Publications and projects

Recent Published papers


Unintended doses in radiotherapy-over, under and outside?

The British Journal of Radiology, 2018, 20170863

A dosimetric comparison of breast radiotherapy techniques to treat locoregional lymph nodes including the internal mammary chain. Clinical Oncology, 30(6), pp.346-353.


Delivered dose can be a better predictor of rectal toxicity than planned dose in prostate radiotherapy. Radiotherapy and Oncology 123,3, 466-471 2017. https://doi.org/10.1016/j.radonc.2017.04.008

Automatic contour propagation using


Simon J Thomas, Marina Romanchikova, Karl Harrison, M Andrew Parker, Amy M Bates,


Abstracts / Presentations/Posters
E. Tait, O. Byrne, D. O'Doherty, B. Evans, T. Ajithkumar, G. Begum, A. Ho. EP-1880: A planning study evaluating the use of 4DCT vs 3DCT in pancreas planning, both conventional and SABR. ESTRO 38, 26-30 April Milan, Italy. 2019


D. Noble, K. Harrison, M. Wilson, A. Hoole, S. Thomas, N. Burnet, R. JenaPO-126 Predictors of dose differences to swallowing OARs in patients undergoing radiotherapy for HNC. In Radiotherapy and Oncology, vol. 132 sup 1, pp. 65-66 DOI: https://doi.org/10.1016/S0167-8140(19)30292-0


PO-0880: Using accumulated delivered dose to predict rectal toxicity in prostate radiotherapy
Amelia Drew, Patrick Elwood, Karl Harrison, Andy Parker, Hannah Pullen, Emma Silvester, Andrew Sultana, Lin Yeap, Michael Sutcliffe, Marina Romanchikova, Simon Thomas Using computing models from particle physics to investigate dose-toxicity correlations in cancer radiotherapy. 22nd International Conference on Computing in High Energy and Nuclear Physics San Francisco, 10th-14th October 2016


Andrew C F Hoole. ?Enhancing the paperless RT Treatment process. 18th International Conference on the use of Computers in Radiation Therapy, London, June 2016.


S McGowan, M Holloway, N Burnet, S Thomas. SU-ET-653: Quantifying Inter-Fraction Range Uncertainty for Input Into Robust Proton Planning. Medical physics 42 (6), 3486-3487.


Radiotherapy & Oncology DOI: http://dx.doi.org/10.1016/S0167-8140(15)40858-8.

Accumulated Dose Volumes to the Rectum are Different from those Planned in Approximately 80% of Patients Treated with Helical Tomotherapy for Prostate Cancer. BUG 2015. Clinical Oncology 27 (2015) e1ee8.

PhD projects

Completed

Ian Cowley.
“New approaches to improving the accuracy and outcome of Intensity Modulated Radiotherapy.”
PhD awarded by the Open University 2006.
Supervisors: Simon Thomas, Philip Dendy, Sarah Brooke.

Thai-Binh Nguyen.
“Method of IMRT optimization of shallow tumour cases where the PTV extends into the build-up region”.
PhD awarded by the University of Cambridge 2009.
Supervisors: Neil Burnet, Simon Thomas, Andrew Hoole.

Mark Cowen.
“Image Guided Radiotherapy Using Tomotherapy”.
PhD awarded by the University of Cambridge 2012.
Funded by MRC studentship.
Supervisors Simon Thomas, Neil Burnet.

Stacey McGowen.
“Incorporation of Range Uncertainty into Proton Treatment Planning.”
PhD awarded by University of Cambridge 2015.
Funded by MRC Studentship.
Supervisors Neil Burnet, Simon Thomas, Raj Jena.

Sam Tudor.
“Ensuring dosimetric coverage of radiotherapy treatment volumes”.
PhD awarded by University of Cambridge 2016.
Part time PhD, supported by East of England SHA.
Supervisor: Simon Thomas.

Leila Shelley.
“Dose-Toxicity Analysis of Rectal and Salivary Toxicity in Patients receiving Radiotherapy within the VoxTox Research Programme”
Supervisors: Michael Sutcliffe, Simon Thomas, Neil Burnet.