

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

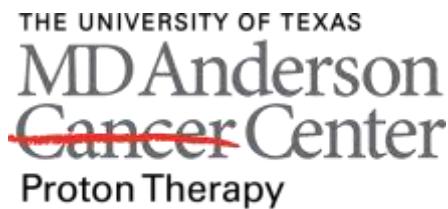
## October 8 – 20, 2018

### 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.**