

IBRA scholarship report

Information about Scholar and fellowship

- Name of Scholar: Paul Tavakolian M.D.
- Country of Citizenship: USA
- Name and Country of Training Center: University of Arizona/Banner University Medical Center, Phoenix, Arizona, USA. Hand, Upper Extremity, and Microsurgery Fellowship
- Name of Fellowship Director: Scott Edwards, MD

- Scholarship Type: Program B
- Scholarship date (from – until): March 2020 @ ClimBA Institute for Hand and Upper Extremity Surgery, Buenos Aires, Argentina. Rotation and site directors: Drs. Aldo Falco and Christian Perrotto.

Professional and personal experience

- What were your professional and personal expectations of the scholarship?
 - * Professional expectations were to observe and assist with Upper Extremity surgery and techniques specific to South America and notably advanced arthroscopy techniques. Personal expectations were to further refine my knowledge of the Spanish language, make long lasting relationships with Argentinean colleagues, and learn about and experience the cultural and tourist sites of the beautiful country.

- What is the main focus of the IBRA training center (in general and of the department) you assisted in?
 - * Main focus of the IBRA training site was Hand and Upper Extremity surgery, complete with 2 years of fellows, each with 2 fellows per year, and a set of core training faculty which the fellows train with. These faculty members are typically complete upper extremity surgeons including shoulder surgery. This training site and center is a “privademics” model. The leadership here are very involved in advanced surgical techniques, notably arthroscopy, being the avant-garde in logistics and innovations, and academic teaching.

- What did you do during your scholarship/how were you incorporated in the training center’s daily routines/activities:
 - * I was treated much like an advanced fellow and at times a visiting professor. I was able to observe most all surgeries on a daily basis along with accompany the faculty and fellows in a clinic setting given that I was able to understand and speak Spanish to a satisfactory level. Surgical cases that were more advanced, more interesting, or where my input was valued, I was allowed to scrub and assist. Given my knowledge of certain hand surgery techniques from my own training, I was asked to present at Grand Rounds one week too which was very well received and both faculty and fellows were grateful for the explanation of our experience with Medartis Scaphoid Plating and treatment of Scaphoid Non-union.

- How many surgeries have you assisted and which concrete technical modifications and methods have you seen?

*I participated and assisted in about 20-30 surgeries a week and saw approximately 20 clinic patients a week, would have likely participated in approximately 100 cases had my rotation not fallen short given global circumstances surrounding the Coronavirus pandemic. I feel very lucky that this site was very active in advance arthroscopy techniques as this was one area of my training I wanted to refine.

- Specify your 3 to 5 favorite procedures and/or new skills you could acquire & Which procedures can potentially be adopted in your future practice and how do they compare to your experiences at home:

1) Arthroscopic Ganglionectomy: this technique for excision and treatment of dorsal or volar ganglion cysts about the wrist is one that is not very common throughout my career or training. This was one of the many arthroscopic techniques that the surgeons here utilized. This was a very valuable technique to learn as not only is it an effective treatment for dealing with these common cysts but also allow the surgeon to practice arthroscopy and visualize normal arthroscopic structures often so that when pathologic structures are seen, they are recognized. Normally, at my training site an open technique is used given that it is quick and the outcomes are similar to arthroscopic techniques however as I desire to get more facile with wrist arthroscopy, I can see myself transitioning to an arthroscopic technique with the lessons and notes I have taken during my time at this IBRA training site.

2) Minimally Invasive Plate Osteosynthesis (MIPO) treatment of distal radius fractures: this treatment of one of the most common fractures an upper extremity surgeon sees was an interesting method for fixation. This technique is similar to methods that an orthopaedic surgeon uses to fix tibia or femur fractures and a technique was that relatively new to me in the setting of the wrist. The technique allows for a surgery that is typically done in a 4-5cm incision to be done in 2 x 1-2 cm incisions with the theoretical benefit of less soft tissue dissection and less post-operative pain along with plate coverage by muscle. I found this technique to be quite interesting however the time intensiveness of the procedure and technical difficulty seemed to outweigh the benefits of a much quicker open procedure that can allow better visualization of the fracture with similar if not better overall outcomes. I do believe that I will incorporate various aspects of this technique in the future including the reduction technique and cannulated screw supplementation techniques.

3) Elbow Arthroscopy: in conjunction with the thought process of minimally invasive and innovative surgery, 2 procedures that I observed and learned from were with elbow arthroscopy: **A)** Arthroscopic lateral epicondyle debridement for chronic lateral epicondylitis. This method seemed to have some clear advantages of being able to debride the affected tendon from deep to superficial with excellent visualization. This is in contrast to the more common open approach I am trained to perform. The technical difficulty of elbow arthroscopy was evident with this technique however quite effective.

B) Arthroscopic Elbow lateral ligament reconstruction. This technique was quite eye opening and something that I plan to incorporate into my practice in the future as the visualization was amazing and the outcome with regards to stability was obviously beneficial. Our typical open techniques are much more invasive. I feel that I would need to practice this technique more but I am grateful for the instruction.

- What was the most significant personal experience of the scholarship for you (e.g. cultural exchange etc.)?

* The most significant personal experience for me was the relationships I built with the current residents, fellows, faculty, and staff there. I feel that I was welcomed into a family there with everyone wanting the best for my experience and well-being. I have continued to stay in touch with everyone there since my early departure and look forward to them being close colleagues and friends for years to come. I was able to further refine my ability to speak conversational and professional Spanish given the immersion into that society. I frequently utilize Spanish in the USA with my Spanish-speaking patients given my location in the South. I cannot express in words my gratitude towards all my hosts and new friends that I made in that beautiful country.

Closing words

- Tips to future scholars (housing, traveling etc.)

*Housing: AirBNBs were quite affordable for a nice place for the month. The Palermo or Recoleta area would be recommended as they are a nicer part of town and walking distance to the training site. No need to rent a car there and parking can be difficult at times.

*Traveling: The main international airport in Buenos Aires is Ezeiza Airport (EZE). It is quite far away from the city center however we found it best to pay a private driver to get you into town. Uber and the Taxis have a somewhere contentious relationship there, notably at the airport so getting an Uber is difficult. Uber in the city itself works very very well and I never had a problem getting around for places that were more than walking distance. Buenos Aires also has 2 more smaller airports, one of which was named Jorge Newberry Aeroparque (AEP) which was close in the city center, flew everywhere domestic, and easy to get in and out of.

Future rotators should definitely consider domestic travel in Argentina while there to Bariloche, Patagonia region, Ushuaia, and even Uruguay.

* Money: the US dollar is quite powerful in Argentina but the economy and inflation fluctuates more than imaginable to us in the US. Bring some US dollars with you and exchange into Arg Pesos as you need it and a reputable exchange facility (don't exchange with street side hecklers). US Dollars, Euros, Pounds go a long way there.

- Acknowledgement (thanking IBRA and the training center)

*1000 thanks to everyone in Buenos Aires for hosting me in their country, teaching me their techniques, being open to my own techniques and experiences, and always making sure that my needs in a foreign country were being met and always being so welcoming. Drs. Aldo Falco and Christian Perrotto were incredibly nice and welcoming to me and I

can't thank them enough. Their fellows are incredible people and I look forward to being in close contact with them and the faculty in the future. Their own fellows have had their IBRA rotations canceled due to the worldwide pandemic and for that I have great sympathy for the experiences they could have had. This IBRA international opportunity is worth so much for the advancement of medicine, innovative ideas in our fields, and making worldwide connections and colleagues. My sincere thanks to the IBRA foundation for allowing me to participate in this unforgettable experience.