CURRICULUM VITAE

Biographical

Name: Hima Bindu Musunuru, MBBS, MRCP, FRCR (UK)

E-mail: musunuruhb@upmc.edu

Education:

1997-03	Siddhartha Medical College NTR University of Health Sciences Andhra Pradesh, India	MB; BS; 2003
2005-08	Royal College of Physicians of the UK London, UK	MRCP-UK (Int Med); 2007
2008-13	Royal College of Radiology of the UK London, UK	FRCR-UK (Clinical Oncology); 2012

Postgraduate training:

	Start Date	End Date	Program Director/Mentor	
Medical School				
Compulsory rotating internship Government General Hospital, Vijayawada, Andhra Pradesh, India	06/01/2002	08/01/2003	Prof. Sasank, MD	
Residency-Internal Medicine				
St. James's University Hospital, Leeds, UK Huddersfield General Infirmary, Huddersfield, UK	01/02/2005	08/1/2008	Dr. Clare Donnellan, MD, FRCP (UK)	
Fellowship-Clinical Oncology*				
Humber and Yorkshire Deanery, Leeds, United Kingdom (UK) St. James University Hospital, Beckett St, Leeds, UK	10/06/2008	10/05/2013	Dr. Rachel A. Cooper, MD, FRCP, FRCR(UK)	

Clinical Fellowship-Radiation Oncology			
Prostate SBRT and HDR Brachytherapy University of Toronto, Toronto, Canada	11/18/2013	06/30/2015	Dr. Andrew Loblaw, MD, FRCPC (Canada)
Research Fellowship-Radiation Oncology			
MR Linac University of Wisconsin, Madison, USA	08/15/2016	06/30/2019	Dr. Paul Harari MD, FASTRO Dr. Michael Bassetti MD, PhD
Residency-Radiation Oncology			
UPMC Hillman Cancer Centre, Pittsburgh, PA	07/01/2019	Current	Dr. Ryan P. Smith MD Dr. Sushil Beriwal MD, FASTRO Dr. John A. Vargo IV MD

- St. James's University Hospital, Leeds, UK is a 10 Elekta Linac cancer centre and has 18 trainees in the program with an excellent reputation for training as evidenced by national surveys and trainee feedback.
- This cancer centre is the sole provider of cancer services to 3.0 million population of the Yorkshire Cancer Network and is the second largest radiotherapy centre in the country(https://www.leedsth.nhs.uk/a-z-of-services/leeds-cancer-centre/your-treatment/radiotherapy).
- The radiotherapy department sees over 6000 new patients per year covering all tumour specific sites and acts as a tertiary referral centre for brachytherapy, gamma knife, 4D RT/IMRT/VMAT, and SABR/SBRT.
- The relationship with the University of Leeds and the Yorkshire Cancer Research Network permits involvement in research as well as undergraduate and postgraduate teaching.

As per the national curriculum set by Royal College of Radiologists (UK), clinical oncology training program extensively covers all cancer subsites and trainees' progress is assessed at regular intervals including annual appraisal (https://www.rcr.ac.uk/clinical-oncology/specialty-training/curriculum/clinical-oncology-curriculum-2010).

Annual appraisal is a formal meeting between the trainee and program director, educational supervisors, an attending from a different training hospital to provide unbiased external appraisal of the trainee, and a representative from human resources department. Trainees are allowed to continue and progress pending satisfactory reports from the annual appraisal committee, educational supervisor/s, training program director and upon completing necessary work-based assessments. Trainees apply for the certificate of completion of training (CCT) after completing five years of dedicated clinical training in oncology.

Memberships in Professional Societies:

- American Society for Radiation Oncology
- Royal College of Radiology, UK

^{*}United Kingdom (UK) has an unusual training in that as holders of MRCP (Internal Medicine, UK), trainees gain expertise in internal medicine before commencing specialist training. We therefore specialize in both radiation therapy as well as systemic therapy and as such our training program is designated clinical oncology rather than radiation oncology.

