

Daniel Strauss, MS

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 DanielRStrauss.com

About

- Graduating CAMPEP accredited residency June 2023
- ABR eligible (Part 1 Therapeutic Medical Physics passed)
- Seeking employment in therapeutic medical physics role
- AAPM Member

Education

[Baylor Scott & White Healthcare](#) / Medical Physics Residency
June 2021 - June 2023 (exp.) | Temple, TX

Attending CAMPEP accredited medical physics residency. Clinical rotations including:

- 3D and IMRT treatment planning
- SRS/SBRT treatment planning
- HDR treatment planning and delivery
- CT simulation
- Quality assurance of clinical assets
- Patient specific quality assurance
- Initial and weekly chart checks
- Commissioning and acceptance testing of two Varian Truebeam Linacs

[Vanderbilt School of Medicine](#) / MS Medical Physics

August 2019 - May 2021 | Nashville, TN

- Involved in Monte Carlo research of proton and carbon ion mini beams using TOPAS simulation package.
- Monte Carlo simulation analysis using python data analysis tools.

[University of Maryland](#) / BS Physics

August 2012 - May 2015 | College Park, MD

- Used Linux based astronomy packages to analyze near infrared spectroscopic imaging taken by the European Southern Observatory (ESO)

Experience

[California Protons Cancer Therapy Center](#) / Medical Physics Asst.

February 2018 - July 2019 | San Diego, CA

- Responsible for quality assurance tasks pertaining to the Varian ProBeam proton treatment system.
- Responsible for the generation of patient specific verification plans and measurement using Sun Nuclear 1D water phantom and PTW Octavius detector array.

[Maryland Proton Treatment Center](#) / Medical Physics Extender

August 2015 - February 2018 | Baltimore, MD

- Assisted medical physicists in the commissioning and acceptance testing of a Varian ProBeam proton treatment system.
- Assisted medical physicists in conducting monthly and annual QA of the Varian Probeam system.
- Utilized various detectors such as:
 - IBA Matrixx
 - IBA Lynx PT
 - IBA Giraffe MLIC
 - LOGOS XRV-124 digital camera phantom

Publications

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- **Strauss, D.**, & Eley, J. (2020). Monte Carlo Simulations of Minbeam Therapy with Protons and Carbon Ions. AAPM EPoster.
 - Langner, U. W., Mundis, M., **Strauss, D.**, Zhu, M., & Mossahebi, S. (2018). A comparison of two pencil beam scanning treatment planning systems for proton therapy. Journal of Applied Clinical Medical Physics, 19(1), 156–163.
 - Yu, J., Nichols, E., **Strauss, D.**, Chung, H., Langner, U., & Langen, K. (2016). SU-F-T-151: Measurement Evaluation of Skin Dose in Scanning Proton Beam Therapy for Breast Cancer. Medical Physics, 43(6Part15), 3496–3496.
 - Eley, J. G., **Strauss, D. R.**, & Langner, U. W. (2016). Polyenergetic Data Acquisition Using a Video-Scintillator Detector for Scanned Proton Beams. International Journal of Particle Therapy, 3(3), 392–397.

Systems

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- Varian Truebeam
 - Elekta Flexitron HDR Afterloader
 - Varian ProBeam
 - Siemens and GE CT
 - Sun Nuclear Detectors
 - IBA Detectors
 - PTW Detectors
 - CIRS Phantoms

Software Experience

-
- Varian Eclipse TPS / Eclipse scripting API
 - Varian Velocity
 - Elekta Oncentra TPS
 - Brainlab Elements
 - Python
 - Matlab
 - HTML/CSS/Javascript
 - 3D Slicer
 - Blender
 - FreeCAD

Volunteer Experience

[Cabin John Park Volunteer Fire Dept.](#) / Emergency Medical Tech.
May 2009 - July 2011 | Bethesda, MD

Hobbies

Private Pilot Certificate / Federal Aviation Administration
November 2017 | Airplane Single Engine Land; Instrument Airplane