

THE AMERICAN DREAM ACCOMPLISHED - CLINICAL FELLOWSHIP AT THE COMPLEX JOINT RECONSTRUCTION CENTRE @ HOSPITAL FOR SPECIAL SURGERY

HSS

Hi Dr Lincoln, thanks for spending time with us for this interview today! Our first question is one that always pops up: How did you get to do a clinical fellowship at Hospital for Special Surgery?

In a way, I took more than 10 years to prepare for it. It was a culmination of time spent in the US for military training, my research fellowship at Massachusetts General Hospital, Harvard Medical School and clearing the United States Medical Leaving Examinations (USMLE) while I was a resident. I got to know **Dr Thomas Sculco** and **Dr Peter Sculco** at AAOS 2019 and subsequently visited them on a self-paid visitation at HSS. Shortly after, they informed me that I had secured my fellowship position. I was over the moon to be given this opportunity.



2023 HSS Adult Reconstruction and Joint Replacement (ARJR) and Complex Joint Reconstruction Centre (CJRC) Fellowship Graduation at The Knickerbocker Club

What did you do in the fellowship?

It was a great fellowship, and understandably so as it is one of the highest rated US-fellowships for adult reconstruction. I did a total of 510 surgeries in my fellowship year, which comprised of 350 primary arthroplasty cases and 160 revisions. It was a high-volume centre, a lot of hands-on, exposure to manual, navigation and robotic surgery and complex revision techniques. My key takeaway was to learn surgical skills to handle complex revision techniques, to ensure safe exposure, efficient implant extraction, perform advanced joint reconstruction and to obtain a stable, functional joint as well as soft tissues techniques to aid exposure or restore function.

I also ran a complex revision clinic where I saw patients with multiple revised arthroplasties with no good solutions, which changed my perspective of arthroplasty. We helped those that we could, but in some patients, sometimes the best solution was to avoid another operation.

Fellow education was extremely structured and covered all aspects of arthroplasty. These included arthroplasty conferences with different focus areas, for example weekly grand rounds where controversial topics would be presented, mentorship conferences where junior arthroplasty surgeons would present their outpatient disaster cases to seek second opinion from senior surgeons, custom implant conferences where 3D modelling was performed to aid surgical planning in patients with complex congenital/dysplastic deformities, radiographic analysis conferences where fellows would be quizzed on interesting radiographs.



Custom 3D printed acetabulum with PSI guides for challenging hip reconstruction

Every Friday, a renowned Visiting Professor would share insights on orthopaedic / non-orthopaedic related topics. The fellows would also run a lab twice a month to practice uncommon, but essential advanced surgical techniques such as extended trochanteric osteotomy, tibial tubercle osteotomy, marlex mesh extensor mechanism reconstruction, and acetabular cup cage revision just to name a few.

I participated actively in research as well, presenting at the HSS alumni day on custom triflange for massive acetabular bone loss. My research project titled "Rotating-hinge revision total knee arthroplasty provides greater arc of motion gains for patients with severe arthrofibrosis" won the Best Poster Award at the 2023 Fellow Research Awards. I attended multiple education-related conferences such as the AAOS and AAHKS, allowing me to keep abreast with the latest in arthroplasty research.



Having a great time in the Operating Rooms with Peter

First day of Fellowship with my Co-fellows (Residency Program)

From Left to Right:

Brandon Bukowski (Mayo Clinic)
Tracy Borsinger (Dartmouth)
Breana Siljander (U Minnesota)
Tony Shen (HSS)
Elshaday Belay (Duke)
Lincoln Liow (SGH)
Daniel Driscoll (HSS)



That sounds like a lot of work! Did you have any fun?

The HSS surgeons were really hospitable and they were kind enough to engage the fellow group after hours. I was invited to various events, the HSS Autumn Benefit fund raising event, East River fishing (giant striped bass!), Thanksgiving and Christmas dinners as well as road trips. I did a half-marathon at Lake Placid with my co-fellows, which was a great experience at the birthplace of the Ironman race. I had an unforgettable time with my family, hanging out at Central Park, chasing the fall colors and the spring blossoms, celebrating Christmas at the Rockefeller Centre, going skiing with my kids, chilling at Jazz clubs and attending lots of Broadway musicals. We had our graduation at the Knickerbocker club and an unforgettable roasting session by my fellow class. It was so much fun!



The research team at AAOS 2023



Dinner with present and past fellows during AAHKS 2022



Unbelievably large striped bass caught at Manhattan East River!

Anything else you would like to share?

It was a great fellowship and I would do it again in a heartbeat. I hope to work towards establishing the first complex revision arthroplasty centre in Singapore to help patients get back to what they love to do!



With my wife and 3 children: Linus, Lucas and Lizzy at Roosevelt Island with HSS in the background.



Attending the Autumn Benefit Gala Dinner at Guastavino's with my wife, Dr Ng Zhi Min and my Fellowship Director, Dr Peter Sculco

This article was contributed by A/Prof Lincoln Liow.

A/Prof Lincoln Liow is currently a Consultant Orthopaedic Surgeon at Singapore General Hospital, specialising in hip and knee replacement surgery. He is also Associate Professor at Duke-NUS graduate medical school and Deputy Vice-Chair, Research (Device Development) of the Musculoskeletal Sciences Academic Clinical Programme (MSK ACP).