Chapter 1

Introduction

1.1 Host Institution Description

Taipei Medical College, located in Taipei's Xinyi District, was established in 1960 by Dr. Shui-Wang Hu and Dr. Cheng-Tien Hsu and was later renamed Taipei Medical University (TMU) in 2000. TMU has grown into a world-class institution with one general education centre, 11 colleges, and six affiliated hospitals, including TMU Hospital, Taipei Municipal Wanfang Hospital, Shuang Ho Hospital, Taipei Cancer Center, Taipei Neuroscience Institute, and Hsin Kuo Min Hospital. Currently, TMU has extended to two other campuses around Taipei, namely Shuangho Campus and Daan Campus.

With the aim of becoming a world-leading university with sustainable development, innovation, and social impacts, TMU has successfully moved up to 384th in the 2023 QS World University Rankings, up from 407th the previous year (Quacquarelli Symonds, 2022) and ranked 43rd in Asia University Rankings 2023 (Times Higher Education, 2023). TMU's vision is to pursue innovative research and development and build an entrepreneurial spirit to adapt quickly to changes, aiming to be a driving force behind social and economic developments in Taiwan. While TMU's mission is "to educate biomedical talents with humanity, innovation, and global vision. TMU strives to develop a comprehensive education system that integrates teaching, research, industrial collaborations, and medical care" (Taipei Medical University, n.d.^a).

1.2 Department Description

Newly established in 2020, the International Ph.D. Program for Translational Science, under the College of Medical Science and Technology, at TMU covers the fields of, but is not limited to, molecular biology, cancer biology, proteomics, genomics, nanotechnology, and structural biology. This program offers comprehensive training programs for clinical and translational research that focus on

the discovery and development of clinical biomarkers for oncology, neuroscience, reproductive medicine, stem cell, and regenerative medicine as means to improve biopharmaceutical research, clinical diagnosis, and medical care by moving research from bench to bedside treatments to community. Moreover, 14 professors are affiliated with the International Ph.D. Program for Translational Science with Dr. Ming-Heng Wu as the director of the program (Taipei Medical University, 2019) and also acts as the field supervisor for this research. Dr. Ming Heng Wu's field of expertise includes cancer cell biology, antibody-drug conjugate, galactin-related studies, and glycoscience.

The department holds four core competencies (Taipei Medical University, n.d.^b):

- "To gain both knowledge and training in biological science and integrate basic and clinical research at an advanced level"
- 2. "To develop the ability for translating basic research to applications"
- "To develop the ability to analyze the developing trends of biomedical industry and medical needs with an international perspective"
- 4. "To gain legal literacy related to biomedical industry and develop managerial expertise"