AAPM Brachytherapy Subcommittee Liaison Report to BRAPHYQS: 2018 November 13

Subcommittee liaisons

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Societal Liaisons to the AAPM BTSC

European Society for Radiotherapy & Oncology (ESTRO): Frank-André Siebert
American Brachytherapy Society (ABS): Dorin Todor
Australasian Brachytherapy Group (ABG): Annette Haworth
National Institute of Standards and Technology (NIST): Michael Mitch
Calibration Laboratory Accreditation Subcommittee (CLA): Ronald Tosh
Imaging and Radiation Oncology Core (IROC) Houston QA Center: David Followill

Subcommittee

Working Group

Task Group chair and vice chair/s

Brachytherapy Subcommittee (BTSC): Zoubir Ouhib and Regina Fulkerson/Ron Sloboda

Brachytherapy Dosimetry (WGBD): Christopher Melhus and Ronald Sloboda
TG-292 Electronic brachytherapy dosimetry: Wes Culberson and Mark Rivard

Brachytherapy Source Registry (WGBSR): Facundo Ballester and Wes Culberson

Brachytherapy Clinical Applications (WGBCA): Ravinder Nath and Mark Rivard
TG-182 Electronic brachytherapy quality management: Bruce Thomadsen
TG-221 Ocular brachytherapy: Rowan Thomson and Christopher Melhus
TG-222 Lung mesh brachytherapy: Wenzheng Feng and Hualin Zhang
TG-236 3D imaging-based treatment planning: Yongbok Kim and Dorin Todor/Yusung Kim
TG-253 Surface brachytherapy: Regina Fulkerson and Jose Perez-Calatayud
TG-267 Biophysical (radiobiology) models: Zhe (Jay) Chen and X. Allen Li
TG-303 MRI guidance on HDR brachytherapy: Firas Mourtada and Joann Prisciandaro
TG-317 Catheter/needle/applicator tracking technology: Luc Beaulieu and Adam Cunha

Robotic Brachytherapy (WGRB): Tarun Podder and Adam Cunha

Model-Based Dose Calculation Algorithms (WGDCBA): Javier Vijande and Firas Mourtada
UN35 Commissioning model-based dose calculations: Luc Beaulieu and Javier Vijande
Brachytherapy Subcommittee
Zoubir Ouhib has worked closely with TPC and promulgated their increasingly formal approaches for approval and review to the committees under BTSC. This has necessitated regular submissions of status reports and exhaustive reviews of draft reports through the AAPM committee hierarchy. Based on 6-year term limits for AAPM leadership positions, there will be substantial changes in 2019.

From the AAPM18 conference, experts on prostate brachytherapy multi-modality imaging were sought to participate on WP20 (led by Jamema Swamidas). Two AAPM volunteers were suggested to Frank-Andre’ Siebert on 20181108. Formalization of their participation and the societal partnership will occur as the project matures.

Brachytherapy Dosimetry working group
a) TG-292 is an AAPM-only report. They are investigating the Zeiss INTRABEAM source calibration and dose calculation protocols. An official letter will be sent to Zeiss seeking clarifications and a plan going forward.

Brachytherapy Source Registry working group
Xoft submitted an application for the model S700 source to be posted on the Registry. Towards meeting the dosimetric prerequisites, an item of concern was the measurement of source strength such as the dose-rate constant or the dose rate conversion coefficient.

Brachytherapy Clinical Applications working group
a) TG-182 is an AAPM-only report. Copyediting and a final TPC vote are underway. The report should be approved by AAPM in early 2019, then submitted to Medical Physics for review and publication by late 2019.
b) TG-221 is an AAPM-only report. It was approved by the AAPM in October and has been submitted to Medical Physics for review and publication (expected by mid-2019).
c) TG-222 is an AAPM-only report. The 2nd review cycle by WGBCA+BTSC is complete and a revision has been prepared. Copyediting is underway preceding the 3rd review cycle, which is expected to start in early 2019.
d) TG-236 is an AAPM-only report with two parts. The 1st review cycle by WGBCA+BTSC is complete and a revision is being prepared.

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Robotic Brachytherapy working group
Nothing new to report.

Model-Based Dose Calculation Algorithms working group
The working group is coordinating test cases for several anatomic sites including breast, GYN, head-and-neck, and ocular brachytherapy. Facundo Ballester continues leading members to evaluate the radiance TPS from Zeiss for the INTRABEAM eBT source.
a) Unit 35 was approved May 2018 as a joint AAPM+GEC-ESTRO report. The ACROP checklist was approved June 2018. A draft report is expected in 2019.

Upcoming brachytherapy-related meetings in the U.S.
The 2019 ABS annual meeting (ABS19) will be held in Miami, Florida (20190613 to 20190615)
https://www.americanbrachytherapy.org/meetings/annual2019/
The 2019 AAPM annual meeting (AAPM19) will be held in San Antonio, Texas (20190714 to 20190718)
http://www.aapm.org/meetings/default.asp

Respectfully submitted,
Mark J. Rivard, Ph.D. FAAPM, FABS
AAPM BTSC liaison to BRAPHYQS