

Adam Kessel, MD - Communications and Advocacy Subcommittee

I am interested in consideration for an executive position on the Communication and Advocacy Subcommittee of ARRO. I have been involved with this subcommittee since early PGY2 year and am a member of the education subcommittee as well. I truly appreciate the impact that ARRO has on residents across the country. I am eager to contribute my skills to support ARRO's mission of advancing training, policy, and professional development within our field.

In radiation oncology, communication plays a vital role in cultivating collaboration among residents, faculty, patients, and national organizations. Whether disseminating relevant information through social media or engaging in advocacy efforts, I believe that strategic communication is critical in ensuring that the voices of radiation oncology residents are heard. We have incredible resources amongst all the subcommittees at ARRO. My goal is to strengthen communication between the various subcommittees. This can be done via digital engagement of ongoing longitudinal projects looking to bring together individuals of different skill sets even outside of their respective subcommittees. I plan to also improve upon our ability to communicate with the public as well. I hope to use resident support to develop further educational materials for the public to learn more about the field of radiation oncology and the need for further advancement in this field.

In the evolving and frequently changing political world, advocacy has become an even more crucial part of our roles as radiation oncologists. As most would agree, I strongly believe in supporting policies that enhance resident experiences, improve patient care, and expand the future of radiation oncology. I hope to help expand ARRO's social media presence on policy to provide residents across the nation with access to important policy changes in radiation oncology. With the proposed ROCR model, improved access to residents on updates as this moves through congress is beneficial to the next generation of radiation oncologists. I will also use social platforms to encourage more resident involvement in national advocacy efforts by increasing awareness of lobbying events and congressional meetings for which residents can make a difference. As my part of my role, I plan to connect interested residents from varying institutions in the same state to collaborate on advocacy initiatives occurring locally. Creating a united front on the national and local level will further strengthen the future of cancer care. Outreach to medical students is another key initiative I would like to pursue by increasing their earlier introduction to our awesome field.

Thank you for your time and consideration for this amazing opportunity. Regardless of the outcome, I look forward to contributing to ARRO throughout my training/career and having the chance to continue work with such outstanding individuals in radiation oncology.

Training

Radiation Oncology Residency: Mayo Clinic in Rochester MN

July 2023 – present

- Current **PGY-3** Resident

Internal Medicine Preliminary Year: Medical College of Wisconsin

2022 - 2023

Education

Medical School: University of Utah SOM

2018 – 2022

- Graduated in good academic standing
- Member of AOA

Undergraduate: University of Utah

2013 - 2017

- Bachelors of Science in Biomedical Engineering.
- Graduated *Magna Cum Laude*.

Leadership Experiences and Extracurricular Activities

Academy for Emerging Leaders in Patient Safety

June 2025

- Planned 4 day immersive workshop applying quality and safety improvement strategies and tools
- Focus on a department safety initiative to build upon
- Quality Academy Fellow Level Bronze

ARRO Communication Subcommittee: Representative

October 2023 - present

- Involved in outreach initiatives to get radiation oncology residents more connected
- Assisting in projects surrounding radiation oncology advocacy

ARRO Education Subcommittee: Representative

October 2023 - present

- Participate in national radiation oncology resident initiatives
- Assist in development and dissemination of educational resources

Radiation Oncology Quality and Safety Committee: Member

January 2024 - present

- Participate in interval quality and safety meetings to assess radiation oncology best practices
- Serve as a resident representative to discuss safety concerns with colleagues in physics, dosimetry, and medical care

Oncology Interest Group: President

September 2018 – 2022

- Host events inviting oncology-focused experts to present their experiences to medical students.
- Connect medical students to the field of oncology through shadowing and research opportunities.
- Setting up unique oncological education opportunities for students.

Medical School Curriculum Subcommittee: Representative

March 2020 – 2022

- Participated in meaningful discussions geared at promoting effective medical education.
- Acted as a representative for my class in these discussions.

Medical School Academic Success Program: Tutor

October 2019 – January 2021

- Assisted students one-on-one with comprehension of medical curriculum.
- Served as a support system for difficult concepts.

Medical Student Free Clinic: Co-Director

January 2019 – September 2020

- Helped manage a medical student-run clinic at Maliheh Free Clinic.
- Coordinated with volunteers to ensure a positive student and patient encounter.
- Assisted a free clinic with providing continuous care to an underserved population in Salt Lake City.
- Clinic is bi-monthly on Saturday mornings.
- Increased student involvement by adding bi-monthly Monday night clinics.

Maliheh Free Clinic: AmeriCorps VISTA

July 2017 – July 2018

- Designated as the Medical Provider Liaison.
- Served with an underserved community of individuals needing healthcare access.
- Focused on building clinic capacity and empowering the local community.
- Worked as Fulltime employee.

