

## 【Campus Asia Report】Jae Won Yang

Home university : Yonsei University

Period of your stay : April 2018 – June 2018

Name of the host department : Public Health

### 1. Program description

I went to Osaka University in Japan from April 13<sup>th</sup> to June 20<sup>th</sup>, 2018 through the Campus Asia program. During this period, I took lectures on various medical and pharmaceutical issues, including psychiatry for foreign students, public health status in Japan, and pharmacological mechanisms to treat chronic disease. Professor Iso have discussed various research fields and have experienced various cohorts and researches. In particular, I was interested in the JECS (Japan Environment and Children's Study) cohort, and came back with a research plan on maternal depression and sleeping time of newborn babies.

### 2. Learning outcomes

Study proposal: Association between maternal depression and infants' sleep period

Infants spent over half of day, by the end of their first year and sleep is known as a major factor affecting infants' development such as cognitive, learning, and physical development. Infant sleep patterns develop rapidly over the first year of life, characterized by inconsistency during the first half of the year but stabilizing by the second half. It has been reported that infants' sleep pattern may be associated with parental mental health as it significantly impacts their baby's sleep behaviors. Increased maternal stress at 4 months has been associated with concurrent infant sleep problems and a decrease in the percentage of night sleep, as well as with greater variability in infants' night sleep at 12 months, with infant temperament serving as a possible mediator in this latter relation. Furthermore, greater maternal stress has been associated with infants' sleep problems and, among mothers on maternity leave, with longer night wakefulness and shorter day sleep duration. Altogether, the above studies suggest both infant characteristics and maternal characteristics can significantly affect the development of infant sleep patterns. However, the factors that contribute to sleep period in early neonatal period have not been fully investigated, and the

relationships between these factors remain poorly understood. The aim of this study was to investigate the association between mental depression and infants' sleep period.

### 3. Experiences in the country you studied

The best experience through Campus Asia was an environment in which we could freely discuss and advise on each other's research topics and methods, as well as the future direction of the thesis. Rather than simply sharing ideas among students, many professors also helped me to develop my research. JACC study Even when I attended regular meetings, there was a brief briefing and sharing of the progress of research topics in each detail. The process of collaborating in developing each other's research was impressive and meaningful time to me.

### 4. Influence on future career goals or choices

I came back to Korea about the subject that I was interested in in Japan and wanted to study more and apply research method.