14 Sachi Takeuchi University of Illinois at Chicago (UIC) College of Nursing 03/26/2023

Sasakawa Nursing Fellow 2022 Progress Report

## 1. Academic Goals

My academic goal is to take on more leadership roles in transforming healthcare, welfare, education, employment, and policies for children, adolescents, and young adults with diverse backgrounds, both locally and globally. During this study abroad program, I aim to acquire knowledge and skills to optimize healthcare resources and transform healthcare systems/policies for adolescents and young adults with special health care needs, including those who have undergone organ transplantation. I plan to achieve this through coursework, participation in projects, and conducting research independently to develop new knowledge.

## 2. Coursework

(1) Philosophy of Science for Health Research (2022 Fall)

This class was held in person. Each of the 14 philosophers was assigned to one faculty member and approximately 10 students. For each philosopher, the materials used for presentation and study were limited to the literature (e.g., a chapter from a book, an article, etc.) distributed by the faculty member. In each class, a presentation for one of the philosophers followed by a discussion of their scientific rationale/explanation and how it could be used in health research.

- (2) Developing Literature Reviews (2022 Fall)
  - The class was held in person. The students received five lessons on the steps and templates for literature reviews, and the other 11 lessons included assignments for students to read materials on literature reviews on their own.
- (3) Biometrics and Applied Statistics (2022 Fall) This class was held in person. The class covered types of data (e.g., nominal and ordinal scales), descriptive statistics, basic data management, linear regression, logistic regression, etc.
- (4) Introduction to Public Health Policy (2022 Fall)
  This class was offered by the school of public health and was held in person. The class was about the role of policy in public health and the process of public health policymaking in the U.S. The class also included group work on Federal Agencies in the U.S.
- (5) Multivariate Analysis for Health Science (2023 Spring)

  This class is currently ongoing and is primarily conducted online. Students will learn about topics such as missing values, power analysis, path analysis, and more. The class will also involve analyzing quantitative data provided by each student's advisor, which will be presented in the final session of the class.

## 3. Daily Life

The financial assistance provided by the Sasakawa Nursing Fellowship has enabled me to reside in a secure apartment, which has greatly contributed to my academic achievements. I was surprised to find

that even on campus, I did not feel safe in terms of security. The financial support from the Sasakawa Nursing Fellowship has allowed me to lease an apartment in a relatively safer location.

In addition, I have placed great importance on creating and maintaining an effective network. A strong network provides invaluable wisdom and insights to live and achieve academic goals. With the assistance of the Sasakawa Nursing Fellowship, my collaborators in Japan, and the study abroad community, I have established connections with individuals in the professions I aspire to work in or with, as well as with interdisciplinary scholars studying at other universities. Furthermore, I authored an article for the "Itsukushimi" alumni newsletter of Osaka University, where I graduated, in the section on my career development. This article has helped me maintain my network in Japan and has opened up new opportunities for collaboration.

## 4. Summary

As the Sasakawa Nursing Fellow, I have been studying at a graduate school in the U.S. with the aim of becoming a nursing leader with a global perspective to support the future of the healthcare field. Thanks to the support of numerous individuals, particularly the generous financial assistance of the Sasakawa Health Foundation, I have been able to pursue my academic goals.

In 2022, I completed several courses, including philosophy, literature review, statistics, and public health policy. In the philosophy class, I learned how to use scientific reasoning and explanation to develop research protocols and nursing theories. The literature review class provided an overview of literature review methods, but I struggled to learn how to use a template or conduct a meta-analysis, which are crucial skills for building evidence to reform healthcare systems or policies. I consulted with advisors and was recommended to take the meta-analysis class at another university. While the statistics classes were similar to what I had learned in my Bachelor's and master's programs, I faced a challenge less than a month before the start of the spring semester when the department did not have any quantitative data available for me to use in my stats class. Despite this additional challenge, I overcame it by quickly finding public data, obtaining institutional review board (IRB) approval, and contracting with a national institution as the principal investigator. However, I wish to have had more time to learn rigorous methods, such as cost-effective analysis and sensitivity analysis, which are necessary skills to optimize healthcare resources and transform healthcare systems and policies. In the public health policy class, I gained knowledge of the role of policy in public health and the process of public health policymaking in the U.S. However, it was challenging to learn specific strategies for policymaking and reformation, as well as about public health policy outside the U.S. and at the global level.

Several circumstances, including the retirement or transfer of faculty members whose research is related to my research topic, faculty strikes, and campus security issues, have made it challenging to

gain research methods through my participation in the faculty's projects and to discuss and develop a research plan for my doctoral study. I wish I had made more progress in my first year. Moreover, the limited research funding that students at UIC can get and the lack of a research team to support my research topic pose significant challenges to my research progress.

Living and studying in the U.S. with its diverse population has strengthened my desire to acquire the knowledge and skills necessary for future leadership in the healthcare field. During this period, I have also observed how the nexus between diversity and disparity exists, persists, and becomes increasingly complex. This has made me reflect on the nature of human wisdom and its development, further reinforcing my determination to learn rigorous methods.