# **JOSHUA ANDERSON**

7426 Cabot Drive Nashville, TN 37209

Phone: 479-879-2946 | Email: Joshua.l.anderson@vanderbilt.edu

### **EDUCATION**

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2016 - Present	Vanderbilt University School of Medicine (VUSM), Nashville, TN
	<ul> <li>Doctor of Medicine, expected May 2020</li> </ul>
	<ul> <li>USMLE Step 1 score 256, Step 2 score 260</li> </ul>
2012 - 2016	University of Arkansas, summa cum laude
	<ul> <li>Bachelor of Science in Biology</li> </ul>
	<ul> <li>Minor in General Business</li> </ul>

Vanderbilt Program in Interprofessional Learning

# **HONORS/AWARDS**

2016

2016	Accepted as 1 of 9 Vanderbilt medical students  University of Astronous Porcebook Classics
2010	<ul> <li>University of Arkansas Razorback Classic</li> <li>Honor given to top 11 male and top 11 female class of 2016 graduates</li> </ul>
2012 - 2016	Arkansas Governor's and Chancellor's Scholarships
2012 - 2010	Four-year merit-based scholarship including full tuition and room/board stipend
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LEADERSHIP	
2018 - Present	Executive Board Member, Rayos Contra Cancer, Inc.
	<ul> <li>Non-profit organization committed to improving delivery of radiotherapy in Latin America via education, research, and telehealth endeavors.</li> </ul>
	<ul> <li>Designed research studies, participated in telehealth sessions, recruited and co-managed medical student team</li> </ul>
2018 - Present	Radiation Oncology Interest Group Co-Leader, VUSM
	<ul> <li>Organized programming including resident panel, "Women in Radiation Oncology"</li> </ul>
	discussion and tours of the department
2017 - Present	President, Sporting Clay Team, VUSM
	<ul> <li>Organized VUSM clay shooting events</li> </ul>
2017 - Present	Vice President, VUSM Thomistic Institute
	<ul> <li>Assisted in founding of Thomistic Institute (TI) chapter at VMS, a national organization that funds guest lecturers on college campuses.</li> </ul>
	<ul> <li>Assisted in organizing guest lectures on medical ethics, end of life care, interplay between religion and health.</li> </ul>
2017 - 2019	Treasurer, American Medical Association-Tennessee Medical Association, VUSM
	<ul> <li>Assisted in organizing events such as local politician guest speakers, annual AMA-TMA "Day on the Hill" event.</li> </ul>
2017 - Present	Executive Board Member, Medicine and Business Society, VUSM
	<ul> <li>Assisted in organizing group events such as private practice panels, personal finance lectures</li> </ul>

# **SERVICE/VOLUNTEER ACTIVITIES**

2018 – Present Volunteer, Room in the Inn, Nashville, TN

 Organization that provides free shelter, food, and clothing to the Nashville homeless population.  Assisted in serving dinner, preparing beds, and assembling care packages for homeless population

2019

Volunteer, Dismas House, Nashville, TN

Cooked and served dinner to former prisoners

2016 - Present

2013 - 2016

- Clinical Volunteer and Peer Educator, Shade Tree Clinic, VUSM
  - Participated in providing patient care at student-run free health clinic for uninsured patient population
  - Mentored and educated pre-clinical medical students on physical exam, clinical diagnosis skills

#### RESEARCH EXPERIENCE

2019-Present Radiation Oncology research, Vanderbilt University Medical Center (VUMC), Albert Attia, MD Leading retrospective cohort analysis investigating the effects of pre-SRS embolization on outcomes for arteriorvenous malformations treated with stereotactic radiosurgery Radiation Oncology research, VUMC, Albert Attia, MD 2019 - Present Participating in retrospective cohort study investigating fractionated SRS vs single fraction SRS in the treatment of pituitary adenomas 2019-Present Radiation Oncology Research, VUMC, Layth Yahya Mula-Hussain, MD Participating in case report publication of the treatment of a patient with breast myeloid sarcoma in a low resource setting 2018 - Present Radiation Oncology research, VUMC, Evan Osmundson, MD, PhD Leading a retrospective cohort study investigating the association between intrathoracic tumor volumetric data and the benefit of prophylactic cranial irradiation in patients with extensive-stage small cell lung cancer U54 grant funded 2018 - Present Radiation Oncology Research, VUMC, Evan Osmundson, MD, PhD Leading a secondary cost analysis project of prophylactic cranial irradiation vs. serial three-month follow up brain MRIs for patients diagnosed with extensive stage small cell lung cancer 2018 - Present Radiation Oncology Research, VUMC, Evan Osmundson, MD, PhD Leading a retrospective cohort study investigating the effects of off-target radiation dose to the thoracic bone marrow and cardiopulmonary circulation on hematologic cell line nadirs in the treatment of locoregional esophageal cancer treated with chemoradiotherapy 2018 - Present Radiation Oncology Research, VUMC, Anthony Cmelak, MD Leading a retrospective cohort analysis investigating local control rates and toxicity in patients with skull-based paragangliomas treated with SRS or IMRT 2018 - Present Radiation Oncology Research, Monroe Carroll Jr. Children's Hospital, Scott Borinstein, MD, PhD Leading a retrospective cohort analysis investigating the prognostic utility of residual PET scan avidity after definitive radiotherapy in pediatric patients treated with chemoradiation for Ewing sarcoma and rhabdomyosarcoma 2017 - Present Radiation Oncology Research, VUMC, Evan Osmundson, MD, PhD Participating in retrospective cohort analysis investigating rates of lymphopenia and dosimetric constraints to the thoracic vertebral column in patients with esophageal cancer treated with chemoradiation 2017 - Present Radiation Oncology Research, VUMC, Anthony Cmelak, MD Participating in retrospective cohort analysis investigating the correlation between obesity and pain sensitization in patients with refractory trigeminal neuralgia previously

