



SCHEDULE

Rev. October 11, 2019 – Schedule subject to change.

DAY 1 - Monday, October 14, 2019

- 07:00 *Registration, Continental Breakfast, Visit Exhibits and Posters*
- 07:45 **Welcome and Opening Remarks** ▪ Eugen Hug, Michael Chuong ▪ Grand Magnolia Ballroom
- 08:00 **KEYNOTE LECTURE 1 - GI Oncology: An Emerging Frontier** ▪ Michael Chuong
- EDUCATIONAL SESSION 1 - Toxicity Is The Difference Maker**
Moderator: Hesham Gayar
- 08:30 **Proton Therapy Is All About Reducing Late Toxicity**
- **The Pediatric Experience** ▪ Torunn Yock
 - **At the Heart of the Matter** ▪ Rachel Jimenez
- 09:30 *Break, Visit Exhibits and Posters*
- 10:00 **Proton Therapy Is All About Reducing Acute Toxicities**
- **Head and Neck** ▪ Steven Frank
 - **Bowel and GI Toxicities** ▪ R. Charles Nichols
- 11:00 **PANEL SESSION: Challenges of Incorporating Proton Therapy into Cooperative Group Clinical Trials and Practical Hurdles of Proton Studies** ▪ Nancy Mendenhall, Daniel Ma
Moderator: William Hartsell
- 12:00 *PTCOG-NA Seattle Planning Meeting ▪ Invitation only*
- 12:00 *Lunch ▪ Table 55*
- 12:20 *Industry Product Theater (30 minutes) - Optional non-CME session concurrent with lunch.*
- ORIGINAL CONTRIBUTIONS SESSION 1 - Breast and Genitourinary**
Moderators: Lisa McGee, Samantha Hedrick
- 13:00 **#41** Should We Contour to the Skin? The Evaluation of Skin Dose During Pencil Beam Proton Therapy for the Chest Wall ▪ Nicholas Marsh
- 13:10 **#21** Clinical Outcomes After Proton Partial Breast Radiotherapy for Early Stage, Hormone Receptor Positive Breast Cancer: Three-Year Outcomes of a Phase II Trial ▪ Isabelle Choi
- 13:20 **#83** Insurance Coverage for Adjuvant Proton Therapy in the Definitive Treatment of Breast Cancer ▪ William Mendenhall
- 13:30 **#39** Patterns of Care and Referral for Proton Therapy in Breast, Lung and Prostate Cancer ▪ Shaakir Hasan
- 13:40 **#13** Initial Clinical Outcomes for Prostate Cancer Patients Undergoing Adjuvant or Salvage Post-Prostatectomy Proton Therapy (PT) ▪ Andrew Barsky
- 13:50 **#19** Postoperative or Salvage Proton Radiotherapy for Prostate Cancer Following Radical Prostatectomy ▪ Shivam Kharod
- 14:00 **#30** Ten-Year Outcomes from Three Prospective Clinical Trials of Image-Guided Proton Therapy in Prostate Cancer ▪ Nancy Mendenhall
- 14:10 **#115** Evaluation of U-net Based Synthetic CT for MRI-only Treatment Planning of Prostate Cancer Proton Therapy ▪ An Qin
- 14:20 **#99** The Impact of Dose Algorithms on Tumor Control Probability in Intensity-Modulated Proton Therapy for Breast Cancer ▪ Xiaoying Liang
- 14:30 **KEYNOTE LECTURE 2 – Improving Dosimetric Precision: Clinical Implementation of Dual Energy CT for PT Planning** ▪ Kevin Teo
- 15:00 **INVITED LECTURE - Multi-Organ Toxicity Prediction Approach for Proton Planning** ▪ Soren Bentzen

- 15:30 **Adjourn and Closing Remarks** ▪ Michael Chuong
- 15:40-16:40 **Mentor-led Abstract Poster Walk (non-CME session)** ▪ Charles Simone, Chris Beltran
- 17:15 **Depart for Miami Cancer Institute** (*transportation is provided or a 15-minute walk*).
- 17:30-19:00 **Reception and Tour - Miami Cancer Institute Proton Therapy Center.**

DAY 2 - Tuesday, October 15, 2019

- 07:00 **Registration, Continental Breakfast, Visit Exhibits and Posters**
- 07:00 **PTCOG-NA Executive Committee Meeting** ▪ *by invitation only*
- 07:55 **Welcome and Opening Remarks** ▪ Craig McKenzie
- 08:00 **RBE/LET Planning: A Realistic Assessment, Pros and Cons** ▪ Chris Beltran, Daniel Indelicato

