



## The ESSKA-APKASS DJO Travelling Fellowship Report 2016

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*“Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the earth all of one’s lifetime.”— Mark Twain*

Sitting in the departures lounge about to embark on the ESSKA travelling fellowship to APKASS, I thought about John Feagin and Werner Müller. In their wildest dreams, could they possibly have imagined how successful the concept of a travelling fellowship would become? Maybe they did. After all, visionary men tend to see possibilities before they become obvious. Being selected as a travelling fellow was one of the greatest honours of my career, and I was eager to meet my fellow fellows and godfather, who undoubtedly shared this feeling. Chosen from the four corners of Europe we would spend 25 days together visiting Japan, South Korea, China, Taiwan, and Hong Kong. So, who are we? Well, I am, Brian Devitt, from Dublin, Ireland; Paolo Arrigoni comes from Milan, Italy; Johannes Barth is from Grenoble, France; and, finally, our Godfather, Professor Mustafa Karahan, hails from Istanbul, Turkey. Join us below for a brief glimpse of our travelling fellowship experience and the many valuable lessons we learned about orthopaedics, research, and life.

### **Kobe, Japan -- Culture drives great results**

Our immersion into Japanese culture was immediate. Having arrived sporadically throughout the day, the first time we met each other, as a fellowship group, was at a dinner hosted by Prof. Kuroda and attended by his team of senior surgeons at a sushi restaurant.

John Feagin once told me you could tell a lot about a person by the first handshake. That evening, I knew I was in the company of fine men indeed. As we chatted among ourselves and got acquainted, we watched in wonderment as the sushi chef prepared our meal. The rare dexterity and skill he displayed with a knife was remarkable. I thought that if our hosts could replicate that proficiency in surgery the following day, we were certainly in for a treat.

The operating room was modern. We counted no less than 16 monitors on display. Before the case started, Prof. Kuroda demonstrated the comprehensive array of objective clinical measurements they routinely perform. First, was the assessment of the pivot shift, the Lachman, and the anterior drawer using an electromagnetic sensor. What was most impressive was that Prof. Kuroda did all the tests. He told us that either himself or one of the other senior surgeons, Dr Matsushita, performed all the assessment to guarantee testing reliability. It was very apparent that research assumed an important, and even critical, role in their practice. What is more, the culture of research was ubiquitous, starting from the top down.

The level of surgical skill on show did not disappoint. In truth, all of the surgeons we witnessed would most surely get a job in any sushi restaurant. The teamwork the surgical team exhibited was very evident. At the beginning of the case, the lead surgeon would ask if everyone was ready and they all responded “*hai*” in unison and with gusto. Also, the humility we experienced was compelling. Senior surgeons with decades of practice assisted each other.

One of the many highlights in Kobe was meeting Prof. Kurosaka, who had just returned as Godfather on the APKASS travelling fellowship to ESSKA. Johannes was particular awestruck to meet his hero and was like a little schoolgirl meeting her pop idol. “*This is a very special moment for me,*” he explained, “*I just want to touch you*”. Prof. Kurosaka captivated us with a story on how he discovered the interference screw and the great efforts he had to make to get his first paper on the biomechanics published. It was quite an honour to share the company of an orthopaedic legend.

We learned a lot in Kobe not only about surgical technique but also the culture of investigation and research. As we travelled to the airport, we all discussed what we would miss most about Japan; was it the cuisine, the culture, or the saké? We unanimously agreed that it was the warmth. By this, I am not referring to the warmth of the heated toilet seat, which we will undoubtedly all miss, but the warmth of the people and the kind and heartfelt hospitality they showed us.

## Seoul, South Korea – The path to enlightenment

Arriving into Seoul, we immediately felt the vibrancy of the city. The hotel where we were staying was in the Gangnam district, made famous by the popular song '*Gangnam Style*'. It was clear to see how this country and its people had embraced technology; from talking traffic lights to modern cars, simply walking down the street was like entering a futuristic movie set.

In need of some reflection and serenity, we ventured to a Buddhist temple. Prior to entering, our guide explained the symbolism of joining hands together in prayer; one hand represents Buddha's mind while the other signifies our own; by placing the two together we join him in spiritual harmony. Murals surrounded the temple and told the story of Buddha's path to enlightenment. Inside, locals prayed in a deep flexed kneeling position. It was quite remarkable the number of people we saw with varus knees and even more astonishing was how they managed to achieve such a posture during devotions.

