



ROECSCG REPORT

RADIATION ONCOLOGY EDUCATION
COLLABORATIVE STUDY GROUP

*The latest news and updates from the Radiation Oncology
Education Collaborative Study Group (ROECSCG)*



IN THIS ISSUE

PROJECT SPOTLIGHT

OPPORTUNITIES FOR GETTING INVOLVED

ONGOING MEDICAL EDUCATION INITIATIVES

RADIATION ONCOLOGY EDUCATION-RELATED PUBLICATIONS

Announcements

ROECSCG is excited to announce our latest **Executive Board members**:

- Resident Representatives: Christian Fernandez, Elizabeth Jeans, Anna Laucis, and Bailey Nelson
- Faculty: Ravi Chandra

ROECSCG is excited to share that our **2020 Spring Symposium** "Education for the Future of Radiation Oncology" was a huge success. Due to the ongoing pandemic, the meeting format was entirely virtual. However, we are happy to share that we had our largest number of attendees yet, with over 285 registered attendees from 20 different countries. We very much value the feedback you have provided in the post-symposium survey and plan to make changes based on this feedback to continue to provide the best meeting experience for everyone in future Spring Symposia.

All of the meeting content, including recorded presentations and keynote speech, are available at: <https://roecsg.org/events/symposium2020>

Project Spotlight

Delphi Consensus Development of a United States Radiation Oncology Curricular Framework and Entrustable Professional Activities

The Leadership Committee (picture below) for the ROECSCG Core Curriculum Project has been diligently working over the past 6 months to develop an initial list of content domains, percent apportioned during training years, and entrustable professional activities to guide a framework for standardization of radiation oncology curriculum and assessment in the United States. The next step of this project includes a rigorous evaluation of these products (Delphi Method) to gain a unified consensus across the United States radiation oncology community. Although this project is focusing on United States radiation oncology education, we anticipate the final product will be applicable for radiation oncology education internationally. Please keep a look out and sign up for possible participation in this project.

THE TEAM



Name	Institution	Stakeholder Group/Expertise
Dan Golden**	University of Chicago	ROECSCG/ADROP
Elizabeth Jeans**	Mayo Clinic, Rochester	ROECSCG/ARRO
Jeffrey Brower	Radiation Oncology Associates	Educator / Private Practice Sector
Jay Burmeister	Wayne State	Expert Physics Educator
Emma Fields	Virginia Commonwealth Univ.	ROECSCG/ADROP
Brian Kavanagh	U. of Colorado	ASTRO/ARRO
John Suh	Cleveland Clinic	ABR/SCAROP
Ari Tekian	UIC Dept. of Medical Education	Medical Education Advisor
Neha Vapiwala	University of Pennsylvania	ACGME/ASTRO BOD
Elaine Zeman	UNC	Expert Radiation Biology Educator

****Co-leads**

Opportunities for Getting Involved

ROECSCG encourages active participation in our collaborative study group. We are in the process of establishing committees to allow for even more engagement from our members. If you are interested in learning more about opportunities for getting involved with ROECSCG and joining one of our new committees, please feel free to contact us anytime at: <https://roecscg.org/contact>. Make sure to follow us on Twitter!



Ongoing medical education initiatives

ROECSSG members are involved in multiple ongoing medical education initiatives. The full list of ongoing projects can be accessed at:

<https://roecssg.org/current-initiatives>

- Development of a structured medical student clerkship curriculum
- Introductory Radiation Oncology Course (IROC) for Residents
- Simulation-based education for radiation oncology contouring
- Residents-as-Teachers (RAT) in Radiation Oncology
- Self-directed treatment planning/dosimetry training for the clinical radiation oncologist
- We are also collaborating with eContour.org to develop novel contouring educational tools for radiation oncology
- ROECSSG Core Curriculum: <https://roecssg.org/corecurriculum>



Recent #RadOnc #MedEd Publications

The following represents a list of recent education-related publications. There is a lot of exciting work in this space! If you would like your publication featured in the next ROECSSG Report, please email the citation to Anna Laucis at: anna.laucis@gmail.com

