breast – Booth 423
Central Nervous System – Booth 2245
Genitourinary – Booth 4045
Head and Neck – Booth 1520
Physics – Booth 3145

ASTRO JOB BOARD

Main Lobby, Street Level

A job board is available in the Main Lobby with an interactive connection to the ASTRO Career Center. Employers who are attending the Annual Meeting can flag job postings online prior to the meeting and connect with job seekers on-site. Job seekers may bring copies of their résumés to post on the on-site job board, in addition to posting it online.

ASTRO PAC POD

Main Lobby, Street Level

ASTRO's political action committee (PAC) pod allows members to get information on ASTRO's advocacy and political giving, contribute on-site and charge their electronic devices. ASTRO PAC provides ASTRO with the opportunity to more fully participate in the political process and ensure our members' voices are being heard by key policymakers on Capitol Hill. Stop by the ASTRO PAC pod to get the most recent legislative updates. For more information, please email camille.kidd@astro.org or visit www.astro.org/astropac.

Hours of operation:

Sunday, October 21	10:00 a.m. – 5:00 p.m.
Monday, October 22	10:00 a.m. – 5:00 p.m.
Tuesday, October 23	10:00 a.m. – 2:00 p.m.

ASTRO PRIVATE INTERVIEW ROOMS

Private interview rooms are available for rent. These rooms are ideal if you have multiple interviews to conduct or prefer to interview applicants in a private setting. A limited number of private interview rooms are available for three-hour periods. For more information, contact Todd Karstaedt at todd.karstaedt@astro.org. On-site, stop by the Ask ASTRO booth located in the Main Lobby to check availability.

APEX, MIPS and RO-ILS OFFICE HOURS

Room 224, Meeting Level

Do you have questions about ASTRO's quality programs, APEX and RO-ILS, or the Medicare Merit-based Incentive Payment System (MIPS)? ASTRO staff are available for one-on-one support or team meetings. Whether you are just beginning or currently working on implementing a plan, we are here to help. For individualized assistance, we recommend emailing apexsupport@astro.org, roils@astro.org, and/or mips@astro.org to schedule an appointment in advance. However, all drop-in inquiries are welcome.

Hours of operation:

Sunday, October 21	1:00 p.m. – 4:00 p.m.
Monday, October 22	10:00 a.m. – 4:00 p.m.
Tuesday, October 23	10:00 a.m. – 2:30 p.m.
Wednesday, October 24	10:30 a.m. – 1:30 p.m.

MyASTROApp

YOUR ANNUAL MEETING RESOURCE

MyASTROApp, formerly ASTROmobile, is getting a new look and feel with exciting innovative features. As always, the official meeting app will give you access to the meeting program and the ability to customize your meeting experience with maps and planners. You can:

- Search sessions by day, track, session type (new feature) or speaker.
- Search exhibitors by name, booth number or product/service category.
- Check out innovative products in the Product Showcase.
- Locate exhibitors on the interactive floorplan.
- Search and view the full abstracts.
- Access "My Schedule"—your personal Annual Meeting schedule.
- Complete the evaluation for continuing education credits.

New this year, you will be able to:

- Complete Live SA-CME evaluations accessible through the app.
- Enjoy a more user-friendly and intuitive interface.
- View presenter slides.
- Take notes as you listen to presentations.
- Interact with presenters by answering polls and asking questions.
- View faculty and presenter photos and bios, if included by presenter.
- Connect with colleagues at the meeting with the Find-a-Friend feature.
- Participate in the Survivor Circle passport program.

MyASTROApp is integrated with the Conference Planner, online at www.astro.org/conferenceplanner, so you can start your Annual Meeting planning early. MyASTROApp is available for iOS and Android devices and can be downloaded from your device's app storefront in late September.



MyASTROApp Login Instructions

Please log in as follows:

iOS Users	Android Users	Other Devices
<ol style="list-style-type: none">1. Download "MyASTROApp" from the App Store.2. Log in with your ASTRO credentials:	<ol style="list-style-type: none">1. Download "MyASTROApp" from the Google Play Store.2. Log in with your ASTRO credentials:	<ol style="list-style-type: none">1. Go to www.astro.org/conferenceplanner in your mobile web browser.2. Log in with your ASTRO credentials:
<p>Username: Email address</p> <p>You can retrieve your password by clicking "Forgot Password?"</p>	<p>Username: Email address</p> <p>You can retrieve your password by clicking "Forgot Password?"</p>	<p>Username: Email address</p> <p>You can retrieve your password by clicking "Forgot Password?"</p>

BUSINESS CENTER

Main Lobby, Street Level

A UPS store is conveniently located inside the Henry B. González Convention Center near the Main Lobby. Here you can ship, mail, fax, photocopy or create a last-minute presentation. To contact the business center, please call 210-258-8950 or email store4180@theupsstore.com.

Hours of operation:

Saturday, October 20	9:00 a.m. – 5:00 p.m.
Sunday, October 21	CLOSED
Monday, October 22	8:00 a.m. – 6:30 p.m.
Tuesday, October 23	8:00 a.m. – 6:30 p.m.
Wednesday, October 24	8:00 a.m. – 6:30 p.m.

BUSINESS MEETING AND LUNCHEON

Tuesday, October 23

11:30 a.m. – 1:00 p.m.

Hemisfair Ballroom 3, Ballroom Level

ASTRO voting members (Active, Affiliate and International members) are invited to attend the Annual Business Meeting. Leaders of the Society will discuss topics of interest to ASTRO members. Lunch will be served.

Connect with attendees.



Tweet
#ASTRO18

CE CENTRAL

Main Lobby, Street Level

ASTRO and ABR staff members will be on hand to answer questions about continuing education and MOC requirements, including the topics:

- How to complete an evaluation.
- ASTRO's Live SA-CME.
- ASTRO Academy.
- Current MOC participation status.
- MyABR attestation and documentation guidance.
- Online Longitudinal Assessment
- ASTRO-ABR Gateway for credit transfer.

CE Central computer stations provide access for you to:

- Complete your continuing education and meeting evaluation.
- Print your Certificate of Attendance.
- View or print a session tracking form.
- Search abstracts.
- Search exhibitors.
- Update your Conference Planner.
- Print your boarding pass.
- Check email and browse the internet.

Hours of operation:

Saturday, October 20	8:00 a.m. – 5:00 p.m.
Sunday, October 21	6:30 a.m. – 5:00 p.m.
Monday, October 22	7:00 a.m. – 5:00 p.m.
Tuesday, October 23	7:00 a.m. – 5:00 p.m.
Wednesday, October 24	7:00 a.m. – 4:45 p.m.

2018 ANNUAL MEETING PROMOTIONAL SPONSORS

As of
August 6,
2018

EXHIBITOR PRODUCT INFORMATION

Your registration badge will include a scan code that contains your contact information. This code can be scanned by exhibitors in the Innovation and Solution Showcase (Exhibit Hall), so that you may request information on products and services offered by the company. Exhibitors may also scan your code to collect your contact information for reporting gifts or payments as required by the Open Payments Program or other state reporting programs. Your contact information will include your email address, unless you opted not to include it during the registration process. Please stop by Attendee Registration located in Hall 1 if you would like to change your contact information.

FACULTY/VIP OFFICE

Room 221A, Meeting Level

Faculty members and VIPs should check in at the Faculty/VIP Office to pick up registration materials and receive last-minute updates and program changes. The Faculty/VIP Office is conveniently located next to the Speaker Ready Room. Faculty and VIPs are welcome in the Faculty/VIP Office throughout the meeting.