Samsung Medical Centre (SMC) was the first hospital we visited. Prof. Wang met us on our arrival. He was impeccably dressed in a short white coat, which resembled a dinner jacket. The attire was certainly appropriate for what followed was a banquet of superior surgery. The appetiser was a sumptuous double-bundle ACL reconstruction performed with such swiftness and precision that we dared not to blink in case we would miss something. The chef even included a special garnish of a lateral and medial meniscal repair. The posterior horn of the medial meniscus was neatly fixed through a posteromedial portal used a spectrum device and tied down with the SMC knot. The sous-chef said it would have been a shame to come all this way not to have had a taste of it! Finally, our main course was a lateral meniscus transplant. The roots were attached using a single bone block and the periphery of the meniscus was secured with an inside-out sutures. If the Michelin guide awarded stars for surgery, this place would certainly have three of the finest. It was truly a delectable feast.

From SMC we were whisked to Konkuk University Hospital to observe Prof. Kim operate. The first case was a posterior cruciate ligament and posterolateral corner reconstruction. He worked with the decisiveness and confidence of a man who could operate in his sleep, and perhaps he did, such was his talent. Each movement was purposeful and he never repeated a step. It was quite a sight to behold. In his scrubs, he looked a little like the statues we had seen the previous day, so we affectionately nicknamed him '*Dynamo Buddha*'. Orthopaedic surgeons sometimes think of themselves as gods, but this man certainly had divine talent. At one point I spotted Johannes on his knees. I am not sure if he assumed the position to gain a better view of the surgery, or if he was genuflexing at the Prof. Kim's feet.

Prof. Lee hosted us at Seoul National University Hospital on our final day. For the first time on our trip, we had a chance to observe some shoulder surgery, performed by Prof Kim – a different Kim to the man we had met the previous day. Johannes, Paolo, and the Godfather, being shoulder surgeons, were giddy with excitement. We watched a very nice rotator cuff repair followed by a shoulder stabilisation. Next, we had the opportunity of watching the master, Prof. Lee, at work. Like a skilled carpenter, he effortlessly carried out in successive cases an opening and closing wedge tibial osteotomy. He shared with us his indications for each procedure, which were all based on extensive experience and rigorous follow-up. The ultimate procedure of the day was a first for us all and was performed by Prof. Han. He carried out an ACL reconstruction with a quadriceps tendon using rectangular tunnels.

I always find it intriguing just how well we can communicate in the operating room without speaking and while wearing a mask covering most of our face. We let our eyes do the talking. Over those two days, we added '*superlative*' to our ocular vocabulary. As we looked at each other in wide-eyed amazement, we were acutely aware the surgery we were witnessing was some of the finest we had ever seen. But, coupled with the feeling of amazement there was also a slight sense of inadequacy. We realised that our South Korean colleagues had just raised the bar in terms of surgical excellence. They were approaching surgical nirvana. We paid our respects to our hosts by joining our hands together; this time the left hand represented the Korean mind, the right the European. It is true to say we had found enlightenment in South Korea.

## Shanghai, China -- Reflections from the window to the world

I was hoping to get a good view of Shanghai when we came in to land but, unfortunately, the city was covered in thick cloud. It was the first time any of us had been to China. We were really looking forward to the visit but I must admit there was a palpable sense of trepidation as we ventured into a country that was so unfamiliar to us. Shanghai is a huge city with approximately 30,000,000 inhabitants. In China, Shanghai is regarded as the '*Window to the World*' and it was easy to see why. Juxtaposed with traditional Chinese temples stood skyscraper buildings, emblazoned with the names of multinational conglomerate companies. It was in one such Buddhist temple that we had our first insight into the Chinese psyche. Unlike the modest Korean temple we had seen only a few days before, the amount of gold on display was dazzling -- gold is a sign of wealth, power, and strength, which is very important to the Chinese people.

That evening we met Prof. Chen and his staff for the welcome dinner. At the meal, Prof. Chen asked us to join him for a glass of Chinese white wine. We had been tipped off by our Korean colleagues that the white wine was not like we were used to in Europe. For a start, the glasses were the size of thimbles. We were assured that the particular bottle we were to sample, which was called Mao Tai, was top class. We were also informed that it was customary to drink the entire volume like a shot. Glasses charged and toasts made, we duly obliged and swigged our drinks. What I experience next would be best described as akin to drinking molten lava. As for the taste, I honestly couldn't tell you. My tongue didn't get a look in, as I tried to calculate which organ I feared for most, my liver, my brain, or my poor oesophagus. I settled on my brain when I discovered the alcohol content was 55% and it was expected that we would finish the bottle.

We certainly slept soundly that night. The next day, it being Saturday, there was no surgery. Prof. Han, one of our hosts, had arranged for us to join him at a cadaver lab. Our godfather, Prof. Karahan, gave a master class on ACL reconstruction, while myself, Paolo and Johannes carried out a posterolateral corner reconstruction together. It was a nice experience to share with our hosts some of our own techniques.

