

IHDI

Twin Research Seminar



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医師であり、研究者であり、自身もふたごである。ツインリサーチ(双生児研究)の基礎となるツインレジストリについて、ハンガリーでの経験を論じる。



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TWIN RESEARCH

本セミナーは

医療科学ゼミナールの対象になります。

2022年9月20日(火) 16:00-17:00

医学部保健学科 第1講義室

Twin studies in Hungary

Twin studies are essential in determining the ratio of genetic and environmental factors involved in the development of a disease or trait, as well as in molecular genetic and gene-environment interaction, epigenetic and microbiome studies, and they also play an important role in exploring the role of family socialization. Hungarian twin research was revived in 2006, during which the genetic and environmental factors behind cardiovascular and respiratory diseases were determined. In recent years, domestic twin research has been supplemented with, among others, radiomics, musculoskeletal, neurologic, intestinal microbiome and epigenetic studies. At the beginning of 2021, after several years of preparation, the population-level twin registry was established at Semmelweis University, in which more than 15,000 twins have so far registered by providing information about their illnesses. The genes of identical twins are almost 100% identical, therefore, by studying discordant identical twins suffering from various chronic diseases, it is possible to identify which genetic, epigenetic or lifestyle factors led to the development of the disease. The current investigations are investigating neurological disorders (dementia, Alzheimer's disease, Parkinson's disease, multiple sclerosis, stroke) in identical twins, and preparations are underway to examine twins with breast cancer. Collaborations and exchange programs with domestic and foreign research groups, as well as the organization of congresses of the International Association of Twin Researchers, also contributed to Hungarian twin research gaining an international reputation.