

## **Report on the APKASS Travelling Fellowship to ESSKA, 18 Apr to 13 May 2018**

Godfather: A/Prof Denny TT Lie (Singapore)

Fellows: Hyuk-Soo Han (S Korea)

Ryuchiro Akagi (Japan)

Chih Hao Chui (Taiwan)

We each departed from our home cities to converge at Istanbul, our first destination. This is the journal of our journey to the West, a journey that covered 8 stops, a journey that will be etched in our memories for a lifetime!

### **1. Istanbul, Turkey; 19-22 Apr 2018**

**Host: Prof Mustapha Karahan**

Istanbul was our first stop of travelling fellowship. All of the fellows and godfather had never visited this historical city before. We were astonished by the ancient walls, building and stories behind them, and were taken in by the hospitality Prof. Karahan gave us. Hyuk-Soo and Chih-Hao arrived earlier. Prof. Karahan gave us a warm welcome and we visited Acibadem Fulya Hospital and Acibadem Sports Center with Dr. Mustafa Yalin, a chief resident of Acibadem Hospital system. First, we met Dr. S.TOLGA AYDOĞ (Fig. 1). He was responsible for post-operative patient care.

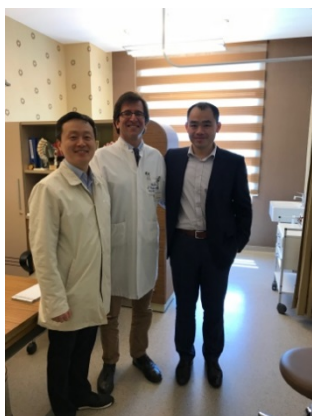


Fig. 1. Dr. S.TOLGA AYDOĞ from Acibadem Fulya Hospital. Hyuk-Soo and Chih-Hao looked just tired after a long flight.

Then we visited Acibadem Sports Center (Fig. 2). They had lots of state of the art training facilities like hypothermia treatment, gait analysis and lots of professional personnels working on the rehabilitation programs. Many elite players like national tennis and volleyball players were trained there.

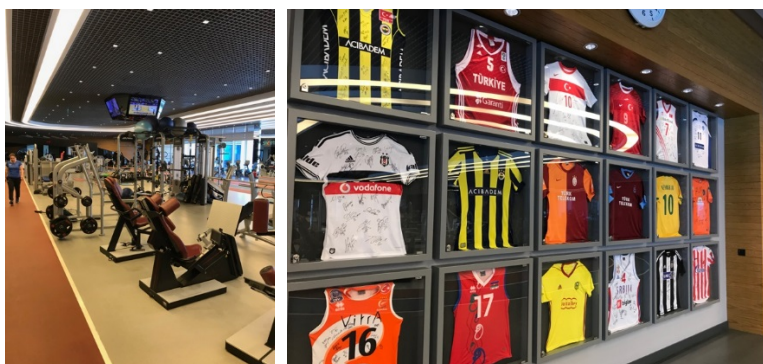


Fig. 2. Acibadem Sports Center.

After that, we headed back to hotel and meet with Denny and Ryu. We visited Acibade Altunizade Hastanesi Hospital and had a great talk with Dr. TEKİN KEREM ÜLKÜ. He showed us the clinic, operation theater, pre-operation preparation room, lab and ward. After that, we had dinner with Prof. Karahan and his family, Dr. BARIŞ KOCAOĞLU and Prof. Karahan's fellow Dr. Birol Aktas at Café Zanzibar. It is a gorgeous restaurant by the shore of Mamara sea (Fig 3).



Fig. 3. Dinner with Prof. Karahan and his team.

On the second day, we attended Prof. Karahan's ACL reconstruction. The patient was a friend of his who played football very well. We had a very thorough discussion about the scientific part of ACL pre-operatively (Fig. 4).



