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**3112****Withdrawn**

1-hour lecture covering introductory topics in radiation oncology as well as case-based learning topics pertaining to radiation oncology in the primary care setting was delivered. Residents were given a pre- and post-lecture survey. Ten residency programs, with a total of 281 residents, extended an invitation for didactics. Given the ongoing COVID-19 pandemic, some programs requested that the lecture be delivered virtually.

**Results:** A total of 122 residents completed the pre-lecture survey; 51.6% were female, 41.7% were interns, 39.2% were second year residents, and 17.5% were third year residents. A total of 50.8% of respondents attended medical school in Oklahoma and 30.3% attended an allopathic medical school. Over half of trainees stated that they had no exposure to didactics covering radiation oncology during the pre-clinical years of medical school (66.1%). A similar number of residents (65.5%) stated that there were no structured radiation oncology rotations in medical school during clinical years. An overwhelming majority of residents felt that the pre-clinical curriculum did not adequately cover radiation oncology (95.9%). Residents reported that most training facilities had radiation oncology services at their disposal (73.3%); however, only 60.3% of residents had previously interacted with a radiation oncologist. When asked about their level of confidence in consulting a radiation oncologist, 63.6% of residents stated that they did not feel confident while 24% felt neutral, 12.4% felt somewhat confident, but none of the residents surveyed felt confident. Following the lecture, 63.3% of responding residents felt confident or somewhat confident consulting radiation oncology, while only 8.8% felt not confident. Additionally, 98.5% of respondents felt this lecture was beneficial to their resident education.

**Conclusion:** The majority of respondents felt medical school curriculum does not adequately cover radiation oncology. Nobody in the pre-lecture survey felt confident consulting a radiation oncologist. Most trainees felt this lecture was beneficial to their training. This study highlights a gap in medical knowledge and identifies areas of collaboration between radiation oncologists and primary care physicians regarding patient co-management.

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**3114**
**Evaluating the Oncology Research Internship (ORIoN) during the COVID-19 Pandemic: A Comparison of Virtual and In-Person Iterations**

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**Purpose/Objective(s):** The Oncology Research Internship (ORIoN), a novel resident-supervised initiative for medical students (MS), was first established in 2018 and found to be mutually beneficial to both residents and MS. The COVID-19 pandemic halted many scholarly programs, including ORIoN, which relied heavily on mentorship through in-person interactions. We report results of the first virtual program, adapted to the COVID-19 pandemic, and compare participant feedback to previous in-person iterations.

**Materials/Methods:** ORIoN application details were published online and emailed to first- and second-year MS. A panel of 3 physicians reviewed and scored applications independently. Successful MS applicants were paired with volunteer resident supervisors; each pair supervised by a staff oncologist. Compared to previous years, all meetings, correspondences and presentations between MS, residents, and supervising oncologists were conducted exclusively remotely. Only chart reviews were conducted on-site by MS. At the program's conclusion, each MS delivered a live virtual oral presentation of their completed case report, previously done in-person. Resident and MS participants completed questionnaires pre-/post program.

**3113**
**Minding the Gap: Assessment of Radiation Oncology Knowledge in Primary Care Residents**

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**Purpose/Objective(s):** The purpose of this study is to assess the knowledge base of primary care residents in the state of Oklahoma regarding radiation oncology.

**Materials/Methods:** For this study, primary care resident physicians were defined as those training in Family Medicine or Internal Medicine. Primary Care residency programs within the state of Oklahoma were identified through the Accreditation Council for Graduate Medical Education (ACGME) website. Residency programs were in both urban and rural communities. Program directors were contacted to set up a didactic session. A

Responses were collected on a 5-point Likert scale with open-ended free-text responses. Survey results from this virtual and the previous in-person programs were compared.

**Results:** Of 54 applications (previously 32 in 2018), 9 MS (three first-year, six second-year) were accepted and assigned to 9 volunteer residents (6 radiation oncology, 2 medical oncology, 1 pathology). To date, 9 manuscripts have been completed with 2 submitted for publication (1 published, 1 under review). Survey response rates were 100% (9/9) for residents and 89% (8/9) for MS. In the post-program surveys comparing the virtual and prior in-person programs, 87.5% (7/8) MS felt comfortable completing a clinical research project (22% strongly agree (SA), 62.5% agree (A), previously 25% and 75% respectively) and 100% (8/8) felt comfortable writing a case report (50% SA, 50% A, previously 75%, 25% respectively). All MS felt comfortable giving an oral research presentation (37.5% SA, 62.5% A) and teaching another MS to complete a case report (37.5% SA, 50% A). Similar to the in-person program, MS unanimously agreed that ORIoN was a beneficial experience (100%) and felt the program contributed to their career goals (100%, previously 88%). Post-program, all residents felt comfortable as a supervisor (67% SA, 22% A, previously 33%, 67% respectively), reviewing manuscripts (56% SA, 33% A, previously 33%, 50% respectively) and providing constructive feedback to trainees (67% SA, 33% A, previously 17%, 67% respectively).