Honours:

1997-03	Academic prizes and distinctions in anatomy, Pathology, Ophthalmology, Obstetrics and Gynaecology
2002	Dr. P. Siva Reddy Endowment Medal in Ophthalmology
2012	Best oral presentation at the UK and Ireland Brachytherapy conference Second cancers post I-125 Brachytherapy Monotherapy in Prostate Cancer
2012	Young Scientist ESTRO session for the abstract: Correlation between Dose Volume Parameters and Clinical Toxicity in Patients Treated with SABR for Stage 1 Lung Cancer
2015	Frank Ellis RCR (UK) Medal for Best Contribution to Clinical Oncology, 2014
2020	Travel Grant Award — American College of Radiation Oncology (ACRO)

Peer Reviewed Publications:

- 1. **Hima Bindu Musunuru** *, Andrew Keller *, Alexander Olawaiye, Paniti Sukumvanich, Sushil Beriwal. Indications for Adjuvant Radiotherapy in Patients with pN0(i+) Adenocarcinoma of the Endometrium. Practical Radiation Oncology.2022. In Press. *co-first authors.
- **2. Musunuru HB*,** Pifer PM*, Mohindra P, Albuquerque K, and Beriwal S. "Advances in Management of Locally Advanced Cervical Cancer" Indian Journal of Medical Research. 2022. In press. *co-first author.
- **3.** Musunuru HB, Cheung P, Vesprini D, Liu SK, Chu W, Chung HT, Morton G, Deabreu A, Davidson M, Ravi A, Helou J, Ho L, Zhang L, Loblaw A. Gantry-Based 5-Fraction Elective Nodal Irradiation in Unfavorable-Risk Prostate Cancer: Outcomes From 2 Prospective Studies Comparing SABR Boost with MR Dose-Painted HDR Brachytherapy Boost. Int J Radiat Oncol Biol Phys. 2022 Mar 1;112(3):735-743.
- **4. Musunuru HB**, Keller A, Beriwal S. Radiotherapy with genomic-adjusted radiation dose. Lancet Oncol. 2021 Nov;22(11): e469.
- 5. Musunuru HB, Loblaw DA. In regard to Yamazaki et al. Int J Radiat Oncol Biol Phys. 2022. In Press.
- **6. Musunuru HB**, Cheung P, Vesprini D, Liu SK, Chu W, Chung HT, Morton G, Deabreu A, Davidson M, Ravi A, Helou J, Ho L, Zhang L, Loblaw A. Stereotactic pelvic radiotherapy with HDR boost for dose escalation in intermediate and high-risk prostate cancer (SPARE): Efficacy, toxicity, and quality of life. Radiother Oncol. 2021 Aug; 161:40-46.
- 7. Musunuru HB, Keller A, Pifer P, Beriwal S. In regard to Hall et al and Small et al. Int J Radiat Oncol Biol Phys. 2021 Mar 15;109(4):1125-1126.
- **8. Musunuru HB**, Yadav P, Olson SJ, Anderson BM. Improved Ipsilateral Breast and Chest Wall Sparing With MR-Guided 3-fraction Accelerated Partial Breast Irradiation: A Dosimetric Study Comparing MR-Linac and CT-Linac Plans. Adv Radiat Oncol. 2021 Jan 22;6(3).
- **9. Musunuru HB**, Witt JS, Yadav P, Francis DM, Kuczmarska-Haas A, Labby ZE, Bassetti MF, Howard SP, Baschnagel AM. Impact of adjuvant fractionated stereotactic radiotherapy dose on local control of brain metastases. J Neurooncol. 2019 Nov;145(2):385-390.