Research Experience

Current Projects

GU: SBRT during Lutetium-177-PSMA

Present

- Retrospective evaluation for patients undergoing Lu-PSMA with SBRT to sites of resistant disease.
- Abstract presented at GU-ASCO 2025
- Faculty mentor: Dr. Jessica Wilson

Breast: Multi-Institutional Study of Oligo-Metastatic Breast

Present

- Evaluated patients with oligo-metastatic breast cancer treated with proton radiation to single treatment field
- Multi-Institutional project with MGH, Johns Hopkins, Florida, and Mayo Clinic
- Abstract submitted to ASTRO 2025
- Faculty mentor: Dr. Roman Kowalchuk and Dr. Kimberly Corbin

Quality Assurance: Provider Specific Quality and Safety Metric Pilot Study

Present

- Aim of identifying medical provider specific metrics that could influence the quality of care provided to patients
- Prospective pilot study. Pending results
- Faculty mentor: Dr. Allison Garda

Previous Projects

Genitourinary Cancer Research: Research Assistant

April 2019 – 2022

- Advisor: Dr. Neeraj Agarwal at Huntsman Cancer Institute
- Involved in compiling a Renal Cell Carcinoma and Prostate Cancer database
- Assisted in gathering genomic data for patients with advanced disease
- Utilized skills in computation and statistical analysis
- Assisted in manuscript writing and maintaining research database

Bench to Bedside: Engineer

September 2018 – 2022

- Designed a portable insufflation device for laparoscopic surgery
- Device is intended for use in a global health setting.
- Patent submitted for novel medical device
- Team took 1st place at Weber State and 2nd place at University of Utah Opportunity Quest competitions
- Took 1st place in international medical device competition in Beijing, China
- Top 20 finalist for the 2020 Utah Entrepreneur Challenge

Neonatology Research: Senior Research Assistant

March 2015 – July 2017

- Advisor: Dr. Kurt Albertine PhD at University of Utah Pediatric Department
- Designated as a Senior; matured research assistant.
- Involved in own research project focused on cardiac hypertrophy in neonatal hearts.
- Presented preliminary results at Bioengineering Research Symposium

Intermountain Healthcare Artificial Heart Program: Intern

May 2016 – August 2016

- Worked with left ventricular assist devices in a clinical setting.
- Involved in research focused on ECMO devices.

Publications

Papers:

- **Kessel A**, Lehrer E. J. (2025). Mind over matter: Complete craniospinal irradiation or just treat the spine. *International Journal of Radiation Oncology*Biology*Physics*, 121(4), 851–852.
- Zimmerman R, Bilen A, Heath E, Nandagopal L, Swami U, **Kessel A**, Jaeger E, Wesolowski S, Hernanandez E, Chipman J, Mack A, Ravindranathan D, Maughan B, Nussenzweig R, Yandell M, Kohli M, Lilly B, Sartor O, Agarwal N, Barata, C. Comprehensive genomic profiling of cell-free DNA in men with advanced prostate cancer: Differences in genomic landscape based on Race. *The Oncologist*. 2022. 27(10).
- Hutten R, Fenlon J, **Kessel A**, Straessler K, Huang Y, Gaffney D, Suneja G, Zempolich K, Burt L (2022). Radical trachelectomy and adjuvant vaginal brachytherapy to preserve fertility in pediatric cervical adenocarcinoma. *Brachytherapy*. 2022. 21(6), 764–768.
- **Kessel A***, Maughan BL*, (*co-first authors), McFarland TR, Sayegh N, Nussenzweig RH, Hahn AW, Hoffman JM, Morton K, Sirohi D, Kohli M, Swami U, Boucher K, Haaland B, Agarwal N. Randomized phase II trial of radium-223 (RA) plus enzalutamide (EZ) versus EZ alone in metastatic castration-refractory prostate cancer (mCRPC): Final efficacy and safety results. *The Oncologist*. 2021. 26(12), 1006-e2129. PMID: 34423501
- Taza F, Holler AE, Adra N, Ashkar R, Sokolova A, **Kessel A**, Nafissi N, Barata PC, Bastos DA, Smaletz O, Aggarwal RR, Berchuck JE, Vlachostergios PJ, Su C, Marshall CH, Antonarakis ES. Differential activity of PARP inhibitors in BRCA1- versus BRCA2-altered metastatic castration resistant prostate cancer (mCRPC). *JCO Precision Oncology*. 2021. 22(5). PMID 34778690
- McFarland TR, Nussenzweig RH, Swami U, Sayegh N, **Kessel A**, Sharma P, Li H, Kohli M, Maughan BL, Pal SK, Agarwal N. Comprehensive genomic profiling of matched primary prostate cancer tissue and cell-free DNA (cfDNA) to assess ontogeny of BRCA1/BRCA2 mutations. *Am J Transl Res*. 2021 Jul 15. 13(7):7427-7439. PMID: 34377227
- **Kessel A**, Kohli M, Swami U. Current management of metastatic castration-sensitive prostate cancer. *Cancer Treat Res Commun*. 2021 Apr 24. PMID: 33951556.
- Rath N, Lin E, **Kessel A**, Agarwal N, & Swami, U. (2021). Recent Advances in the Treatment of Metastatic Prostate Cancer. *Advances in Oncology*, 1, 263–272. <https://doi.org/10.1016/j.yao.2021.02.022>
- Swami U, Haaland B, **Kessel A**, Nussenzweig R, Maughan BL, Esther J, Sirohi D, Pal SK, Grivas P, Agarwal N. Comparative Effectiveness of Immune Checkpoint Inhibitors in Patients with Platinum Refractory Advanced Urothelial Carcinoma. *J Urol*. 2021 Mar. 205(3):709-717

