Arizona Chapter of the AAPM (AzAAPM): From Past to Present

Chris Watchman, PhD (President, AzAAPM); Erdal Gurgoze, PhD, FAAPM (Secretary, AzAAPM), Steve Sapareto, PhD (Past President, AzAAPM), Tariq Mian, PhD (Board Rep, AzAAPM)

Throughout their history, the Arizona chapters of both AAPM and HPS (AHPS) have enjoyed a close, collaborative relationship, including holding joint meetings and co-sponsoring larger meetings for their parent organizations in Arizona.

Meeting Presentations and Topics

2000: Deconstructing Linearity
Fetal Dose Assessment by Monte Carlo Techniques
IMRT Topics

2001: PET Clinical Uses
Design of a PET Clinic
Radiation Protection and Precautionary Principles

2002: HPS is about Education
Experiential Radiation in an Unshielded Operating Room

2003: Health Physics Society Strategic Plan and Important Initiatives

2004: Essential Physics of Electron Beam Dosimetry: Do We Need the Full Monte?
Monte Carlo Methods in Accelerator Shielding Design
Dirty Bombs Extraterrestrial: Arizona’s Response for Homeland Security

2005: Stereotactic Radiosurgery and Radiosurgery
Monte Carlo Calculations of a PET Facility Design
Bexar 1-151 Antibody Therapy: Preparation, Administration and Subsequent Release
PET Center Design using the New AAPM Guide for Shielding
Tomotherapy: Delivering Image Guided and Intensity Modulated Radiation Therapy
ULAs: Safety and Security of Radioactive Sources

2007: Review of Medical Management of Acute Radiation Syndrome
Responding to Emergencies at Palos Verdes
Training Opportunities in Medical Physics, Radiation Protection,
and Radiation Therapy in Arizona

2008: Rapid Arc: The next advance in IMRT
State Legislature Proposes Changes to the ARRA Partial Breast Irradiation
Why No One Believes Us: Cognitive Neuroscience and Radiation Risk
Will They Ever Learn? The public education game

2009: Postion Emission Mammography
The Physics of PEM and PEM Guided Biopsy
Cyberknife: A Physicist’s Primer
New concepts in Radiological Emergency Planning

2010: Activities of the ICRP Committee 2 in Implementing ICRP 2007
Recommendations
Safety Developments in Linear Accelerator Design
Radiation Safety in Imaging and Therapy
PET Disassembly and Conversion Project: Radiological Design Considerations
The Physics of Airport Security: Are Scanners Safe?

2011: Impact of Defeasible Registration in Radiation Oncology
Best Practices in Radiation Therapy

2011 (cont’d): Medical Isotope Production
Current and Future Clinical uses of Imaging Isotopes
Creation of AAPM Arizona Region Chapter
Cancer as a Disease of Complexity: Implications for LNT and Radiation Protection
Patient Identification and Tracking by RFID
Geometric Preparedness, a Radiation Risk Scale, and Marketing of Health Physics
Clinical Physics of MicroPET x-ray Sources

2012: Patient Dose Reduction Efforts with Diagnostic Imaging at Mayo Clinic Arizona
AAPM Initiatives: 2012 and Beyond
Status of the Arizona Radiation Regulatory Agency
Airport Security Scanners: An Update
Proton Therapy Project at Mayo Clinic Arizona

2013: HDR Guided Radiotherapy
SRT Therapies in Development
Gating with the Catalyst System
Reducing Patient Dose with CT
Dose Impact for Sub-Millimeter Collimator Size Differences
National Error Reporting System

2014: Implement of CT dose reporting in the University of California system
CT Dose Reduction at the Mayo Clinic Scottsdale
MR Implementation in Radiation Therapy
Implementation of FFF on Varian and Eleka Linear Accelerators
Commissioning TomoTherapy with ArcCheck following the TG-115 protocol
A Shell model for calculating BED as a Function of Tumor Volume
Evaluation and comparison of the doses differences between Line Source and Point Source methods for COMS Brachytherapy
Using Statistical Process Control for QA
IMRT QA, what are the options beyond gamma analysis?
IMRT Proton Planning
QA for a Proton Scanning Pencil Beam
Robust Optimization for Proton Planning
QA Tools for Linear Accelerators
HDR Brachytherapy Current and Future Developments

April, 2014: Our second annual meeting

April, 2014: Second annual meeting of the AzAAPM

March, 2000: First recorded meeting – AzAAPM is born!

April, 2013: First annual meeting of the AzAAPM

July, 2012: Formal recognition of AzAAPM as an official chapter

April, 2012: First annual meeting of the AzAAPM

April, 2014: Second annual meeting of the AzAAPM

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