- 10. HB Musunuru, M Davidson, L D'Alimonte, L Ho, P Cheung, D Vesprini, S Liu, W Chu, H Chung, A Ravi, A Deabreu, Z Bhounr, L Zhang, K Commisso, DA Loblaw. Phase I/II Study of Stereotactic Ablative Radiotherapy Including Regional Lymph Node Irradiation for Patients with High-Risk Prostate Cancer (SATURN): Acute Toxicity and Quality of Life Results. Int J Radiat Oncol Biol Phys. 2018 Dec 1;102(5):1438-1447.
- 11. Musunuru HB, Klotz L, Vesprini D, Morton G, Cheung P, Chung H, Sethukavalan P, Ghanem G, Zhang L, Mamedov A Jethava V, D'Alimonte L, Deabreu A, Jain S, Yamamoto T, Loblaw A. Active Surveillance in intermediate-risk patients: Survival outcomes in the Sunnybrook Experience- Journal of Urology. 2016 Dec; 196(6): 1651-1658.
- **12. Musunuru HB**, Davidson M, Cheung P, Vesprini D, Liu S, Chung H, Chu W, Mamedov A, Ravi A, D'Alimonte L, Commisso K, Helou J, Deabreu A, Zhang L, Loblaw A. Predictive Parameters of Symptomatic Hematochezia Following 5-Fraction Gantry-Based SABR in Prostate Cancer. Int J Radiat Oncol Biol Phys. 2016 Apr 1; 94(5):1043-51.
- **13. Musunuru HB**, Quon H, Davidson M, Cheung P, Zhang L, D'Alimonte L, Deabreu A, Mamedov A, Loblaw A. Dose-escalation of five-fraction SABR in prostate cancer: Toxicity comparison of two prospective trials. Radiother Oncol. 2016 Jan; 118(1):112-7.
- **14.** Musunuru HB, Klotz L, Vesprini D, Morton G, Cheung P, Chung H, Sethukavalan P, Ghanem G, Zhang L, Mamedov A Jethava V, D'Alimonte L, Deabreu A, Jain S, Yamamoto T, Loblaw A. Comparison of Contemporary Treatment Options for Early Prostate Cancer: A Single Institution Series- Austin Journal of Radiation Oncology and Cancer, 2016.
- **15. Musunuru HB**, Loblaw A. Clinical trials of stereotactic ablative radiotherapy for prostate cancer: updates and future direction. Future Oncol. 2015; 11(5):819-31.
- **16. Musunuru HB**, Cheung P, Loblaw A. Evolution of hypo fractionated accelerated radiotherapy for prostate cancer The Sunnybrook experience. Front Oncol. 2014 Nov 14; 4:313.
- **17. Musunuru H,** Mason M, Murray L: Second primary cancers occurring after I-125 brachytherapy as monotherapy for early prostate cancer: Clin Oncol (R Coll Radiol). 2014 Apr; 26(4):210-5.
- **18.** Jaishankar S, Pifer PM, Bhargava R, Keller A, **Musunuru HB**, Patel AK, Sukumvanich P, Boisen M, Berger JL, Taylor S, Courtney-Brooks M, Olawaiye A, Lesnock J, Edwards R, Vargo JA, Beriwal S. Is Substantial Lymphovascular Space Invasion Prognostic for Clinical Outcomes in Type II Endometrial Cancer? Clin Oncol (R Coll Radiol). 2022
- 19. Rydzewski N, Yadav P, Musunuru HB, Condit KM, Francis D, Zhao SG, Baschnagel A. Radiomic Modeling of Bone Density and Rib Fracture Risk after Stereotactic Body Radiation Therapy for Early-Stage Non-Small Cell Lung Cancer. Advances in Radiation Oncology, In Press. 2022.
- **20.** Witek ME, Woody NM, **Musunuru HB**, Hill PM, Yadav P, Burr AR, Ko HC, Ross RB, Kimple RJ, Harari PM. Defining high-risk elective contralateral neck radiation volumes for oropharynx cancer. Head Neck. 2022 Feb;44(2):317-324.
- **21.** Glicksman RM, Liu SK, Cheung P, Vesprini D, Chu W, Chung HT, Morton G, Deabreu A, Davidson M, Ravi A, **Musunuru HB**, Helou J, Ho L, Zhang L, Loblaw A. Elective nodal ultra hypofractionated radiation for prostate cancer: Safety and efficacy from four prospective clinical trials. Radiother Oncol. 2021 Sep; 163:159-164.
- **22.** Lee SL, Mahler P, Olson S, Witt JS, **Musunuru HB**, Rajamanickam V, Bassetti MF, Yadav P. Reduction of cardiac dose using respiratory-gated MR-linac plans for gastro-esophageal junction cancer. Med Dosim. 2021 June;46(2):152-156.

