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

Tricia Tynan, PhD; Steve Sapareto, PhD (President, AzAAPM); Tariq Mian, PhD, FAAPM (Secretary, AzAAPM), Robert Metzger, PhD (President, AHPS)

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

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

April, 2013: First annual meeting of the 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
- Intraoperative 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 Extraordinaire: Arizona’s Response for Homeland Security

2005: Stereotactic Radiosurgery and Radiotherapy
- Monte Carlo Calculations of a PET Facility Design
- Bexxar I-131 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
- IAEA: Safety and Security of Radioactive Sources

2007: Review of Medical Management of Acute Radiation Syndrome
- Responding to Emergencies at Palo Verde
- 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: Positron Emission Mammography
- The Physics of PEM and PEM Guided Biopsy
- Cyberknife: A Physician’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
- Pit Disassembly and Conversion Project: Radiological Design Considerations
- The Physics of Airport Security: Are Scanners Safe?

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
- Grassroots Preparedness, a Radiation Risk Scale, and Marketing of Health Physics
- Clinical Physics of Miniature eBx 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: MR Guided Radiotherapy
- 90Y Therapies in Development
- Gating with the Catalyst System
- Reducing Patient Dose with CT
- Dose Impact for Sub-Millimeter Collimator Size Difference
- National Error Reporting System
- Agility 160 Leaf MLC: Design to Dosimetry
- Minimally Invasive Brachytherapy for Macular Degeneration
- Safety in Radiotherapy: What is Working?
- Composite Shielding Barriers for Space Limited Rooms