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Education Updates and Spotlight on Sarcoma

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Each year, autumn arrives with its traditional promises of cooler weather, striking foliage, and all things pumpkin. Marking the start of the academic year, it's also replete with exciting educational opportunities, including a few of our own. In our previous issue, we introduced 4 new medical student committees for *Applied Radiation Oncology*: First Pass Peer Review Committee, Podcast and Webinar Committee, Future Content Committee, and the Social Media Committee. Please join us in welcoming these bright new members and co-chairs for the 2022-2023 academic year (see p. 45 for details) and be sure to stay tuned to their contributions to ARO.

In the Issue

We are also pleased to present our issue theme of sarcoma and the role that radiation therapy plays in treating this uncommon cancer. The research article, *Radiation Therapy Techniques in the Management of Locally Advanced, High-Grade, Soft-Tissue Sarcoma (STS)*, presents a relevant study investigating prognostic factors associated with local recurrence and wound complications. Among findings, the authors discuss how high-grade STS (greater or equal to 5 cm) may benefit from increased radial CTV margins in the absence of a fascial boundary. They also discuss important considerations regarding bolus techniques and wound complications.

Two case reports on sarcoma are featured as well. *Shingles After a Single Fraction of Radiation for Ewing Sarcoma* describes the first reported case of varicella-zoster virus reactivation after 1 fraction of radiation. The authors posit that a common mechanism, which may be distinct from immunosuppression, may exist whereby radiation therapy lowers the threshold for reactivation of latent alpha herpesviruses. The second case, *Aggressive Multimodality Therapy for Treatment of a Locally Advanced Radiation-Related Chest*

Wall Sarcoma, is a novel case showing successful treatment using neoadjuvant thermochemoradiation, surgical resection, and complex reconstruction with a titanium mesh implant and multisite flap closure.

In addition, the issue features the SA-CME-accredited review, *Practical Applications of the Internet of Things in Radiation Oncology*. This timely article explores the applications – and major challenges – of IoT in radiation oncology, including the integration of electronic health records and nonhealth care data with therapeutic augmented reality, wearable technologies, smart voice assistants, digital medications, artificial intelligence, robots, continuous Bluetooth-enabled monitors, and smart cameras. We hope you enjoy this review and its promising outlook on how IoT applications can augment the quality and efficiency of cancer care, bringing several practical applications to radiation oncology.

A second review article, *The Evidence and Rationale for a Coronary Brachytherapy Dose-Response*, offers a compelling and comprehensive look at how and why increasing the prescription dose or prescription depth could improve effectiveness of intravascular brachytherapy. While IVB has been shown to reduce restenosis by half, recurrence rates of 40% at 3 years call for

Webinars and SA-CMEs

Additional educational offerings include our webinars and SA-CME activities, which are both complimentary, housed at www.appliedradiationoncology.com. Attending webinars live is ideal given the real-time Q&A session, but archived webinars afford the bonus of round-the-clock convenience. Our most recent topics include:

- Clinical Applications of FLASH Radiation Therapy
- Using Decision Theory for Re-irradiation of Head & Neck Cancer
- Radiation-Induced Carotid & Vertebral Artery Stenosis in the Intensity-Modulated Radiation Therapy Era
- The Emerging Role of Digital Therapeutics in Clinical Oncology Practice
- Formalized Mentorship in Radiation Oncology in the COVID Era
- Radiation Recall After the COVID-19 Vaccine
- MR-Guided Radiotherapy: Patient Selection and New Opportunities
- The Benefits and Future of Proton FLASH
- Technological Basis for Clinical Trials in FLASH Radiation Therapy
- Managing Anxiety & Minimizing Sedation in Pediatric Radiation Oncology

Recent SA-CME courses include:

- The Emerging Role of Digital Therapeutics in Medical, Surgical and Radiation Oncology
- A Proposed Way Forward From the Prior Authorization Crisis in Radiation Oncology
- Stereotactic Body Radiation Therapy (SBRT) vs Stereotactic Ablative Radiation Therapy (SABR): Does Terminology Differentiate Treatment Intent in Metastatic Cancer?
- Actualizing Risk-Adapted Thoracic Stereotactic Body Radiation Therapy With MR Guidance
- Integrating MR-Guided Radiation Therapy Into Clinical Practice: Clinical Advantages and Practical Limitations
- MR-Guided Radiation Therapy for Oligometastatic Malignancies
- FLASH Radiation Therapy: Review of the Literature and Considerations for Future Research and Proton Therapy FLASH Trials
- Technological Basis for Clinical Trials in FLASH Radiation Therapy: A Review
- Managing Anxiety and Minimizing Sedation Requirements in the Pediatric Radiation Oncology Population
- Applications of Artificial Intelligence in Head and Neck Radiation Therapy

improvement. The authors examine how better methods to individualize dose delivery to a patient's vessel walls seem a viable way to improve IVB effectiveness.

Rounding out the issue is the Resident Voice editorial, *Environmentally Sustainable Radiation Oncology: Can We Turn the Tides?* Discussing the newly formed Climate Health, Equity, and Sustainability Task-force (CHEST) – created by the Association

of Residents in Radiation Oncology's Global Health Subcommittee – the column underscores the critical need for advocacy and commitment to sustainable practices in our field and beyond. We applaud these important efforts and urge your support to help decarbonize energy sources, reduce waste, recycle more often, promote climate health equity, and enact additional measures toward a greener future.

Connecting at ASTRO

In closing, fall also plays host to the annual ASTRO conference – the ultimate occasion to gather, learn, teach, share, and connect. I hope to see you in San Antonio to harvest all these opportunities and more. Thank you for your continued support over the years, and happy autumn!