- **23.** Hafeez N, **Musunuru HB**, Keller A, Beriwal S. Feasibility of breast radiation therapy in a Fanconi Anemia patient diagnosed with breast cancer: A case report and review of literature. Clin Transl Radiat Oncol. 2021 Apr 9; 28:129-132.
- **24.** Yadav P, Kuczmarska-Haas A, **Musunuru HB**, Witt J, Blitzer G, Mahler P, Bassetti MF. Evaluating dose constraints for radiation induced liver damage following magnetic resonance image guided Stereotactic Body radiotherapy. Phys Imaging Radiat Oncol. 2021 Feb 6; 17:91-94.
- 25. Alayed Y, Davidson M, Liu S, Chu W, Tseng E, Cheung P, Vesprini D, Cheung H, Morton G, Musunuru HB, Ravi A, Korol R, Deabreu A, Ho L, Commisso K, Bhounr Z, D'Alimonte L, Mittmann N, Dragomir A, Zhang L, Loblaw A. Evaluating the Tolerability of a Simultaneous Focal Boost to the Gross Tumor in Prostate SABR: A Toxicity and Quality-of-Life Comparison of Two Prospective Trials. Int J Radiat Oncol Biol Phys. 2020 May 1;107(1):136-142.
- **26.** Y Alayed; M Davidson; H Quon; P Cheung; W Chu; HT Chung; D Vesprini; A Ong; A Chowdhury; S K Liu; D Panjwani; J Helou; **H B Musunuru**; G Pang; R Korol; A Ravi; B McCurdy; L Zhang; A Mamedov; A Deabreu; A Commisso; K Comisso; L D'Alimonte; L Ho; Z Bhounr; A Loblaw. Dosimetric Predictors of Toxicity and Quality of Life Following Prostate Stereotactic Ablative Radiotherapy. Radiother Oncol. 2020 Mar; 144:135-140.
- **27.** Sebastian N, Wu T, Driscoll E, Willers H, Kelly S, **Musunuru HB**, Mo X, Tan Y, Bazan J, Haglund K, Xu-Welliver M, Baschnagel AM, Ju A, Keane F, Williams TM. Pre-treatment serum bicarbonate predicts for primary tumor control after stereotactic body radiation therapy in patients with localized non-small cell lung cancer. Radiother Oncol. 2019 Nov; 140:26-33.
- **28.** Yadav P, **Musunuru HB**, Witt JS, Bassetti M, Bayouth J, Baschnagel AM. Dosimetric study for spine stereotactic body radiation therapy: magnetic resonance guided linear accelerator versus volumetric modulated arc therapy. Radiol Oncol. 2019 Sep 24;53(3):362-368.
- 29. Alayed Y, Cheung P, Vesprini D, Liu S, Chu W, Chung H, Musunuru HB, Davidson M, Ravi A, D'Alimonte L, Ho L, Deabreu A, Bhounr Z, Zhang L, Commisso K, Loblaw DA. SABR in high-risk prostate cancer: outcomes from two prospective clinical trials with and without elective nodal irradiation. Int J Radiat Oncol Biol Phys. 2019 May 1;104(1):36-41.
- **30.** Witt JS, **Musunuru HB**, Bayliss RA, Howard SP. Large volume re-irradiation for recurrent meningioma with pulsed reduced dose rate radiotherapy. J Neurooncol. 2019 Jan;141(1):103-109.
- **31.** Dilshad Nathoo, Andrew Loblaw, Melanie Davidson, **Hima Bindu Musurunu**, Amir Khojaste, Ananth Ravi. A Feasibility Study on the Role of Ultrasound Imaging of Bladder Volume **A** Method to Improve Concordance of Bladder Filling Status on Treatment with Simulation. Journal of Medical Imaging and Radiation Sciences. 2018 Sep;49(3):277-285.
- **32.** Alayed Y, Cheung P, Pang G, Mamedov A, D'Alimonte L, Deabreu A, Commisso K, Commisso A, Zhang L, Quon HC, **Musunuru HB**, Helou J, Loblaw DA. Dose escalation for prostate stereotactic ablative radiotherapy (SABR): Late outcomes from two prospective clinical trials. Radiother Oncol. 2018 May;127(2):213-218.
- **33.** Helou J, Torres S, **Musunuru HB**, Raphael J, Cheung P, Vesprini D, Chung HT, D'Alimonte L, Krahn M, Morton G, Loblaw A. Stereotactic Body Radiotherapy versus Low Dose Rate Brachytherapy for Localised Prostate Cancer: A Cost-Utility Analysis. Clin Oncol (R Coll Radiol). 2017 Nov;29(11):718-731.
- **34.** Quon HC, **Musunuru HB**, Cheung P, Pang G, Mamedov A, D'Alimonte L, Deabreau A, Zhang L, Loblaw A. Dose Escalated Stereotactic Body Radiation Therapy for Prostate Cancer: Quality of Life Comparison of Two Prospective Clinical Trials. Front Oncology, 2016 Aug 29; 6:185.

