

RT-PAL: Radiotherapy Paediatric Atlas

The Radiotherapy Paediatric Atlas (RT-PAL) is a set of 3D images that make a virtual model of an average paediatric patients across developmental stages. The models were developed for radiotherapy academic (non-commercial) research use.

Category

Software/Bioinformatics

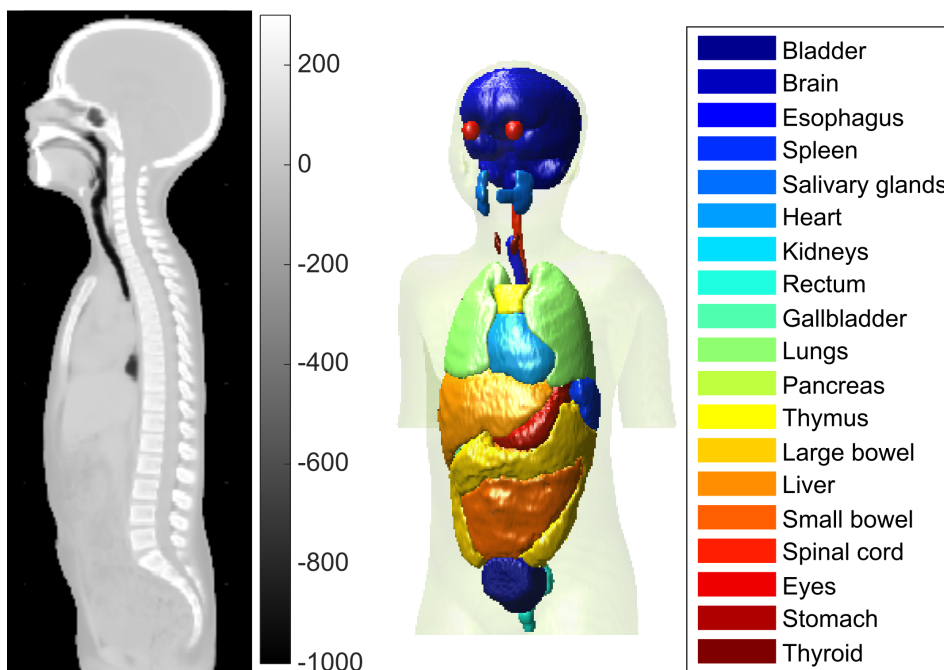
Authors

Catarina Veiga

Reem Ahmad

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RT-PAL 2021 model



The RT-PAL models were generated by merging computed tomography (CTs) from a population of paediatric radiotherapy patients.

Full description of the methodology used for its synthesis can be found in Veiga et al (2021) and Ahmed et al (2024).

The atlases serve for a range of applications in radiotherapy-related research. It was developed with the aim of facilitating research into late effects of radiotherapy in paediatric patients, as it serves as a common reference frame to spatially standardise this complex population. They may also be used for other applications, such as reconstruction of radiotherapy doses, quality assurance, research & development of novel radiotherapy/diagnostic exposures, etc.

The atlases were built through a collaboration with University College London Hospitals.

Further information available in our [website](#).

References

1. Veiga C, Lim P, Anaya VM, Chandy E, Ahmad R, D'Souza D, Gaze M, Moinuddin S, Gains J(2021 May 4) , <https://doi.org/10.1088/1361-6560/abf010>, Phys Med Biol
2. R Ahmad, J Cantwell, C Borrelli, P Lim, D D'Souza, MN Gaze, S Moinuddin, J Gains, and C Veiga(November 13 2024) , <https://iopscience.iop.org/article/10.1088/2057-1976/ad8c4a>, Biomedical Physics & Engineering Express