

**Welcome to
The University of Texas MD Anderson Cancer Center**

**Proton Therapy Center – Houston, TX
1840 Old Spanish Trail
Houston, TX 77054**

**Two Week Course Curriculum
October 8 - 20, 2018**



Welcome to MD Anderson Cancer Center and the Proton Therapy Center in Houston, TX. We are excited that you have chosen our world-class facilities to further your knowledge and understanding of proton therapy. With the most innovative technology and a multidisciplinary team approach, our cancer experts include radiation oncologist, physicists, medical dosimetrists, nurses, anesthesiologist, radiation therapist and others.

Depending on the training track(s) you have chosen, over the course of the next week(s), our goal is to educate you on Clinical Operations, Treatment Planning and/or Physics and Service Maintenance. Any one or all three of these tracks will better prepare you as you engage in new frontiers with proton therapy and extend its benefits to patients with a wide range of cancers.

Thank you and enjoy the program!

Steven J. Frank, MD

Medical Director, Proton Therapy Center

Brandon Gunn, MD

Associate Medical Director, Proton Therapy Center

Matthew Palmer, MBA, CMD

Chief Operating Officer, PTC-H

X. Ronald Zhu, PhD

Physics Director, Proton Therapy Center

Mayankkumar Amin, CMD

Medical Dosimetry, Clinical Supervisor

Charles Merrifield, BS, RT

Radiation Therapy, Clinical Supervisor

Jo McDonald, RN

Nurse Manager

Beth De Gracia, RN

Research Nurse Supervisor

Lee Chamblee, MBA

Education Program Coordinator

2 Week Training Course

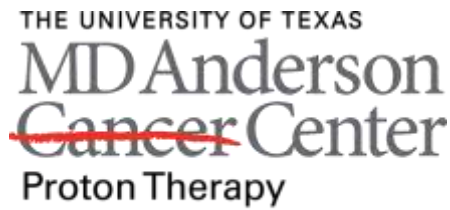
October 8 – 20, 2018

Week 1 (Clinical & Operations)

Monday	Introduction to Proton Therapy - Clinical	2 hours
Monday	Introduction to Proton Therapy - Physics	1.5 hours
Monday	Operations & Facilities	3 hours
Monday	Service Maintenance	1 hour
Tuesday	Clinical Nutrition/Nursing Overview	2 hours
Tuesday	MDs (disease site specific)	6 hours
Wednesday	MDs (disease site)/MLPs/Pedi Anesthesia	7 hours
Thursday	MDs (disease site specific)/Pediatrics	5 hours
Friday	Research (Nurses)	2.5 hours
Friday	International Patient Center	1 hour
Friday	Financial Clearance (Optional)	2 hours

Week 2 (Treatment Planning and Physics + Service Maintenance)

Monday	Dosimetrist (6 hrs.) / Physicists (2 hrs.)	6.5 hours
Tuesday	Dosimetrist (6 hrs.) / Physicists (2 hrs.)	8 hours
Wednesday	Dosimetrist (6 hrs.) / Physicists (2 hrs.)	7 hours
Thursday	Dosimetrist (6 hrs.) / Physicists (2 hrs.)	5 hours
Friday	Dosimetrist (6 hrs.) / Physicists (2 hrs.)	7.5 hours
Saturday	Physicist	7 hours



Making Cancer History®

Week 1 (Clinical & Operations) Course Breakdown

Monday, Oct. 8 – Operations & Facilities and MDs (disease site specific)

- 9:00am – 9:30am Registration + Breakfast
- 9:30am – 10:20am Welcome Video + Tour **Lee C.**
- 10:20am – 11:00am Introduction to Proton Therapy – Clinical **Dr. Frank**
- 11:00am – 11:15am Break**
- 11:15am – 12:30pm Introduction to Proton Therapy – Physics **Dr. Zhu**
- 12:30pm – 1:30pm Lunch with Dr. Cox**
- 1:30pm – 3:30pm (Operations/Facilities) Overview of Proton Therapy Center
(Patient flow, staffing, special consideration) **Matt P.**
- 3:30pm – 3:45pm Break**
- 3:45pm – 4:15pm Service Maintenance **Enzo Pera/Luster McDaniel**