Fig. 4. Pre-operative assessment of ACL reconstruction

After that, we had an authentic lunch experience at Acibadem University, one of the best private university of Turkey. Prof. Karahan introduced us to the Dean of the University. He explained how Acibadem medical group could be so successful. The interesting part came after that. We visited medical simulation center of Acibadem University. It was so real that they even put an ambulance

inside the building. When the drill started, a simulated street voice was played, making it sound so real (Fig. 5).



Fig. 5 Ambulance and simulated patient model inside medical simulation center of Acibadem University.

Another interesting department is virtual reality center. There was 3D simulation system for ACLS training (Fig. 6). It made us realise that how lucky the medical students in Acibadem University were.



Fig. 6. Prof. Karahan and Godfather Denny Lie experiencing virtual reality.

After the tour of simulation center, we had some presentation about topics regarding knee and shoulder surgeries with doctors from Acibadem and APKASS (Fig. 7).

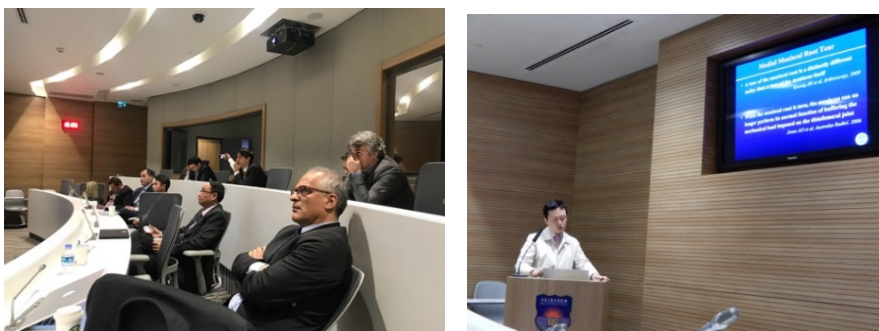


Fig. 7. Presentations of Acibadem and APKASS group.



By the time we arrived, it was just the time of EuroLeague Basketball Finals. One of Prof. Karahan's friend is a crazy basketball fan and he helped us get into balcony seat of Fenerbache vs. Spain KBV game (Fig. 8). They beat KBV amidst the fanatic cheerings of whole audience.



Fig. 8. Fenerbache fans (yellow) vs. Spain KBV (red).

After an exhausting day, we had 2 shoulder surgeries with Dr. BARIŞ KOCAOĞLU in Acibade Altunizade Hastanesi Hospital. After that, we hurried to another surgical knot-tying skill training camp, on the sea of Marmara. A good friend of Prof. Karahan picked us up on his sailing boat named fifty-fifty. Under the Asian-European sunshine, we headed to one of the four island of Istanbul city, Burgazadası. Ryu and Denny helped the captain to rise the sail! Quite a sailor they are! Prof. Karahan prepared some heavy cord for us that we could practice and practice again his Pretzel knot. He got this idea when sailing with his family and published it in 2010. He is a man who enjoyed both work and family so much. He also did his "revenge" on us with a huge portion of seafood BBQ. Several years ago, he visited Seoul for an orthopedic conference. At that time, he was overfed by our Korean fellow. Now he did pay his revenge (Fig. 9).



Fig. 9. Sailing, knot tying and BBQ

Prof. Karahan had morning meeting about history and geography of Istanbul. He introduced the development of the Ayasofya Müzesi, Byzantine wall and the history of 7 hills. In order to impress us after an exhausting day

as sailors, we had a breakfast named after his topic of lecture. We had the panoramic view of the Ayasofya Müzesi. I had the impression that I will go back again, to enjoy the gratefulness and hospitality of the city and people.

## 2. Larissa, Greece; 22-24 Apr 2018

**Host: Prof Michael Hantes**

Our second stop of the travelling fellowship journey was Larissa, Greece. Upon arrival at Thessaloniki airport, we were greeted by Dr. Hantes, and took a ride to Larissa. On the way we had dinner at Paleos Panteleimon, a nice village on the hillside of Mt. Olympus, which was great with wonderful views. Arrival at the hotel in downtown Larissa, located in the center of the town close to the ancient theatre, was around 11pm.



