2nd ESSKA-EKA European Knee Arthropasty Traveling Fellowship
19 September - 11 October 2015

Fellows:
Dr Octav Russu, Ortopedie si Traumatologie, Târgu Mureș, Romania
Dr Tom Piscaer, Erasmus Medical Center, Rotterdam, The Netherlands

Sittard-Geelen, Zuyderland Medical Center, The Netherlands
Host: Dr Nanne Kort

We arrived in the beautiful town of Sittard and enjoyed a warm welcome dinner hosted by Dr Nanne Kort and his family. The next afternoon, we relaxed on his speedboat on the river Maas and spent the evening at his ranch for dinner. The medical part of the fellowship started the next morning at the futuristic Zuyderland hospital in Sittard — a real 21st century hospital with robots, single bedrooms and rapid recovery protocols. Dr Kort used patient specific instrumentation for the total knee arthroplasties. For a total knee, only two surgical nets were opened, there was no stock and surgery time was very short. The rapid recovery allowed the patient to go home in the afternoon after surgery, already walking on stairs with minimal pain. He also showed us a bi-cruciate retaining knee implant. There was also a cruciate-retaining total knee arthroplasty on which Dr Kort is doing a trial. In the afternoon, we had a scientific meeting with the whole department. The hosts presented two interesting works: one about patient-specific positioning guides for TKA and another one about functional outcome assessment in TKA. The day ended with a dinner in a cosy restaurant nearby.
Stadtisches Klinikum Brandenburg, Brandenburg, Germany
Host: Prof. Dr Roland Becker

After a welcome by the entire orthopaedic team, we started in the OR. Prof. Roland Becker performed an operation with a patient-specific uni-condylar knee implant, showing a nice way of bone preserving partial knee arthroplasty. A TKA and a patella-femoral arthroplasty, a distal femoral osteotomy and a TKA with a ligament-balancing device followed. We discussed and learned about soft tissue balancing and osteotomies around the knee from Prof. Becker. The day finished with a special choir concert at the local church. Prof. Becker invited us for a great run through the East German forest, showed us the city of Brandenburg by segway and took us on a boat ride on the river Havel with everyone from the orthopedic department. During the weekend, we strolled around the palaces of Potsdam discussing orthopaedic surgery throughout Europe and science in orthopaedics. We enjoyed a nice dinner at his house on the last night.

Munich, Germany, Orthopedic Clinikum Munich,
Host: Prof. Dr Herman Mayr

We arrived on Sunday, in the middle of Oktoberfest. After a short pit stop at this festival, we started the next day filled with total knee replacements. Straightforward surgery, impeccable organisation, excellent explanations were the key words of a beautiful Monday. Our host, Prof. Hermann Mayr, organised a scientific symposium in which the history of ACL surgery, technical mistakes and their connections with early failure in total knee replacement, the German cartilage replacement register and approaches for total surgery in a multiple scarred skin were presented. The second day, we spent time at the OR where Prof. Mayr performed a PCL and PLC reconstruction using the Larson technique. In the outpatient clinic, he showed us his way of working and we discussed every case. In the evening, our host decided that instead of a dinner in a typical Bavarian restaurant we should watch a Champions League football game, which we happily agreed to.
Bern, Switzerland, Insel Spital
Host: Dr Sandro Kohl

A nice welcome dinner with Dr Sandro Kohl and one of his residents Sufian Ahmad in a typical Swiss restaurant made us feel that we were in Switzerland right away. Next morning we were taken to the InselSpital: well-known for Reinhold Ganz and Thomas Muller. We assisted Dr Kohl on two revision knee surgeries — the second was a re-revision with a broken cemented tibia stem. At the outpatient clinic, we were impressed by the difficult academic pathology, there was not one clear-cut case.

We took a cooking class with the entire knee department team and were taken to the beautiful Swiss Alps for hiking. One of the residents, Anna Krismer, who is also a mountaineer, guided us up on the top of the Vaul Horn. An amazing experience!

