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## **강연제목:** 임상 및 디지털헬스케어를 위한 불확실성 하에서의 의사결정 보조

Decision Support under Uncertainty for Clinical and Digital Healthcare

### **Abstract:**

In modern healthcare, decision-making challenges are everywhere. While mathematical models and artificial intelligence increasingly support clinical decisions, effectively managing uncertainty is crucial for patient safety and optimal care. In this talk, this challenge will be addressed through several studies, including the use of AI models to predict blood infections in emergency departments while accounting for uncertainty to support physicians, and the development of personalized recommendations for out-of-hospital cardiac arrest situations, where time is critical.

To be effective in clinical and healthcare applications, models should be explainable with their results and confidence levels, designed to guide clinicians, patients, and healthcare service providers, and adaptable across different scenarios. These findings underline the importance of collaboration between technology and human expertise, highlighting the need for a systematic approach to managing uncertainty in healthcare AI to ensure safe and reliable implementation in biomedical and healthcare fields.

### **Brief Biosketch**

(국문)

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