- **35.** Yamamoto T, **Musunuru B**, Vesprini D, Zhang L, Ghanem G, Loblaw A, Klotz L. Metastatic Prostate Cancer in Men Initially Treated with Active Surveillance. J Urol. 2016 May; 195(5):1409-14.
- **36.** Choong ES, Bownes P, **Musunuru HB**, Rodda S, Richardson C, Al-Qaisieh B, Swift S, Orton J, Cooper R. Hybrid (CT/MRI based) vs. MRI only based image-guided brachytherapy in cervical cancer: Dosimetry comparisons and clinical outcome. Brachytherapy. 2016 Jan-Feb; 15(1):40-8.
- **37.** Murray L, Karakaya E, Hinsley S, Naisbitt M, Lilley J, Snee M, Clarke K, **Musunuru HB**, Ramasamy S, Turner R, Franks K. Lung stereotactic ablative radiotherapy (SABR): dosimetric considerations for chest wall toxicity. Br J Radiol. 2016; 89(1058):20150628.
- **38.** Murray L, Ramasamy S, Lilley J, Snee M, Clarke K, **Musunuru HB**, Needham A, Turner R, Sangha V, Flatley M, Franks K. Stereotactic Ablative Radiotherapy (SABR) in Patients with Medically Inoperable Peripheral Early-Stage Lung Cancer: Outcomes for the First UK SABR Cohort. Clin Oncol (R Coll Radiol). 2016 Jan; 28(1):4-12.
- **39.** Henry AM, Rodda SL, Mason M, **Musunuru H**, Al-Qaisieh B, Bownes P, Smith J, Franks K, Carey B, Bottomley D. The Effect of Dose and Quality Assurance in Early Prostate Cancer Treated with Low Dose Rate Brachytherapy as Monotherapy. Clin Oncol (R Coll Radiol). 2015 Jul; 27(7):382-6.
- **40.** Nicolae A, Davidson M, Easton H, Helou J, **Musunuru H,** Loblaw A, Ravi A. Clinical evaluation of an endorectal immobilization system for use in prostate hypo fractionated Stereotactic Ablative Body Radiotherapy (SABR). Radiat Oncol. 2015 May 30; 10:122.
- **41.** Cooper R, Brearley E, Hurmuz P, **Musunuru HB**, Richardson C, Swift S, Orton J, Bownes P: Assessment of uterus position as a surrogate for high-risk clinical target volume with respect to the applicator position for multiple fractions of brachytherapy in cervical cancer: Arch Gynecol Obstet. 2014 Dec; 290(6):1201-5.
- **42.** Helou J, Morton G, Zhang L, Deabreu A, D'Alimonte L, Elias E, **Musunuru HB**, Mamedov A, Ravi A, Chung H, Cheung P, Loblaw A. A comparative study of quality of life in patients with localized prostate cancer treated at a single institution: stereotactic ablative radiotherapy or external beam+high dose rate brachytherapy boost. Radiother Oncol. 2014 Dec; 113(3):404-9.

