

# BSSH EDUCATION AND TRAVEL BURSARY 2024

Department of Hand and Reconstructive Microsurgery

Singapore General Hospital

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Han Hong Chong, FRCS (Tr&Orth)



(Photo from <https://www.sgh.com.sg/>)

## Introduction

I am Han Hong Chong, current hand fellow at Cardiff and Vale UHB. I completed my orthopaedic training in East Midlands South (Leicester) UK and recently successful in my appointment as substantial orthopaedic hand & wrist surgeon at Calderdale and Huddersfield NHS Foundation Trust.

I sought to visit the department of hand and reconstructive surgery at the Singapore General Hospital as part of my ongoing learning with the following objectives.

- To study the management perspectives at different healthcare settings and population
- Specific interest with regards to wrist arthroscopy and its role

## Singapore

Singapore, a vibrant city-state located at the southern tip of the Malay Peninsula in Southeast Asia, is renowned for its dynamic blend of cultures, modern infrastructure, and economic prowess. With a population of approximately 5.7 million, Singapore is one of the world's most densely populated countries. Despite its small size, it boasts a highly developed economy and is a global hub for finance, trade, and transportation. Known for its cleanliness, efficient public services, and high standard of living, Singapore also offers a rich cultural tapestry, reflected in its diverse culinary scene, festivals, and architectural landmarks. As a global city, it continues to attract tourists and business professionals from around the world.

## Department of Hand and Reconstructive Surgery, Singapore General Hospital

Singapore General Hospital (SGH) is the oldest and largest hospital in Singapore, founded in 1821. It is a leading tertiary referral centre and academic medical institution, renowned for its comprehensive range of medical services, cutting-edge research, and commitment to education. Located in the central region of Singapore, SGH offers a wide array of specialised medical treatments and houses numerous specialist centres. It plays a crucial role in the country's healthcare system, providing high-quality patient care and serving as a hub for medical innovation and training. SGH's dedication to excellence has established it as a premier healthcare institution in the region.

The Hand and Reconstructive Microsurgery Department at the SGH is a renowned centre of excellence specialising in the treatment of hand, wrist, and peripheral nerve conditions, as well as complex reconstructive microsurgery. The department is staffed by a team of highly skilled surgeons and healthcare professionals who employ

advanced surgical techniques to deliver top-tier patient care. Known for its comprehensive approach, the department offers a wide range of services, including trauma care, congenital hand anomaly correction, and intricate reconstructive procedures. In addition to clinical services, the department is actively involved in research and education, contributing to advancements in the field and training future specialists. Its commitment to innovation and excellence has earned it a reputation as a leading centre for hand and reconstructive microsurgery in the region.

## Visiting Journey

I visited A/Professor Andrew Chin, who is globally renowned for his expertise in wrist arthroscopy interventions for wrist pathology. On my first day, after completing the induction, I joined Prof Chin in his clinic, where he sees approximately 100 patients in a half-day session. His clinic operates with an open-door setting across three rooms, with registrars initially seeing the patients and then presenting their cases to him. Prof Chin then decides if a senior review is necessary. For any patient requiring surgery, he thoroughly explains the procedure and provides a specific surgery date within three months.

We discussed the healthcare service model in Singapore, noting the government's decision to abolish free healthcare, necessitating that the population pays for medical treatment with the government subsidising a portion of the medical fees. The hospitals provide services based on a payment class system (A, B, and C), with the efficiency of treatment varying according to the class chosen by the patient.

I observed six operating lists comprising a mix of cases. The first case typically begins around 08:00, with the list aiming to conclude by 17:00, depending on the number of cases. There was a wide range of elective and trauma cases, and the hospital offers a 24-hour trauma operating list.



Selfie of the two visiting fellows (I'm on the right)

Specifically, I observed a wrist arthroscopy and TFCC repair through a bone tunnel performed by Prof Chin. He explained his arthroscopic view and his preference for using a bone tunnel over an anchor for TFCC repair. I also followed up with the patient one-week post-surgery, noting a successfully stable DRUJ and ongoing hand therapy care.

For thumb CMCJ arthroplasty, the procedure steps were similar to my experience in the UK. Interestingly, instead of performing the capsulotomy perpendicular to the joint line, Prof Chin performs it in line with the joint line to minimise soft tissue trauma while providing adequate joint exposure. The patient had an excellent outcome, with improved pain and range of motion at the one-week review.

During Prof Chin's absence on an educational trip to China, I observed A/Professor Lim during one of her operating lists. It was my first encounter with the concept of cartilage regeneration for early arthritis in the hand. She performed microfracture and neo-cartilage implantation on the cartilage surface of the index CMCJ. She has successfully performed approximately 20 cartilage regeneration operations in various hand arthritis cases.

The department has an early start, with ward rounds commencing around 07:00, followed by a departmental session from 07:30 to 08:30. On Tuesdays, the team discusses complex cases, with registrars presenting cases operated on by their supervisors, followed by a review of recent evidence. Wednesdays are dedicated to registrars teaching on various topics relevant to their exams. During my visit, Thursday was their journal club day, where a recent JHSE publication was critically appraised. The journal club effectively guides the registrars in reviewing literature that could influence their future practice while encouraging research.

I also met Mr Wee Lam, an esteemed member of the BSSH and editor-in-chief of JHSE. He plays a significant role in enhancing the academic environment for residents during the journal club and actively involved me in both case discussions and the journal club.



Assisting Mr Wee Lam with assembling an IKEA sofa in his office

## Overall Impression

This visiting fellowship was an eye-opener for my transition to becoming a hand and wrist surgeon. It broadened my understanding of hand and wrist management within different healthcare systems and communities. Discussions on the role of wrist arthroscopy and new cartilage regeneration techniques for hand arthritis provided valuable insights into potential future treatment trends. The team was very welcoming, with special thanks to Prof Chin and Mr Wee Lam for buying lunch. Overall, the fellowship offered me a new perspective for my future practice, and I am immensely grateful to the BSSH for their generous support in making this visit possible.



Receiving the fellowship certificate from Prof Chin.



Expressing our gratitude to Prof Chin for hosting us in the department.



Photo with Mr Wee Lam on our final day.