At the end of the weekend, we were desperate to get back into the operating room. On Monday, Prof. Chen performed a single bundle ACL reconstruction, which was remarkably similar to the one Prof. Karahan had carried out two days earlier; great minds think alike. We watched with interest his neat little trick using a transpatellar (Gillquist) portal to view his femoral tunnel position.

After the procedure, we ventured outside of our comfort zone. We had learned that traditional Chinese medicine was still widely used in China and Prof. Chen had arranged for his colleague, Prof. Lei, to demonstrate to us a variety of treatment techniques. It was fascinating to see him perform acupuncture and cupping and to listen to him eloquently describe the philosophy behind traditional Chinese medicine. It was quite amazing how they married modern medical techniques with traditional practices. We even referred Prof. Lei a patient of our own. Prof. Karahan had been plagued with sinusitis and, being a good sport, he agreed to undergo some acupuncture treatment. I don't know if it was just me, but his oration at the research symposium later that afternoon was certainly delivered with more gusto than usual.

In Chinese philosophy, yin and yang describes how contrary forces are actually complementary, interconnected, and interdependent in the natural world. We experienced this principle on a daily basis during our time in Shanghai. Traditional co-existed with modern, wealth coincided with poverty, and chaos concurred with regulation. We were grateful to have experience China's window to the world. But, the thing about windows is that they work both ways, looking out as well as looking in. Initially, like the weather we experienced, a curtain of cloud obscured our view. However, as the days passed, the cloud lifted and we finally got a vision of what makes these people and this country so special.

### **Chengdu, China – Plus ça change, plus c'est la même chose**

None of us had any idea what to expect of Chengdu. The very fact that our flight was to take three hours from Shanghai suggested that we were going to get a very different experience of China. From the moment we arrived, we knew this to be true. Entering the bustling city was like stepping into a sauna with your clothes on, such was the temperature and humidity. The sheer volume of people ruled that observing '*personal space*' was not high on the agenda. We were buffeted from the front, back and each side as we battled our way into our hotel. Chengdu has a population of 10,000,000 in the city and a further 10,000,000 in the surrounding area. It is the provincial capital of the Sichuan province in Southwest China. The region is famous for its cuisine of spicy chillies and peppercorns and most notably the Chengdu hotpot, a fact we will not forget for some time to come.

The hospital we visited is the largest single unit hospital in the world with an amazing 4,800 beds. It is called West China Hospital because it is the tertiary referral unit for the western region of China, even though it is located pretty much in the centre of the country. Prof. Cheng, the associate dean of the hospital, Prof. Jian Li, our host, received us, along with the head nurse of the sports medicine department. Much like in our own institutions, we immediately recognised that the head nurse was a person of great importance and we saluted her with suitable deference. It was very evident that they took immense pride in their hospital and there was a strong team spirit. After the reception, the whole group went for dinner to a local restaurant, where we were treated to Peking duck.

The next day we went to the hospital to observe Prof. Li and his team operate. The operating facility was extremely modern but it was interesting to see the use of green cloth drapes, which had long disappeared from our operating rooms. It was obvious that cost was an important consideration within the hospital but it certainly didn't detract from the quality of surgery we witnessed. It was interesting to see how effectively the surgical team communicated and how familiar the preoperative surgical routines were. Prior the commencement of surgery, the circulating nurse performed a surgical time out and the lead surgeon briefed the team on any specifics related to the case at hand. We noticed that each of the knee patients had a red ribbon tied around the operative limb. The ribbon had a dual function; not only did it mark the correct side but it also was considered good luck for a speedy recovery.

Over the next three days we saw a fantastic array of surgical procedures, predominantly knee operations but also shoulder and elbow. The level of arthroscopic skill was impressive but what was most remarkable was that Prof. Li was predominantly self-taught. We were fortunate to see him perform two posterior cruciate ligament reconstructions over this period. The confidence and expertise he exhibited in accessing the posterior aspect of the knee was superior. As we marvelled at his speed and proficiency, Prof. Li humbly responded that he gets plenty of practice. The region has a very high number of motorcycles and a large incidence of road trauma. He performs over 70 multi-ligamentous knee reconstructions per year. Even despite this huge workload, there was a big emphasis on research. Patients are followed up rigorously with subjective and objective measures. Included in this is a postoperative gait analysis using computer navigation, which is completed by the ward nurses.

Part of the fellowship experience is the two-way exchange of techniques and experience. Johannes was asked by our hosts to demonstrate his technique for the mini-open Latarjet procedure to treat a patient with recurrent shoulder instability. He duly obliged and gave a masterful display, despite the lack of his standard instruments. It struck me as I watched him operating with our host that although our upbringing and training are very different, there is a commonality in orthopaedics that binds us together. For a place and people that initially seemed so foreign and diverse, we are in fact remarkable similar.

