Daniel Strauss

✉ *danielrstrauss@gmail.com*
danielrstrauss.com

Education

2021 (expected) **Medical Physics**, *Vanderbilt University*, Nashville, TN.
Master of Science

2015 **Physics**, *University of Maryland*, College Park, MD.
Bachelor of Science

Employment History

2018–2019 **Medical Physicist Assistant**, *California Protons Cancer Therapy Center*, San Diego, CA.

2015–2018 **Medical Physics Extender**, *Maryland Proton Treatment Center*, Baltimore, MD.

Clinical Projects and Responsibilities

- Responsible for patient specific verification and ensuring the dosimetric viability of proton radiation treatment plans.
- Responsible for monthly and assisting in annual proton machine QA.
- Familiar with various radiation detectors including: IBA Matrixx, IBA ion chambers, PTW Octavius and UNIDOS E electrometer, Catphan 500, PTW, IBA, and SNC 3D and 1D water phantoms.
- Developed MATLAB software capable of identifying locations within a proton treatment field that can be used to more accurately verify dose output.
- Assisted with the acceptance testing and commissioning of treatment rooms.
- Responsible for the storage of radioactive parts and waste. Ensured compliance with the state mandated requirements.

Publications

- **Strauss, D.**, Eley, J. (2020), Monte Carlo Simulations of Minibeam Therapy with Protons and Carbon Ions. AAPM ePoster. Poster Number: BReP-SNAP-T-142
- Lagner, U. W., Mundis, M., **Strauss, D.**, Zhu, M. and Mossahebi, S. (2017), A comparison of two pencil beam scanning treatment planning systems for proton therapy. J Appl Clin Med Phys. doi:10.1002/acm2.12235
- Eley, J., **Strauss, D.**, and Langner, U. (2016). Polyenergetic Data Acquisition Using a Video-Scintillator Detector for Scanned Proton Beams. Int J Particle Ther, 3(3), 392-397.

- Yu, J., **Strauss, D.**, Langner, U. and Langen, K. (2016), Patient Surface Dose Measurements Using Optically Stimulated Luminescence Dosimeters in Scanning Proton Beam Therapy for Breast Cancer. Med. Phys., 43:3501
- Yu, J., Nichols, E., **Strauss, D.**, Chung, H., Langner, U., and Langen, K. (2016), Measurement Evaluation of Skin Dose in Scanning Proton Beam Therapy for Breast Cancer. Med. Phys., 43:3496

Teaching Experience

2016–2019 Mentor, Junior Medical Physicist Extenders (MPTC)

Additional Experience

2009–Present Private Pilot (Airplane Single Engine Land with Instrument Rating), General Aviation

2009–2011 Emergency Medical Technician, Cabin John Park Volunteer Fire Department