Fig  
10:

Thessaloniki seafront, coffee Michael and surgery with Michael Hantes

Next morning, we were picked up at the hotel at 7:35 am, and with about a 15 min drive arrived at the University of Thessalia Hospital. Dr. Hantes scheduled three cases in the morning; (1) high tibial osteotomy, (2) ACL revision, (3) labrum repair. Dr. Akagi, Dr. Han, and Dr. Chiu were allowed to scrub for each case, respectively. Among the cases, the ACL revision was an interesting case, which was after 19 years from the primary surgery. The patient suffered from gross instability, though he was free from pain. After removing the previously inserted screws, new tunnels were created without problem since the tunnels from the previous surgery was not in good position. A single bundle reconstruction using hamstring autograft, along with partial resection and repair of the complex tear in the posterior body of medial meniscus was performed.



Fig 11: Department office, after presentation at Hippocratic Auditorium, University of Thessalia



After lunch at the department office, Dr. Hantes took us around the University campus. The relation with the Anatomy Department, whose director was a former resident of the Department of Orthopaedics, is highly important for the Orthopaedic Department, providing the department opportunities to hold cadaveric courses. In the evening a scientific symposium was held at the Hippocrates auditorium, and both fellows and the local staffs presented their studies and experiences.

On the last day before leaving, we were picked up at the hotel by the resident Dr. Fyllos in the morning, and headed to the Monasteries in Meteora. There we had a very impressive tour guided by one of the nuns, learning historical backgrounds and enjoying the breathtaking views of the area.



Fig 12: Meteora hills, visiting St John's monastery where we were warmly hosted

During the three days we had invaluable experience with the unique culture, and enjoyed the wonderful hospitality of Dr. Micheal Hantes and Larissa. The duration of stay may be longer, since our schedule was packed and we could have had some more social and cultural exchanges with some more extra days.

### 3. Rome, Italy; 24-26 Apr 2018

**Host: Prof Giuseppe Milano & Dr Maristella Saccomanno**

We arrived at Rome via Belgrade in Serbia. There was an incredibly long queue at the immigration and the host waited for a long time yet Prof. Milano and Dr Maristella welcomed us so pleasantly. Even though it was 10 pm, we had a great dinner at Italian restaurant near the airport (L'Osteria dell'Orologio, Fiumicino).



Fig 13: dinner with Prof Milano, Vatican museum tour with local guide

The following day at Rome was a Italian National Holiday (Independence day). We rested in the morning and in the afternoon, we had a guided tour of the Vatican Museums and Sistine Chapel. We were most delighted to see Michelangelo's and the Botticelli's amazing works of art. Histories of Pope and Vatican were amazing. We even had the chance to ascend the 500 steps up the dome of Cathedral Saint Peter! The view from the top was great. After the tour, we had a late lunch of pizza and pasta. Gelato in hot weather was awesome. Dr Maristella and her husband invited us for dinner. We had a great dinner at a restaurant near Navona square (L'Antica Pesa). The dark blue sky of Rome was so beautiful. We had a frank exchange of knowledge and experiences.

On the 3<sup>rd</sup> and last day in Rome, we visited the Catholic University of Rome and the Gemelli Hospital. We presented our topics during their morning meeting. Dr Maristella performed a TKA and an arthroscopic rotator cuff repair surgery. She was so enthusiastic and her assistants were so skilled. We had an interesting discussion on whether the spontaneous osteonecrosis of the knee is a real osteonecrosis or subchondral stress fracture according to the pathogenesis of osteoarthritis. The chair of the Orthopedics department then joined us for lunch. He was so polite and friendly. He was proud that the trauma center was responsible for severely injured patients when other centres did not offer similar services.