ORIGINAL CONTRIBUTIONS SESSION 2 - Other Topics

Moderators: Eugen Hug, Soren Bentzen

- 08:45 **#1** Average LET of X-rays and Gamma Radiation for Radiobiological Modeling ▪ Oleg Vassiliev
- 08:55 **#46** Evaluating Proton Relative Biological Effectiveness for Spinal Cord Toxicity ▪ Chris Beltran
- 09:05 **#33** Concurrent Pencil Beam Scanning Proton Therapy and Hyperthermia: Growing Experience with Promising Results ▪ James Snider
- 09:15 **#124** The Impact of Dual Energy CT Scans on TPS Calculated Dose Accuracies for Biological and Non-Biological Samples ▪ Pouya Sabouri
- 09:25 **#23** Comparative Effectiveness of Proton Therapy Versus Photon Therapy as Part of Concurrent Chemo-Radiotherapy for Locally Advanced Cancer: Analysis of Patients with Private Health Insurance ▪ Brian Baumann
- 09:35 **#82** Impact of Proton Technology Evolution on Patient Volumes at a Large Academic Medical Center ▪ Isabella Amaniera
- 09:45 **#63** Treatment Planning Strategies to Mitigate the Relative Biological Effectiveness Uncertainty in Proton Therapy for Targets in the Brain ▪ Narayan Sahoo
- 09:55 **#86** Improving Proton Plan Robustness Evaluation Standardization and Efficiency Through Scripting ▪ Samantha Hedrick
- 10:05 **#52** Carbon Ion Dose Constraints for Organs at Risk at MedAustron ▪ Piero Fossati
- 10:15 **Break, Visit Exhibits and Posters**

EDUCATIONAL SESSION 2 - Emerging Clinical Data

Moderator: Carl Rossi

- 10:45 **Protons and Cognition** ▪ Rupesh Kotecha
- 11:15 **Lung Cancer Conundrum** ▪ Charles Simone
- 11:45 **Lunch**
- 12:05 **Industry Product Theater (30 minutes) - Optional non-CME session concurrent with lunch.**

ORIGINAL CONTRIBUTIONS SESSION 3 - CNS and Pediatrics

Moderators: Matthew Hall, Chris Beltran

- 12:45 **#18** Outcomes After Proton Therapy for Skull-Base Chordoma: A Prospective Study ▪ Adam Holtzman
- 12:55 **#48** Pilot Study on Critical Structure Dosing for Ocular Melanoma Radiation Techniques: An Analysis of 1-125 Brachytherapy Plaque and Dedicated Proton Eye Beamline Treatment Planning Dosimetry ▪ Jessica Scholey
- 13:05 **#135** Routine Neurocognitive Testing of Patients Treated with Proton Therapy on a Prospective Registry Study - Feasibility and First Results ▪ Petra Georg
- 13:15 **#59** Outcomes of Intracranial High-Grade Glioma Treated with Proton Therapy ▪ Julie Bradley
- 13:25 **#6** What's Gone Wrong in Head and Neck Rhabdomyosarcoma? ▪ Dana Casey
- 13:35 **#81** Proton Therapy for Pediatric Bladder Rhabdomyosarcoma ▪ Michael LaRiviere
- 13:45 **#31** Computer-Based Assessment of Neurocognitive Decline in Pediatric Patients Treated with Proton Therapy: A Prospective Study ▪ Amar Srivastava
- 13:55 **#28** Organ Sparing with Proton Radiation Therapy for Pediatric Hodgkin Lymphoma ▪ Leslie Modlin
- 14:05 **#129** Proton Irradiation Using Pencil Beam Scanning (PBC) Correlates with Taste/Odor Changes Identified by the Layer Defined Dose and Bragg Peak Delivery to the Olfactory Structure (OS) for Brain Tumors ▪ Terri Bevolo
- 14:15 **PTCOG-NA General Assembly Meeting**
- 15:00 **Break, Visit Exhibits and Posters**

ORIGINAL CONTRIBUTIONS SESSION 4 - Physics

Moderators: Mark Pankuch, Alonso Gutierrez

- 15:30 #36 Clinical Sensitivity of a Prototype Proton Radiography System ▪ Mark Pankuch
- 15:40 #50 Deep Learning Based Relative Stopping Power Mapping Generation for CBCT-Guided Adaptive Proton Radiotherapy ▪ Joseph Harms
- 15:50 #44 Clinical Workflow to Evaluate and Incorporate a High-Density Implant into Pencil Beam Scanning Proton Therapy Planning ▪ Weili Zheng
- 16:00 #47 Real-Time, Patient-Specific Quality Assurance ▪ Daniel Mundy
- 16:10 #98 Evaluations of a Flat-Panel Based Compact Daily QA Device for Proton Pencil Beam Scanning (PBS) System ▪ Zhong Su
- 16:20 #109 Status on Carbon Ion Commissioning at MedAustron Ion Therapy Center ▪ Markus Stock
- 16:30 #117 Reducing Pencil Beam Proton Lateral Penumbra by Using Layer-by-Layer Adaptive Aperture, Bolus and Smaller Air Gap ▪ Peter Ahn
- 16:40 #118 A Sub-Cubic Millimeter Single Particle Sensor for In Vivo Dosimetry ▪ Mekhail Anwar
- 16:50 #92 Feasibility of Predicting Proton Stopping Power Ratio Using the MRI-Measured Material Hydrogen Density ▪ Sina Mossahebi
- 17:00 **INVITED LECTURE - Hyperthermia and Protons: Is This the Safe Way to Get the “Carbon Effect”?** ▪ Zeljko Vujaskovic
- 17:30 **Adjourn and Closing Remarks** ▪ Michael Chuong
- 18:00 **Depart for City Night Miami** (*transportation is provided. Please arrive 15 minutes before the departure time.*)
- 19:00-21:00 **City Night Miami**
- 21:30 **Transportation departs the City Night Miami venue.**

