## University of Szeged, Albert Szent-Györgyi Medical School Department of Medical Physics and Informatics <u>Topic list</u>

<u>i opic iist</u>	
Supervisor	Topic
Prof. Ferenc Peták professor	Respiratory consequences of mechanical ventilation in experimental models
Prof. Ferenc Peták professor	Respiratory consequences of cerebral hypoperfusion in experimental models
Prof. Ferenc Bari professor	Experimental modelling of cerebral hypoperfusion
Prof. Ferenc Bari professor	Nanomedicine as therapeutic option for stroke
Prof. Tibor Nyári professor	Investigation of the pattern of deaths in Hungary
Dr. József Tolnai assistant professor	Monitoring of physiological processes with telemedicine tools
Dr. Gergely Fodor assistant professor	Respiratory mechanical investigations in small animal models
Dr. Gergely Fodor assistant professor	Applications of artificial intelligence in respiratory measurements
Dr. Tibor Szabó assistant professor	Redox proteins for biosensor application
Dr. Árpád Márki and Dr. Attila Nagy assistant professors	Applications of 3D printing in medicine
Dr. László Égerházi and Dr. Tibor Szabó assistant professors	3D printed microfluidic devices for biophotonic applications
Dr. László Égerházi and Dr. Ferenc Rárosi assistant professors	Evaluating the capabilities of generative artificial intelligence in validating the accuracy of medical documentations
Dr. Ferenc Rárosi assistant professor	Application of classification methods and prediction models in biomedical research
Dr. Ferenc Rárosi assistant professor	Statistical hypothesis testing in biomedical research
Dr. Péter Makra assistant professor	Data collection and analysis problems in respiratory mechanics
Dr. Péter Makra assistant professor	Haemoglobin correction in the multimodal imaging of the cortex
Dr. Tamás Lantos assistant professor	Analysing mortality trends in Hungary and Europe
Dr. Tamás Lantos assistant professor	Quantitative synthesis of literature data on a biomedical topic
Dr. Tamás Lantos assistant professor	Statistical analysis of time-to-event data
Dr. Mónika Szűcs assistant lecturer	Application of statistical methods in biological and medical research