**Conclusion:** Compared to the previous in-person program, the virtual ORIoN retained strongly favorable ratings from MS and residents alike. These findings support adapting similar scholarly and mentorship programs to a virtual setting when in-person interactions are not feasible.

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## 3115

### Associations between Disclosed Conflicts of Interests and Abstract Prestige at the 2021 ASTRO Annual Meeting

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**Purpose/Objective(s):** There have been substantial and growing concerns about conflicts of interest (COI) involving clinical research. Using data from the American Society of Radiation Oncology (ASTRO) 2021 annual meeting, we assessed the frequency and type of COI and evaluated associations between COI and opportunity for oral presentation.

**Materials/Methods:** A web scraping program was used to capture all abstracts, authors, and COI disclosures from ASTRO's 63rd Annual Meeting issue of the Red Journal (11/1/21). COI disclosures were categorized into monetary (advisory board, consulting, honorarium, industry employment, patent, research funding, royalties, stock) or non-monetary (leadership role at professional society) disclosures. Abstracts were stratified based on acceptance as poster, quick pitch oral, or oral scientific presentation. Pearson's  $\chi^2$  and independent t-test were used to determine differences across abstract categories. Binary logistic regression was used to determine factors that portended for monetary disclosures. Univariate and multivariate analysis was used to determine the impact of various disclosures on acceptance category.

**Results:** 1548 abstracts with 7529 authors were analyzed. Oral scientific sessions, quick pitch oral sessions, and poster sessions composed 148 (9.6%), 108 (7.0%), and 1292 (83.5%) abstracts, respectively. The median number of authors per abstract was 8 (range:1-44). 612 (39.5%) abstracts had no disclosures amongst listed authors, and 936 (60.5%) abstracts had at least one author noting a relevant disclosure. The most common types of

disclosures were Research Funding, Consulting, and Honoraria (42.1%, 33.4%, and 28.7% of abstracts, respectively). 165 (10.7%) abstracts involved authors disclosing leadership at a professional society. There were 898 (58.0%) monetary disclosures and 165 (10.7%) non-monetary disclosures. Disclosure rates were significantly different ( $p=.001$ ) between abstracts awarded posters 58.5%, quick pitch oral (67.6%), and oral scientific abstracts (72.3%). Oral scientific and quick pitch oral abstracts had higher rates of monetary disclosures relative to poster abstracts (70.3% and 65.7%, vs. 56.0%, respectively;  $p=.001$ ). Abstracts that involved professional society leadership were more likely to report a monetary disclosure (91.5% vs. 54.0%;  $p<.001$ ). On multivariate analysis, monetary disclosures were associated with abstracts written by authors with leadership at professional societies (OR: 7.763, CI 4.421-13.631;  $p<.0001$ ), abstracts containing  $\geq 5$  authors (OR 3.589, CI 2.668-4.827;  $p<.0001$ ), and abstracts awarded oral presentations (OR 1.306, CI 1.086-1.567;  $p=.005$ ).

**Conclusion:** Most abstracts at the 2021 ASTRO annual meeting had COI disclosures, and most disclosures were monetary. Rates of disclosure increased as abstract prestige increased, and monetary disclosures were associated with oral presentations and abstracts written by authors with leadership roles in professional societies.

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## 3116

### Assessing Adult Patients' Understandings of Secondary Malignancy Risk Terms in Radiation Therapy Consent

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**Purpose/Objective(s):** Informed consent is an essential component of cancer care. The terms "second tumors" or "secondary tumors" are sometimes used in radiation therapy consent. Their incidences are sometimes described as "rare," although vary greatly from nearly negligible in patients treated with palliative intent, to 20% in young patients undergoing myeloablative total body irradiation. We evaluated whether patients without prior knowledge of radiation therapy interpret the terms in a way consistent with physician intent.

**Materials/Methods:** We screened 164 adult subjects who did not require medical interpreters at a university-affiliated family medicine clinic, excluding cancer patients and those with any prior knowledge of or experience with radiation treatment. One hundred subjects were eligible for and completed a 12-question multiple choice questionnaire, which assessed their understanding of the term "secondary tumor" or "second tumor", and how they would interpret the terms "small chance" or "rare" in the context of a "bad side effect."

**Results:** Twenty-nine percent of subjects correctly identified that "secondary tumors" referred to new and different tumors caused by treatment. Forty-nine percent thought the term referred to their original tumor recurring, and 22% thought the term referred to new and different tumors not caused by radiation therapy. Subjects with college degrees were not more likely to choose the correct answer than subjects without college degrees  $p=0.63$ . College degree status was not available for 5 subjects. Given choices between 1:10, 1:100, 1:1000, and 1:100,000, subjects associated "rare" with 1:1000 or 1:100,000 82% of the time. The term "small chance" was associated with 1:1000 or 1:100,000 59% of the time.

**Conclusion:** Adult non-cancer patients have a demonstrably different understanding than radiation oncologists of the terms "second tumor" or "secondary tumor." Additionally, patient understanding of the terms "rare" or "small chance" varies from secondary malignancy incidences in many clinical scenarios. Radiation oncologists should use clearer terms for secondary malignancies and their incidence.