1. Álvarez-Del-Río, Asunción, Edwin Ortega-García, Luis Oñate-Ocaña, and Ingrid Vargas-Huicochea. 2019. "Experience of Oncology Residents with Death: A Qualitative Study in Mexico." *BMC Medical Ethics* 20 (1): 93. <https://doi.org/10.1186/s12910-019-0432-4>.
2. Balushi, Mustafa Al, and Zahid Al Mandhari. 2020. "Radiation Oncology in Oman: Current Status and Future Challenges." *International Journal of Radiation Oncology, Biology, Physics* 0 (0). <https://doi.org/10.1016/j.ijrobp.2020.05.059>.
3. Bates, James E., Robert J. Amdur, and W. Robert Lee. 2020. "Unfilled Positions in the 2020 Radiation Oncology Residency Match: No Longer an Isolated Event." *Practical Radiation Oncology* 0 (0). <https://doi.org/10.1016/j.prro.2020.04.012>.
4. Bates, James E., Akash D. Parekh, Mudit Chowdhary, and Robert J. Amdur. 2020. "Geographic Distribution of Radiation Oncologists in the United States." *Practical Radiation Oncology* 0 (0). <https://doi.org/10.1016/j.prro.2020.04.008>.
5. Best, Lara R., Arpita Sengupta, René J. L. Murphy, Catherine de Metz, Theresa Trotter, Shaun K. Loewen, Paris-Ann Ingledeew, and Joan Sargeant. 2019. "Transition to Practice in Radiation Oncology: Mind the Gap." *Radiotherapy and Oncology: Journal of the European Society for Therapeutic Radiology and Oncology* 138: 126-31. <https://doi.org/10.1016/j.radonc.2019.06.012>.
6. Campbell, Shauna R., Elizabeth B. Jeans, Ashley Albert, Ankit Agarwal, Karen Tye, and Chelain R. Goodman. 2020. "Radiation Oncology Initial Certification Qualification Examinations: The Resident Experience in 2019." *Practical Radiation Oncology* 0 (0). <https://doi.org/10.1016/j.prro.2020.04.010>.
7. Chapman, Christina Hunter, Darlene Gabeau, Chelsea C. Pinnix, Curtiland Deville, Iris C. Gibbs, and Karen M. Winkfield. 2020. "Why Racial Justice Matters in Radiation Oncology." *Advances in Radiation Oncology*. <https://doi.org/10.1016/j.adro.2020.06.013>.

