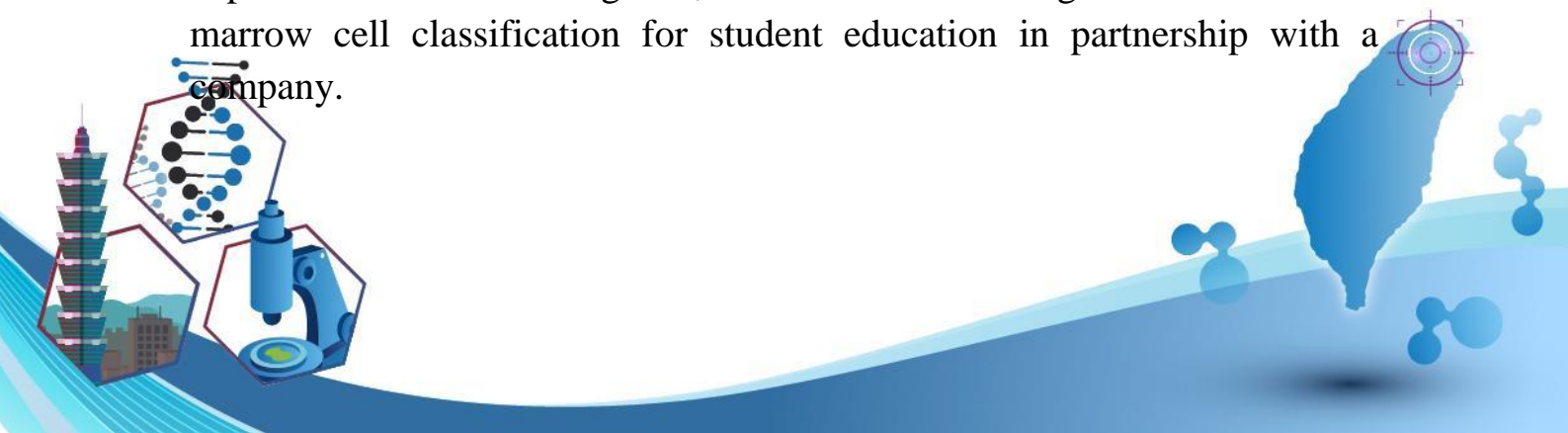


Interdisciplinary Collaboration for Promoting Research and Education in Medical Laboratory Science

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Medical technologists can perform accurate tests and interpret results on the basis of their knowledge and skills related to various medical laboratory tests. This ability is also utilized in medical research, and research activities are encouraged, particularly in university hospitals. Medical laboratories cover several tests, including hematology, chemistry, immunology, microbiology, pathology, blood transfusion, genetics, and physiology, and opportunities for collaborative research with various departments are undertaken. New technologies, including comprehensive genetic analysis and artificial intelligence, have been recently applied to medicine, and interdisciplinary collaboration with other fields is becoming increasingly significant. I participated in physiology and blood transfusion examinations at a university hospital for 5 years and am currently involved in educating medical technology students as a university faculty member. Throughout my professional endeavors, I have conducted research and educational activities in collaboration with various medical departments and other fields. For example, I have conducted research on a very rare case of respiratory disease in collaboration with respiratory medicine, respiratory surgery, pathology, and radiology departments; clarified prognostic factors for leukemia alongside medical institutions throughout Japan; developed a predictive model for relapse of rheumatoid arthritis in collaboration with experts in artificial intelligence; and created e-learning materials on bone marrow cell classification for student education in partnership with a company.



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Precision, Innovation, and Legacy in Laboratory Medicine



In this presentation, I aim to introduce some of the examples and discuss how medical laboratory professionals should promote interdisciplinary collaboration.