Fig 14: visiting St Peter's, lunch with staff of Catholic University of Rome

#### 4. Bologna, Italy; 26-28 Apr 2018

**Host: Prof Stefano Zaffagnini**

We arrived at Bologna airport and were picked up by residents of Prof. Zaffagnini. It is very difficult to apply for residency in Istituto Ortopedico Rizzoli. Hence they showed their enthusiasm and utmost respect to their mentor and our host. We had a great dinner at Ristornate Panoramica, a restaurant near hospital and hotel. For me, I had the best Palma ham, tortellini, Bologna tanglila and steak in my life. During the dinner, we were briefed about the busy schedule tomorrow.

The next day on 27 April, we were picked up at 0700 AM although the hotel and hospital were within walking distance. The hospital was on the hill and had the best view all over the city. Prof. Zaffagnini arranged his trademark surgeries (many of them) for us. We had over-the-top ACL reconstruction plus extra-articular lateral tenodesis with hamstring tendon grafts<sup>1</sup>, medial and lateral meniscus allograft transplantation plus osteotomy and MPFL reconstruction. His ACL recon and lateral



tenodesis had only 3% failure (revision) rate in 25 years. Most of the time are contralateral injuries. 74% of his meniscus allograft transplantation return to sports (12% competitive, 88% recreational). He finished above surgery before 2PM in one operation theater. Before the ACL reconstruction, he assessment the pivot shift using inertial sensors,<sup>2</sup> which can be integral in increasing our understanding of knee kinematics and improving diagnostic capabilities .



Fig. 15. KiRA device for quantitative pivot-shift analysis

Because the surgery was done in such an efficient way, we had the chance to see most famous anatomical theatre of the Archiginnasio of Bologna .



Fig. 16. Anatomical Theatre of the Archiginnasio

On Saturday 28 Apr, we had a scientific meeting. The meeting was held in Prof. Zaffagnini's office in an elegant building. It made us feel like we worked in some museum. They had a prestigious museum indeed.

We first visited Prof. Vittorio Putti's office. He was familiar with Prof. Mayo and Cushing, all of them were big names in medical history. He was also a famous collector with ancient books (66 incunabula, 238 sixteenth century books, 957 rare volumes and pamphlets that belonged to the collection) and medical instrument like birth clamp.



Fig. 17. Prof. Putti's office

The museum of Rizzoli is just in front of Prof. Putti's office. Aside for its graceful mural everywhere, there are lot of treasure such as an early earth globe made by a monk, which Australia was not on it



because it had not found. If you study here, you can always check medical journals published in early 19<sup>th</sup> century. Bologna is such a city of history and gourmet. You will never be bored here.

## **5. Heidelberg, Germany; 28 Apr – 1 May 2018**

### **Host: Prof Rainer Siebold**

We arrived at Heidelberg through Frankfurt airport. Three Heidelberg fellows, Lazarus from Greece, Kaori from Japan, and Purna from India welcomed us and we had a great dinner at the hotel restaurant.

With the nice weather on Sunday the following day, we rented bikes and had a good cycling track round Heidelberg old town and up the Philosopher's path. We had a great guided tour of the famous Heidelberg Castle. Secret paths not open to the public were opened and they were amazing, and the history of Castle was interesting. Rainer Siebold joined us for dinner after long flight from Seoul. We appreciated him for having dinner with us even though he was so tired.