Faculty and VIPs include:

- Educational session chairs and speakers.
- Panel moderators and speakers.
- Scientific program moderators and discussants.
- eContouring learning lab speakers.
- Presidential Symposium speakers.
- Keynote speakers and introducers.
- International symposium speakers.
- 2018 ASTRO Fellows.
- 2018 ASTRO Gold Medalists.

Note: Presenters of abstracts are not classified as faculty and should follow attendee registration instructions.

Hours of operation:

Saturday, October 20	6:30 a.m. – 6:00 p.m.
Sunday, October 21	6:30 a.m. – 6:00 p.m.
Monday, October 22	6:30 a.m. – 5:30 p.m.
Tuesday, October 23	6:30 a.m. – 6:00 p.m.
Wednesday, October 24	6:30 a.m. – 4:30 p.m.

FIRST AID

Room 1109, off of West Registration, Street Level

First Aid and Building Emergency: 210-207-7773 or extension 7773 from a house phone.

First Aid is located in Room 1109, off of West Registration. In an emergency, please dial 210-207-7773 to contact First Aid or go to ASTRO Registration, located in Hall 1, and have a staff person contact security.

Hours of operation:

Monday, October 15	8:00 a.m. – 5:00 p.m.
Tuesday, October 16	8:00 a.m. – 5:00 p.m.
Wednesday, October 17	8:00 a.m. – 5:00 p.m.
Thursday, October 18	8:00 a.m. – 8:00 p.m.
Friday, October 19	8:00 a.m. – 8:00 p.m.
Saturday, October 20	8:00 a.m. – 8:00 p.m.
Sunday, October 21	6:30 a.m. – 6:00 p.m.
Monday, October 22	7:00 a.m. – 7:00 p.m.
Tuesday, October 23	7:00 a.m. – 12:00 a.m.
Wednesday, October 24	7:00 a.m. – 8:00 p.m.
Thursday, October 25	8:00 a.m. – 12:00 p.m.

INNOVATION AND SOLUTION SHOWCASE (EXHIBIT HALL)

Exhibit Hall, Halls 1-4, Street Level

Learn more about the latest products in cancer treatment in the Innovation and Solution Showcase.

Hours of operation:

Sunday, October 21	10:00 a.m. – 5:00 p.m.
Monday, October 22	10:00 a.m. – 5:00 p.m.
Tuesday, October 23	10:00 a.m. – 5:00 p.m.

LOST AND FOUND

Ask ASTRO Booth, Main Lobby, Street Level

To report a missing item, check if an item has been turned in to security or turn in a lost item, stop by the Ask ASTRO booth located in the Main lobby.

Hours of operation:

Saturday, October 20	8:00 a.m. – 5:00 p.m.
Sunday, October 21	6:30 a.m. – 5:00 p.m.
Monday, October 22	7:00 a.m. – 6:00 p.m.
Tuesday, October 23	7:00 a.m. – 5:00 p.m.
Wednesday, October 24	7:00 a.m. – 4:00 p.m.

LUGGAGE/COAT CHECK

West Registration, Street Level

Luggage and coat check will be available in the Henry B. González Convention Center in the West Registration area for \$3 per coat and \$4 per bag.

NEWS BRIEFINGS AND PRESS OFFICE

Rooms 225 D and C, Meeting Level

Accredited journalists are provided with press materials and access to cover ASTRO's 60th Annual Meeting. For more information about ASTRO's press program and policies, please contact ASTRO's media relations team at press@astro.org or visit www.astro.org/AMpress.

RADIATION ONCOLOGY INSTITUTE (ROI) BOOTH

Exhibit Hall – Booth 1540, Street Level

Visit the Radiation Oncology Institute (ROI) Booth to hear about ROI and its research programs, view the names of the generous donors to the ROI and learn about the impact of giving to the ROI. Opportunities to meet ROI researchers, members of the ROI Board of Trustees and others who support the ROI will be available at the booth, and you can learn how you can support research that improves outcomes for patients and enhances the radiation oncology field.

Hours of operation:

Sunday, October 21	10:00 a.m. – 5:00 p.m.
Monday, October 22	10:00 a.m. – 5:00 p.m.
Tuesday, October 23	10:00 a.m. – 5:00 p.m.

PARKING

The Henry B. González Convention Center has a garage located across the street from the main entrance to the convention center on 850 E. Commerce Street (corner of Commerce and Bowie Streets) with a daily flat rate of \$10 and event flat rate of \$11. Please note that ASTRO does not validate for parking.

Other public parking garages nearby:

Grand Hyatt Parking Garage
600 East Market Street

Convention Center South Parking
637 South Tower of the Americas Way
(corner of TOA Way and Montana Streets)

Riverbend Garage
210 North Presa Street
(corner of Presa and Market Streets)

Tower of the Americas Parking
801 Chavez Boulevard

POSTERS

Poster Viewing Q&A Sessions

Innovation Hub, Exhibit Hall – rear of Hall 2, Street Level

NEW! Poster Viewing Q&A sessions will now be all electronic and posters will be integrated into the Innovation Hub (Exhibit Hall). Posters will be grouped by disease site, and all poster authors will have the opportunity to provide a brief overview of their poster during a scheduled time. When not in session, the poster stations will be available for poster viewing electronically. Each presenter will have seven minutes, in a timed, fast-paced TED talk format overseen by a session moderator.

Poster viewing hours:

Sunday, October 21	10:00 a.m. – 5:00 p.m.
Monday, October 22	10:00 a.m. – 5:00 p.m.
Tuesday, October 23	10:00 a.m. – 5:00 p.m.

Poster Viewing Presenter Check-in

Innovation Hub, Exhibit Hall – rear of Hall 2, Street Level

Poster Viewing Q&A presenters must check-in at Concierge Desk, located in the Innovation Hub (Exhibit Hall) in the rear of Hall 2, 24 hours prior to their presentation time.* Staff will be available to assist presenters with uploading any last-minute changes and to help locate their assigned station. Presenters are required to stand by the poster station during their scheduled time. Fifteen minutes before the session begins, presenters should be at their designated stations and wait for the Moderator to start the session. Poster Viewing Q&A sessions are a total of 90 minutes long.

**Anyone wanting to check in on Saturday can go to the Poster Check-in desk near the main registration area.*

Poster Viewing Q&A Session Schedule

View the Poster Viewing Q&A schedule on the Conference Planner at www.astro.org/conferenceplanner or on the Annual Meeting app.

Sunday, October 21

Poster Session 1

1:15 p.m. – 2:45 p.m.

Gastrointestinal, Genitourinary,
Central Nervous System, Breast cancer

Monday, October 22

Poster Session 2

10:45 a.m. – 12:15 p.m.

Biology, Head and Neck, Palliative,
Patient Safety, Patient Reported Outcomes, Lung

Tuesday, October 23

Poster Session 3

1:00 p.m. – 2:30 p.m.

