**SF05-S4**                          **Recent Studies of Therapeutic Ultrasound**

**17:00-17:20**                                                    **Room 203**

Chairperson(s): **Jae Young Lee** *(Seoul National University Hospital, Korea)*
**Eun-Joo Park** *(Seoul National University Hospital, Korea)*

# Artificial Intelligence Based Monitoring and Treatment Planning for Transcranial Focused Ultrasound Therapy

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In the huge paradigm shift of 4th industrial revolution driven by AI technique, the medical industry is also pursuing personalized precision medicine through digital transformation and smart transformation from analogue, standard, and empirical medical procedure. At the center of this change, IT technology is acting as key driving force. In particular, personalized digital twin model of human body and therapeutic tool will be the core engine of smart medicine. In this presentation, I will introduce research on the development of artificial intelligence-based monitoring and treatment planning method for digital/smart FUS therapeutics by convergence of computational science, medical engineering, and artificial intelligence technologies as the core technologies of the 4th medical revolution.