

Keio University Global Research Institute KGRI Lecture Series

Big data analyses for supporting integrated care in sleep apnea



2020年2月6日 🔝 18:30~19:30





慶應義塾大学信濃町キャンパス 総合医科学研究棟 6階会議室

Dr. Jean Louis PÉPIN, MD, Ph.D

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講演内容







Sleep apnoea is now regarded as a highly prevalent systemic, multimorbid, chronic disease requiring a combination of long-term home-based treatments. Optimization of personalized treatment strategies requires accurate patient phenotyping. Data to describe the broad variety of phenotypes can come from electronic health records, health insurance claims, socio-economic administrative databases, environmental monitoring, social media, etc. Connected devices in and outside homes collect vast amount of data amassed in databases. All this contributes to 'Big Data' that, if used appropriately, has great potential for the benefit of health, well-being and therapeutics. Sleep apnoea is particularly well placed with regards to Big Data because the primary treatment is positive airway pressure (PAP). PAP devices, used every night over long periods by millions of patients across the world, generate an enormous amount of data. In this lecture we will discuss how different types of Big Data have, and could be, used to improve our understanding of sleep-disordered breathing, to identify undiagnosed sleep apnoea, to personalize treatment and to adapt health policies and better allocate resources. We will discuss some of the challenges of Big Data including the need for appropriate data management, compilation and analysis techniques employing innovative statistical approaches alongside machine learning/artificial intelligence; closer collaboration between data scientists and physicians; and respect of the ethical and regulatory constraints of collecting and using Big Data.

お問い合わせ

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