### **Taipei, Taiwan – It's the little things that matter**

One of the special aspects of a travelling fellowship to Asia is that every city and country is entirely unique and offers a completely different experience. Although the chaos of Chengdu's traffic was compelling, it came as a welcome relief to be in a city where the people seemed to comply with the rules of the road. Motorbikes were once again in plentiful supply, but here they carried a solitary passenger as opposed to entire families, pets and furniture as we had just witnessed. It almost came as a novelty to see people actually wear safety helmets again. Coming from the vast expanse of China, it was interesting to learn just how small the island of Taiwan is; it stretches 392 km from North to South and 144 km from East to West. We immediately recognised many similarities to Japan, not least the heated toilets. It came as no surprise to learn of the complicated history of this proud country over the past two centuries with influences from European settlers, Japanese rule, and the Republic of China governance.

We had the chance to relax on our first day in Taipei and travelled around with Dr Wu, who had travelled to Europe as an APKASS fellow two years previously. The drive up into the mountains was like a scene from the Game of Thrones; the steam arising from the hot springs created an eerie backdrop, which was made more sinister by the whiff of sulphur in the air. It reminded me of a chemistry experiment gone wrong. Dr Wu was a wonderful host and brought us to an outdoor gallery which depicted the Chinese martial art of Tai Chi. It was very interesting to learn more about the philosophy behind this exercise, which is practised so widely in Asia, particularly by the elderly population.

Unfortunately, the surgery planned for the following day had to be cut short due to a royal dignitary requiring an emergency procedure. Instead, we were treated to some of the finest Dim Sum in Taipei. Over lunch, Prof. Chen shared with us his experience as a travelling fellow in 1995. He spoke of how the fellowship had shaped his future career. He enthralled us with his outstanding research using hydrogels and photopolymerisation for ACL-graft-bone interface healing. The poor queen mother's misfortune was certainly our gain.

The final two days were a blur to be honest. We observed shoulder surgery in one of the biggest operating rooms any of us had even seen; we were even tempted to start a five-a-side football game. We discovered the 'Air Shower', which was essentially a sealed chamber separating the changing rooms from the main operating room, and became the source of great amusement. We then took a high-speed train down to the southern most tip of the island to the national sports training centre. It was a unique experience where we had the opportunity of watching Olympic athletes preparing for the games. We even managed to squeeze in another operating session prior to our final flight together to Hong Kong. We left exhausted; eating, drinking, and laughing are hard work.

### **Hong Kong – This is not the end but the end of the beginning**

If Taipei was a blur, Hong Kong was a dense fog. The travelling fellowship culminated at the APKASS Congress. The occasion provided the opportunity of meeting up with all of our hosts over the previous three weeks and the Sociedad Latino Americana de Artroscopia (SLARD) fellowship group. But better still, we finally had the chance to meet our guardian angel during our fellowship, Ms Cheung, the APKASS fellowship administrator. Although none of us had ever met her we all felt we knew her such was the constant attention and support she offered us through her kind emails.

The time in Hong Kong reminded me of the last few days of school. We knew the experience would come to an end and after three weeks away from our families we were looking forward to going home, but at the same time we were desperate

to savour every last minute of our remaining time together. The whole weekend was like one big reunion. Everywhere we went we bumped into someone we recognised. Whereas we had initially greeted them with respectful handshakes, we now embraced them and laughed heartily together. Prof. Yung and Prof. Chan had arranged a wonderful meeting, where we had the opportunity of seeing our former hosts present their work. We had a real sense of *'I know that guy'*, which is really what this experience is all about. As part of the meeting, we had to present our own papers and then a brief report about our travels. In the past, the Godfather had assumed this role. However, we didn't have just any Godfather, we had a *'Karahan-Godfather'*. In a gesture that epitomises his complete selflessness and eagerness to promote us as fellows first, he simply said, *"You will all present. This is a fellowship after all, not a Godfathership!"* I still can't believe he saved the best line until last.

The formalities over, we joined our fellow Fellows for one last hurrah at the gala dinner. As we had done over the past 24 days, we ate together, drank together, danced together, sang together and laughed together; there was also a tear or two if the truth were told. After the dust had settled the following day, we went our separate ways. We were sad to say goodbye to our friends, but happy in the knowledge that they were now friends for life. We had shared something truly exceptional time together that no one could ever take away.

As I sat in the departures lounge reminiscing about the trip, my mind was drawn back two days and our excursion to Macau with the SLARD fellows. Prior to departure we had to go through immigration. It was quite an amazing scene. There we stood eight orthopaedic surgeons with passports from eight different countries sharing our common interest in a land that was foreign to all of us. This was made possible by two orthopaedic surgeons, one Swiss and one American, who had the vision and drive to make their dreams our reality.

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