Recent #RadOnc #MedEd Publications

- 8. Chiu, Tsuicheng, Zhenyu Xiong, David Parsons, Michael R. Folkert, Paul M. Medin, and Brian Hrycushko. 2020. "Low-Cost 3D Print-Based Phantom Fabrication to Facilitate Interstitial Prostate Brachytherapy Training Program." *Brachytherapy*, July. <https://doi.org/10.1016/j.brachy.2020.06.015>.
- 9. Deville, Curtiland, Ian Cruickshank, Christina H. Chapman, Wei-Ting Hwang, Rhea Wyse, Awad A. Ahmed, Karen Winkfield, Charles R. Thomas, and Iris C. Gibbs. 2020. "I Can't Breathe: The Continued, Disproportionate Exclusion of Black Physicians in the United States Radiation Oncology Workforce." *International Journal of Radiation Oncology, Biology, Physics* 0 (0). <https://doi.org/10.1016/j.ijrobp.2020.07.015>.
- 10. Dowse, Ros. 2004. "Using Visuals to Communicate Medicine Information to Patients with Low Literacy." *Adult Learning* 15: 22-25.
- 11. Fefer, Maia, Carolyn C. Lamb, Abra H. Shen, Peter Clardy, Vinayak Muralidhar, Phillip M. Devlin, and Edward Christopher Dee. 2020. "Multilingual Analysis of the Quality and Readability of Online Health Information on the Adverse Effects of Breast Cancer Treatments." *JAMA Surgery*, June. <https://doi.org/10.1001/jamasurg.2020.1668>.
- 12. Feuz, Carina, Karen Tse, Maisie Kwan, Christine Hill, Peter Rakaric, Kieng Tan, and Tara Rosewall. 2019. "Implementing Workshops to Improve Radiation Therapists' Knowledge and Attitudes about Sexual Health Issues in Cancer Patients." *Journal of Medical Imaging and Radiation Sciences* 50 (1): 98-105. <https://doi.org/10.1016/j.jmir.2018.08.001>.
- 13. Franco, Pierfrancesco, Valentina Tesio, Jenny Bertholet, Anne Gasnier, Elisabet Gonzalez del Portillo, Mateusz Spalek, Jean-Emmanuel Bibault, et al. 2020. "Professional Quality of Life and Burnout amongst Radiation Oncologists: The Impact of Alexithymia and Empathy." *Radiotherapy and Oncology* 147 (June): 162-68. <https://doi.org/10.1016/j.radonc.2020.05.017>.
- 14. Giuliani, Meredith, and Paris-Ann Ingledeew. 2020. "IROC Illuminates a Transition to Discipline and a Transition of Medical Education Research in Radiation Oncology." *International Journal of Radiation Oncology, Biology, Physics* 107 (3): 417-18. <https://doi.org/10.1016/j.ijrobp.2020.03.025>.
- 15. Halkett, Georgia K. B., Susan Merchant, Sian K. Smith, Moira O'Connor, Michael Jefford, Sanchia Aranda, and Penelope Schofield. 2020. "Supporting and Preparing Patients for Radiotherapy: Patients' and Radiation Therapists' Perspectives on Their One-to-One Consultations." *European Journal of Cancer Care*, July. <https://doi.org/10.1111/ecc.13284>.
- 16. Henry-Noel, Nayanee, Maria Bishop, Clement K. Gwede, Ekaterina Petkova, and Ewa Szumacher. 2019. "Mentorship in Medicine and Other Health Professions." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education* 34 (4): 629-37. <https://doi.org/10.1007/s13187-018-1360-6>.
- 17. Ito, Emma, Fabio Y. Moraes, Matthew Ramotar, Isis Lunskey, Hany Soliman, Charles N. Catton, Zahra Kassam, et al. 2020. "Radiation Oncology Fellowship: A Value-Based Assessment Among Graduates of a Mature Program." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, July. <https://doi.org/10.1007/s13187-020-01767-5>.

Recent #RadOnc #MedEd Publications

- 18. Leung, John. 2020. "United States and Australia and New Zealand Radiation Oncology Trainee Concerns, Examination, and Training: A Comparison and What We Can Learn From Each Other." *International Journal of Radiation Oncology, Biology, Physics* 106 (5): 914–15. <https://doi.org/10.1016/j.ijrobp.2019.12.035>.
- 19. Loewen, S. K., R. Halperin, G. Perry, M. McKenzie, E. Vigneault, T. Stuckless, and M. Brundage. 2019. "Employment Outcomes for Recent Canadian Radiation Oncology Graduates." *Current Oncology (Toronto, Ont.)* 26 (4): e510–14. <https://doi.org/10.3747/co.26.4925>.
- 20. MacNevin, Wyatt, Todd Dow, Rumana Rafiq, Margaret Man-Ger Sun, and David Bowes. 2020. "The Impact of a Rotating Elective on Medical Students' Perception of Radiation Oncology." *Cureus* 12 (5): e7931. <https://doi.org/10.7759/cureus.7931>.
- 21. Malik, Nauman H., George J. Li, Meredith Giuliani, Michael Brundage, Amanda Caissie, Jeffrey Q. Cao, Ross Halperin, Paris-Ann Ingledew, Eric Vigneault, and Andrea Bezjak. 2020. "Mapping the Current State of Canadian Medical School Oncology Interest Groups." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, June. <https://doi.org/10.1007/s13187-020-01803-4>.
- 22. Matalon, Shanna A., Stephanie A. Howard, and Matthew J. Abrams. 2019. "Assessment of Radiology Training During Radiation Oncology Residency." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education* 34 (4): 691–95. <https://doi.org/10.1007/s13187-018-1357-1>.
- 23. McDade, William, Monica B. Vela, and J. P. Sánchez. 2020. "Anticipating the Impact of the USMLE Step 1 Pass/Fail Scoring Decision on Underrepresented-in-Medicine Students." *Academic Medicine* Publish Ahead of Print (July). <https://doi.org/10.1097/ACM.0000000000003490>.
- 24. McKinlay, Eileen, Kristen White, Pauline McChesney, Claire Hardie, Rebekah Higgs, Jo Hilder, and Peter Gallagher. 2019. "Interprofessional Education for Cancer Care." *The Clinical Teacher* 16 (5): 519–24. <https://doi.org/10.1111/tct.12985>.
- 25. Mosaly, Prithima R., Robert Adams, Gregg Tracton, John Dooley, Karthik Adapa, Joseph K. Nuamah, Lawrence B. Marks, and Lukasz M. Mazur. 2020. "Impact of Workspace Design on Radiation Therapist Technicians' Physical Stressors, Mental Workload, Situation Awareness and Performance." *Practical Radiation Oncology* 0 (0). <https://doi.org/10.1016/j.prro.2020.07.002>.
- 26. Murakami, Yuji, Shin-Ei Noda, Yoshiomi Hatayama, Toshiya Maebayashi, Keiichi Jingu, Yasushi Nagata, and Takashi Mizowaki. 2020. "What Motivated Medical Students and Residents to Become Radiation Oncologists in Japan?-Questionnaire Report by the Radiotherapy Promotion Committee of JASTRO." *Journal of Radiation Research*, July. <https://doi.org/10.1093/jrr/rraa051>.
- 27. Neve, Matt, Nayanee Henry-Noel, Rajin Mehta, Maureen Trudeau, Ines Menjak, and Ewa Szumacher. 2020. "Development and Testing of an Adjuvant Radiotherapy Decision Aid for Older Women Diagnosed with Stage I Breast Cancer: A Pilot Study." *Cureus* 12 (4): e7690. <https://doi.org/10.7759/cureus.7690>.

