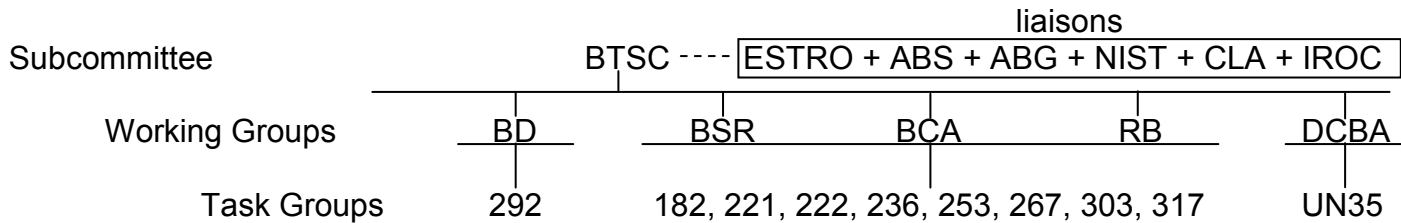


# AAPM Brachytherapy Subcommittee Liaison Report to BRAPHYQS: 2018 November 13



## 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 2<sup>nd</sup> review cycle by WGBCA+BTSC is complete and a revision has been prepared. Copyediting is underway preceding the 3<sup>rd</sup> review cycle, which is expected to start in early 2019.
- d) TG-236 is an AAPM-only report with two parts. The 1<sup>st</sup> review cycle by WGBCA+BTSC is complete and a revision is being prepared.
- e) TG-253 is a joint AAPM+GEC-ESTRO report. Collaboration was established in 2013 with the ACROP checklist approved in 2014. The 3<sup>rd</sup> review cycle by TPC is underway.
- f) TG-267 is a joint AAPM+GEC-ESTRO report a 20181231 deadline. Collaboration was established in June 2016. The ACROP checklist was submitted in January 2017 and later approved.
- g) TG-303 is an AAPM-only report with a 20201231 deadline. They are making good progress and already have a 50-page document capturing the role and practice of MRI for brachytherapy.
- f) TG-317 is a joint AAPM+GEC-ESTRO report with a 20201231 deadline. Collaboration was established in 2017 with the ACROP checklist approved in May 2018.

### **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