

Erich A. Schnell, M.S.

800 N.E. 10th Street Suite OKCC #L100, Oklahoma City, OK 73104
Phone: (405) 271-8000 x41465 Fax: (405) 271-8297 E-mail: erich-schnell@ouhsc.edu

Professional Experience

- Oklahoma University Health Sciences Center, Oklahoma City, OK
Staff Physicist
July 2013 - Present

Education and Clinical Training

- Oklahoma University Health Sciences Center, Oklahoma City, OK
CAMPEP Accredited Medical Physics Residency Program
Director: Salahuddin Ahmad, Ph.D.
July 2011-June 2013
- Aurora St. Luke's Medical Center, Milwaukee, WI
Radiation Oncology – Medical Physics Intern (Voluntary)
Supervisor: Cindy Thomason, Ph.D.
Summer 2009, Sept. 2010 – April 2011
- Duke University, Durham, NC
CAMPEP Accredited Medical Physics M.S. Program, Radiation Therapy Track
Thesis: Plate-Specific Gain Map correction for the improvement of DQE in Computed Radiography
Advisor: James T. Dobbins III, Ph.D.
2008 -2010
- Carleton College, Northfield, MN
B.A. in Physics, Cum Laude
2004-2008

Select Honors/Awards

- Excellence in Research Award for Masters 2009-2010 academic year
Duke University - Medical Physics Graduate Program
- Summer Undergraduate Research Fellowship (SURF) 2007
National Institute of Standards & Technology (NIST)
Physics Lab, Ionizing Radiation Division, Radiation Interactions & Dosimetry Group
Gaithersburg, MD
Research topic: Characterizing Heat Transport in Water Calorimeters
Advisors: Ronald Tosh, Ph.D. & Heather Chen-Mayer, Ph.D.

Research Publications and Proceedings

- **Schnell EA**, Samei E, Dobbins JT "Plate-specific gain map correction for the improvement of detective quantum efficiency in computed radiography." *Med. Phys.* **39(3)**, 1495-504 (2012)
- **Schnell EA**, De La Fuente Herman T, Young J, Hildebrand K, Algan O, Syzek E, Herman T, Ahmad S "Dosimetric Comparison of Volumetric Modulated Arc Therapy, Step-And-Shoot, and Sliding Window IMRT for Prostate Cancer," *Proc. XII Mexican Symposium on Medical Physics*, March 2012

Society Memberships

- American Association of Physicists in Medicine (AAPM)

Board Certification

- American Board of Radiology (ABR) Part 2 passed August 2013
- Part 3 to be taken 2014

Clinical Experience:

- Monthly Quality Assurance for Varian linear accelerators (Clinac, Trilogy, TrueBeam), Ximatron simulator, Nucletron HDR systems, Gamma Knife systems, GE CT simulators, Orthovoltage units, gated systems, and image guidance devices.
- Annual Quality Assurance for Varian linear accelerators, Gamma knife units, and GE CT simulators. Source change calibrations for Nucletron HDR systems.
- Participation in commissioning of Varian linear accelerators (2 Clinac, 1 Trilogy, 2 TrueBeam).
- LDR preparation for prostate seed implant, interstitial implant, bile duct Iridium treatment, Brachymesh lung treatment, and Eye plaque including source ordering, calibration, planning, loading, removal, and preparation for use in a sterile environment. Experience in emergency source recovery.
- Gamma Knife patient setup and treatment using both automated positioning and trunnion setups on an Elekta Leksell mark C.
- Patient specific quality assurance for IMRT and electron block treatments.
- Initial and weekly chart checks of radiation therapy treatment plans using Varian ARIA record and verify, as well as paper based systems.
- Various radiation safety tasks such as shielding calculation and shielding leakage measurements for photons and neutrons, in vivo TLD measurements for pregnant patients or patients with pacemakers, radioactive material wipe tests and inventory.

Treatment Planning Experience:

- Treatment planning for photon and electron external beam therapy with Varian Eclipse version 8.9 and version 11, including 3D, Conformal, and IMRT (Arc and static) for most treatment sites, including brain, head and neck, lung, breast, abdominal, pelvic, prostate, etc.
- HDR 3D treatment planning for cylinder and tandem & ring using Nucletron's Oncentra.
- LDR interstitial planning using Varian BrachyVision. Prostate seed implant planning and post-planning using VariSeed.
- SRS and SBRT planning for Linac and CyberKnife using BrainLab and Multiplan, respectively.

Research Interests:

- Dosimetric comparisons between treatment technologies and modalities.