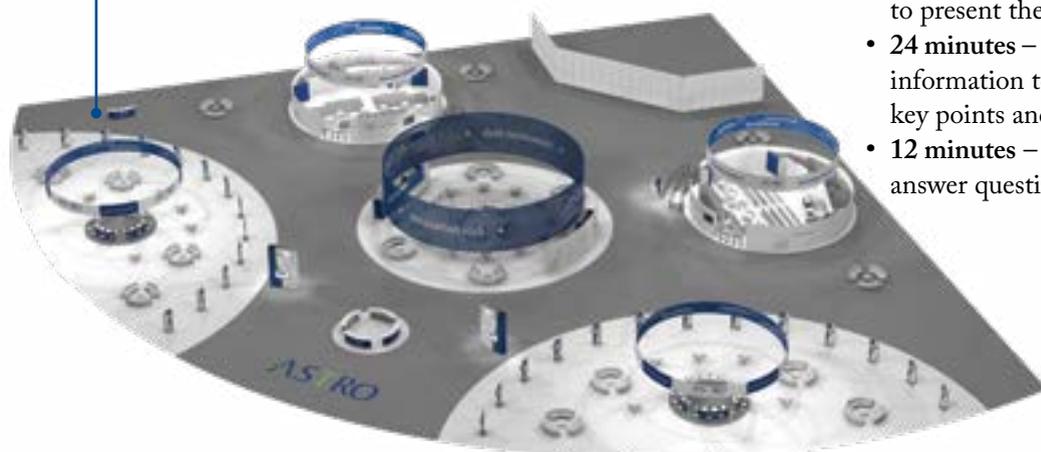
Physics, Hematologic, Pediatrics

Poster Session 4

2:45 p.m. – 4:15 p.m.

Gynecological, Education/History,
Digital Health/Informatics, Health Services Research,
Nonmalignant, Nurses, Sarcoma/Skin

**New Innovation Hub
will feature
all-digital posters**



SCIENTIFIC SESSION DESCRIPTIONS

Science Highlights

These sessions will highlight up to five of the highest rated abstracts in six disease site tracks. Experts will highlight clinically applicable information and compare the abstract with similar studies.

Monday, October 22

Science Highlights 1: Lung Cancer

7:45 a.m. – 8:15 a.m.

Science Highlights 2: Pediatric Cancer

8:30 a.m. – 9:00 a.m.

Tuesday, October 23

Science Highlights 3: Gastrointestinal Cancers

7:45 a.m. – 8:15 a.m.

Science Highlights 4: Genitourinary Cancers

8:30 a.m. – 9:00 a.m.

Wednesday, October 24

Science Highlights 5: Breast Cancer

7:45 a.m. – 8:15 a.m.

Science Highlights 6: Palliative Care

8:30 a.m. – 9:00 a.m.

Poster Discussion Sessions

The Poster Discussion sessions will begin with oral presentations followed by an interactive discussion provided by experts in the field, then poster viewing and face-to-face dialogue with authors.

- **54 minutes** – Nine authors have six minutes each to present their posters at the podium.
- **24 minutes** – Discussants provide additional information to compare the abstracts, highlight key points and moderate questions and answers.
- **12 minutes** – Authors stand by posters and answer questions.

Poster Discussion Presenter Check-in*Outside Hall 1, Main Lobby, Street Level*

Poster Discussion presenters must check-in at the Poster check-in booth located in the main registration area at least two hours prior to their presentations. Staff will be available to assist presenters with uploading any last-minute changes and to help them prepare for their oral presentations. Once the session begins, presenters should sit in the front row and wait for the Discussant to call them up to the podium for their presentations. Poster discussion sessions are 90 minutes long. Presenters are required to attend the full 90 minutes and stand by their posters for the last 12 minutes of the session.

Oral Scientific Sessions

There are 45 oral scientific sessions, labeled as SS 01 – SS 45. These are 75- or 90-minute sessions where the abstract presenter has up to 10 minutes to discuss their study. Oral Scientific Sessions are organized by disease site and also include Radiation Physics, Radiation Biology, Palliative Care, Patient Reported Outcomes/Quality of Life/Survivorship and Pediatrics. There is a new track this year for Digital Health Innovation and Informatics, which will have one oral session and one poster discussion session. The oral scientific sessions are scheduled throughout the meeting and run concurrently with the other session types, such as the Education and Panel sessions.

SAN ANTONIO VISITOR INFORMATION CENTER*Walkway adjacent to the Lila Cockrell Theater and West Lobby Entrance, Street Level*

Attendees can stop by the San Antonio Visitor Center to receive local city information as well as maps, guides and brochures.

SMOKING

The Henry B. González Convention Center is a nonsmoking facility.

Connect with attendees.

Tweet
#ASTRO18

SPEAKER READY ROOM*Room 221 B/C, Meeting Level*

Faculty members and abstract presenters should upload their PowerPoint presentations in advance of their sessions through the online Speaker Center. To ensure presentations have been properly uploaded, faculty members and abstract presenters are asked to check in at the Speaker Ready Room to review the information and make any last-minute edits.

Every speaker should also save their presentation on a portable device and bring it to the Speaker Ready Room at least 24 hours in advance of the presentation or upon arrival at the Henry B. González Convention Center.

Hours of operation:

Saturday, October 20	6:30 a.m. – 6:00 p.m.
Sunday, October 21	6:30 a.m. – 6:00 p.m.
Monday, October 22	6:30 a.m. – 5:30 p.m.
Tuesday, October 23	6:30 a.m. – 6:00 p.m.
Wednesday, October 24	6:30 a.m. – 4:30 p.m.

TRANSPORTATION

San Antonio offers a number of convenient transportation options to help attendees easily get around the city. For more information on transportation services, visit www.astro.org/travel.

Rental Car Reservations

Avis and Hertz are offering ASTRO attendees special rates on car rentals during Annual Meeting.

Avis Rent-A-Car

To reserve your Avis rental car, call 1-800-311-1600. Be sure to mention the Avis Worldwide Discount number, J657704 when making your reservation.

Hertz

To reserve your Hertz rental car, call 1-800-654-2240 or 405-749-4434 or go to www.hertz.com. Be sure to mention the CV ID number, 04840018, in order to receive the discounted rate.

To and From the Airport

San Antonio International Airport (SAT) is approximately 10 miles, or 18 minutes, from the Henry B. González Convention Center.

Taxi

On average, a one-way taxi ride from San Antonio International Airport (SAT) to the Henry B. González Convention Center is approximately \$30 (gratuity not included).

Ride Sharing

San Antonio has a multitude of rideshare car service options, such as Uber, Lyft, Get Me or Wingz.

VIRTUAL MEETING

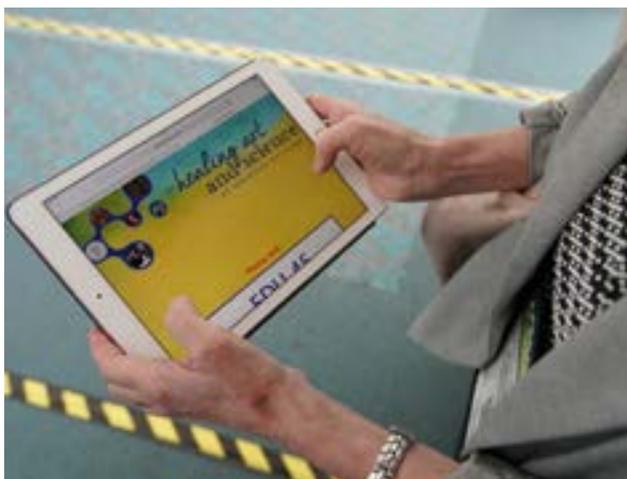
Extend your learning experience with access to the 2018 ASTRO sessions long after the meeting is over. All full conference attendees receive the Virtual Meeting with their registration at no additional cost. One-day and PRO Program-only registrants may purchase the Virtual Meeting through registration for an additional fee.

