

Five (5) day Medical Physics Training includes extensive Hi-Art System instruction geared to the Medical Physics Professional. All coursework is provided at TomoTherapy's Technology and Customer Training Center in Madison, Wisconsin. Tuition fee covers one (1) physics staff member. Associated travel and living expenses are not included in tuition fee.

Physicist Training: Course Outline

● **Monday**

- Treatment demonstration with Rando pelvis phantom
- Tour of customer training area and TomoTherapy Operations Center
- Course Overview
- Introductory Material
 - TomoTherapy vs Conventional Linacs
 - Basic TomoTherapy physics (beam-line measurements)
 - Introduction to the Operator Station
- Machine operation, warmup, and daily QA

● **Tuesday**

- Overview of Installation, Verification, & Acceptance Testing
- Physics Verification Testing
 - Beam Alignment
 - Beam Profiles with the Water Tank
 - Couch Alignment
 - "Twinning" in manufacturing and in the field
 - Hands-on verification, including Film Analyzer software
- Final procedures during verification and Acceptance Testing
 - Monitor Unit calibration
 - "Acceptance Test Procedure" (ATP) checklist
 - Creation of procedures (XML's) for machine quality assurance (QA)
- TomoImage commissioning and post-install issues

● **Wednesday**

- Physics of Planning
 - Optimization
 - Convolution/Superposition

- **Wednesday, cont'd**

- Basics of the Planning Station software
- Junction Effects
- IMRT validation
- Pre-Planning Preparation
 - IVDT Creation
 - Film Calibration
 - Pre-Planning CT requirements
- Hands-on with the Planning System
 - Planning System tabs: ROI, Optimize, Fractionate
 - Practice basic plan creation
 - Create patient DQA plans on the Planning System
- Perform patient DQA plans at the Operator Station
 - Phantom setup; typical film & ion chamber placement
 - Scanning & Registration
 - DQA measurements with ion chamber & film

- **Thursday**

- Machine QA – Overview
- Post-Installation service & physics support
- IMRT verification with the “TomoPhant_5Sets” commissioning patient
- Record & Verify Procedures
- Cluster maintenance
- Hands-on practice with the Planning System
- Hands-on practice with patient DQA

- **Friday**

- Additional time for planning practice
- Final time for question & answer sessions
- Course evaluations