Biochemistry Research, University of Arkansas, Suresh Kumar Thallapuranam, PhD

human acidic fibroblast growth factor

Basic science research investigating the thermodynamic and structural stability of the

#### **PUBLICATIONS**

- 1. **Anderson J,** Khattab M, Anderson C, Sherry A, Luo G, Manzoor N, Netterville J, Attia A, Cmelak A. Long Term Outcomes for the Treatment of Paragangliomas in the Upfront, Adjuvant, and Salvage Settings with Stereotactic Radiosurgery and Intensity Modulated Radiotherapy. *Otology and Neurotology*. 2020 Jan;41(1):133-140. doi: 10.1097/MAO.0000000000002461
- 2. **Anderson, J,** Khattab M, Sherry A, Luo G, Chitale R, Froehler M, Fusco M, Cmelak A, Attia A. Improved Cerebral Arteriovenous Malformation Obliteration with 3D Rotational Digital Subtraction Angiography for Radiosurgical Planning: A Retrospective Cohort Study. Resubmitted to *Neurosurgery* with minor revisions, January 2020.
- 3. Sherry A, Newman N, **Anderson J,** Osmundson E. Systemic Inflammatory Dynamics during Chemoradiotherapy Predict Response, Relapse, Metastasis, and Survival in Esophageal Carcinoma. *Journal of Surgical Oncology*. 2019 Dec 4. doi: 10.1002/jso.25793.
- 4. **Anderson J**, Newman N, Anderson C, Sherry A, Osmundson E. Mean cardiopulmonary dose and vertebral marrow dose differentially predict lineage-specific leukopenia kinetics during radiotherapy for esophageal cancer. Accepted to *Radiotherapy and Oncology*, December 2019
- 5. Sherry A, Khattab M, Xu M, Kelly P, **Anderson J,** Luo G, Utz A, Chambless L, Cmelak A, Attia A. Long-Term Outcomes of Hypofractionated Stereotactic Radiotherapy for Refractory Functional Pituitary Adenoma. Submitted to *Journal of Radiation Oncology*, November 2019.
- 6. **Anderson J,** Anderson C, Xu M, Osmundson E. Intrathoracic Disease Burden and Therapeutic Response Predicts Benefit of Prophylactic Cranial Irradiation (PCI) in Extensive Stage Small Cell Lung Cancer (ES-SCLC). Submitted to *Clinical and Translational Radiation Oncology*, October 2019.
- 7. Sherry A, Khattab M, Xu M, Kelly P, **Anderson J,** Luo G, Utz A, Chambless L, Cmelak A, Attia A. Outcomes of Stereotactic Radiosurgery and Hypofractionated Stereotactic Radiotherapy for Refractory Cushing's Disease. Accepted to *Pituitary*, September 2019.
- 8. Khattab M, Sherry A, Xu M, Kelly P, Patrick D, **Anderson J**, Luo G, Chambless L, Cmelak A, Attia A. Stereotactic Radiosurgery and Hypofractionated Stereotactic Radiotherapy for Nonfunctioning Pituitary Adenoma. Submitted to *Journal of Neurosurgery*, August 2019.
- 9. Khattab M, Sherry A, **Anderson J**, Kim E, Yu Huong, Luo G, Yock A, Morales M, Cmelak A, Attia A. Body mass index and response to stereotactic radiosurgery in the treatment of refractory trigeminal neuralgia: A retrospective cohort study. *Journal of Radiosurgery and SBRT*. Accepted for publication July 12th. 2019
- 10. Newman N, Sherry A, **Anderson J**, Osmundson E. Clinical and Dosimetric Predictors of Lymphopenia in Esophageal Carcinoma. Submitted to *Journal of Medical Imaging and Radiation Oncology*, July 2019
- 11. Eberle J, Gundampati R, Jayanthi S, **Anderson J**, Pickhardt A, Koppolu B, Zaharoff D, Kumar TKS. Effect of extension of the heparin binding pocket on the structure, stability, and cell proliferation activity of the human acidic fibroblast growth factor. *Biochemistry and Biophysics Reports*. 2018; 13:45-57

### PRESENTATIONS (\*presenter)

#### ORAL

1. **Anderson J\***, Newman N, Anderson C, Sherry, Alexander; Osmundson, Evan. Dose to thoracic cardiopulmonary volume and to vertebral marrow differentially predict lineage-specific cytopenia kinetics during radiotherapy for esophageal cancer. American Society for Radiation Oncology 61th Annual Meeting. Chicago, IL. September 2019

