

# **Sasakawa Nursing Fellow Progress Mid-Report**

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## 1. Background and Objectives

I am a first-year Master of Health Science (MHS) student in the Department of Health, and Behavior and Society (HBS) at Johns Hopkins Bloomberg School of Public Health (BSPH) in Baltimore, Maryland. BSPH comprises various departments (e.g., HBS, International Health, Epidemiology, Health Policy and Management) and programs (e.g., MHS, MPH, Master of Science in Public Health), each with its own specializations, research focuses, and graduation requirements. HBS advances health equity and social justice through research, training, and practice that emphasize the influences of social context, structures, systems, and behaviors<sup>1</sup>. The MHS program in HBS is an advanced research degree that equips students with interdisciplinary knowledge and analytical skills in the social aspects of public health, preparing many for further academic training in doctoral programs<sup>2</sup>. After working as a clinical nurse and assistant head nurse at Kobe University Hospital, I developed an interest in public health due to the impact of COVID-19, which led me to pursue an MPH at the Kyoto University School of Public Health, specializing in social epidemiology. During the pandemic, I became increasingly aware of widening disparities for socially marginalized groups, including those facing financial difficulties, individuals with illnesses or disabilities, and the socially isolated. Given this background, **I am drawn to this program's focus on health equity and social justice, as well as its approach to behavior change that considers both individual and social determinants of health.**

Therefore, I enrolled in this program to conduct research on reducing disparities, including those related to racial inequities and residential segregation, which are still difficult to study in depth in Japan. My goal is to examine how social environments contribute to disparities in the incidence, prevalence, prognosis, and quality of life (QOL) of individuals with cancer and chronic diseases.

## 2. Academic Progress

In my program, 96 credits are required for graduation, with 64 credits completed in the first year. Due to the workload, students can take a maximum of 22 credits per term. BSPH follows a term system rather than semesters, with each term lasting about two months and classes held twice a week. This structure results in midterm and final exams every month, along with frequent quizzes and assignments, creating an intense workload. Despite this, I was eager to take as many courses as possible in my first year to build foundational knowledge, connect with faculty, and prepare for my research. Additionally, BSPH offers certificate programs that provide specialized academic training<sup>3</sup>. I enrolled in four certificates, including those in HBS, Health Policy and Management, and Epidemiology, which further increased my coursework. As a result, I took the full 22 credits in Terms 2 and 3. This approach had both advantages and drawbacks. I developed strong skills in broad and intensive study, as well as the ability to complete assignments efficiently—both essential abilities for a researcher. On the other hand, I had limited time to review lectures in depth. Nonetheless, this experience allowed me to expand my knowledge beyond my field and connect with diverse classmates, making it highly rewarding. Below,

I introduce several courses I completed or participated in.

- *Statistical Methods in Public Health I, II, III, and IV*

From I to III, students gain practical knowledge in basic statistics, regression models, and model selection. In the final course, IV, students analyze their own data and summarize the results. Since the MHS is a research-focused program, I–IV are all required, whereas III and IV are often taken as electives in other programs. Among the required courses, this was the most challenging due to difficult assignments and exams. However, it was a highly meaningful course that emphasized understanding the concepts and formulas behind the analyses—not just how to run statistical software.

- *Epidemiologic Inference I & II, Public Health Surveillance*

I took these courses, which are foundational to public health, across multiple terms. While Public Health Surveillance was designed for practitioners and may not directly align with my goals as a researcher, it was still a very informative and meaningful course for the following reasons. Students learned from instructors with firsthand experience in disease surveillance and infection control during Ebola outbreaks in African countries. We also engaged in discussions and presentations, offering practical suggestions to improve real-world approaches. These were valuable opportunities to study core public health practices at BSPH, a global leader in infectious disease control.

- *Psychosocial Factors in Health and Illness*

In the first half of the course, we studied several theories explaining health behaviors and the underlying factors contributing to disease risk. In the second half, based on these theories, we worked in groups to design intervention projects aimed at changing specific behaviors. I presented a project on promoting HPV vaccination among young adults in their 20s, covering theory selection, intervention strategies, evaluation methods, and a discussion of the pros and cons. The course covered diverse topics such as alcohol and substance use, mental health, climate change, and residential segregation. For each, we explored both the social context and theory-based solutions grounded in prior research. This class aligned most closely with my research interests and career goals.

- *Scientific Writing in Health Sciences: Developing a Manuscript for Publication I & II*

This excellent course covers not only how to write each section of a research paper (Introduction, Methods, Results, Discussion, Conclusion), but also how to select an appropriate journal and write a strong cover letter for submission. With guidance from this course, I plan to submit a manuscript on research using Japanese data I began over the winter break by June. The class, with around 10 students, fosters active discussion and helps students develop the ability to clearly present their research to audiences outside their field.