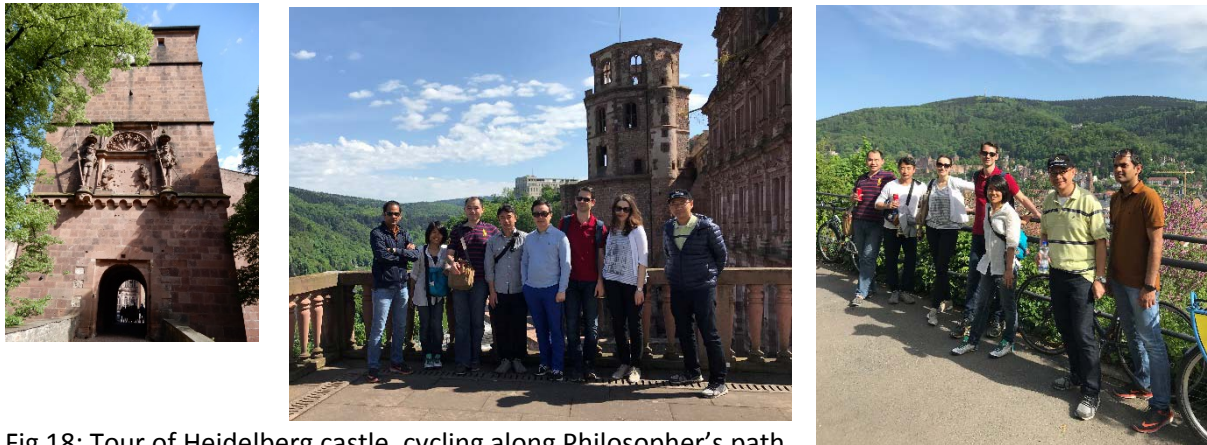


Fig 18: Tour of Heidelberg castle, cycling along Philosopher's path

On the third day, we visited ATOZ clinic. Rainer showed us several diverse operations. The AMIC technique of Rainer was so unique and easy to follow. Revision ACL surgery using BPTB graft was awesome. Meniscal repair with CMI was not something we were familiar with. Rainer gave us the opportunity to see unusual cases and it was a great learning experience. After observing his operations, Rainer, his fellows and we, the travelling fellows, presented topics and shared some discussions.

1.MPFL reconstruction: basic strain studies, surgical techniques and clinical outcomes. Mr. Denny Tjiauw Tjoen LIE, MD – Godfather (Singapore)

2.ACL Anatomy and Reconstruction, Mr. Rainer SIEBOLD

3.Double bundle ACL reconstruction with hamstring tendon using adjustable-length loop device for graft fixation on both tibial and femoral side. Mr. Ryuichiro AKAGI, MD – Fellow (Japan)

4. Meniscus repair and transplantation with allografts. Ms. Kaori NAKAMURA (Heidelberg Fellow from Japan)

5. Medial meniscus posterior root tear. Mr. Hyuk-Soo HAN, MD – Fellow (South Korea)

6. Arthroscopic autologous cartilage transplantation, Mr. Ravipati A.P. TEJASWL (Heidelberg Fellow from India)

7. Development of Personalized Best-fit Platelet-Rich Plasma Real-time Screening Platform Facilitating Tenocytes Proliferation. Mr. Chih-Hao CHU, MD – Fellow (Taiwan)



Fig 19: surgery with Prof CMI being prepared for

After scientific great dinner at a “Weisser Bock”. Large delicious. We ended the another round of local

inebriated locals!



Rainer at ATOZ clinic, transplantation.

presentations, we had a gorgeous restaurant white asparagus was so memorable stay with beer at the tavern full of



Fig 20: with Rainer in his office, and his team after dinner and drinks!

## 6. Antwerp, Brugge, Brussels; 1-5 May 2018

**Host: Prof Peter Verdonk**

Our final stop for the travelling fellowship before attending the Magellan meeting in Gleneagles was Belgium. Upon arrival at Brussel airport, we were greeted by Prof. Verdonk, and took a ride to our accommodation in Antwerp, which was an apartment of Prof. Verdonk. After a brief stop at the apartment, we drove to Prof. Verdonk’s house in Ghent. There we had a wonderful dinner prepared by Mrs. Verdonk, also with their lovely three boys.

For the second day we had some surgical cases scheduled at AZ Sint-Jan in Brugge. We planned a train ride to Brugge, and arrived at the hospital at around 11 AM. Dr. Pieter-Jan Vandekeekhover showed us one ACL reconstruction, one unicompartmental knee replacement, and a fixation of the medial femoral condyle in a polytrauma case. It was interesting that they use the EOS imaging system for preoperative alignment measurement, which is still not so common in Japan. After the surgery we had time to go for a canal boat tour in Brugge, and had a nice dinner.