### **POSTER**

- 1. **Anderson J\***, Anderson C, Xu M, Osmundson E. Quantitative Volumetric Disease Burden Response to Predict Benefit of Consolidative Thoracic Radiotherapy in Extensive Stage Small Cell Lung Cancer (ES-SCLC). American Society for Radiation Oncology 61th Annual Meeting. Chicago, IL. September 2019
- 2. **Anderson J\***, Khattab M, Sherry, A, Luo G, Attia A, Cmelak A. Stereotactic Radiosurgery and Intensity Modulated Radiotherapy for Treatment of Paragangliomas: A Tertiary Medical Center's 17 Year Experience. American Society for Radiation Oncology 61th Annual Meeting. Chicago, IL. September 2019
- 3. Sherry A\*, Newman N, **Anderson J**, Osmundson E. Inflammation with Lymphopenia during Chemoradiotherapy Predicts Recurrence and Mortality in Locally Advanced Esophageal Carcinoma. American Society for Radiation Oncology 61th Annual Meeting. Chicago, IL. September 2019
- 4. **Anderson J\*,** Xu M, Anderson C, Osmundson E. Prognostic Significance of Quantitative Imaging in Response to Chemotherapy in Extensive-Stage Small Cell Lung Cancer. MVT Cancer Partnership Annual Symposium. Nashville, TN. February 15th, 2019
- 5. Sherry A\*, **Anderson J**, Bradshaw M, Wharton D, Brett C, Delbeke D, Shinohara E, Borinstein S. Persistent [18F] Flurodeoxyglucose Positron Emission Tomography Avidity after Definitive Radiotherapy and Outcome in Ewing Sarcoma and Rhabdomyosarcoma. Radiation Oncology Summit: American College of Radiation Oncology 2019 annual meeting. Orlando, FL. March 9, 2019
- 6. Li B, Sherry A\*, Bajpai S, Oladeru O, Castaneda S, **Anderson J**, Trump S, Gonzales G, Newman N, Morales M, Ayala-Peacock D, Mula-Hussain L, Roa D. The Concept, Design, and Formation of Rayos Contra Cancer: Ready to Address Global Health Radiotherapy Gaps. International Cancer Experts Corp Annual Conference: Pioneering Action for Global Cancer Care. Washington, DC. February 14, 2019
- 7. Li B, Castaneda S, Oladeru O, Sherry A\*, Ning M, Perez T, Sarria G **Anderson J**, Lo C, Morales M, Peacock-Ayala D, Roa D, Mula-Hussain L, Jhingran A. Regional Analysis of Radiotherapy Planning Differences: Latin American Cooperative Study 1 (LACOS-1) Baseline Results and Next Steps. International Cancer Experts Corp Annual Conference: Pioneering Action for Global Cancer Care. Washington, DC. February 14, 2019
- 8. Khattab M, Sherry A, **Anderson, J\*,** Kim E, Yu H, Luo G, Yock A, Morales M, Cmelak A, Attia A. Obesity predicts poor outcomes to stereotactic radiosurgery for trigeminal neuralgia. American Society for Radiation Oncology 60th Annual Meeting. San Antonio, TX. Oct 21, 2018
- 9. Li B, **Anderson J\***, Sherry A, Trump S, Savoie B, Morales M, Ayala-Peacock D, Newman N, Gonzalez G, Gomez D, Ureta L, Gharzouzi E, Wiesner C, Cotes M, Torres L, Sarria G. Rayos Contra Cancer: An Organization for International Collaboration in Radiation Oncology. Vanderbilt-Ingram Cancer Center 2018 Annual Scientific Retreat. Nashville, TN. May 3, 2018
- 10. **Anderson J\***, Newman N, Sherry A, Osmundson E. Dose dependent association of vertebral body irradiation and lymphopenia during chemoradiation for esophageal cancer. Vanderbilt-Ingram Cancer Center 2018 Annual Scientific Retreat. Nashville, TN. May 3, 2018
- 11. **Anderson J\***, Eberle J, Gundampati R, Jayanthi S, Pickhardt A, Koppolu B, Zaharoff D, Kumar, TKS. Modulating the mitogenic activity and stability of the human acidic fibroblast growth factor. Joint Southeastern Regional Meeting of the American Chemical Society. Memphis, TN. November 7, 2015

### **OTHER SKILLS AND INTERESTS**

July 2019, TreeAge Cost Analysis Software Public Healthcare Training, Boston, MA

- Attended 2-day training course in TreeAge software learning how to build and analyze economic healthcare models including cost-effectiveness models, sensitivity analyses, and Markov models.
- October 2018, SAS statistics software training, Nashville, TN
- Attended full-day training in SAS statistics software
   April 2019, Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) Certified, Nashville, TN

### **PROFESSIONAL ORGANIZATION MEMBERSHIPS**

Phi Beta Kappa Honor Society American Society for Radiation Oncology (ASTRO) American Society for Clinical Oncology (ASCO)