# AAPM Brachytherapy Subcommittee Liaison Report to BRAPHYQS: 01 June 2021

Committee		TPC				
Subcommittee		— <del> </del> втѕсЕ	STRO + AB	liaisons S + ABG + NIS	Γ + CLA	+ IROC
Working Groups	BD	BSR	B(	CA	RB	
Task Groups	s 292	2 222	2,236,253,26	67,303,317,337	342	UN35

## Societal Liaisons to the AAPM BTSC

European SocieTy for Radiotherapy & Oncology (ESTRO): Frank-André Siebert American Brachytherapy Society (ABS): Gil Cohen Australasian Brachytherapy Group (ABG): Joel Poder 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: Jessica Lowenstein

## <u>Committee</u>

## Subcommittee

Working Group

<u>Task Group</u>

chair and vice chair/s

Therapy Physics Committee (TPC): Sonja Dieterich and Dimitris Mihailidis

Brachytherapy Subcommittee (BTSC): Zoubir Ouhib and Susan Richardson

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

Brachytherapy Source Registry (WGBSR): Åsa Carlsson Tedgren and Wes Culberson

Brachytherapy Clinical Applications (WGBCA): Mark Rivard and Chris Deufel

TG-222 Lung mesh brachytherapy: Wenzheng Feng and Hualin Zhang

- TG-236 3D imaging-based treatment planning: Yongbok Kim and DorinTodor/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
- TG-337 Intensity modulated & anisotropic brachytherapy sources: Shirin Enger and William Song

Robotic Brachytherapy (WGRB): Tarun Podder and Adam Cunha TG-342 Update on AAPM/GEC-ESTRO robotic brachytherapy: Tarun Podder and Adam Cunha

Model-Based Dose Calculation Algorithms (WGMDCAB): Javier Vijande and Firas Mourtada UN35 Commissioning model-based dose calculations: Luc Beaulieu and Javier Vijande

#### **Brachytherapy Subcommittee**

Phonecalls are held every other month to discuss new projects and overcoming hurdles for ongoing projects. There is increased coordination with parent committees to streamline the report reviews and clarify the process.

#### Brachytherapy Dosimetry Working Group

TG-292 is an AAPM-only report. A report on the Zeiss INTRABEAM source calibration and dose calculation protocols was published in 2020. The main report is being written towards meeting the 20201231 sunset deadline.

## Brachytherapy Source Registry Working Group

The AP75 policy on seed calibration requirements of vendors is under revision. This is in advance of the 20211231 deadline, but driven based on complications from a vendor compliance with the current policy.

## Brachytherapy Clinical Applications Working Group

- a) TG-222 is an AAPM-only report started on 20110916. The report is under 2<sup>nd</sup> revision from *Medical Physics*.
- b) TG-236 is an AAPM-only report with two parts started on 20121003. The reports are under revision following review by WGBCA+BTSC.
- c) TG-253 is a joint AAPM+GEC-ESTRO report started on 20130930 and published in Medical Physics in 2020.
- d) TG-267 is a joint AAPM+GEC-ESTRO report started on 20140924. Reviews have been received from WGBCA+BTSC and ESTRO/ACROP, and the report is being revised.
- e) TG-303 is an AAPM+ABS report started on 20170807. Reviews by TPC and AAPM members are underway.
- f) TG-317 is a joint AAPM+GEC-ESTRO report started on 20180325 and with a 20201231 sunset deadline. ESTRO collaboration was established in 2017 with the ACROP checklist approved in May 2018.
- g) TG-337 started on 20190509 with a sunset date of 20211231. Outlines for each section are being drafted. There is potential for GEC-ESTRO collaboration given solicitation for BRAPHYQS participation in December 2019 and ongoing efforts by Åsa Carlsson Tedgren, Torbjörn Larsson, and Björn Morén. Formalities are being examined for GEC-ESTRO participation.

#### Robotic Brachytherapy Working Group

TG-342 is a joint AAPM+GEC-ESTRO report started on 201911 to update the 2014 recommendations by AAPM+GEC-ESTRO in the TG-192 report on robotic brachytherapy. The ACROP checklist was approved on 20200428. European members include Rien Moerland, Christian Langmack, and Alexander Schlaefer. Sunset date is 20211231.

#### Model-Based Dose Calculation Algorithms Working Group

The working group is coordinating test cases for several sites including breast, GYN, head-and-neck, ocular brachytherapy, and eBT. These collaborative projects are making good progress. Unit 35 was approved May 2018 as a joint AAPM+GEC-ESTRO report. The ACROP checklist was approved June 2018. The UN35 report was reviewed by WGBCA+BTSC and ESTRO/ACROP, and the 1<sup>st</sup> revision is being finalized.

#### Upcoming brachytherapy-related meetings

The 2021 American Brachytherapy Society meeting will be held virtually (June 22-25). <u>https://www.americanbrachytherapy.org/meetings-events/annual-2021/</u>

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