The Virtual Meeting includes professionally recorded, streaming content as well as downloadable MP3 and PDF files for each presentation.* To access, navigate to www.astro.org/virtualmeetings and log in with your ASTRO credentials. Full conference attendees will have access to the recorded presentations 24 hours after each session.

**Presentations are included in the Virtual Meeting as approved per faculty.*

WIRELESS INTERNET ACCESS

Complimentary wireless internet access is provided in all common areas, session rooms and the Innovation and Solution Showcase (Exhibit Hall). Laptops must have a Wi-Fi card to connect.



PASSPORT PROGRAM

Thanks to the generous support from the Annual Meeting sponsors, the Survivor Circle Passport Program funds two grants of \$10,000 for cancer support organizations in the Annual Meeting host state.

Be sure to stop by the participating companies' booths and use the Annual Meeting app to scan the QR code and answer a quick question. Once you have visited 10 booths, your name will be entered into a daily drawing for fabulous prizes.

Prize drawings will occur at 4:00 p.m. Sunday, October 21, through Tuesday, October 24. The generous donations from the Passport Program participants will help support the Candlelighters of El Paso and the Light and Salt Association.



As of
August 8,
2018

INDUSTRY-EXPERT THEATER

This activity allows companies to present their noteworthy new products and services through live presentations. Seating is available on a first-come, first-served basis. The Industry-Expert Theater content and views expressed therein are those of the companies and not of ASTRO.

Lunch or other food and beverages may be provided by the companies, which may subject you to reporting under the Federal Sunshine Act (the Open Payments Program) or other state laws. Otherwise, food may be available for purchase prior to the start of an event in the ASTRO Bistro and concession area.

Theaters 1 and 2 are located in the Innovation Hub in the rear of the Innovation and Solution Showcase (Exhibit Hall). Room 216 A/B is located on the Meeting Level.

SUNDAY, OCTOBER 21			
<p>Theater 1, Innovation Hub</p> <p>Title: <i>Detecting and Localizing Recurrent Prostate Cancer with Axumin® (fluciclovine F 18) injection</i> Time: 12:15 p.m. – 1:15 p.m. Company: Blue Earth Diagnostics Inc. Contact: Maura Harrigan Phone: 855-298-6461 Email: m.harrigan@blueearthdx.com</p>	<p>Theater 2, Innovation Hub</p> <p>Title: <i>Breast Cancer: Your Challenges Today – Our Solutions for Tomorrow</i> Time: 12:15 p.m. – 1:15 p.m. Company: Accuray Incorporated Contact: Diane Hobaugh Phone: 408-789-4265 Email: dhobaugh@accuray.com</p>	<p>Session Room 216 A/B</p> <p>Title: <i>Immunotherapy for Patients with Unresectable Stage III Non-small Cell Lung Cancer Following Chemoradiation Therapy – A Case-based Program</i> Time: 12:15 p.m. – 1:15 p.m. Company: AstraZeneca Contact: Chris Koo Phone: 301-398-6087 Email: chris.koo@astrazeneca.com</p>	<p>Theater 2, Innovation Hub</p> <p>Title: <i>MRI-guided Radiotherapy: Imaging of Tumor Response to Therapy</i> Time: 2:45 p.m. – 3:45 p.m. Company: ViewRay Contact: Erin Schesny Phone: 404-931-3918 Email: eschesny@viewray.com</p>
MONDAY, OCTOBER 22			
<p>Theater 1, Innovation Hub</p> <p>Title: <i>From Early Adoption to Widespread Use: The Impact of the Prostate Hydrogel Spacer on Prostate Radiotherapy</i> Time: 12:30 p.m. – 1:30 p.m. Company: Augmenix Contact: Eileen Gardner Phone: 781-902-1625 Email: egardner@augmenix.com</p>	<p>Theater 2, Innovation Hub</p> <p>Title: <i>Dynamic Tracking and Motion Correction: Over 15 Years of Accuray Leadership</i> Time: 12:30 p.m. – 1:30 p.m. Company: Accuray Incorporated Contact: Diane Hobaugh Phone: 408-789-4265 Email: dhobaugh@accuray.com</p>	<p>Theater 2, Innovation Hub</p> <p>Title: <i>The Big Road Ahead for Nanoparticles and Radiation Therapy</i> Time: 3:45 p.m. – 4:45 p.m. Company: Nanobiotix Contact: Monica Sukhatme Phone: 630-441-0846 Email: monica.sukhatme@nanobiotix.com</p>	
TUESDAY, OCTOBER 23			
<p>Theater 1, Innovation Hub</p> <p>Title: <i>SGRT: Advances in Accuracy and Improved Patient Experience</i> Time: 10:15 a.m. – 11:15 a.m. Company: Vision RT Ltd. Contact: Shekira Francis Phone: +44 208-349-6447 Email: sfrancis@visionrt.com</p>	<p>Theater 1, Innovation Hub</p> <p>Title: <i>MRI-guided Radiotherapy Clinical Outcomes: A Summary of Prospective Trials</i> Time: 12:30 p.m. – 1:30 p.m. Company: ViewRay Contact: Erin Schesny Phone: 404-931-3918 Email: eschesny@viewray.com</p>		

2018 ANNUAL MEETING UNRESTRICTED EDUCATIONAL GRANT SUPPORTERS

Astellas and Medivation Inc., a Pfizer company

AstraZeneca

Elekta, Inc.

Novocure

As of
August 7,
2018

INDUSTRY SATELLITE SYMPOSIA

ASTRO has reviewed and approved these symposia for presentation. These symposia represent the content and views of the supporters and are not part of the official ASTRO Annual Meeting.

SUNDAY, OCTOBER 21, 2018

6:30 p.m. – 9:30 p.m. | Symposium

Advances in SBRT in the Management of Prostate Cancer

Venue Location: Marriott Riverwalk, Alamo Ballroom C

Dinner will be provided.

Accreditation: NYU Winthrop Hospital is Accredited with Commendation by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CME Credits: NYU Winthrop Hospital designates this live activity for a maximum of 2.75 *AMA PRA Category 1 Credit(s)*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

For more information and to register please visit www.StereotacticRadiosurgeryCME.org or contact Keyana.Golds@nyulangone.org.

This activity is hosted by Accuray.

SUNDAY, OCTOBER 21, 2018

6:30 p.m. – 7:00 p.m. | Registration and Dinner

7:00 p.m. – 9:00 p.m. | Symposium

Medical Crossfire®: Overcoming Clinical Inertia in Glioblastoma: The Experts Weigh In on Recent Data Sets and Next Steps to Move the Field Forward

Venue Location: Grand Hyatt San Antonio, Texas Ballroom C

Dinner will be provided.

Accreditation: Physicians' Education Resource®, LLC, is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

CME Credits: Physicians' Education Resource, LLC, designates this live activity for a maximum of 2.0 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity is supported by an educational grant from Novocure.

MONDAY, OCTOBER 22, 2018

6:45 p.m. - 7:15 p.m. | Registration and Dinner

7:15 p.m. - 8:45 p.m. | Symposium

The Era of Immunotherapy in Stage III NSCLC: Exploring the Evidence and Practicalities of Integrating Checkpoint Inhibition into the Multimodal Treatment Arsenal

Venue Location: Grand Hyatt San Antonio, Texas Ballroom C

Dinner will be provided.

Accreditation: This activity will be planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Medical Learning Institute, Inc. and PVI, PeerView Institute for Medical Education. The Medical Learning Institute, Inc. is accredited by the ACCME to provide continuing medical education for physicians.

