



Muhammad Ramish Ashraf

Postdoctoral Medical Fellow, Radiation Therapy

Bio

HONORS AND AWARDS

- 2nd Place Young Investigator Symposium, Northern California AAPM (2022)
- Best Abstract Award, International FLASH Radiotherapy and Particle Therapy Conference (FRPT) (2021)
- 3rd Position Young Investigator Symposium, AAPM Spring Clinical Meeting (2020)
- BEST Medical Resident Challenge Award, The Radiosurgery Society (2019)

Publications

PUBLICATIONS

- **Individual pulse monitoring and dose control system for pre-clinical implementation of FLASH-RT** *PHYSICS IN MEDICINE AND BIOLOGY*
Ashraf, M., Rahman, M., Cao, X., Duval, K., Williams, B. B., Hoopes, P., Gladstone, D. J., Pogue, B. W., Zhang, R., Bruza, P.
2022; 67 (9)
- **Quantification of Oxygen Depletion During FLASH Irradiation In Vitro and In Vivo** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Cao, X., Zhang, R., Esipova, T. V., Allu, S., Ashraf, R., Rahman, M., Gunn, J. R., Bruza, P., Gladstone, D. J., Williams, B. B., Swartz, H. M., Hoopes, P., Vinogradov, et al
2021; 111 (1): 240-248
- **Spatial and temporal dosimetry of individual electron FLASH beam pulses using radioluminescence imaging** *PHYSICS IN MEDICINE AND BIOLOGY*
Rahman, M., Ashraf, M., Zhang, R., Gladstone, D. J., Cao, X., Williams, B. B., Jack Hoopes, P., Pogue, B. W., Bruza, P.
2021; 66 (13)
- **Electron FLASH Delivery at Treatment Room Isocenter for Efficient Reversible Conversion of a Clinical LINAC** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Rahman, M., Ashraf, R., Zhang, R., Bruza, P., Dexter, C. A., Thompson, L., Cao, X., Williams, B. B., Hoopes, P., Pogue, B. W., Gladstone, D. J.
2021; 110 (3): 872-882
- **The Conversion of Clinical Linear Accelerators for FLASH Radiation Delivery Reply** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
Rahman, M., Ashraf, M., Zhang, R., Bruza, P., Dexter, C. A., Thompson, L., Cao, X., Williams, B. B., Hoopes, P., Pogue, B. W., Gladstone, D. J.
2021; 110 (3): 909-910
- **Spatiotemporal Dose Characterization of An Electron FLASH Beam from a LINAC Using Radioluminescence and Cherenkov Imaging**
Rahman, M., Ashraf, M., Zhang, R., Gladstone, D., Cao, X., Williams, B., Hoopes, J., Pogue, B., Bruza, P.
WILEY.2021
- **Electron FLASH in Clinical Setting: LINAC Conversion, Commissioning and Treatment Planning**
Rahman, M., Ashraf, M., Gladstone, D., Bruza, P., Jarvis, L., Schaner, P., Cao, X., Pogue, B., Hoopes, J., Zhang, R.
WILEY.2021

- **Technical Note: Single-pulse beam characterization for FLASH-RT using optical imaging in a water tank** *MEDICAL PHYSICS*
Ashraf, M., Rahman, M., Zhang, R., Cao, X., Williams, B. B., Hoopes, P., Gladstone, D. J., Pogue, B. W., Bruza, P.
2021; 48 (5): 2673-2681

- **Treatment Planning System for Electron FLASH Radiotherapy: Open-source for Clinical Implementation.** *International journal of radiation oncology, biology, physics*
Rahman, M., Ashraf, M. R., Gladstone, D. J., Bruza, P., Jarvis, L. A., Schaner, P. E., Cao, X., Pogue, B. W., Hoopes, P. J., Zhang, R.
2021

- **Dosimetry for FLASH Radiotherapy: A Review of Tools and the Role of Radioluminescence and Cherenkov Emission** *FRONTIERS IN PHYSICS*
Ashraf, M., Rahman, M., Zhang, R., Williams, B. B., Gladstone, D. J., Pogue, B. W., Bruza, P.
2020; 8

- **Optical imaging provides rapid verification of static small beams, radiosurgery, and VMAT plans with millimeter resolution** *MEDICAL PHYSICS*
Ashraf, M., Bruza, P., Pogue, B. W., Nelson, N., Williams, B. B., Jarvis, L. A., Gladstone, D. J.
2019; 46 (11): 5227-5237

- **Technical Note: Time-gating to medical linear accelerator pulses: Stray radiation detector** *MEDICAL PHYSICS*
Ashraf, M., Bruza, P., Krishnaswamy, V., Gladstone, D. J., Pogue, B. W.
2019; 46 (2): 1044-1048