

Application Form for Exchange Students For Lee Kong Chain School of Medicine, Nanyang Technological University, Singapore (Inbound Students of Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand)

| Part 1. Personal Information | |
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| Full Name | Lew Yen Jun Renee |
| Title | Miss |
| Age | 25 |
| Nationality | Singaporean |
| Passport Number | |
| E-mail | reneelew71@gmail.com |
| Phone Number | |
| Part 2. Academic Information | |
| Level of Study | Doctoral Degree |
| Current Major/ Area of Study | Microbiology / Antimicrobial Resistance, bacteriophage therapy |
| Research/ Dissertation Topic | Therapeutic applications of Staphylococcus aureus bacteriophages |
| Part 3. Preference for Research Visit | |
| Duration (working days) | 5 days |
| The First Preference of Start Date | Monday, June 10, 2024 |
| The First Preference of Department / A Interest | Area of 14-06-2024 |

Renee Lew Yen Jun

PhD Student

/ reneelew71@gmail.com

PROFILE A budding scientist passionate about bacteriophages, drug resistance, ESKAPE pathogens, and all things on antimicrobial resistance. Experiences and expertise in bacteria and bacteriophage laboratory techniques, molecular biology techniques such as PCR, gel electrophoresis, DNA and RNA extraction.

EXPERIENCE

PhD Research Scholar (Pablo Bifani Lab) – *Aug 2022 - Present* Lee Kong Chian (LKC) School of Medicine, Nanyang Technological University (NTU)

Recipient of the NTU Research Scholarship Award

Currently investigating the potential of *Staphylococcus aureus* bacteriophages as a treatment for antibiotic resistant infections, so as to narrow the current gap in phage therapy from bench to bedside applications.

Research Intern – July 2021 – Jan 2022

Agency of Science, Technology, and Research (A*STAR) / Genome Institute of Singapore (GIS)

Recipient of the A*STAR research internship award (ARIA)

Under GIS Associate Direction Niranjan Nagarajan's Lab, planned, optimised and conducted NGS to analyse microbiomes in fermented food samples. Experienced in python and R to facilitate metagenomic analysis.

Student Research Intern – July 2020 – Aug 2022

National University of Singapore (NUS) / Freshwater and Invasive Biology Lab (FIB)

Under the guidance under Associate Professor Darren Yeo's Lab, conducted analysis and quantification of zooplankton from Singapore reservoirs to understand the impact of invasive species on water quality. Facilitated data collection and improved workflow of microscopic analysis and classification.

EDUCATION

Bachelors of Life Sciences (Honours with Distinction) - Jun 2022

National University of Singapore (NUS)

Minor in Forensice Science with a Specialisation in Biomedical Sciences

Student (Summer School Programme) - July 2021

University of Hohenheim / Euroleague for Life Sciences (ELLS)

- Enrolled in the programme "Pathogens, Parasites and their hosts"
- Participated in a global programme across multiple countries to gain insights and discuss the microbial and pathogenic relations in the context of agriculture, food security and public health outcomes. Obtained an "A" grade.

Student (Winter School Programme) – Dec 2020

National Yang Ming University, Taiwan

- Participated in the programme "Microbial Biotechnology and Drug Discovery"
- Receipient of the Best Team Presentation Award (Overall)

Dear Postgraduate Education Team at Siriraj Hospital,

I am writing to express my strong interest in participating in the Global Health Awareness Attachment at the department of Microbiology in Siriraj Hospital. As a dedicated and ambitious graduate student, I am eager to gain hands-on experience, further develop my research skills and global perspectives under the mentorship of your esteemed medical professionals.

I am currently pursuing my PhD in Lee Kong Chian School of Medicine, and my research focuses on antimicrobial resistance, particularly the use of bacteriophages as a means to tackle ESKAPE pathogens. Throughout my academic journey, I am aware of the impact of research and consistently work towards translational applications of my current work into a clinical perspectiv . Participating in a clinical attachment at Siriraj Hospital presents an invaluable opportunity for me to immerse myself in a dynamic healthcare environment. Moreover, it grants the chance to understand the global impacts of antimicrobial resistance and aid in understanding the trajectory of bacteriophage research applications at a deeper level.

During my academic work, I have developed a good foundation in a wide range of microbiological techniques and bacteriophage work through multiple exchange programmes and research internships in my undergraduate degree and while working as a teaching assistant. Additionally, under the mentorship of my supervisor, Prof. Pablo Bifani, I have benefited from various experiences working with multidisciplinary healthcare teams and regulators. While these have honed my communication, teamwork, and problem-solving abilities, I would like to further my growth by working with diverse patient populations – something that I believe this attachment more than fulfils.

Siriraj Hospital has been my first choice because of its reputation for excellence as the leading medical school, and its richness in history as the oldest and largest hospital in Thailand. I am eager to observe and learn from the innovative practices employed by the hospital. Furthermore, I am excited about the opportunity to contribute to high-quality patient care and make a positive impact within the community with my research.

In conclusion, I am enthusiastic about the prospect of completing a clinical attachment and I am confident that it will be a rewarding and enriching experience. I hope to contribute my skills, learn from experienced professionals, and ultimately, further my career in medical research. Thank you for considering my application.

Renee Lew PhD Student, Kee Kong Chian School of Medicine Prof. Pablo Bifani Lab