Textbook Chapters:

- 1. **Hima Bindu Musunuru**, John Austin Vargo, Alexander Olawaiye, Sushil Beriwal. Cancer of the Vagina and Vulva. *Principles & Practice of Oncology*, 12th edition, edited by Drs. Vincent T. DeVita, Theodore S. Lawrence, and Steven A. Rosenberg, 2022, In Press.
- 2. **Hima B. Musunuru**, John C. Flickinger, Peter C. Gerszten. Radiotherapy for intramedullary tumors. In: Simon Hanft, Paul C. McCormick, editors. Tumors of the Spinal Canal. Springer 2021. Chapter 9; p.165-177.
- 3. **Pifer PM, Musunuru H**, Flickinger JC, Gerszten PC. IG-HSRT for Benign Tumors of the Spine. In: Sahgal A, Lo S, Ma L, Sheehan J, editors. Image-guided hypofractionated stereotactic radiosurgery 2 ed. Boca Raton, FL: CRC Press; 2022. Chapter 11; p.189-206. 189-206p.
- 4. **HB Musunuru**, DA Loblaw. EAU-ICUD Guidelines: Medical Management of Urological Malignancies, 2015. Overview of Clinical Trials.

Oral and Poster Presentations:

2021 *ASTRO*

Musunuru HB, Keller A, Beriwal S.

Wait and Watch Approach for Patients with Rectal Cancer following Neoadjuvant Therapy.

2021 ARS

Pifer PM, Jaishankar S, Bhargava R, Keller A, **Musunuru HB**, Patel AK et al.

Is Substantial Lymphovascular Space Invasion Prognostic for Clinical Outcomes in Type II Endometrial Cancer?

2021

ROECSG

Keller A, Richman AH, **Musunuru HB**, Kim H, Methodology and efficacy of weekly web-based Vargo JA, Beriwal S.

Radiation Oncology Educational Conference.

2020

ACRO

Musunuru HB, Patel AK, Rodriguez-Lopez JL, Local Therapy Influences Patterns of Disease Progression Beriwal S.

in Stage IV Synchronous Oligometastatic Breast Cancer.

ACRO Travel Grant

2020 *ASTRO*

Musunuru HB, Patel A, Rodriguez-Lopez JL, Brufsky A, Beriwal S.

Impact of Metastasis Directed Therapy on Progression and Survival in Metachronous Oligometastatic Breast cancer: An Extended Follow-up Study.

2019 *ASTRO*

H.B. Musunuru, P. Yadav, S.J. Olson, B.M. Anderson.

H.B. Musunuru, P. Yadav, M.F. Bassetti, J. Bayouth, A.M. Baschnagel.

H.B. Musunuru, P. Yadav, S.J. Olson, Q. Khan, J. Bayouth, M.F. Bassetti

H.B. Musunuru, P. Yadav, J.S. Witt, A. Kuczmarska-Haas, B.M. Anderson, F. Kelcz.

N R Rydzewski, P Yadav, **HB Musunuru**, D Francis, A M. Baschnagel.

Improved Ipsilateral Breast and Chest Wall Sparing with MR-Guided Radiation Therapy: A Planning Study of 3-Fraction Accelerated Partial Breast Irradiation.

Magnetic Resonance Image-Guided Treatment: An Innovative Approach for Spine Stereotactic Body Radiation Therapy.

Quantifying the Relationship between Pancreatic Tumor and Organs at Risk during Maximum Inhale and Exhale: Identifying the Ideal Respiratory Phase to Deliver SBRT.

How Does 0.35T Magnetic Resonance Imaging Compare with Computed Tomography for Post-Lumpectomy Tumor Bed Delineation in Breast Cancer?

Osteoporosis and Vertebral Body Hounsfield Units as Predictors of Stereotactic Body Radiotherapy Induced Rib Fracture.

2018 *ASTRO*

D.M. Francis, **H.B. Musunuru**, Z. Labby, P. Yadav, A. Kuczmarska-Haas, H.C. Ko, M.F. Bassetti, S.P. Howard, A.M. Baschnagel.

A. Kuczmarska-Haas, P. Yadav, **H.B. Musunuru**, J.S. Witt, D.M. Francis, S.A. Rosenberg, H.C. Ko, Q. Khan, M.F. Bassetti.

Improved Outcomes with Adjuvant Stereotactic Radiosurgery Compared with Fractionated Stereotactic Radiation Therapy for Resected Intracranial Metastases.