Abstracts:

- **Kessel, A.**, Pafundi, D. H., Johnson, D. R., Sarkaria, J. N., Brown, P. D., Mahajan, A., Sener, U., Burns, T., Uhm, J. H., Laack, N. N., Brinkmann, D. H., & Breen, W. (2024). Evaluation of 18F-DOPA PET imaging features and impact on radiation target volumes for patients with oligodendroglioma. *International Journal of Radiation Oncology*Biophysics*, 120(2).
- Vera, A., Neibart, S., **Kessel, A.**, McDonald, J., Fattahi, S., Corrigan, K., & Basree, M. (2024). Enhancing radiation oncology resident education: A multifaceted approach to managing emergencies. *International Journal of Radiation Oncology*Biophysics*, 119(4)
- **Kessel A**, Burlile J, Tobin W, Goyal G, Shah M, Bennani N, Rouse, R, Lester S, Abeykoon J, Go R, Breen W (2024). Local Disease Control in Patients with Erdheim-Chester Disease treated with External Beam Radiation Therapy. [Abstract]. In: Erdheim Chester Disease Annual Scientific Meeting; 2024 April 14-16; Seattle, WA.
- Ito, S., Deisher, A., Kruse, J., **Kessel, A.**, Dalvin, L., Corbin, K. Spot scanning gantry-based gaze-gated ocular proton treatment at Mayo Clinic Rochester. *Particle Therapy Co-Operative Group North America*. 2024

Genitourinary ASCO 2020

- Kessel A, Tran S, Rivers Z, Hahn AW, Nussenzeig RH, Rathi N, Maughan BL, Sirohi D, Stenehjem DD, Agarwal N (2020). Identification of genomic aberrations associated with overall survival in metastatic clear cell renal cell carcinoma (mccRCC). [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2020 Feb 13-15; San Francisco, CA. *Journal of Clinical Oncology* 2020 38:6_suppl. 745-745, Abstract nr 745
- Hahn AW, Kessel A, McFarland TR, Swami U, Nussenzeig RH, Esther J, Goel D, Sirohi D, Maughan BL, Agarwal N (2020). Response to systemic therapy and survival outcomes in de-novo (D1) metastatic castration-sensitive prostate cancer (mCSPC) versus mCSPC with prior local therapy (D0) [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2020 Feb 13-15; San Francisco, CA. *Journal of Clinical Oncology* 2020 38:6_suppl 46-46, Abstract nr 46

ASCO 2020

- Swami U, Haaland B, Maughan BL, Nussenzeig RH, Esther J, Kessel A, Pal SK, Grivas P, Agarwal N (2020). Comparative effectiveness of second-line (2L) single-agent atezolizumab (A), nivolumab (N), and pembrolizumab (P) in patients (Pts) with locally advanced or metastatic urothelial cancer (aUC) who progressed on platinum-based systemic chemotherapy (plat-chemo): Results from a real-world dataset. In: ASCO Cancer Symposium; 2020 May 29-June 2; Virtual. *Journal of Clinical Oncology* 2021 38:15_suppl, Abstract nr 5032.

Genitourinary ASCO 2021

- Kessel A, McFarland TR, Sayegh N, Morton K, Sirohi D, Kohli M, Swami U, Nussenzeig RH, Agarwal N, Maughan BL. Randomized phase II trial of radium-223 (RA) plus enzalutamide (EZ) versus EZ alone in metastatic castration-refractory prostate cancer (mCRPC): Final efficacy and safety results [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2021 Feb 11-13; San Francisco, CA. *Journal of Clinical Oncology* 2021 39:6_suppl, Abstract nr 135.
- McFarland TR, Nussenzeig RH, Swami U, Sayegh N, Kessel A, Sharma P, Li H, Kohli M, Maughan BL, Pal SK, Agarwal N. Comprehensive genomic profiling of matched primary prostate cancer tissue and cell-free DNA (cfDNA) to assess ontogeny of BRCA1/BRCA2 mutations [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2021 Feb 11-13; San Francisco, CA. *Journal of Clinical Oncology* 2021 39:6_suppl, Abstract nr 166.

