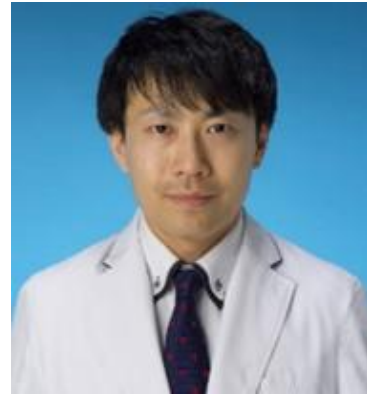


International Observership in HBP Surgery

Department of Hepato-Biliary-Pancreatic Surgery,

Dokkyo Medical University

Takayuki Shimizu



From August 2022 to June 2024, I had the privilege of participating in an clinical fellowship at the University of California, Los Angeles (UCLA) as part of the 13th International Observership in HBP Surgery of the Program. I chose UCLA because it has a specialized team dedicated to pancreatic diseases and conducts clinical trials on neoadjuvant therapy for pancreatic cancer (PC). During my fellowship, I observed many surgeries and outpatient care primarily related to pancreatic diseases and participated in clinical research under the supervision of Professor Timothy Donahue.

My mentor, Prof. Donahue is a chief professor of Surgical Oncology at UCLA and one of the editors of the National Comprehensive Cancer Network (NCCN) guideline for PC, which are widely used internationally. He is also a representative of therapeutic and educational programs at UCLA. Moreover, he has secured several research grants and conducts translation research on tumor immune system in PC with basic researchers at his extensive laboratory. During my fellowship, he was invited to Japan

and England, where he delivered lectures regarding the latest results of his clinical trials. He was president of the Society of University Surgeons and focused his presidential year on preserving the academic mission in modern day healthcare in the United States. Additionally, he performed surgery internationally as he is one of the world's renowned surgeons.

I had many opportunities to observe complex pancreatic surgeries with vascular reconstruction. I was particularly impressed by that Prof. Donahue's Whipple procedure with a small mid-line incision. He ensured an adequate surgical view using the Bookwalter retractor and skillfully utilized the LigaSure Maryland. His surgical technique was exceptionally gentle, and he consistently minimized blood loss through meticulously controlling hemostasis. Furthermore, he is passionate about educating surgical residents. He mentors them by assigning them a first assistant in his surgeries. He also teaches them the responsibility of primary surgeon by having them perform hepato-jejunostomy and gastrojejunostomy. Additionally, I also had several opportunities to observe robotic pancreatic surgeries performed by Dr Girgis and Dr King. Their robotic Whipple procedure gave me a chance to learn new robotic techniques and reconstruction methods that differ from conventional open surgery.

Regarding the clinic, multi-disciplinary meeting is consistently conducted before

seeing new patients. These meetings include not only physicians but also nurses, dietitians, coordinators and even social workers join to plan treatment and check the eligibility for clinical trial. I found this system at UCLA to be very efficient. Prof. Donahue has surgical residents or medical students interview patients before he sees them. He educates them through their presentation about interviewing patients. He often used encouraging words with his patients, such as “Our goal is to cure you,” “One step at a time,” and “I’m on your team.” I was really impressed by this his warm attitude toward them. Fortunately, there were many opportunities for me to discuss cases of neoadjuvant therapy for borderline resectable and locally advanced PC with Prof. Donahue. Through these discussions, I discover differences in the approaches of neoadjuvant therapy between Japan and the United States. Attending his clinic provided me with valuable ideas for my clinical research and helpful knowledge for practicing neoadjuvant therapy.

The main theme of my clinical research is the necessity of adjuvant therapy in patients who receive neoadjuvant therapy for PC. Thank to collaboration with Dr Maeda and Ms. Deranterisassian, Prof. Donahue provided me with access to multi-institutional database of PC, which included data from UCLA, Johns Hopkins Hospital and Massachusetts general Hospital. As a result, we found that an additional adjuvant

therapy was associated with survival benefit in patients who received less than 4 months neoadjuvant therapy or who had microscopic margin positive surgical resection. I presented this research at the annual meeting of American Pancreatic association in San Diego in October 2023, and it was published in "SURGERY", an international renowned journal. I am grateful to Professor Hines, who visited my poster presentation and gave me valuable comments. Currently, I am writing other research papers titled "Optimal Timing of Surgery for Pancreatic Cancer treated by Neoadjuvant Therapy" and "Comparing Neoadjuvant Stereotactic Body Radiation Therapy and Conventionally Fractionated Radiation Therapy in Patients with Borderline Resectable and Locally Advanced Pancreatic Cancer" using this database.

