Stanford

Thomas Niedermayr

Clinical Associate Professor, Radiation Oncology - Radiation Physics

Bio

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Radiation Oncology - Radiation Physics

Publications

PUBLICATIONS

- **Development and clinical implementation of simple needle attachment post placement interstitial template (SNAPP-IT) enabling a shorter, more direct needle path while preserving tumor visualization.** *Brachytherapy*
  Baniel, C. C., Hui, C., Franco, P. A., Niedermayr, T., Kidd, E. A.
  2023

- **Developing next generation 3D-printing for cervical cancer hybrid brachytherapy: a guided interstitial technique enabling improved flexibility, dosimetry, and efficiency.** *International journal of radiation oncology, biology, physics*
  Marar, M., Niedermayr, T., Kidd, E.
  2023

- **Radio-luminescent imaging for rapid, high resolution eye plaque loading verification.** *Medical physics*
  Yan, H., De Jean, P., Grafil, E., Ashraf, R., Niedermayr, T., Astrahan, M., Mruthyunjaya, P., Beadle, B., Xing, L., Liu, W.
  2022

- **Applying 3D-Printed Templates in High-Dose-Rate Brachytherapy for Cervix Cancer: Simplified Needle Insertion for Optimized Dosimetry.** *International journal of radiation oncology, biology, physics*
  Marar, M., Simiele, E., Niedermayr, T., Kidd, E. A.
  2022

- **Dose Prediction for Cervical Cancer Brachytherapy Using 3-D Deep Convolutional Neural Network** *IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES*
  Ma, M., Kidd, E., Fahimian, B. P., Han, B., Niedermayr, T. R., Hristov, D., Xing, L., Yang, Y.
  2022; 6 (2): 214-221

- **Limited Time Penalty for Improved Dosimetry: Simplified Needle Insertion in Combined Tandem and Ovoid plus Interstitial Cases with Custom Templates**
  Niedermayr, T., Kidd, E.
  LIPPINCOTT WILLIAMS & WILKINS.2021: S14-S15

- **MR to Ultrasound Image Registration with Segmentation-Based Learning for HDR Prostate Brachytherapy**
  Chen, Y., Xing, L., Yu, L., Liu, W., Fahimian, B., Niedermayr, T., Bagshaw, H., Buyyounouski, M., Han, B.
  WILEY.2021

- **MR to ultrasound image registration with segmentation-based learning for HDR prostate brachytherapy.** *Medical physics*
  Chen, Y. n., Xing, L. n., Yu, L. n., Liu, W. n., Fahimian, B. P., Niedermayr, T. n., Bagshaw, H. P., Buyyounouski, M. n., Han, B. n.

2021

- **Intensity modulated Ir-192 brachytherapy using high-Z 3D printed applicators.** *Physics in medicine and biology*
  Skinner, L. B., Niedermayr, T., Prionas, N., Perl, J., Fahimian, B. P., Kidd, E.
  2020

- **Factor 10 Expedience of Monthly Linac Quality Assurance via an Ion Chamber Array and Automation Scripts.** *Technology in cancer research & treatment*
  Skinner, L. B., Yang, Y., Hsu, A., Xing, L., Yu, A. S., Niedermayr, T.
  2019; 18: 1533033819876897

- **Optimizing efficiency and safety in external beam radiotherapy using automated plan check (APC) tool and six sigma methodology.** *Journal of applied clinical medical physics*
  Liu, S. n., Bush, K. K., Bertini, J. n., Fu, Y. n., Lewis, J. M., Pham, D. J., Yang, Y. n., Niedermayr, T. R., Skinner, L. n., Xing, L. n., Beadle, B. M., Hsu, A. n., Kovalchuk, et al
  2019; 20 (8): 56–64

- **A multichannel superconducting tunnel junction detector for high-resolution X-ray spectroscopy of magnesium diboride films** *Applied Superconductivity Conference*
  Friedrich, S., Vailionis, A., Drury, O., Niedermayr, T., Funk, T., Kang, W. N., Choi, E. M., Kim, H. J., Lee, S. I., Cramer, S. P., Kim, C., Labov, S. E.
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