CME Credits: The Medical Learning Institute, Inc. designates this live activity for a maximum of 1.5 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

For more information please visit www.peerview.com/radNSCLC or contact live@peerview.com.

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AMERICAN SOCIETY FOR RADIATION ONCOLOGY



ASTRO 2018 GOLD MEDALISTS ARE SHINING STARS IN THE FIELD OF RADIATION ONCOLOGY

ASTRO congratulates the 2018 Gold Medalists. Patricia Eifel, MD, FASTRO, David Jaffray, PhD, and Ralph Weichselbaum, MD, have been awarded the highest honor bestowed upon ASTRO members.

ASTRO AWARDS ITS ANNUAL GOLD MEDAL to individuals who have made outstanding lifetime contributions in the field of radiation oncology, including achievements in clinical patient care, research, teaching and service to the profession. In the award's 42nd consecutive year, the new awardees join an exclusive class of 84 Gold Medalists selected over the decades from the Society's more than 10,000 members.



**PATRICIA EIFEL,
MD, FASTRO**

Patricia Eifel, MD, FASTRO, is known by many names: clinician, researcher, educator, author and mentor. But her name is most significantly synonymous with excellence in the field of gynecologic radiation oncology. For 30 years, she has been on staff at MD Anderson Cancer Center in Houston, including 20 years as the chief of gynecologic oncology service. Prior to her time there, she was the first woman hired as a faculty member at the Joint Center for Radiation Therapy at Harvard Medical School in 1982.

Internationally, Dr. Eifel is a sought-after speaker and educator. She delivered the ASTRO Refresher Course on cervical cancer for 15 years. She has written 68 book chapters and edited or authored three books, most recently including *Gynecologic Radiation Therapy: A Practical Guide*, with Ann Klopp, MD. She has given 165 invited lectures nationally and internationally—from Kyoto to Cape Town to Kauai, Hawaii.

As a researcher, Dr. Eifel is both prolific and meticulous. She has published 180 articles in the field of radiation oncology. Her clinical database, which documents and analyzes the outcomes of thousands of patients treated with radiation therapy, is considered one of the most extensive in the field. This goldmine of

data has led to many observations that have influenced clinical practice and trial designs around the world.

Dr. Eifel was lead author on the seminal study demonstrating that the addition of chemotherapy to radiation therapy improved survival for women with cervical cancer. The results of this study led to a new standard of care for cervical cancer. The resulting article, published in the *Journal of Clinical Oncology*, is one of the most widely cited in the field.

Her contributions to the field have gone beyond the clinic and the lab—as an ASTRO member since 1983, Dr. Eifel served as chair of the board of directors in 2008-2009. During her years on the board, ASTRO built a lobbying effort against self-referral. Also under her tenure, the Radiation Oncology Institute (ROI) was founded, ASTRO successfully lobbied against proposed cuts in Medicare reimbursement and the guidelines committees expanded.

David Jaffray, PhD, a leading medical physicist, is known for his innovation, leadership and



**DAVID JAFFRAY,
PHD**

scholarship. The head of the radiation physics department at Princess Margaret Cancer Centre in Toronto, Dr. Jaffray wears many additional hats—as the director of the Spatio-Temporal Targeting and Amplification of Radiation Response (STTARR) Innovation Centre; as the director of the Techna Institute for the Advancement of Technology for Health in the University Health Network; and as the executive vice president of technology and innovation, also with the University Health Network.

His most well-known contribution to the field is the development of the kilovoltage cone-beam CT (CBCT) for image-guided radiotherapy (IGRT).

This technology revolutionized the field and changed the way patients are treated. CBCT-based IGRT significantly reduced margins, which led to a reduction of normal tissue toxicity. This change enabled the growth of stereotactic body radiation therapy to treat cancer—all due to the development of CBCT, which Dr. Jaffray led.

Dr. Jaffray's work on CBCT has resulted in several patents and licenses. The original paper by Dr. Jaffray on the development of CBCT is one of the most highly cited papers in radiation oncology, with more than 1,200 citations. The increased use of IGRT meant more research was needed to test outcomes, so Dr. Jaffray developed a small-animal image-guided irradiator, which is indispensable for the field of radiobiology research.

With nearly 250 peer-reviewed publications and more than 300 invited lectures, Dr. Jaffray's extensive CV reflects the impact his work has had on the field of radiation oncology. He has been awarded the major awards in the field of medical physics, including the Sylvia Sorokin-Greenfield Award, the Farrington Daniels Award and the Sylvia Fedoruk Award.

Ralph Weichselbaum, MD, is responsible for several important advances in the field of radiation oncology. He was one of the first investigators to recognize that radiation can activate signal transduction processes that result in activation of the immediate early genes and cytokine genes. He and his colleagues were one of the first groups to systematically study multiagent chemotherapy and radiotherapy combinations in head and neck cancer.

He has been credited, along with colleague Samuel Hellman, MD, with describing the oligometastatic state. In 1995, the pair published the seminal *Journal of Clinical Oncology* article that posited that there was a state in between a few and many metastases, which they

termed oligometastasis. They further argued that these oligometastases could be successfully treated with high-dose radiation or surgery.

He is the Daniel K. Ludwig Distinguished Service Professor and Chair of the Department of Radiation and Cellular Oncology at the University of Chicago and the co-director of the Ludwig Center for Metastasis Research. With more than 850 published articles, Dr. Weichselbaum's scientific investigations have run the gamut from radiobiology, radiochemistry, molecular biology, virology, translational science, medical utility theory, clinical research, anti-angiogenesis, immunology, the pathophysiology and molecular signature to predict metastatic state and new methods to inhibit the metastatic process. As a consequence of investigating the oligometastatic state and the systemic effects of ablative radiotherapy, Dr. Weichselbaum's research has focused on ways to combine radiation therapy with immunotherapy—using radiation to activate the immune system to attack cancer cells. This concept is now being studied in clinical trials.

Earlier this year, the American Society of Clinical Oncology honored him with the David A. Karnofsky Memorial Award and Lecture—one of three radiation oncologists to receive this award. He is one of 12 Donald K. Ludwig professors and the only radiation oncologist. He is a member of the Association of American Physicians and the National Academy of Medicine. He has also been identified as the most cited radiation oncologist of the past decade.

Please join ASTRO in celebrating these leaders at an awards ceremony at ASTRO's 60th Annual Meeting on Tuesday, October 23. 



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LEADERS IN RADIATION ONCOLOGY AWARDED ASTRO FELLOW DESIGNATION

ASTRO HAS SELECTED 35 DISTINGUISHED MEMBERS to receive the ASTRO Fellow (FASTRO) designation. The 2018 class of Fellows will be recognized during ASTRO's 60th Annual Meeting in San Antonio.

The ASTRO Fellows Program recognizes individuals who have made significant contributions to radiation oncology and the Society through research, education, patient care and/or service to the field. Since its inception in 2006, the FASTRO designation has been awarded to just 327 of ASTRO's more than 10,000 members worldwide.

Candidates for the Fellows program must be nominated by a current ASTRO Fellow, accompanied by three letters of support from ASTRO members. A committee reviews all nominations and presents the candidates to ASTRO's Board of Directors for approval.