Tuesday, Oct. 9 – MDs (disease site specific); Nursing and Clinical Nutrition

- 9:00am – 10:00am (MD) Head & Neck (H&N) Evidence/Literature **Dr. Frank or Dr. Gunn**
- 10:00am – 11:15am (MD) H&N Way of Treatment **Dr. Frank or Dr. Gunn**
- 11:15am – 11:30am Break**
- 11:30am – 12:15pm (MD) Head & Neck (H&N) Case Presentation **Dr. Frank or Dr. Gunn**

12:15pm – 1:00pm Lunch

1:00pm – 1:30pm Clinical Nutrition **Haley Deas**

1:30pm – 2:00pm Child Life Advocacy **Laura Wiedemann**

2:00pm – 2:30pm Nursing **Rochelle Manning, RN**

2:30pm – 2:45pm Break

2:45pm – 3:45pm Radiation Therapy Gantry Observation

Wed., Oct. 10 – MDs (disease site specific); MLPs and Pediatric Anesthesia

8:30am – 9:15am (MD) Lung Evidence/Literature **Dr. Liao**

9:15am – 10:00am (MD) Lung Quality Safety **Dr. Joe Chang**

10:00am – 10:15am Break

10:15am – 11:00am MLPs (Side effects, exams, problems, writing Rx's) **Tai Ly**

11:00am – 12:00pm Pediatric Anesthesia **Dr. Shannon Popovich**

12:00pm – 1:00pm Lunch

1:00pm – 2:00pm (MD) (CNS) Evidence/Literature **Dr. Grosshans**

2:00pm – 2:30pm (MD) Central Nervous System - Quality & Safety **Dr. Grosshans**

2:30pm – 2:45pm Break

2:45pm – 3:15pm (MD) (CNS) MDACC way of treatment **Dr. Grosshans**

3:15pm – 3:45pm (MD) (CNS) Case Presentation **Dr. Grosshans**

Thursday, Oct. 11 – MDs (disease site specific)

8:00am – 9:00am (MD) Genitourinary - Prostate (GU) Evidence/Literature **Dr. Choi**

9:00am – 9:45am (MD) Genitourinary - Prostate (GU) Case Presentation **Dr. Choi**

9:45am – 10:00am Break

10:00am – 11:00am Tour of Radiation Treatment Center – MDACC Main

11:00am – 12:00pm (MD) Pediatric Evidence/Literature **Dr. Kristina Woodhouse**

12:00pm – 1:00pm Lunch

1:00pm – 1:30pm (MD) Pediatric – Quality & Safety **Dr. Kristina Woodhouse**

1:30pm – 2:30pm (MD) Pediatric MDACC Way of Treatment **Dr. Kristina Woodhouse**

2:30pm – 2:45pm Break

2:45pm – 3:15pm (MD) Pediatric Case Presentation **Dr. Kristina Woodhouse**

Friday, Oct. 12 – Research Nurses and Financial Clearance

9:00am – 9:45am Fundamentals of Clinical Research **Leni Matthews**

9:45am – 10:15am (Research) Overview of exciting clinical trials and prospective/QOL studies at the PTC **Beth De Gracia**

10:15am – 10:35am (Research) Overview of clinical research at the RCCs and collaborative studies where MDACC is the lead site/collaborating site **Joanie Blais**

10:35am – 10:45am Break

10:45am – 11:00am (Research) Overview of interesting studies for our pediatric patients **Nancy Philip**

11:00am – 11:10am (Research) Overview of future projects **Beth De Gracia**

11:10am – 12:10pm Lunch

12:10pm – 12:40pm – International Patient Center **TBD**

12:40pm – 1:00pm Insurance Welcome + Video **Deanna Martin**

1:00pm – 1:30pm New Patient Referral **Kimberly Bennett**

1:30pm – 2:00pm Insurance Authorization Process **Deanna Martin**

2:00pm – 2:15pm Break

2:15pm – 2:45pm Denials & Appeals **Deanna Martin**

2:45pm – 3:00pm Final Insurance Approval Process **Deanna Martin**

Week 2 (Treatment Planning & Physics) Course Breakdown

Monday, Oct. 15 – Dosimetry/Physics

9:00am – 9:30am Registration/Breakfast + Welcome Address/Video **Lee C.**

9:30am – 10:45am Overview of Proton Therapy Physics **Dr. Ronald Zhu**

10:45am – 11:00am Break

11:00am – 12:45pm Overview of Patient Treatment Planning **Mayank Amin**

12:45pm – 1:30pm Lunch

1:30pm – 1:50pm Tour of PTC **Lee C.**

1:50pm – 3:50pm Dosimetry – Treatment Planning & Demo for Prostate (PSPT and SFO) **Catherine Evans**