### 3. Research Activities

Starting in March, I secured a paid research assistant (RA) position, which I am incorporating into

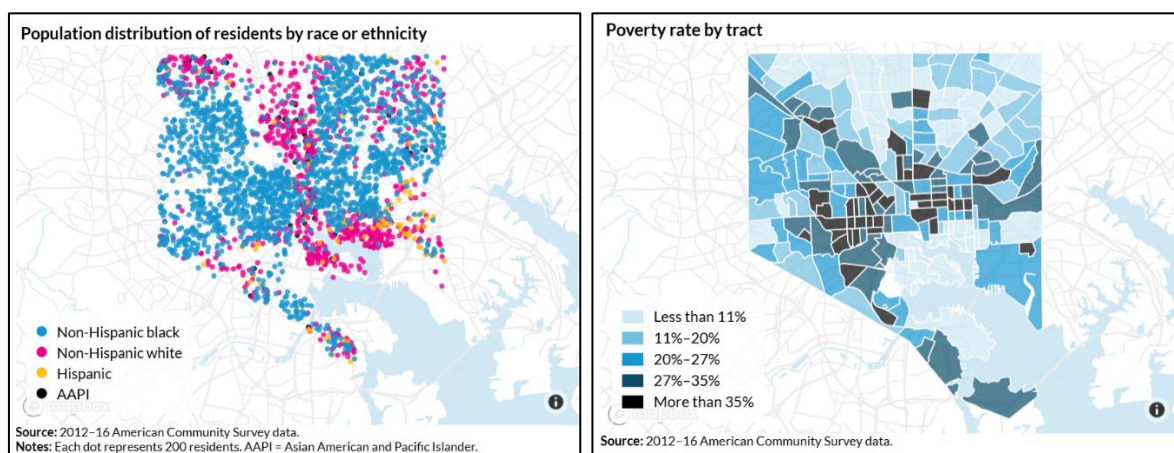
my graduation research. My project involves evaluating online programs designed to raise learners' awareness of the importance of applying a gender lens to global public health data, policy, and practice, offered by Hopkins faculty. To graduate, students are required to complete 600 hours of research in their second year. The first year is dedicated to coursework, refining research questions, identifying a research mentor, and securing a placement to begin research by the summer. Securing a research placement requires reaching out to faculty with similar research interests, demonstrating research abilities, and requesting mentorship—a challenging process for both native and international students. With many research funds suspended or terminated due to policy changes, I am especially grateful for the paid RA position, which I believe reflects my efforts in showcasing my analytical skills and research experience.

Additionally, I compiled the research I conducted at Kyoto University School of Public Health into a paper during Terms 1 and 2, which is now under review in a peer-reviewed journal. During the four-week winter break between Terms 2 and 3, I also completed a research project using Japanese data in collaboration with Japanese and American researchers and submitted an abstract to an academic conference. Building on what I learned in my *Statistical Methods in Public Health IV* and *Scientific Writing in Health Sciences* (introduced in Section 2), I plan to complete and submit this paper by June. Adapting to a new environment while balancing two research projects, coursework, and securing a research placement was challenging. However, I saw this as essential preparation for pursuing a PhD in the U.S. and pushed myself with that goal in mind. I plan to continue conducting research that contributes to Japanese society by utilizing domestic data and collaborating with researchers from Japan, even while based in the U.S.

#### 4. Life in Baltimore

While enjoying life in Baltimore, where BSPH is located, I have also been learning about the city's challenges. Thanks to the significant resources of Johns Hopkins, the area around the university is well-developed—my apartment is clean and well-equipped. There is a police box on every block, and free shuttle buses and taxis make it easy to get to major shopping areas, tourist spots, and the Homewood main campus. These services have made my daily life comfortable and safe.

However, the city faces deeply rooted residential segregation and health disparities tied to its racial history. While many researchers and community initiatives are tackling issues such as HIV, substance use, food access, and the built environment, resolving these challenges remains a long-term effort. As shown in the map below, racial segregation is striking: areas with a high percentage of Non-Hispanic black residents also face higher poverty rates and lower life expectancy. These areas form a pattern known as **“The Black Butterfly”**—a term often discussed in class, highlighting the repeated patterns of disinvestment and inequality across Baltimore's neighborhoods.



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Before coming to Baltimore, I was interested in national-level cancer disparities research and aimed to conduct research at the National Cancer Institute in Washington D.C. However, after living here, I have become increasingly drawn to local public health issues and now have a growing interest in community engagement and neighborhood-level research. I am currently exploring opportunities in this area.

Baltimore is more than its challenges. The city has beautiful streets, a scenic harbor, and is conveniently located near major cities like D.C. and New York. In the year ahead, I hope to explore more of the city and surrounding areas and experience more of the local and U.S. culture.



HBS New Student Orientation  
(Bottom left: M. Terada, Bottom center: K. Suga)



Johns Hopkins at Night



The George Peabody Library,  
recognized as one of the most beautiful  
libraries in the world

## 5. Acknowledgement

I would like to express my heartfelt gratitude for the grant support from the Sasakawa Health Foundation and the teamwork among its fellows. The opportunity to study and conduct research at the Johns Hopkins Bloomberg School of Public Health—one of the world's leading institutions—has been made possible through the Foundation's support and network. Thanks to financial, informational, and emotional support, I have been able to focus on my studies in this new environment. I will continue to deepen my research in the United States and consider how I can apply the insights gained to benefit Japanese society.

6. References (All URLs were last accessed and verified on March 27, 2025.)

- 1) Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, available at: <https://publichealth.jhu.edu/departments/health-behavior-and-society>
- 2) Master of Health Science (MHS) in Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, available at: <https://publichealth.jhu.edu/academics/mhs-in-health-behavior-and-society>
- 3) Academic Certificate Programs, Johns Hopkins Bloomberg School of Public Health, available at: <https://publichealth.jhu.edu/academics/academic-program-finder/certificate-programs>
- 4) Features, The Black Butterfly, available at: <https://apps.urban.org/features/baltimore-investment-flows/>