Fig 21: Dinner with family of Peter Verdonk in Ghent, surgery in Brugge and boating around the canals of picturesque Brugge

Next morning, Prof. Verdonk picked us up at the apartment and took us to his hospital. We saw two total knee arthroplasties, one ACL reconstruction, and an interesting case with persistent rotational instability after previous ACL reconstruction, which he performed only lateral extra-articular tenodesis. Another interesting finding was that in Belgium the representative of the implant company was allowed to scrub and assist the surgery by preparing the grafts and implants. This seemed to be very helpful for the surgeon. After having a light lunch with Prof. Verdonk, we had some time to go sightseeing around Antwerp before dinner, and again had a wonderful dinner with Prof. Verdonk and his Dutch fellow Erick.



Fig 22: surgery with Peter Verdonk in Antwerp



Fig 23:

Orthopedica Belgica, Brussels conference centre and mussels from Brussels!

Next day we travelled to Brussel by train to attend the Orthopedica Belgica conference, and presented our studies. It was a honour to have an opportunity to give a talk at the national conference of Belgium Orthopaedic Society. Our stay in Antwerp was the longest of all stops in our travelling itinerary. We had enough time to enjoy scientific, cultural, and scientific aspects of Belgium, and Prof. Verdonk and his colleagues were wonderful hosts.

## 7. Magellan Meeting, Gleneagles, Scotland 5-8 May 2018

If there is anything that characterised Magellan meetings, then it must be the luxurious location of the meeting and the good science. We were certainly not disappointed this year. The Magellan meeting was held at the Gleneagles Hotel, the legendary birthplace of golf. Arriving from Brussels, there was apprehension at Edinburgh airport as we were uncertain of our transfer to Gleneagles. Thankfully the organisation went like clockwork and we safely arrived at the hotel. The reception that evening was a meeting of old friends, a recollection of memories and good time spent together, unlocked by the good wine!



Fig 24: Magellan society, a meeting of old friends: with Rene Verdonk, John Bartlett and Dean Taylor

The first day was on Sunday 6 May started off at 7am. Magellan meetings occupied the morning and afternoons were designed for more cultural & sports activities. Although the slot was reserved for 15 min for each speaker, our talk should be kept to 6 min with the rest for discussion. And in a room full of experts in sports surgery, one can imagine the excitement and often heated discussions that ensued after each talk. Most of the talks were related to ACL surgery. That afternoon we took a bus to visit the gardens of Drummond Caste. It was still a functional castle with the Baroness in-house. The Italianate gardens were beautifully maintained and in the warm spring sun, it was worth the time strolling the gardens. Then it was off to the Famous Grouse, one of Scotland's best whiskey distillery. We saw the distilling process then had dinner at the distillery.





Fig 25: visit to Drummond castle, whisky tasting & dinner at Old Grouse Distillery and cycling around the Perthshire countryside amidst church ruins

Monday 7 May was another early start. There was predilection of meniscus & cartilage talks during the session. Yet effort was made to finish early, so that more can play golf or cycle. Hyuk Soo went to golf while the rest of us rented bicycles. We took a 27 km cycling route that snaked up hills and undulating plains. It took us a good 3 hours to complete the ride, at the end of which we were exhausted! Down the final slope back to the hotel, Denny's (Godfather) bicycle hit a man-hole sending him flying forwards. He sustained injuries to the nasal bridge and abrasions to the right elbow. Thankfully nothing else and no one else was injured. The evening ended with drinks in the patio as we soaked in the evening sun, the hottest May Bank holiday on record (high of 28 deg C)! The Gala dinner at the Ballroom made a fitting end to the day as we spent hours chatting with Dr Bruce Reider.

