

59<sup>th</sup> Annual Conference of the Particle Therapy Co-operative Group

## Abstract Evaluation Guidelines for Reviewers

Abstract evaluation is to be completed via the online peer review system. All abstracts must be evaluated electronically no later than:

**Evaluation Deadline: 16 January 2020**

## Guidelines:

1. After logging in to the Portal use the “Enter Abstract Review” button to access the review platform
2. Select a topic from the drop-down list **(1)**.
3. Select an abstract to review from the left column **(2)**. Contents will open in the “Abstract Details” tab **(3)**.
4. Submit your score in the “Score” tab **(4)** and click on the “Save” button to save it/ “Clear” button to delete it **(5)**.
5. Once the score is saved, it will be displayed in the topic overview column **(6)**
6. You can sort and filter the abstracts **(7)**, print all abstracts from the currently open topic **(8)** or just the abstract currently being viewed **(9)**.
7. Two progress bars show how many abstracts have been scored within the particular topic **(10)** and overall **(11)**.

The screenshot shows the abstract evaluation interface with the following numbered callouts:

- 1**: Topic selection dropdown menu.
- 2**: Abstract list table.
- 3**: Abstract Details tab.
- 4**: Score selection options.
- 5**: Save and Clear buttons.
- 6**: Progress bar for the selected topic.
- 7**: Sort and Filter controls.
- 8**: Print button for the current abstract.
- 9**: Print button for the current abstract.
- 10**: Progress bar for the selected topic.
- 11**: Overall progress bar.

Abstract Title	Author(s)	Topic	Status
The project NEPTUNE (Nuclear process-driven Enhancement of Proton)	Cultone, Giacomo	PTC58-0419	2
Radiographer led daily cone beam CT anatomical match and online	Boon, Cheng	PTC58-0414	1
Survival and radiation damage analysis of human skeletal muscle cells after	Cicchetti, Alessandro	PTC58-0362	COI
Quantifying DNA Damage in Comet Assay Images using Neural Networks	Dhinsey, Selina	PTC58-0304	4
Monte Carlo simulation of a multi-source, flat-panel-detector, digital	Primids, Thomas	PTC58-0291	1
Proton therapy: A Malaysian perspective	Ying, C. K.	PTC58-0039	1

**Abstract Details (PTC58-0304):**

**Presenting Author:** Dhinsey, Selina

**Author(s):** S. Dhinsey<sup>1</sup>, T. Greenstiah<sup>1</sup>, J. Parsons<sup>2</sup>, C. Welsch<sup>1</sup>

**Institute(s):** <sup>1</sup>University of Liverpool, Department of Physics, Liverpool, United Kingdom  
<sup>2</sup>University of Liverpool, Institute of Translational Medicine, Liverpool, United Kingdom

**Presentation Preference:** Oral

**Abstract Text:**  
Proton therapy for cancer treatment is a rapidly growing field as increasing evidence suggests it induces more complex damage in DNA than photons. Accurate comparison between the two requires quantification of the damage caused, one method being the comet assay. The program discussed here, based on neural network architecture, aims to speed up analysis of comet assay images and provide accurate assessment of the DNA damage levels apparent in them.

The comet assay is an established technique in which DNA strand breaks are spread out, creating a comet-like object, Figure 1. The elongation and intensity of the comet tail indicate the level of damage incurred. Many methods to measure damage exist, from “by eye”

**Score:** 4

**Comment:**

**Buttons:** Save (5), Clear

PTCOG 59  
TAIPEI  
2020



# 59<sup>th</sup> ANNUAL CONFERENCE

OF THE PARTICLE THERAPY CO-OPERATIVE GROUP

9 – 14 MAY 2020  
TAIPEI TAIWAN

Should you need any assistance please feel free to contact the [PTCOG 59 Scientific Programme Department](#) via e-mail.

Thank you for your time spent with the evaluation, we highly appreciate all your efforts and hard work.

Kind regards,

PTCOG 59 Scientific Programme Department