

# Michelle Schwer, MSc, DABR

## CAREER OBJECTIVE

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Provide patient-centered care by applying innovative and quality approaches to ensure safe, accurate, and timely treatments.

## EDUCATION

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**Vanderbilt University** May 2010  
Masters of Science in Medical Physics  
CAMPEP Accredited Program

**Tennessee Technological University** May 2008  
Bachelors of Science in Physics  
Minor in Mathematics  
Member of the Physics Honors Society, Sigma Pi Sigma  
Graduated Magna Cum Laude

## PROFESSIONAL EXPERIENCE

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**Rhode Island Hospital** February 2018 - Present  
**Brown University** *Providence, RI*  
*Clinical Assistant Professor*

- Service lead for Image Guided Radiotherapy
- Clinical Protocols Liaison
- Implemented TG263 compliant structure sets into RayStation TPS
- Team member handling HDR and LDR prostate cases
- CyberKnife planning for Cranial cases
- Revising CT-Sim Quality Assurance
- Assessing MIM software for clinical and research feasibility
- Supervised education of physician and medical physics residents

**East Carolina University** August 2016 - February 2018  
*Clinical Assistant Professor* *Greenville, NC*

- Developed clinical procedure for simulation, planning, quality assurance, and treatment of Rapid Arc craniospinal treatments
- Lead physicist for planning specialized cases, pediatrics, and all protocol patients
- Implemented dosimetry goal sheets and standardized nomenclature for all treatment sites that are robust enough for adaptive radiotherapy
- Executed the departmental use of dotDecimal for custom electron blocks
- Modeled the Calypso treatment couch in Eclipse V11
- Worked with the Chief Physicist to update the departmental QA procedures for both the CT Simulator and the Linear Accelerators

- Supervised education of medical physics residents and graduate students
- Served on the departmental committee for process improvement and LEAN technique implementation
- Team member on commissioning a Varian TrueBeam V2.5 including respiratory gating and SRS/SBRT capabilities
- Lead brachytherapy physicist

**HannLeb Physics, Inc**

*Consulting Medical Physicist*

August 2013 - August 2016

*Gastonia, NC*

- Performed daily, monthly, and annual quality assurance on a variety of linear accelerators
- Ensured that QA procedures were in compliance with TG-142, TG-51, and state regulations
- Routinely performed absolute dose measurements and calibrations
- SRS and SBRT commissioning
- Functioned as an ARIA administrator
- Acted as a leader in the department implementing Meaningful Use

**RadPhys Oncology, LLC**

*Consulting Medical Physicist*

August 2010 - January 2012

*Knoxville, TN*

- Responsible for routine linear accelerator quality assurance
- Performing patient specific quality assurance
- Participated in two separate accelerator commissioning projects
- Leader in incorporating TG142 quality assurance tests into the existing QA program

**Vanderbilt University**

*Radiation Safety Compliance Officer*

June 2008 - June 2009

*Nashville, TN*

- Responsible for annual calibration of survey meters
- Received and logged any incoming or outgoing radioactive material
- Labs certified for radiation use were surveyed monthly, quarterly, or semiannually to locate radiation contamination or non-compliance issues

**CLINICAL HARDWARE AND SOFTWARE**

**Treatment Devices**

TrueBeam, 2100IX, 2100EX, and a 2100SC (Varian)  
 Versa HD and Inifinity (Elekta)  
 CyberKnife (Accuray)  
 Primus (Siemens)  
 HDR afterloaders (Nucletron and Varian)  
 Phillips, GE, and Siemens CT Simulators  
 Varian Conventional Simulator

**Respiratory Gating**

Varian RMP System and Phillips Bellows

**TX Planning Software**

Eclipse, Oncentra, RayStation, Variseed for LDR cases, Multiplan (CyberKnife), and Pinnacle

**Registration Software**

Velocity, Mirada, and MIM

**R&V Software**

ARIA and Mosaiq

## ABSTRACTS

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S. Sharma, J Yoon, **M Schwer**, A Ju Treatment Planning Comparison of CyberKnife and Linac-Based SBRT  
*AAPM Annual Meeting 2018*, accepted as a poster presentation

## Ad Hoc Reviewer

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2018 – Brachytherapy

## CLINICAL PROTOCOLS SUPPORTED

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**NRG-BR001** A Phase I study of stereotactic body radiotherapy (SBRT) for the treatment of multiple metastases

**NRG-BR002** A Phase IIR/III trial of standard of care therapy with or without stereotactic body radiotherapy (SBRT) and/or surgical ablation for newly oligometastatic breast cancer

**NRG-B51** A Randomized Phase III clinical trial evaluating post-mastectomy chestwall and regional nodal XRT and post-lumpectomy regional nodal XRT in patient with positive axillary nodes before neoadjuvant chemotherapy who convert to pathologically negative axillary nodes after neoadjuvant chemotherapy

**NRG-GY006** A Randomized Phase II trial of Radiation Therapy and Cisplatin Alone or in Combination with Intravenous Triapine in Women with Newly Diagnosed Bulky Stage IB2, Stage II, IIIB, of IVA Cancer of the Uterine Cervix or Stage II-IVA Vaginal Cancer