Recent #RadOnc #MedEd Publications

- 28. Nguyen, Minh Hao, Ellen Ma Smets, Nadine Bol, Eugène F. Loos, Hanneke Wm van Laarhoven, Debby Geijssen, Mark I. van Berge Henegouwen, Kristien Maj Tytgat, and Julia Cm van Weert. 2019. "Tailored Web-Based Information for Younger and Older Patients with Cancer: Randomized Controlled Trial of a Preparatory Educational Intervention on Patient Outcomes." *Journal of Medical Internet Research* 21 (10): e14407. <https://doi.org/10.2196/14407>.
- 29. Odei, Bismarck, Prajnan Das, Chelsea Pinnix, Raju Raval, and Emma B. Holliday. 2020. "Potential Implications of the New USMLE Step 1 Pass/Fail Format for Diversity within Radiation Oncology." *Advances in Radiation Oncology* 0 (0). <https://doi.org/10.1016/j.adro.2020.07.001>.
- 30. Papadakos, Janet, Anna D'souza, Adeline Masse, Susan Boyko, Susan Clarke, Meredith Giuliani, Keira MacKinnon, et al. 2019. "Development of a Professional Certification in Cancer Patient Education." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education* 34 (4): 749–54. <https://doi.org/10.1007/s13187-018-1367-z>.
- 31. Roos, Daniel E., Elizabeth F. Foley, and Tim J. Wonders. 2019. "Trainee Research Requirements of Australasian Medical Colleges: How Does the Faculty of Radiation Oncology Compare?" *Journal of Medical Imaging and Radiation Oncology* 63 (6): 862–68. <https://doi.org/10.1111/1754-9485.12930>.
- 32. Sim, Austin J., Anna M. Laucis, Mudit Chowdhary, Fumiko Chino, Daniel W. Golden, and Rahul D. Tendulkar. 2020. "Taking a Step in the Right Direction for Radiation Oncology." *International Journal of Radiation Oncology, Biology, Physics* 107 (5): 1014–15. <https://doi.org/10.1016/j.ijrobp.2020.04.033>.
- 33. Suneja, Gita, Malcolm Mattes, Raymond B. Mailhot Vega, Freddy E. Escorcía, Colleen Lawton, Joel Greenberger, Aparna Kesarwala, et al. 2020. "Pathways for Recruiting and Retaining Women and Under-Represented Minority Clinicians and Physician Scientists into the Radiation Oncology Workforce: A Summary of the 2019 ASTRO/NCI Diversity Symposium Session at the ASTRO Annual Meeting." *Advances in Radiation Oncology*, May. <https://doi.org/10.1016/j.adro.2020.05.003>.
- 34. Turner, Angela. 2019. "Sexual Health Issues in Patients with Cancer—An Exploratory Mixed Methods Study of the Awareness Levels of Radiation Therapists." *Journal of Medical Imaging and Radiation Sciences* 50 (1): 106–12. <https://doi.org/10.1016/j.jmir.2018.08.005>.
- 35. Vargas, Andrés, Carolina Torres, Anna Küller-Bosch, and Belén Villena. 2020. "Palliative Care Physicians and Palliative Radiotherapy, Knowledge and Barriers for Referring: A Cross-Sectional Study." *Journal of Pain and Symptom Management*, June. <https://doi.org/10.1016/j.jpainsymman.2020.06.021>.
- 36. Varmus, Harold, and Edward L. Trimble. 2011. "Integrating Cancer Control into Global Health." *Science Translational Medicine* 3 (101): 101cm28. <https://doi.org/10.1126/scitranslmed.3002321>.

