

BAHNO Travel Award 2023 Report

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Program Title: Reconstructive Microsurgery Fellowship
 MSc Reconstructive Microsurgery

Program Director: Prof. Fu-Chan Wei

Location: Chang Gung Memorial Hospital, Taiwan

Duration: 1st July 2023 – 30th June 2024 (12 months)

Introduction

Professor Fu-Chan Wei is a pioneer in Reconstructive Microsurgery, renowned for his prestigious fellowship program that has trained over 200 reconstructive microsurgeons internationally. I had the privilege of completing a one-year fellowship in Reconstructive Microsurgery at Chang Gung Memorial Hospital, Taiwan, under his supervision. The fellowship provided comprehensive training in head and neck reconstruction and peripheral nerve reconstruction, focusing on facial palsy management.

Key Learnings and Skills Acquired

During my fellowship, I gained hands-on experience with nearly 100 free flap microvascular reconstructions. The training was generally indirectly supervised, fostering independent practice and decision-making. I encountered different approaches to reconstruction compared to my training in the UK. For example, while the radial forearm free flap is common in the UK, it is rarely used in Taiwan. Instead, the profunda artery perforator flap is preferred to reduce donor site morbidity.

Under the guidance of Professor Chuang, I learned dynamic facial reanimation using the gracilis functional muscle and a conservative approach utilizing selective facial nerve neurectomy. I also gained exposure to robotic surgery through Dr. Tommy Nai-Jen Chang, who introduced me to the Da Vinci system. This highlighted the potential applications of robotic surgery in head and neck microvascular reconstruction.

Collaborations, Publications, and Degree Achievements

I led a project to develop Entrustable Professional Activities (EPAs) for one-year head and neck reconstruction fellowships. This collaborative effort involved international experts and aimed to standardize and enhance training. The project outcome will be presented at the World Society of Reconstructive Microsurgery conference in Barcelona in April 2025.

Academically, the fellowship was integrated with a master's degree program in Reconstructive Microsurgery from Chang Gung University. I co-authored the manuscript "Immediate Pre-operative Small-group Discussion" with Professor Wei, which is scheduled for publication in *Hand Clinics* in May 2025. Upon its publication, I will be awarded a Master of Science degree.

Challenges and Solutions

Understanding Chinese was beneficial for comprehending my supervisor's instructions and communicating with staff. I attended weekend Chinese language classes, which enabled me to understand general conversations, though professional discussions remained challenging.

The fellowship was a non-salaried position, which required supporting my family in Asia while maintaining financial obligations in the UK. Grants and sponsorships, including BAHNO Travel Award and support from the Ministry of Foreign Affairs (MOFA), alleviated this burden and allowed me to focus on my training and professional development.

Conclusion

The fellowship at Chang Gung Memorial Hospital provided invaluable training and experience in reconstructive microsurgery. I developed a deeper understanding of various surgical techniques and their rationales, enhancing my skills and confidence. The exposure to innovative surgical practices and the collaborative projects I led will have a lasting impact on my career.

Acknowledgements

I extend my gratitude to the oral and maxillofacial teams in Liverpool and North Wales for their foundational teaching, the Reconstructive Microsurgery team at Chang Gung Memorial Hospital for their hands-on training and mentorship, my family for their support and adaptability, and BAHNO for their generous grant. This support was crucial in enabling me to complete this transformative fellowship.