

DTU School of Medicine and Pharmacy Lecturers Win Second prize at Conference on Diagnosis and Treatment of Diseases

On May 31, the scientific conference titled "Application of Digital Transformation and Artificial Intelligence in Disease Diagnosis and Treatment" was held to serve as a forum where health professionals could discuss and exchange information on the digital transformation and Artificial Intelligence in healthcare to improve service quality and community health. The only ones from Central Vietnam at the conference, DTU doctors and scientists presented their promising research results on "Potential diagnostic value of serum microRNAs for 19 cancer types" and were awarded second prize.



Dr. Dinh Phong Son, representing the DTU research team, received the second prize for the research presentation titled "Potential diagnostic value of serum microRNAs for 19 cancer types"

The Center of Science and Technology Development for Youth of Ho Chi Minh City, Thong Nhat Hospital, and the Ho Chi Minh City University of Medicine and Pharmacy jointly organized this conference. A total of 43 papers from 32 units, including domestic and international hospitals, universities, and institutes as well as businesses and research institutes, were submitted to the conference.

At the conference, experts agreed that the digital transformation and the application of Artificial Intelligence in healthcare are among the top global priorities to improve service quality and enhance community health. Although Vietnam has favorable conditions for applying digital health solutions, the digital transformation in this field still faces many challenges including service accessibility, quality of care, lack of healthcare resources, and infrastructure. Experts emphasized the necessity of applying Information Technology in healthcare to enhance the efficiency and effectiveness of the sector.



Prize-winning speakers with the Board of Organizers and the jury

DTU was the only institution from Central Vietnam participating in the conference. Two of its staff members Dr. Dinh Phong Son, a researcher from the DTU Center for Molecular Biology, and Ms. Tran Chau My Thanh, a lecturer from the DTU School of Medicine and Pharmacy, talked about Oncology & Early Diagnosis of Diseases with the presentation “Potential diagnostic value of serum microRNAs for 19 cancer types”. With the current development of online medical databases and next-generation sequencing technologies, modern molecular biology techniques are attracting interest from clinicians and scientists studying disease progression. Therefore, Dr. Dinh Phong Son and MSc. Tran Chau My Thanh focused on

finding potential biomarkers for early screening and diagnosis of diseases such as diabetes, cardiovascular diseases, strokes, and cancers.

Additionally, Dr. Dinh Phong Son and MSc. Tran Chau My Thanh demonstrated that it is also possible to detect protein targets related to diseases to support pharmacokinetic research on protein drug targets in treatment, as well as editing and replacing endogenous mutated genes using CRISPR-Cas9 gene-editing technology, and studying gene function through overexpression and silencing genes. This research presentation was highly regarded by the jury and awarded second prize, and also selected as one of the nine best papers to be included in the conference proceedings. This recognition is a well-deserved acknowledgment of the efforts and hard work for the past two years by Dr. Dinh Phong Son and MSc. Tran Chau My Thanh from the conception of the research idea to its publication in the *Journal of Biomolecular Structure and Dynamics*, an ISI/Scopus journal of Q2 rank and IF of 4.4, and the presentation at this conference.

Participating in scientific research conferences is an annual activity of the DTU School of Medicine and Pharmacy, aiming to connect education with research to enhance the quality of teaching and academics. Hopefully, the authors will continue to pursue new research directions in the future, combining modern biological analysis algorithms with clinical and paraclinical knowledge to predict optimal diagnostic and treatment targets for various diseases.

(Media Center)