We assisted Dr Kohl on an acute knee dislocation — with an impressive open PCL and ACL reconstruction with internal bracing. There was also a nice PLC reconstruction using the LaPrade technique. The Bern experience was great! The difficult pathology impressed us and the hospital and the OR were equipped with modern technology. Most of all, the people were very open about discussing cases and research and the future of orthopaedics. We also learned to approach difficult cases, infection and revision arthroplasties.
Rizzoli Orthopaedic Institute, Bologna, Italy
Host: Prof. Stefano Zaffagnini

We arrived in late afternoon during Bologna’s patron saint’s festival so we enjoyed a beautiful opera concert in Piazza Maggiore, the main square. The first morning’s OR was on total knee replacement and partial knee replacement. Unfortunately, scheduled a computer-assisted knee replacement had to be postponed but nevertheless it was demonstrated in one of the many Rizzoli labs. Besides that, a young physicist showed us earlier and future devices related to pivot-shift diagnosing this team is working on. Science day continued with a tour through the huge research facility, where our guide, Cecilia Signorelli, showed us that part of the lab where, with the aid of a plasma cannon, another team works on a project about ceramic coating of polyethylene surfaces. This day ended with a wonderful dinner in a beautiful Italian restaurant where we discussed surgery and science with our host Prof. Zaffagnini. The following day Prof. Zaffagnini organised a scientific meeting in the Aula Campanacci where we discussed the abductor tubercle ratio as a reference point for joint line preservation in total knee revision cases, computer navigated TKA and dynamic RSA for kinematic assessment of TKR. The Bologna experience finished with an absolutely impressive tour on the historical part of the Rizzoli Institute: the church, the library with all the important old and new reference books and magazines on orthopedics and last, but not least, Vittorio Putti’s office, with the collection of ancient medical books (Ambroise Pare and Vesalius, Galenus, to mention a few).

Clinique de la Sauvegarde/ Hospital Jean Mermoz, Lyon, France,
Hosts: Dr David Dejour/Dr Michel Bonin/Dr Guillaume Demey

We had a welcome dinner with Dr David Dejour and Dr Guillaume Demey — it was a typical French culinary experience.

We started the next day in the OR with Dr Dejour at the Clinique de la Sauvegarde — an impressive private clinic with well-arranged logistics and a very well-trained operating team. Everything in this clinic worked very smoothly. Dr Dejour explained that pre-planning with CT and X-rays and the instruments of the total knee made it possible to position the knee arthroplasty in the exact well rotation and varus-valgus alignment. Of course, Dr Dejour showed us a trochlea plasty on a dysplastic knee. He also showed us a revision ACL reconstruction with the outside-in technique for the femur and an extra-articular lateral tenodesis. In the evening, we were treated with another very nice French culinary experience. A day at the OR with Dr Michel Bonin at the Hospital Jean Mermoz followed. He started the day with a custom-made, patient-specific implant. He told us about the French way of pre-planning a total knee and how to
approach a knee with a dysplastic lateral condyle. On the last day we were invited to the Clinique de la Sauvegarde again to operate with Dr Guillaume Demey. He showed us the different ways of performing an ACL reconstruction — outside-in, all-inside, hamstring/BTB, lateral tenodesis and press-fit BTB.

In the afternoon, we had a teaching session in which the indications of using a patello-femoral prosthesis and a variety of clinical cases passed.

The fellowship ended with a nice walk through the beautiful old Lyon with Dr Dejour.

In Lyon we learned a lot about biomechanics of the patello-femoral joint and the knee. It was very nice to experience the exact pre-planning before any surgery which helped a lot in thinking about the exact pathology and the approach for any surgery.

All in all, in the fellowship we experienced the total knee. The importance and goal to bring back the knee kinematics in an original way was shown everywhere. The use of patient specific instrumentation and patient specific implants made its introduction throughout Europe. The operation pre-planning for osteotomies as well as for knee implants was used everywhere in a well designed fashion. In all institutes we visited, research was the basis on which new or more or less experimental techniques were monitored. We were very impressed with the logistics in the different clinics.

Orthopaedic surgery in these institutes in Europe was performed with a great deal of enthusiasm and passion, never to lose thinking about the indication and operating techniques. They all wondered what the future of treating knee pathology would bring us — is it the biologically maintained knee by the use of disease-modifying drugs or will tissue engineering be the next step in improving the degenerative joint? For now, the patient specific approach might be the next step.

We gained a lot of new friends and good contacts throughout Europe. Proposals for co-operation in research with the Netherlands and Romania were made.

WE WOULD LIKE TO THANK ESSKA, EKA AND ALL THE HOSTS AND THEIR TEAMS FOR THIS GREAT EXPERIENCE. WHAT A GREAT PROFESSION WE HAVE!!