DAY 3 – Wednesday, October 16, 2019

07:00 *Registration, Continental Breakfast, Visit Exhibits and Posters*

07:25 **Welcome and Opening Remarks** ▪ Anita Mahajan

07:30 **KEYNOTE LECTURE 3 – FLASH** ▪ James Metz

08:00 **Challenging Cases with Audience Participation - Miami Cancer Institute: Protons Are Not a Panacea** ▪ Michael Chuong, Marcio Fagundes, Alonso Gutierrez, Craig McKenzie, Fazal Khan
Moderator: Minesh Mehta

ORIGINAL CONTRIBUTIONS SESSION 5 - Lung and Motion

Moderators: Jing Zeng, Paige Taylor

- 08:45 #4 A University of Florida and Proton Collaborative Group Phase I/II Study of Hypofractionated Proton Therapy with Concurrent Chemotherapy for Stage II-III NSCLC ▪ Bradford Hoppe
- 08:55 #76 Interplay Evaluation of High-Frequency Percussive Ventilation (HFPV) for Motion Greater than 10 MM During Proton Beam Scanning ▪ Ina Sala
- 09:05 #10 Image-Guided Hypofractionated Proton Therapy in the Management of Early Stage Non-Small Cell Lung Cancer ▪ Shivam Kharod
- 09:15 #22 Using Breath Hold at the End of Exhale for Lung Treatment in Pencil Beam Scanning Proton Therapy ▪ Limin Song
- 09:25 #15 Clinical Outcomes Following Proton Beam Therapy for Locally Advanced Non-Small Cell Lung Cancer: Analysis of a Multi-Institutional Prospective Registry ▪ Aurelien Jongen
- 09:35 #49 Dual-Energy CT-Based Accurate Relative Stopping Power Mapping Using Deep Learning ▪ Joseph Harms
- 09:45 #111 Evaluation of the Gain in Using Higher Order Components of the Thoraco-Abdominal Surface to Estimate Volumetric Tidal Flow ▪ Sina Mossahebi
- 09:55 #112 Evaluation of Stopping Power Ratio Prediction of Lung Tissue from Dual-Energy CT ▪ Sina Mossahebi
- 10:05 #101 Effectiveness of Motion Interplay Effect Mitigation Using Spot-Scanning Proton Arc (SPArc) Therapy in Lung Stereotactic Body Radiotherapy (SBRT): A Quantitative Comparison Study Based on a Digital Phantom ▪ Gang Liu
- 10:15 *Break, Visit Exhibits and Posters*

ORIGINAL CONTRIBUTIONS SESSION 6 - Head and Neck and Gastrointestinal

Moderators: Adeel Kaiser, Jen Yu

- 10:30 **#3** Intensity Modulated Proton Therapy Using Dose-Painting Pencil Beam Scanning for High-Risk Hepatocellular Carcinomas ▪ Smith Apisarnthanarax
- 10:40 **#20** Re-irradiation with Proton Therapy for Recurrent Malignancies of the Esophagus and Gastroesophageal Junction: Results of the Proton Collaborative Group Multi-Institutional Prospective Registry Trial ▪ J. Isabelle Choi
- 10:50 **#5** Early Results of Re-irradiation for Rectal Cancer Using Pencil-Beam Scanning Proton Therapy Are Promising ▪ Antony Koroulakis
- 11:00 **#27** Minimal Severe Acute Toxicity in Anal Cancer Patients Treated with Proton Beam Therapy ▪ Michael Chuong
- 11:10 **#134** Estimating the Individual Quality of Life Benefit and Cost Effectiveness of Proton Therapy for Patients with Oropharyngeal Cancer ▪ Patrik Brodin
- 11:20 **#62** Quantification and Verification of Skin Dose for Patients with Head and Neck Cancer Receiving Intensity Modulated Proton Therapy ▪ Narayan Sahoo
- 11:30 **#100** Spot-Scanning Proton Arc Therapy (SPArc) for Improved Optic Pathway Sparing in Paranasal Sinus and Nasal Cavity Cancer Treatment ▪ Rohan Deraniyagala
- 11:40 **#113** The Importance of Verification Computed Tomography Quality Assurance Scans in Patients Treated with Spot-Scanning Intensity Modulated Proton Therapy for Head and Neck Cancers ▪ Scott Lester
- 11:50 **#110** Enhancing LET in Proton Beam Therapy for Pancreas Cancer ▪ Jiasen Ma
- 12:00 **Adjourn and Closing Remarks** ▪ Eugen Hug
- 12:15 **PTCOG-NA Post-Conference Executive Committee Meeting** ▪ *by Invitation only*