Assessing Radiation Induced Liver Damage Following MR-Guided SBRT: Challenging Current Dose Constraints.

ASTRO

Musunuru HB, Rosenberg S, Mittauer K et al. Differential Response of Gastrointestinal Tumors During Real-

time MRI-Guided Radiotherapy.

Digital Poster Discussion

Musunuru HB, Yadav P, Ko H et al. Can Elective Neck Radiation Treatment Volumes be Safely

Reduced to Diminish Toxicity Profiles for Oropharynx Cancer

D. Francis, **HB Musunuru**, P Yadav et al. Do We Need to Dose-Escalate Fractionated Stereotactic

Radiation Therapy for Resected Brain Metastases?

D. A. Loblaw, P. Cheung, G. Pang, H. C. Quon, Dose Escalation For prostate SABR: Late Outcomes from Two

H. B. Musunuru, and J. Helou. **Prospective Clinical Trials**

G. Bauman, J. Chen, G. Rodrigues,

Extreme Hypofractionation for High-Risk Prostate Cancer:

K. Commisso, A. Mamedov, H. B. Musunuru, Dosimetric Correlations with Rectal Bleeding

M. Davidson, A. Warner, A. Loblaw.

ESTRO

Musunuru HB, Rosenberg S, Mittauer K et al. Rapid Early Response of Gastroesophageal Junction Tumors

During Real-time MRI-Guided Radiotherapy.

Poster Discussion

GUASCO

Musunuru HB, Deabreu A, Davidson M et al. Pelvic SABR with HDR Boost in Intermediate and High-Risk

Prostate Cancer (SPARE): Favorable Early Toxicity and

Quality of Life Outcomes.

2016

ASTRO

J Helou, S Torres, HB Musunuru et al. Low dose rate brachytherapy vs standard external beam

radiotherapy vs. SABR for low-risk prostate cancer: A cost-

utility analysis.

2015

ASTRO and CARO

HB Musunuru, Davidson M, Loblaw et al. Phase I/II Study of Stereotactic Ablative Radiotherapy

Including Regional Lymph Node Irradiation for patients with

high-risk prostate cancer (SATURN).

HB Musunuru, Davidson M, Loblaw et al. Predictive parameters of symptomatic Haematochezia

following 5-fraction Gantry-Based SABR in prostate cancer.

Oral Presentation at CARO

CARO

HB Musunuru, L Klotz, DA Loblaw et al.

Active surveillance in intermediate-risk prostate cancer:

Survival outcomes in the Sunnybrook experience.

2014

ASTRO

al.

HB Musunuru, P Sethukavalan, A Loblaw et Comparison of Active Surveillance, Low Dose Rate Brachytherapy, Stereotactic Ablative Body Radiotherapy

and Standard External Beam in Low-Risk Prostate

Cancer

S. L. Rodda, M. Mason, H. Musunuru, A. Henry et al.

Ten Year Outcomes In Men Under 60 Treated With Iodine -125 Permanent Brachytherapy As Monotherapy.

Digital Poster Discussion

CARO

HB Musunuru, P Sethukavalan, A Loblaw et Comparison of Active Surveillance, Low Dose Rate

Brachytherapy, Stereotactic Ablative Body Radiotherapy and Standard External Beam in Low-Risk Prostate Cancer.

ESTRO

H Musunuru, Junni P, Lilley J et al.

Effect of duodenal overlap with PTV (DUO OLV) on radiotherapy planning in patients with locally advanced pancreatic cancer.

E.S. Choong, S. Rodda, H. Musunuru et al.

Brachytherapy in cervical cancer-Comparison between CT/MRI based versus MRI only based conformal approach.

E Choong, S Rodda, H Musunuru et al.

Outcomes in locally advanced cervical cancer (LACC) patients treated radically with/without staging FDG-PET/CT.

Young Scientist Poster Presentation

S Rodda, E Choong, H Musunuru et al.

Relapse patterns in node positive cervical cancer patients treated with modern radiotherapy techniques.

2013

BTS (British Thoracic Society)

S Ramamasy, **HB Musunuru**, K Franks et al.