Recent #RadOnc #MedEd Publications

- 37. Vides-Porras, Ana, Paula Cáceres, Assumpta Company, Olga Guillen, Martha Alicia Arrien, Yolanda Castellano, Mercè Margalef, Wendy Yantuche, Esteve Fernández, and Cristina Martínez. 2020. "Gaining Insight into the Implementation of an E-Learning Smoking Cessation Course in Latin American Countries." *Health Promotion International*, June. <https://doi.org/10.1093/heapro/daaa054>.
- 38. Vulpe, Horia, Ian J. Pereira, Jean-Marc Bourque, Fleur Huang, Jenna Adleman, Danielle Rodin, Joda Kuk, et al. 2020. "Impact of a Global Radiation Oncology Scholarship for Trainees: An Evaluation of Early Outcomes." *Radiotherapy and Oncology: Journal of the European Society for Therapeutic Radiology and Oncology*, July. <https://doi.org/10.1016/j.radonc.2020.07.013>.
- 39. Vulpe, Horia, Verna Vanderpuyne, Joel Yarney, Sarah Tosoni, Jolie Ringash, Zahra Kassam, and Rebecca K. S. Wong. 2020. "Design and Implementation of a Distant-Learning Clinical Research Mentorship Program: The Accra-Toronto Collaboration." *JCO Global Oncology* 6 (June): 919–28. <https://doi.org/10.1200/JGO.19.00240>.
- 40. Walls, Gerard M., Gerard G. Hanna, and James J. McAleer. 2020. "Learning Radiotherapy: The State of the Art." *BMC Medical Education* 20 (1): 150. <https://doi.org/10.1186/s12909-020-02054-z>.
- 41. Walls, Gerard, James J. McAleer, and Gerard G. Hanna. 2020. "Perception of Modern Radiotherapy Learning: Study Protocol for a Mixed-Methods Analysis of Trainees and Trainers at a UK Cancer Centre." *BMJ Open* 10 (5): e037171. <https://doi.org/10.1136/bmjopen-2020-037171>.
- 42. Wang, Michael H., Shaun K. Loewen, Meredith Giuliani, Alys Fairchild, Don Yee, and Brock J. Debenham. 2020. "Clinical Learning, Didactic Education, and Research Experiences of Radiation Oncology Resident Physicians in Canada." *Journal of Cancer Education: The Official Journal of the American Association for Cancer Education*, July. <https://doi.org/10.1007/s13187-020-01799-x>.
- 43. Winter, Jeff D., Jenna Adleman, Thomas G. Purdie, Jacqueline Heaton, Andrea McNiven, and Jennifer Croke. 2020. "An Innovative Learning Tool for Radiation Therapy Treatment Plan Evaluation: Implementation and Evaluation." *International Journal of Radiation Oncology, Biology, Physics* 107 (4): 844–849. <https://doi.org/10.1016/j.ijrobp.2020.03.018>.



ROECSG
RADIATION ONCOLOGY EDUCATION
COLLABORATIVE STUDY GROUP

REPORT