

The Better Healthcare Technology Foundation Topical Lecture Series 2022

Winter 2022 Lecture

Radiation cancer treatment during conflict: what we can learn from the war in Ukraine

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Date: Monday June 27 2022 Times: NZ: 3pm (NZST); NSW/VIC/TAS/QLD: 1pm (AEST); SA/NT: 12:30pm (ACST); WA: 11am (AWST)

Join Zoom Meeting: https://us02web.zoom.us/j/89272303767?pwd=Z1F1cFk1M1I3WitHWi96VHZodXN3QT09

The Russian invasion of Ukraine in February 2022 has seen health care facilities, including dedicated cancer care infrastructure with radiation equipment, being damaged or destroyed. The war follows almost a decade of conflict in east Ukraine which created significant challenges to Ukraine's healthcare system.

Prior to the conflict, Ukraine had 55 functional cancer care facilities, 52 of which provided radiotherapy with 106 radiation treatment units. Of these over 80% were cobalt units which the Ukrainian Ministry of Health was in the process of replacing with modern linear accelerators. When Russia annexed part of Ukraine in 2014, control of 10 radiotherapy centres with 17 external beam radiation therapy machines was lost. In 2022 with the onset of large-scale war the arterial and aerial bombing of hospital sites affected electricity supply, internet connection and caused vibration and structural movement, factors which significantly impact imaging and treatment delivery. In the demolished hospital in Mariupol, the fate of the Cobalt unit with an active source is not currently known.

The conflict in Ukraine has revealed how modern war affects cancer services and radiation safety. The presentation will discuss the cancer patient-centred solutions that have been implemented, some of which are in collaboration with a rapidly responding multidisciplinary international community

Aim of the Lectures

The Better Healthcare Technology Foundation (BHTF) is the fundraising and research support arm of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM). One of its primary remits is to help support its members, who are predominately medical physicists and biomedical engineers, in R&D activities.

The aim of this series of lectures is to provide the members with a "bigger picture" of what is happening in innovative science and technology to widen their horizons. The four topical lectures per year are intended to have broad appeal that may, in particular, help foster cross-disciplinary collaborations. The BHTF intends to offer pilot research grants from charitable income that will be available to multidisciplinary teams, thereby further encouraging broadening of college member involvement to a wider scope.

All meetings will be held by Zoom at 1pm (AUS East Coast time – NSW/VIC/TAS) on the <u>last Monday of the month indicated</u> and will be of 1 hr duration including Q&A. All welcome – no pre-booking or registration required. All lectures will be recorded for subsequent on-demand review.