**Alliance A011202** A Randomized Phase III Trial Combining Axillary Lymph Node Dissection to Axillary Radiation in Breast Cancer Patients (cT1-3 N1) who have positive Sentinel Lymph Node disease after neoadjuvant chemotherapy

**Alliance A071102** A Phase II/III Randomized trial of Veliparib or Placebo in combination with adjuvant Temozolomide in newly diagnosed Glioblastoma with MGMT Promoter Hypermethylation

**Alliance A021501** Preoperative extended chemotherapy vs. chemotherapy plus hypofractionated radiation therapy for borderline resectable adenocarcinoma of the head of the pancreas

**COG AEWS1221** Randomized Phase II Trial evaluating the addition of the IGF-1R Monoclonal Antibody Ganitumab (AMG 479, NSC# 750008, IND# 120449) to multiagent Chemotherapy for Patients with newly diagnosed metastatic Ewing Sarcoma

**COG AHOD1331** A Randomized phase III study of Brentuximab Vedotin (SGN, IND #117117) for newly diagnosed high-risk classical Hodgkin Lymphoma (cHL) in children and adolescents

**COG AALL1131** A phase III randomized trial for newly diagnosed high risk B-Lymphoblastic leukemia (B-ALL) Including a Stratum evaluating Dasatinib (IND#73789, NSC#732517) in patients with ph-like tyrosine kinase inhibitor (TKI) sensitive mutations

**COG AALL1231** A Phase III randomized trial investigating Bortezomib (SC# 681239; IND#58443) on a modified augmented BFM (ABFM) backbone in newly diagnosed T-Lymphoblastic leukemia (T-ALL) and T-Lymphoblastic Lymphoma (T-LLy)

**COG ACNS0331** A study evaluating limited target volume boost irradiation and reduced dose craniospinal radiotherapy (18.00 Gy) and chemotherapy in children with newly diagnosed standard risk medulloblastoma: A phase III double randomized trial

**COG ACNS0332** Efficacy of Carbotin administered concomitantly with radiation and Isotretinoin as a pro-apoptotic agent in other than average risk medulloblastoma/PNET patients

**COG ACNS0822** A randomized phase II/III study of Vorinostat (IND#71976) and local irradiation OR Temozolomide and local irradiation OR Bevacizumab (IND#7921) and local irradiation followed by maintenance Bevacizumab and Temozolomide in children with newly diagnosed high-grade gliomas

**COG AHOD03P1** Treatment of children with newly-diagnosed low stage lymphocyte predominant Hodgkin Disease (LPHD)

**COG AREN0532** Treatment for very low and standard risk favorable histology Wilms tumor

**COG AREN0533** Treatment of newly diagnosed higher risk favorable histology Wilms tumor

**COG ARST1321** Pazopanib neoadjuvant trial in non-Rhabdomyosarcoma soft tissue sarcomas (PAZNTIS): A Phase II/III randomized trial of preoperative chemoradiation or preoperative radiation plus or minus pazopanib (NSC# 737754, IND#118613)

**COG ARST1431** A Randomized Phase 3 study of Vincristine, Dactinomycin, Cyclophosphamide (VAC) alternating with Vincristine and Irinotecan (VI) versus VAC/VI plus Temsirolimus (TORI, Torisel, NSC# 683864, IND# 122782) in Patients with Intermediate Risk (IR) Rhabdomyosarcoma (RMS)

**BrUOG 265** Phase I and Pharmacology study of Oral 5-Iodo-2-Pyriminone-2'-Deoxyribose (IPdR) as a prodrug for IUdR-mediated tumor radiosensitization in Gastrointestinal cancers

**BrUOG R302** BYL719, Capecitabine and Radiation for Rectal Cancer: a Brown University Oncology Research Group Phase I Study

**GOG-0263** Randomized Phase III clinical trial of adjuvant radiation versus chemoradiation in intermediate risk, stage I/IIA cervical cancer treated with initial radical hysterectomy and pelvic lymphadenectomy

**RTOG 0724 / GOG 0724** Phase III Randomized study of concurrent chemotherapy and pelvic radiation therapy with or without adjuvant chemotherapy in high-risk patients with early-stage cervical carcinoma following radical hysterectomy

**RTOG 0848** A Phase II-R and a Phase III trial evaluating both \*Erlotinib (PH II-R) and Chemoradiation (PH III) as adjuvant treatment for patients with resected head of pancreas adenocarcinoma

## PROFESSIONAL MEMBERSHIPS

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Diplomate of the American Board of Radiology in Therapeutic Medical Physics

Member of the American Association of Physics in Medicine since 2009

Member of the New England AAPM (NEAAPM) chapter since 2018

## RESEARCH EXPERIENCE

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**Duke University**

*Research Assistant*

May 2007 - Aug 2007

*Durham, NC*

- Researched under Dr. Haiyan Gao in the setup of the  $^3\text{He}$  injection test in the search for the neutron electric dipole moment.

**Purdue University**

*Research Assistant*

May 2006 – August 2006

*West Lafayette, IN*

- Researched under Dr. Ken Ritchie performing single molecule imaging on *Escherihia coli* bacteria utilizing a fluorophore called Di I