The 2018 Fellows are:

- **Søren M. Bentzen**, DSc, PhD, University of Maryland School of Medicine, Baltimore
- **Jeffrey C. Buchsbaum**, MD, PhD, AM, National Cancer Institute, Rockville, Maryland
- **Paul M. Busse**, MD, PhD, Massachusetts General Hospital, Harvard Medical School, Boston
- **Arnab Chakravarti**, MD, The Ohio State University College of Medicine/Arthur G. James Cancer Hospital, Columbus, Ohio
- **Joe Y. Chang**, MD, PhD, The University of Texas MD Anderson Cancer Center, Houston
- **Peter Y. Chen**, MD, Beaumont Health System, Oakland University William Beaumont School of Medicine, Royal Oak, Michigan
- **Jason Chia-Hsien Cheng**, MD, PhD, MS, National Taiwan University College of Medicine and Hospital, Taipei, Taiwan
- **Indrin J. Chetty**, PhD, Henry Ford Health System, Detroit
- **Benjamin W. Corn**, MD, Shaare Zedek Medical Center, Jerusalem
- **Iris C. Gibbs**, MD, Stanford Medicine, Stanford, California
- **David Gius**, MD, PhD, Northwestern University Feinberg School of Medicine, Chicago
- **Eleanor E. R. Harris**, MD, Case Western Reserve University and University Hospitals, Cleveland
- **Mark D. Hurwitz**, MD, Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia
- **Reshma Jagsi**, MD, DPhil, University of Michigan, Ann Arbor, Michigan
- **Ashesh B. Jani**, MD, Emory University, Atlanta
- **John A. Kalapurakal**, MD, Northwestern University, Chicago
- **Matthew S. Katz**, MD, Radiation Oncology Associates PA, Lowell, Massachusetts
- **Sameer Keole**, MD, Mayo Clinic, Phoenix
- **Feng-Ming (Spring) Kong**, MD, PhD, University Hospitals Cleveland Medical Center, Case Western Reserve Comprehensive Cancer Center, Cleveland
- **Zhongxing Liao**, MD, The University of Texas MD Anderson Cancer Center, Houston
- **Mitchell Machtay**, MD, University Hospitals, Seidman Cancer Center, Case Western Reserve University, Cleveland
- **Catherine C. Park**, MD, University of California San Francisco, San Francisco
- **Shilpen Patel**, MD, GRAIL, Menlo Park, California
- **Robert A. Price Jr.**, PhD, Fox Chase Cancer Center, Philadelphia
- **David Raben**, MD, University of Colorado Denver School of Medicine, Aurora, Colorado
- **Hui-Kuo G. Shu**, MD, PhD, Emory University, Atlanta
- **Berend J. Slotman**, MD, PhD, Amsterdam University Medical Center, Amsterdam
- **Robert Timmerman**, MD, University of Texas Southwestern Medical Center, Dallas
- **Gregory M. M. Videtic**, MD, CM, Cleveland Clinic, Cleveland
- **Bhadasain Vikram**, MD, National Institutes of Health, Bethesda, Maryland
- **Stephanie E. Weiss**, MD, Fox Chase Cancer Center, Philadelphia
- **Gayle E. Woloschak**, PhD, Northwestern University, Chicago
- **Min Yao**, MD, PhD, University Hospitals Cleveland Medical Center, Cleveland
- **Ellen D. Yorke**, PhD, Memorial Sloan Kettering Cancer Center, New York
- **Weining (Ken) Zhen**, MD, University of Nebraska Medical Center, Omaha, Nebraska 



ASTRO AWARDS 2018 SURVIVOR CIRCLE GRANTS TO TWO TEXAS CANCER CHARITIES

Candlelighters of El Paso and the Light and Salt Association set to receive grants at Annual Meeting

TWO TEXAS-BASED NONPROFITS, Candlelighters of El Paso and the Light and Salt Association, have been named the recipients of the ASTRO 2018 Survivor Circle grants. Each organization will receive a \$10,000 grant to support their programs for those who have been affected by cancer and will be recognized during ASTRO's Annual Meeting, October 21-24, in San Antonio.



Candlelighters of El Paso was formed in 1978 as an informal support group for parents of children with cancer. "At that time, there were few resources available to provide information,

financial assistance or the emotional support necessary to cope with this life-threatening disease," says Scott Lynch, chief executive officer of Candlelighters.

"Today, parents of children with cancer continue to lend their unique perspective as members of our board, staff and volunteers as we provide free support to childhood cancer patients, ages birth to 21 years of age, and their families across the El Paso region," Lynch says.

Candlelighters' current continuum of care is offered in three main areas: emergency financial assistance, psychosocial programs and therapeutic services. The

organization offers camps to children with cancer, as well as camps for siblings of children with cancer. They also offer a horse therapy program for teens, a three-session intervention for caregivers of children recently diagnosed and provide monthly support groups, family enrichment workshops and holiday-centered activities.

"Our organization remains the sole provider of free family services in the region offering support, advocacy and education to children diagnosed with cancer, their families and the community-at-large," says Lynch.

"Our continuum of care addresses the prolonged strain, including financial, emotional and social strain, resulting from a child battling a life-threatening illness. This range of care begins immediately following the diagnosis, throughout the treatment period and up to six months after treatment as families regain normalcy to their lives."

More than 90 percent of the families the nonprofit assists live at or below the national poverty level, so the organization provides emergency financial assistance to cover immediate needs such as rent, utilities, unreimbursed medical expenses and transportation costs to and from treatment.

"The ASTRO Survivor Circle grant will provide support for our Emergency Financial Assistance (EFA) program," says Lynch. "The financial impact is often



the most immediate concern for clients, as unreimbursed medical bills and time away from work inevitably reduces the household income. Reliable transportation, meal assistance and out-of-town travel for treatments are essential to the families adjusting to having a child with an acute illness.”



光鹽社
Light and Salt
Association

The Light and Salt Association is a nonprofit that aims to assist the vulnerable Asian-American community in the greater Houston area, promoting healthy living and fostering a sense of community.

Through its Cancer Support Network, the Light and Salt Association assisted 897 cancer patients and survivors in 2017. This program provides transportation assistance to treatments and grocery shopping to cancer patients and their caregivers, translation and interpretation services during doctor’s appointments, home and hospital visits to cancer patients and other peer support during cancer treatment.

“For 2017 alone, we provided 685 trips of treatment-related transportation assistance and 891 units of home or hospital visits to cancer patients,” says Helen Sun, executive director of the Light and Salt Association. “All of these services were provided by staff or volunteers using their own vehicles. Funding from ASTRO’s Survivor Circle Grant will definitely help provide gas and mileage reimbursements for staff or volunteers who provide transportation and language assistance and peer support services to cancer patients.”

“These services are crucial because they will increase cancer patients’ adherence to treatments,” Sun says. “Cancer treatments like radiation treatment last a relatively longer period of time and occur with frequent visits. These supporting services can provide some relief for caregivers because many of them cannot afford to take off work to accompany their loved ones to treatment facilities due to conflict in work schedules or fear of losing their jobs.”

In addition to the transportation, language and peer support assistance, the Light and Salt Association also holds cancer support group meetings and helps with cancer screening services, such as Hepatitis C testing, fecal occult blood tests, mammograms and pap smears.

For more information about Candlelighters of El Paso, visit www.candlelighterselp.org. For more information about the Light and Salt Association, visit www.light-salt.org/English. To view past Survivor Circle grant awardees and more information about the Survivor Circle grant and award winners, visit www.rtanswers.org/survivorcircle. 





2018 SURVIVOR CIRCLE AWARD HONORS TWO CANCER SURVIVORS

Breast cancer survivor Susan Rafte is honored and posthumous award goes to William Fults

FOR ONLY THE SECOND TIME, two survivors—not one—were selected to receive the ASTRO Survivor Circle Award this year. Susan Rafte, a Houston breast cancer survivor, will be honored at an award ceremony during ASTRO's 60th Annual Meeting in San Antonio. The second recipient, William Fults, will be posthumously awarded the honor.