- Taza F, Holler AE, Adra N, Ashkar R, Sokolova A, Kessel A, Nafissi N, Barata PC, Bastos DA, Smaletz O, Aggarwal RR, Berchuck JE, Vlachostergios PJ, Su C, Marshall CH, Antonarakis ES. Differential activity of PARP inhibitors in BRCA1- versus BRCA2-altered metastatic castration resistant prostate cancer (mCRPC) [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2021 Feb 11-13; San Francisco, CA. Journal of Clinical Oncology 2021 39:6_suppl, Abstract nr 100.
- Freeman MM, Jaeger E, Zhu J, Phone A, Nussenzeig RH, Caputo S, Ravindranathan D, Layton JL, Nandagopal L, Kessel A, Desai A, Koshkin VS, Basu A, Bilen MA, Swami U, Garcia JA, Agarwal N, Burgess EF, Sartor AO, Barata PC. Multi-institutional evaluation of the clinical outcomes and genomic correlates of African Americans with metastatic castration-sensitive prostate cancer (mCSPC) [Abstract]. In: ASCO Genitourinary Cancer Symposium; 2021 Feb 11-13; San Francisco, CA. Journal of Clinical Oncology 2021 39:6_suppl, Abstract nr 17.

ASCO 2021

- Barata PC, Swami U, Kessel A, Jaeger E, Wesolowski S, Chipman J, Bilen MA, Heath EI, Nandagopal L, Vaena DA, Maughan BL, Nussenzeig RH, Yandell M, Kohli M, Agarwal N, Sartor OA. Landscape of circulating tumor DNA (ctDNA) abnormalities in advanced prostate cancer (aPCa): Distinctions in African American (AA) versus Caucasian (Ca) patients [Abstract]. In: ASCO Cancer Symposium; 2021 June 4-8; Virtual. Journal of Clinical Oncology 2021 39:15_suppl, Abstract nr 5032.
- Swami U, McFarland T.R, Haaland B, Kessel A, Nussenzeig R.H, Sayegh N, Hahn A.W, Rath N, Sirohi D, Esther J, Li H, Kohli M, Maughan B.L, Goldkorn A, Agarwal N. Association of circulating tumor cells (CTC) with survival outcomes in patients (pts) with metastatic castration-sensitive prostate cancer (mCSPC) in a real-world cohort [Abstract]. In: ASCO Cancer Symposium; 2021 June 4-8; Virtual. Journal of Clinical Oncology 2021 39:15_suppl, Abstract nr 5077

Presentations:

- Kessel, A. (2024, October). Evaluation of 18F-DOPA PET imaging features and impact on radiation target volumes for patients with oligodendroglioma. *Poster Session*. ASTRO; 2024 Sept 30-Oct 02; Washington DC.
- Kessel A. (2024, October). Updates to Local Disease Control in Patients with Erdheim-Chester Disease treated with External Beam Radiation Therapy. *Poster Session*. ASTRO; 2024 Sept 30-Oct 02; Washington DC.
- Kessel A. (2024, April). Local Disease Control in Patients with Erdheim-Chester Disease treated with External Beam Radiation Therapy. *Oral Presentation*. Erdheim Chester Disease Annual Scientific Meeting; 2024 April 14-16; Seattle, WA.
- Kessel A. (2021, February). Randomized phase II trial of radium-223 (RA) plus enzalutamide (EZ) versus EZ alone in metastatic castration-refractory prostate cancer (mCRPC): Final efficacy and safety results. *Poster Highlight Session*. ASCO Genitourinary Cancer Symposium; San Francisco, CA.
- Kessel A. (2021, October). Identification of genomic aberrations associated with overall survival in metastatic clear cell renal cell carcinoma (mccRCC). *Poster Session*. University of Utah School of Medicine Summer Research Symposium; Salt Lake City, UT.
- Kessel A. (2020, February). Identification of genomic aberrations associated with overall survival in metastatic clear cell renal cell carcinoma (mccRCC). *Poster Session*. ASCO Genitourinary Cancer Symposium; San Francisco, CA.

Personal Interests

- My wife is a pediatrics resident at Mayo Clinic
- We have three dogs and one cat
- Avid skier, mountain biker, and runner
- Completed my 2nd Birkebeiner cross-country ski race this year!