

# BRUCE CRAWFORD, MS DABR

## WORK EXPERIENCE

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**May 2011 - Present** **Massachusetts General Hospital**

***Medical Physicist***

- Assisted the department relocation and adoption of Elekta linear accelerators at the MGH main campus
- Member of the stereotactic physics team
- Serve on the lymphoma, prostate, and CNS clinical collaborative groups
- Serve on the ACR accreditation task force
- Principal physics liaison to MGH dosimetry for the RayStation treatment planning system
- Maintain quality assurance records for the RayStation planning system
- Perform initial chart checks and weekly physics checks

**May 2011 – Present** **Alliance Healthcare Services**

***Per-diem Physicist***

- Perform routine quality assurance checks on an Elekta Synergy linear accelerator with MOSAIQ Record and Verify
- Perform IMRT Quality Assurance Checks
- Perform routine measurements for electron cut-outs
- Maintain quality assurance of patient records through initial chart checks and weekly physics checks
- Provide clinical direction as needed

**August 2008 – May 2011** **Alliance Healthcare Services**

***Senior Medical Physicist***

- Led successful effort in achieving ACR accreditation at one site, assisted in the success of two other facilities
- Responsible for all acceptance tests and commissioning of an Elekta Synergy linear accelerator, Philips Brilliance Big Bore CT Simulator, Philips Pinnacle<sup>3</sup> Treatment Planning System, and LDR prostate brachytherapy program
- Performed weekly and monthly quality assurance tests on radiotherapy equipment, as suggested in relevant AAPM Task Group Reports
- Maintained quality assurance of patient records through initial chart checks and weekly physics checks
- Served on the radiation safety and quality assurance committees
- Supervised a regional team of three medical physicists

**October 2007 – August 2008**

**Alliance Healthcare Services**

***Per-diem Physicist***

- Performed routine quality assurance checks on a Varian 21 IX linear accelerator with Aria Record and Verify
- Performed IMRT quality assurance checks with Varian Eclipse and Map- Check
- Performed routine measurements for electron cut-outs
- Maintained quality assurance of patient records through initial chart checks and weekly physics checks
- Provided clinical direction as needed

**April 2007 – August 2008**

**Mount Auburn Hospital**

***Clinical Physicist***

- Performed routine quality assurance checks on a Varian 21 EX linear accelerator with Aria Record and Verify
- Assisted with LDR prostate brachytherapy using Varian VariSeed
- Generated IMRT and 3D Conformal treatment plans for a variety of sites with Varian Eclipse
- Maintained quality assurance of patient records through initial chart checks and weekly physics checks
- Provided clinical assistance in dosimetry

**August 2004 – April 2007**

**North Shore Cancer Center**

***Clinical Physicist [Oct 2006 – Apr 2007 Chief Physicist]***

- Responsible for developing LDR Brachytherapy program
- Performed routine quality assurance checks on Varian and Siemens linear accelerators
- Generated IMRT and 3D Conformal treatment plans for a variety of sites using CMS XiO
- Maintained quality assurance of patient records through weekly physics checks using IMPAC Record and Verify
- Participated in monthly and annual quality assurance for treatment planning and linear accelerators
- As chief physicist, directed a dosimetry and physics team of 8 people, including performance evaluations
- Co-leader on commissioning and acceptance testing a Varian 21EX linear accelerator
- Radiation Safety Committee member

**January 2002 – August 2004**

**St Jude Children's Research Hospital**

***2002 Clinical Physicist [2003 – 2004 Lead Clinical Physicist]***

- Provided supervision to a team of 2 physicists, 1 dosimetrist, and 1 engineer
- Generated IMRT and 3D conformal plans for a variety of pediatric malignancies
- Participated in monthly and annual quality assurance for treatment planning and linear accelerators

**September 2000 – December 2001** **Suffolk University**  
***Adjunct Faculty – Departments of Physics & Medical Sciences***

- Taught classes on Radiotherapy Dosimetry, Mathematical Methods of Physics, and Science and Technology Today
- Served on the Medical Sciences Advisory Board

**January 1998 – December 2001** **Massachusetts General Hospital**  
***Clinical Physicist [1998 – 2000 Dosimetrist]***

- Maintained routine quality assurance on linear accelerators
- Performed 3D Conformal Treatment Planning to a variety of sites
- Developed ultrasound guidance program for external beam prostate patients
- Performed LDR and HDR brachytherapy planning
- Performed physics and dosimetry duties related to Stereotactic Radiosurgery with Radionics X-Knife and Exact Couch

**February 1996 – January 1998** **Bowling Green Radiation Therapy**  
***Junior Physicist***

Under the supervision of an off-site physicist:

- Maintained routine quality assurance on linear accelerators
- Performed 3D Conformal Treatment Planning to a variety of sites
- Performed LDR brachytherapy planning
- Supervised 1 dosimetrist

**January 1995 – December 1995** **University of Memphis**  
***Graduate Teaching Assistant – Department of Physics***

- Presented lectures to pre-med and engineering physics students
- Maintained laboratory equipment

**August 1993 – January 1995** **Baptist Hospitals of Memphis**  
***Dosimetrist/Junior Physicist***

- Assisted on-site physicist with quality assurance on linear accelerators
- Performed 3D Conformal Treatment Planning
- Performed LDR brachytherapy planning

**January 1992 – January 1994** **Methodist Hospitals of Memphis**  
***Dosimetrist***

- Performed external beam treatment planning
- Handled Cs-137 and Ir-192 sources for brachytherapy
- Performed LDR brachytherapy planning
- Constructed Cerrobend Blocks
- Taught Radiological Physics to Radiologic Technology students

## EDUCATION

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**1998**                      **University of Memphis**                      **Memphis, TN**

- Master of Science, Physics
- Thesis: A Random Walk Model of Fractional Diffusion

**1991**                      **Memphis State University**                      **Memphis, TN**

- Bachelor of Science, Physics – Magna Cum Laude
- Research Honors Scholar