

Nume prenume conducător doctorat: Prof. dr. BÁLINT Zoltán

Nr. locuri la doctorat: 1/1

Tip loc la doctorat: fără bursă și cu frecvență

Membrii comisiei de admitere:

1. Prof. dr. BÁLINT Zoltán
2. Prof. dr. LEOPOLD Nicolae
3. Conf. dr. JÁRAI-SZABÓ Ferenc

Tematica pentru examen:

1. Efectul radiației asupra țesutului viu
2. Tehnici moderne de radioterapie
3. Utilizarea algoritmilor inteligenți în radioterapie

Bibliografie

1. E. B. Podgorsak, *Radiation Physics for Medical Physicists*. Springer, 2018.
2. F. M. Khan, *The Physics of Radiation Therapy*. Lippincott Williams & Wilkins, 2012
3. A. Hussain and W. Muhammad, *Treatment planning in radiation therapy*, Biological and Medical Physics, Biomedical Engineering, pp. 63–129, 2017. doi:10.1007/978-3-319-61540-0_4
4. L. Conroy, J. Winter, A. Khalifa, G. Tsui, A. Berlin, T.G. Purdie, *Artificial Intelligence for Radiation Treatment Planning: Bridging Gaps From Retrospective Promise to Clinical Reality*, Clinical Oncology, Volume 37, 2025, 103630, ISSN 0936-6555, <https://doi.org/10.1016/j.clon.2024.08.005>.
5. Jiang C, Ji T, Qiao Q. *Application and progress of artificial intelligence in radiation therapy dose prediction*. Clin Transl Radiat Oncol. 2024 May 9;47: 100792. doi: 10.1016/j.ctro.2024.100792. PMID: 38779524; PMCID: PMC11109740.
6. Liesbeth Vandewinckele, Michaël Claessens, Anna Dinkla, Charlotte Brouwer, Wouter Crijns, Dirk Verellen, Wouter van Elmpt, *Overview of artificial intelligence-based applications in radiotherapy: Recommendations for implementation and quality assurance*, Radiotherapy and Oncology, Volume 153, 2020, Pages 55-66, ISSN 0167-8140, <https://doi.org/10.1016/j.radonc.2020.09.008>.
7. Shan G, Yu S, Lai Z, et al. *A Review of Artificial Intelligence Application for Radiotherapy. Dose-Response*. 2024;22(2). doi:10.1177/15593258241263687

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