3:50pm – 4:00pm Break

4:00pm – 4:45pm Physics – Intro. Motion Management (Adaptive for lung) **Dr. Li**

Tuesday, Oct. 16 – Dosimetry/Physics

8:00am – 9:45am Dosimetry – Treatment Planning & Demo for Lung (PSPT and SFO) **Rachel Hunter / Dr. Heng Li**

9:45am – 10:00am Break

10:00am – 11:15am Dosimetry – Treatment Planning & Demo for Esophagus (PSPT and SFO) **Roberto Gongora/Dr. Heng Li**

11:15am – 12:15pm Lunch

12:15pm – 1:45pm Dosimetry – Treatment Planning & Demo for Head & Neck (SFO & MFO) **Rola Georges**

1:45pm – 2:00pm Break

2:00pm – 3:30pm Physics – Introduction to robust optimization **Dr. X. Zhang**

Wednesday, Oct. 17 – Dosimetry

8:00am – 10:15am Dosimetry – Treat. Plan. & Demo for CSI **Tyler Williamson**

10:15am – 10:30am Break

10:30am – 12:00pm Dosimetry – Treat. Plan. & Demo for CNS **Katina Crabtree**

12:00pm – 1:00pm Lunch

1:00pm – 2:45pm Dosimetry – Treat. Plan & Demo GI (Liver) **David Lege**

2:45pm – 3:00pm Break

3:00pm – 4:15pm Dosimetry – Treat. Plan & Demo APBI (Partial Breast) **Michael Rambaud**

Thursday, Oct. 18 – Physics

- 9:00am – 10:00am Physics – Commissioning Spot Scanning **Dr. Falk Poenisch**
- 10:00am – 11:00am Treatment Planning System Commissioning **Dr. Falk Poenisch**
- 11:00am – 11:15am Break**
- 11:15am – 12:00pm Treat. Plan. Sys. Commissioning – Passive **Dr. Heng Li**
- 12:00pm – 1:00pm Lunch**
- 1:00pm – 3:00pm Physics – Commissioning Passive Scattering (including CT Calibration for Proton Therapy) **Dr. Narayan Sahoo**

Friday, Oct. 19– Physics

- 8:00am – 8:50am Proton Dose Calculation Algorithms **Dr. X. Zhang**
- 8:50am – 9:45am Advanced Optimization for Scanning Beam (robust optimization and robust analysis) **Dr. X. Zhang**
- 9:45am – 10:00am Break**
- 10:00am – 10:45am Advanced motion management **Dr. Heng Li**
- 10:45am – 11:45am Machine QA for passive scattering **Dr. N. Sahoo**
- 11:45am – 12:45pm Lunch**
- 12:45pm – 1:45pm Machine QA for scanning **Dr. Falk Poenisch**
- 1:45pm – 2:30pm Patient specific QA for passive scattering **Dr. N. Sahoo**
- 2:30pm – 2:45pm Break**
- 2:45pm – 3:30pm Patient specific QA for scanning **Dr. R. Zhu**

Saturday, Oct. 20 – Physics

8:00am – 12:00pm Observation – Dr. X. Ronald Zhu + Physics Team

Cost Structure for PTC Training One – Two Weeks

Program 1 – Clinical & Operations (5 days)

(Week 1) (5 days – Mon – Fri) = **\$3,000**

Program 2 – Treatment Planning (Dosimetrist) (3 days)

(Week 2) (3 days – Mon – Wed = **\$2,400**

Program 3 – Physics (Physicist) (3 days)

(Week 2) (3 days – Thurs – Sat) = **\$2,400**

Program 4 – Treatment Planning + Physics (6 days)

(Week 2) (6 days – Mon – Sat) = **\$4,800**

Program 5 – Clinical & Operations + Treatment Planning + Physics (11 days)

(Weeks 1 & 2) (10 ½ days Mon – Friday + ½ day last Sat) = **\$7,800**

A 15% DISCOUNT will be given to anyone attending from one of our sister institutions.