Lung SABR for medically inoperable peripheral stage 1 non-small cell lung cancer - Analysis of 305 patients.

Also presented at NCRI, Liverpool, UK

2012 **ASTRO**

HB Musunuru, M Mason, A Henry et al.

Second Primary cancers occurring after I125 Brachytherapy as mono therapy for Early Prostate Cancer.

Presented at Concurrent Session

ESTRO

HB Musunuru, S Ramasamy, K Clarke, et al.

Correlation between dose volume parameters and clinical toxicity in patients treated with SABR for stage 1 lung cancer.

Young Scientist Poster Presentation

Prostate Brachytherapy UK and Ireland

Conference

HB Musunuru, M Mason, A Henry et al.

The risk of second cancers occurring more than 5 years after I-125 monotherapy for early prostate cancer.

Awarded Best Oral Presentation

NCRI, Liverpool, UK

E Choong, A Keding, **B Musunuru** et al. Life after Surgery and Radiotherapy for Breast

Cancer: What do our patients have to say?

2011

ESMO GI Cancer

HB Musunuru, R Roy, A Dhadda et al. Positive benefit of adjuvant chemotherapy on outcome in

pT3/4 or N+ rectal cancer following pre- operative chemo

radiotherapy.

ESTRO

HB Musunuru, D Bottomley, K Franks et al. Acute toxicity of forward Planned Simultaneous

Integrated Boost (SIB) IMRT in the first 105 patients with prostate cancer treated to a dose of 76Gy in 37 fractions.

Teaching

Medical Student teaching:

- Taught basic radiation oncology to rotating medical students: Drs. Sean Parker and Melissa Berger
- Mentored Dr. Hafeez on research project which resulted in a first author publication for the medical student

Resident teaching:

- Taught Radiation Oncology Induction Curriculum to Drs. Mulherkar and Bahar

Research

Current Funding:

Organization	Years
Thomas H. Nimick Research Fund Grant	2012-2022
Shadyside Hospital Foundation Grant	2021-2022
Thomas H. Nimick Research Fund Grant	2020-2021

Prior Grant Support:

2014 - 2021 Stereotactic Pelvic Radiotherapy with HDR Boost for Dose Escalation in High-Risk Co-Primary Prostate Cancer (SPARE)

Investigator

Principal Investigators Dr. Andrew Loblaw, Dr. H B Musunuru

Funding source Movember Discover Grants, Prostate Cancer, Canada

Total Funding 159,650 CAD

Funding Competitive Yes

2014-2020 Prostate Specific Quality of Life and Health Preference Values of patients Co-Investigator

undergoing a Two Treatment SBRT Program for Localized Prostate Cancer (2)

STAR)

Principal investigator Dr. Andrew Loblaw Funding source AbbVie-ACURA Total funding 30,000 CAD

Funding Competitive

2014 - 2020 Prostate Specific Quality of Life and Health Preference Values of patients Co-Investigator undergoing a Two Treatment SBRT Program for Localized prostate Cancer (2

STAR)

Principal investigator Dr. Andrew Loblaw Funding source Ride For Dad, Hunoria

Total funding 19,943.27 CAD

Funding Competitive Yes

Protocol Development:

MR-Linac based 3-fraction APBI for Early-Stage Breast Cancer, UW, Madison, 2016

Stereotactic Pelvic Radiotherapy with HDR Boost for Dose Escalation in High-Risk Prostate Cancer (SPARE), Toronto, Canada, 2015

SABR Including Regional Lymph Node Irradiation for Patients with High-Risk Prostate Cancer (SATURN), Toronto, Canada, 2013

Current Research Interests:

- SBRT for Oligometastatic / Oligoprogressive Breast cancer
- Gyn Brachytherapy-cervix cancer outcomes
- Radiation Induced Lymphopenia in upper GI malignancies
- Feasibility of online adaptation using CT based platform (ETHOS)

Participation in Committees:

- ROECSG-GME Sub Committee, 2021-current
- AAWR, 2021-current
- ARRO Equity and Inclusion, Mentorship Sub Committee, completed one year in 2021
- ARRO-Global Health, completed one year in 2021