The ASTRO Survivor Circle Award is an annual recognition of cancer survivors who have dedicated their time and energy in service and support of their local communities. Honorees are selected from the community in which ASTRO hold its Annual Meeting, where awardees are presented with the honor, along with \$1,000.



SUSAN RAFTE

Susan Rafte was only 30 years old when she was diagnosed with stage III ductal carcinoma in 1994. She first felt a lump in her breast while she was pregnant with her daughter. But it wasn't until 18 months later, when Rafte pushed for a biopsy, that the lump was diagnosed as a malignant tumor. Rafte was treated at MD

Anderson Cancer Center by a multidisciplinary care team with chemotherapy, surgery and radiation therapy.

"From the beginning of my diagnosis, I have always been public about my disease," Rafte says. "I felt it was important to spread awareness about breast health and breast cancer. I knew from personal experience that this disease has no boundaries."

Rafte began giving back as a peer-to-peer support volunteer through MD Anderson Cancer Center. In 2000, she helped to start an on-site peer support program at the breast cancer center there. She also serves on many research projects and committees as a patient advocate.

In 1998, her sister, a dancer, started a fund-raising event called the Pink Ribbons Project, an arts and dance initiative to promote awareness about breast cancer and help raise funding for breast cancer advocacy

and education. Since the Project's inception, they have raised nearly \$6 million.

"We need to pay it forward," says Rafte. "So many people helped me and my family through [my diagnosis and treatment]... We felt it was important to help others who were facing similar challenges."

William Fults, the second honoree of the 2018 Survivor Circle Award, passed away on May 6, 2018, following a battle with prostate cancer. He was diagnosed with metastatic prostate cancer that had spread to his bones and adrenal gland. At the Brooke Army Medical Center at Fort Sam Houston in San Antonio, Fults underwent treatment, including pelvic radiation therapy, chemotherapy, radiopharmaceutical injections, immunotherapy, surgery and medication.

He got involved as a patient support volunteer with Us TOO, a national nonprofit dedicated to providing education and support to those affected by prostate cancer. Fults also got involved in the prostate cancer nonprofit ZERO – The End of Prostate Cancer. His team raised the most money for the past three years as part of the ZERO Prostate Cancer Run/Walk in San Antonio. He also attended the ZERO Summit in Washington the past two years, speaking with elected officials about increasing prostate cancer research, which resulted in increased funding.

Fults served in the United States Air Force for 23 years. His family was stationed at Warren Air Force Base (AFB), Texas A&M University, Vandenberg AFB, Offutt AFB, Maxwell AFB, Randolph AFB and Lackland AFB over the course of his career.

Before his death, Fults wrote, "Get involved with any group that is in the fight to cure cancer—any type. Being involved means... putting time and personal effort toward raising funds for the fight, participating in local advocacy groups and regularly engaging politicians to gain their support." 



WILLIAM FULTS

THORACIC SURGEON NAMED 2018 ASTRO HONORARY MEMBER

Jessica Donington, MD, MS, honored with ASTRO award for nonmembers



JESSICA DONINGTON, MD, MS, a thoracic surgeon and professor at the University of Chicago, has been selected as the 2018 ASTRO Honorary Member. She is slated to receive the award at ASTRO's 60th Annual Meeting in San Antonio during an awards ceremony on Tuesday, October 23.

Honorary membership is the highest honor that ASTRO bestows upon cancer physicians and researchers who do not qualify for active ASTRO membership—namely, those outside of the specialties of radiation oncology, radiobiology or medical physics. ASTRO Honorary Members must have made significant contributions to the specialty of radiation oncology.

Dr. Donington has long supported collaborations between thoracic surgeons and radiation oncologists to provide lung cancer patients with the best care. As one of two surgeons on the guideline committee, she was a key contributor to the recent ASTRO clinical practice statement on stereotactic body radiotherapy (SBRT) for early stage non-small cell lung cancer, released in 2017.

Drew Moghanaki, MD, MPH, a fellow member of the ASTRO lung SBRT guideline committee, says Dr. Donington is “a true inter-disciplinary collaborator.” “She encouraged us to consider all potential benefits that SBRT might have over surgery,” says Dr. Moghanaki, one of the ASTRO members who supported Dr. Donington for the honor. “We never lost focus on the challenges of shared decision-making

for patients who are normally offered surgery as the standard of care.”

Dr. Donington has also been involved in ASTRO as a member of the steering committee for the 2017 Multidisciplinary Thoracic Cancers Symposium and currently serves as co-chair of the 2019 symposium. She has participated in several ASTRO Annual Meetings as a speaker and attendee.

She recently became chief of general thoracic surgery and professor at the University of Chicago. From 2007 until 2018, she was an attending surgeon at New York University Langone Medical Center and associate professor at the NYU School of Medicine.

Prior to her time at NYU, Dr.

Donington was at Stanford, where she collaborated with Quynh-Thu Le, MD, FASTRO, on a dose-escalation lung SBRT trial. That trial, published in the *Journal of Thoracic Oncology* in 2006, was one of the earliest lung SBRT trials in the United States evaluating single fraction SBRT in a phase I trial.

She has been a member of the NRG/RTOG Thoracic Malignancy committee for many years, serving since 2015 as the thoracic surgery co-chair for NRG/RTOG 0839. She has led or co-authored more than 90 papers, written 19 textbook chapters and made 79 presentations.

She has been invited to author multiple clinical guidelines in clinical oncology, as well as ASTRO's, and has been appointed to the editorial boards of several thoracic oncology journals and scientific advisory boards of multiple lung cancer foundations.

“As radiation oncologists and thoracic surgeons continue to identify the importance of working more closely together, thoracic surgeons like Dr. Donington serve a critical role to bridge our specialties,” says Dr. Moghanaki. 🇺🇸

“As radiation oncologists and thoracic surgeons continue to identify the importance of working more closely together, thoracic surgeons like Dr. Donington serve a critical role to bridge our specialties.”

ADDING VALUE THROUGH COLLABORATION: WINNERS OF ASTRO'S 2018 RESEARCH AWARDS

FOR MANY YEARS, ASTRO has been supporting research efforts in the field of radiation oncology through our Research Grants program, helping investigators fund the research vital to improving patient care. This year, ASTRO has partnered with other funding organizations to increase our collaborations, which has led to the selection of an outstanding group of awardees.

This is the first year that we've been able to offer, in collaboration with the Breast Cancer Research Foundation, the ASTRO-BCRF Career Development Award to End Breast Cancer. This award grants \$100,000 per year for two years to a researcher in his or her transition period to independence as an investigator working in the field of breast cancer. Our first winner of this award is **Corey Speers, MD, PhD**, from the University of Michigan. His project is titled *Targeting checkpoint kinases for the more effective treatment of radioresistant TNBC*. It will focus on novel treatment modalities using kinase pathways.

Also new this year, ASTRO has collaborated with the Prostate Cancer Foundation to create the ASTRO-PCF Career Development Award to End Prostate Cancer. Awarding \$75,000 per year for three years, this grant is given to an early-career investigator whose research focuses on prostate cancer. Our first winner is **Brandon Mahal, MD**, from Dana-Farber Cancer Institute. His project, *Integrative genomics of prostate cancer disparities*, will help tease out the factors that lead to disparity in treatment and outcomes for minority patients in our country.