On the third day Tuesday 8 May, the APKASS fellows had the task of presenting at the last session. Denny (Godfather) spoke on Shoulder Global Arc of Motion, then Hyuk Soo presented his data on results of ACL recon using Quadriceps grafts. Chih Hao presented his familiar talk on PRP and tenocytes and Ryu ended the session with his presentation on Arthroscopic repair of PCL avulsion. They were well received and generated some questions even though it was the last session of the meeting. Magellan meeting thus ended at midday and we then took a bus to Glasgow for the ESSKA meeting.

## 8. ESSKA Meeting, Glasgow, Scotland 8-12 May 2018

A restful bus ride from Gleneagles took us to the Village hotel in Glasgow. After registering at the conference, we met Joseph Ramesh, the ESSKA education coordinator. We had dinner at the nearby Rotunda, where it was evident that we had a good time at the Magellan meeting, for we continued our often heated discussion right past dinner! Clearly all of us had and were having a good time!



Fig 26: ESSKA president Roman Seil handing over to David Dejourn, William Hunter museum, a meeting of all fellows from AOSSM, SLARD and APKASS!

The opening ceremony was held on Wednesday 9 May in the auditorium, with the pomp of the ESSKA board members wearing kilts. Roman Seil gave an insightful speech on the organisational challenges of ESSKA and the many programs they have. It was an eye opener and something APKASS could collaborate and perhaps emulate. Then John Bartlett gave the first lecture on his years of

experience with TKA, appropriately titled “Natural History of Enthusiasm”. It was indeed an honour that an APKASS member was invited to give the inaugural lecture! The APKASS-ESSKA symposium was in the afternoon, during which Chen Chih Hwa from Taiwan and Lee Mung Chul from Korea were invited to speak on Infections after ACL surgery. The talks were well received in the packed room! The evening was meant for us to reach out to our fellows and residents from our respective countries. So Ryu and his fellows, Hyuk Soo and his residents all descended to the Celtic soccer match on the cold rainy Glasgow night! Chih Hao joined me and the Singapore residents to enjoy dinner at the Corinthian.

ESSKA conference this year attracted more than 3000 registrations and more than 1000 abstracts submitted. Hence the selection process was immensely competitive. Many papers from Japan, Korea and Singapore were accepted for poster and podium presentations. This speaks well of the Asian academic credibility and participation, which should increase. Most of the talks from Wednesday 9 May to Saturday 12 May were mainly related to all aspects of the knee surgery, with some symposia on the shoulders. So all of us with our varied interests, attended the talks we have preference for.



Fig 27: Day trip to Edinburgh, thanking Roman Seil for the hospitality at ESSKA and farewell to Glasgow & a most memorable travelling fellowship!

If the academic level of ESSKA was dynamic, its social activities were energetic! On Thursday 10 May we had a Fellows night where we took the opportunity to thank each host warmly. All Godfathers had to give a speech. The intimate gathering of all travelling fellows from AOSSM, SLARD and APKASS made us realise that the travelling fellowship is indeed a privilege and truly an honour! The gala dinner on Friday 11 May at the Riverside museum started off calmly at first, with speeches and ceremonies with lots of expressions of gratitude! After dinner the Red Hot Chilli Pipers played, they were Scottish bag pipers who played to rock music and brought the house down! We saw senior ESSKA members like David Dejour, Matteo Denti and even Phillipe Neyret dancing wearing kilts! What an amazing sight! The energy in the hall was so infectious, everyone was dancing! The fun continued past midnight with DJs playing contemporary music and music from the 80's. It was chaos as prim and proper senior surgeons began to dance like they were in their 20's! Needless to say, all travelling fellows, even the usually quiet AOSSM fellows, let their hair and ties down, dancing till late!

We thanked Roman and the ESSKA friends on Saturday 12 May as Ryu and Denny departed. Hyuk Soo and Chih Hao departed for home on Sunday 13 May 2018.