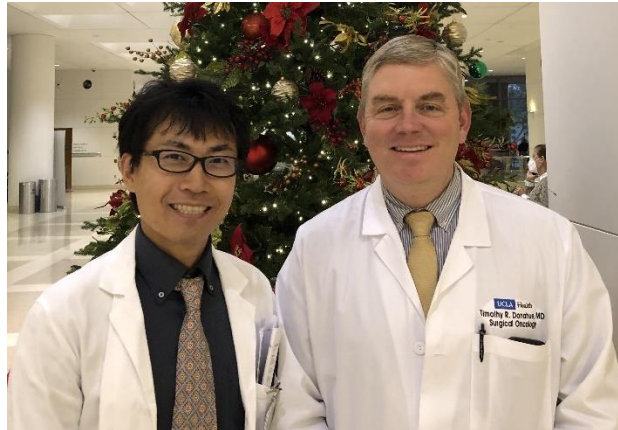
Furthermore, Prof. Donahue gave me opportunities to collaborate with surgical residents. I worked with Dr. Link, Dr Labora, Dr Premji, Dr Chevru, Dr Park, and I am contributed to their clinical research. Only seven medical students out of 1,400 candidates are selected for surgical residents at UCLA. They were not only exceptionally intelligent but also demonstrated outstanding kindness. When I couldn't keep up with the meetings, they always reached out to me with patient and support. Their great leadership and suggestions significantly improved our research. It was an unforgotten experience to work with them.

My wife and our children accompanied me to the United States. Our eldest and middle sons attended a public elementary school in Los Angeles on weekdays to learn English and went to a Japanese supplementary school on Saturdays to continue their Japanese studies. Our youngest son attended a public kindergarten where he also learned English. During the first year, the children struggled with their English classes and sometimes cried, but by the second year, they had made friends outside the Japanese community and were enjoying their school life in English. My wife and I also received valuable advice and support from local parents through our children's schools. Through our life in Los Angeles, while focusing on my work and research is important, taking care of my family in an unfamiliar environment is even more crucial.

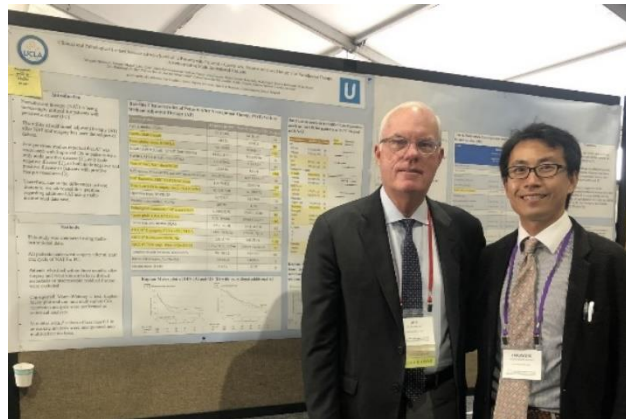
I met many international students and realized that the experience of studying abroad depends greatly on the location and timing. Living in a place with different languages and cultures can be challenging, but the true appeal of studying abroad lies in gaining unique experiences. Hopefully, my report will inspire others to develop an interest in studying abroad. I am grateful for Prof. Takada, the founder of this exchange program, Prof. Eguchi, the director of this program, Dr. Maeda, a previous observer and Ms. Uenotani who reach out to me before my studying abroad. I am also thankful to Prof. Donahue and all the staffs at UCLA for welcoming me. Finally, I really appreciate Prof.

Aoki, all the members of my Japanese department and my family for their gentle support and for accepting the extension of my studying aboard.

1 . A photo with Prof. Timothy Donahue at Ronald Regan Hospital



2 . A photo with Prof. Joe Hines at the annual meeting of APA 2023



#3. A photo with Prof. Jin He at the annual meeting of APA 2023



#4. A photo with Prof. Cristina Ferrone at the annual meeting of APA 2023



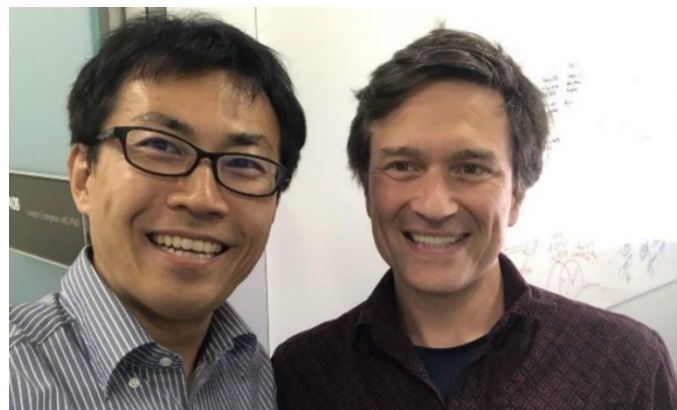
#5. A photo with Dr. Mark Girgis at Holiday Party



#6. A photo with Dr. Jonathan King at operation room



#7. A photo with Dr. Jason Link at his office



#8. A photo with Dr. Michael Mederos, a surgical resident at the clinic



#9. A photo with Dr. Alykhan Premji, a surgical resident at the office



#10. A photo with clinical nurses at operation room



#11. A photo of our farewell party with clinical technician and nurses