Our third and final new award for the 2018-2019 award cycle was given in collaboration with the American Association of Physicists in Medicine. The ASTRO-AAPM Physics Resident/Postdoctoral Fellow Seed Grant is given to a physics resident or postdoc doing research in radiation oncology. The first winner of this newly established award is **Khadija Sheikh, MD, PhD**, of Johns Hopkins University School of Medicine. Her project, *Predicting radiation-induced toxicities using radiation and imaging biomarkers of head and neck cancer*, will be focused on finding ways to predict side effects of radiation treatment and plan accordingly before treating patients.

In addition to our new collaborative grants, ASTRO gave several radiation oncology residents and fellows a seed grant to help them complete a project with significant potential impact on the radiotherapy landscape. This year's winners of the ASTRO Residents/Fellows in Radiation Oncology Seed Grant are **Christien Kluwe, MD, PhD**, from Vanderbilt University Medical Center and **Everett Moding, MD, PhD**, from Stanford University School of Medicine. Dr. Kluwe's project is titled *Radiation-induced metabolic reprogramming promotes tumorigenesis*, while Dr. Moding will study *Circulating tumor DNA kinetics during radiation therapy as a prognostic biomarker for non-small cell lung cancer*.

Please join us in congratulating our award winners for this year by attending our Research Spotlight session at the ASTRO Annual Meeting, on Tuesday, October 23, at 1:45 p.m., when we will recognize our new awardees and highlight the success of our past awardees. 



COREY SPEERS,
MD, PHD



BRANDON MAHAL,
MD



KHADIJA SHEIKH,
MD, PHD



CHRISTIEN KLUWE,
MD, PHD



EVERETT MODING,
MD, PHD

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Learn about the latest products in cancer treatment and care in the Exhibit Hall. More than 200 companies will be displaying the latest products and technologies. To find an exhibitor, use ASTRO's Conference Planner at www.astro.org/conferenceplanner.

HOURS OF OPERATION:

Sunday, October 21
10:00 a.m. – 5:00 p.m.

Monday, October 22
10:00 a.m. – 5:00 p.m.

Tuesday, October 23
10:00 a.m. – 5:00 p.m.

*Enhanced RO MarketPlace listing • Ambassadors are in **Bold**

2018 HOTELS AND



Note: Rates quoted are for one night and exclude taxes and additional fees. Most hotels will charge extra for three or more people to a room. Some hotels with premium rooms may charge additional fees for a specific room type.

SHUTTLE MAP

MAP LOCATION	HOTEL AND SHUTTLE BOARDING LOCATION	SHUTTLE ROUTE NUMBER	DISTANCE TO CONVENTION CENTER	SINGLE – DOUBLE DOUBLE/DOUBLE
1	Crockett Hotel At Historic Menger Hotel	Route 2	3 blocks	\$169
2	Emily Morgan Hotel, The (a DoubleTree by Hilton) On Avenue E, across the street	Route 2	3 blocks	\$235
3	Grand Hyatt San Antonio (HQ)	Walk Hotel	Adjacent	\$294
4	Hampton Inn San Antonio—Downtown (Riverwalk)	Walk Hotel	3 blocks	\$149
5	Hilton Garden Inn San Antonio Downtown At Hyatt Regency San Antonio Riverwalk	Route 2	4 blocks	\$189
6	Hilton Palacio del Rio	Walk Hotel	4 blocks	\$295/\$284
7	Historic Menger Hotel Curbside on Crockett St.	Route 2	3 blocks	\$165
8	Holiday Inn San Antonio Riverwalk At Omni La Mansion del Rio	Route 3	6 blocks	\$185
9	Hotel Contessa Luxury Suites Curbside on Navarro St.	Route 1	3 blocks	\$250
10	Hotel Valencia Riverwalk At Omni La Mansion del Rio	Route 3	6 blocks	\$229
11	Hyatt Regency San Antonio Riverwalk Curbside on Losoya St.	Route 2	4 blocks	\$300
12	La Quinta Inn & Suites San Antonio Riverwalk	Walk Hotel	1 block	\$199
13	Marriott Plaza San Antonio Curbside on S. Alamo St.	Route 1	2 blocks	\$219
14	Marriott Rivercenter, San Antonio (HQ)	Walk Hotel	1 block	\$299
15	Marriott Riverwalk, San Antonio (HQ)	Walk Hotel	Across the street	\$299
16	Mokara Hotel & Spa At Omni La Mansion del Rio	Route 3	5 blocks	\$349
17	Omni La Mansion del Rio Curbside on College St.	Route 3	5 blocks	\$289
18	SpringHill Suites San Antonio Downtown/ Riverwalk Area	Route 1	5 blocks	\$164
19	St. Anthony, a Luxury Collection Hotel, The Curbside on Travis St.	Route 3	5 blocks	\$269
20	Tru by Hilton San Antonio Downtown	Walk Hotel	3 blocks	\$169
21	Westin Riverwalk, San Antonio, The At Hotel Contessa on Navarro St.	Route 1	3 blocks	\$289

Go online to see the complete shuttle schedule, including updated hours of operation, boarding locations, approximate travel times and shuttle service for ASRT registrants at www.astro.org/travel.

Annual Report | 2017

TREASURER'S REPORT

It is my pleasure to report that 2017 was a financially successful year for ASTRO. ASTRO's long-term investment portfolio generated a strong absolute return for the year and compared favorably to each of the comparison benchmarks. This allowed ASTRO to reinvest funds to continue to be the premier radiation oncology society and the leader in providing educational and professional development opportunities to members.

ASTRO once again engaged Raffa, an independent auditor, to conduct an audit of ASTRO's 2017 financial statements. The auditors expressed an unmodified, "clean opinion," and the highest opinion available. ASTRO's Finance/Audit Committee, which meets regularly to discuss investment and other financial matters, reviewed the report in detail with the auditors. The report was submitted to ASTRO's Board of Directors at the June 2018 meeting.



PROFIT AND LOSS STATEMENT

ASTRO generated \$19,260,023 from operating income. Meeting registration revenue (including Annual Meeting at \$9.1 million and specialty meetings at \$1.3 million) represents 55 percent or \$10.6 million; individual and corporate membership dues and subscription revenue represents 19 percent or \$3.716 million; and journal royalty revenue represents 14 percent or \$2.604 million of the total 2017 operating revenue. ASTRO had a \$875,090 loss from its operating activities; however, after accounting for the investment portfolio earned income, ASTRO generated a \$3,833,174 profit for the year.

BALANCE SHEET

As of December 2017, ASTRO sustained a strong financial position with a net worth of \$31 million with total assets of \$42.6 million and total liabilities of \$11.6 million. ASTRO's 2017 portfolio generated a positive return, with investment performance net of fees generating a year-end balance of \$36.3 million making up the majority of ASTRO's assets. Deferred revenue (\$4.6 million) make up the majority of ASTRO's liabilities as members continue to take advantage of ASTRO's multiple year membership dues payment options and Annual Meeting exhibitors pre-purchase for the following year's booth registrations.

ASTRO maintains its strong commitment to serve our members and cancer patients worldwide and position ASTRO as an industry leader. ASTRO continues to focus on financial planning that promotes the goals of the strategic plan, ensures our future financial stability and supports our mission of advancing the practice of radiation oncology.

GERALDINE JACOBSON, MD, MBA, MPH, FASTRO

ASTRO Secretary/Treasurer

**For the full
2017 financial
report, go to
[www.astro.org/
astronews](http://www.astro.org/astronews)**



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