WFNS-Aesculap Paediatric Neurosurgery Fellowship in Tübingen (1st July 2020 - 30th September 2020)

Dear Professors,

I am writing this letter in order to express my gratitude of participating in WFNS-Aesculap Paediatric Neurosurgery Fellowship in Tübingen between 1st Jul 2020 and 30th Sep 2020.

I am a neurosurgeon at "Marie Curie" Childrens Hospital in Bucharest Romania from 2017, a national reference centre, a multidisciplinary environment where we are facing every day new and challenging cases. We are trying our best to remain always updated in the field in order to provide our patients the best therapeutic options. I have finished my training in Cluj Napoca - Romania. I have had the opportunity to work, during residency with all the senior surgeons and residents in 4 different neurosurgical departments in Romania, Belgium and Switzerland. This is the 7th neurosurgical department I have had the chance to see in the last 10 years but for a 3 months concentrated period I have had the most enhanced learning posibility.

In our small department in Bucharest we are often facing "big" operations. I have also said that no intervention is difficult if you do it frequently enough, but having good mentors is as important as the surgical practice. The beauty, but also the danger of this paediatric neurosurgical field is the high variability among patients and pathologies approached. As there are no established guidelines in our country, witnessing the case-management in Tubingen, a world renowned reference centre, confirmed many of our own therapeutic strategies.

After 4 years of dealing with the diversity of this field this fellowship was something different, a unique and most useful experience. In this "fellow" period I've had had the time to look back and retrospectively compare the solutions offered here with our own case-management. Naturally I've had many questions and fortunately Professor Schuhmann is a great teacher, always willing to share his hardly gained expertise in practice and clinical research. Besides the medical part, also the human part of interacting with patients and colleagues was an example for me to follow. I have never seen him tired after daily 12h+ of work, always calm and enthusiastic, explaining, searching or providing therapeutic solutions.

I have tried to participate at all activities concerning paediatric neurosurgery. I have attended daily elective and emergency interventions, the day-long outpatient clinic on Mondays, webminars and multidisciplinary oncologic, craniofacial and spina-bifida meetings and consultations. I have observed or assisted about 100 paediatric interventions, most of them cases with complex operative and perioperative management and I was engaged all the time in case based discussions with Professor Schuhmann. Assisting these surgeries, the indication-making and the follow-up, I have gained peerless experience.

It's difficult to resume a short list of the most important lessons learned. For example the chronic overdrainage consequences in hydrocephalus, surgical treatment of secondary

craniosynostosis, ICP monitoring and data interpretation, using the dural patch for closure in spinal lipomas, improving the laminotomy technique, many of the ultrasound applications in neurosurgery, the importance of multidisciplinary conferences and outpatient clinics, most complex tumor management and increasing the resection rate, the intraoperative assurance by proper neuromonitoring, the importance of having detailed patient files and a structured patient database, and so on.

One of the mottos of Professor Schuhmann that I've liked the most was "work hard, relax hard, and afterwards work harder" as the balance in life alongside with patience, courage, manual precision and curiosity for knowledge are, I think, the most important features of a neurosurgeon.

The organisation and structure of german hospitals, the model of reference centres system enhances doctors to attain their medical potential. I have interacted with many members of the staff but mostly with Dr. Jordana Sosa, Dr. Julien Zipfel, Dr. Isabel Gugel, Dr. Katja Macoustra and Dr Susanne Kerscher and I admire their devotement. Neurosurgical training, is a hard job in every department, but here they get the chance of learning from the best, so it really worths the effort. I wish them best continuation in their career.

Ms. Susanne Efferenn, was my first contact in Tübingen and has guided me through all this program and I am truly grateful for her kindness, enthusiasm and professionalism. All the international visiting doctors are very well received and informed by her throughout the period spent in the department.

In this kind of high-volume department, with daily interventions in 5 OR's covering all the neurosurgical pathology, it is not easy for the staff members to always have around them visiting doctors or students, but in Tübingen, every one of them, depending on the interest, is very well integrated regardless of the language-barrier. I have had the possibility to observe also many adult surgeries as there was the possibility to move between the OR's in order to watch the surgical steps of interest in concomitant surgeries. From the adult cases I was most interested observing some procedures I have only read about or have seen before only in presentations and those procedures where equipment, unavailable for the moment in our department, was used.

I have also watched Professor Tatagiba operating some of the most complex oncological and vascular cases, always with calm and great precision as any neurosurgeon should aspire. I have tried to assimilate especially the technique of vestibular schwannoma resection with its origins in Hannover and perfectioned over the years. He was also very kind, and in the two meetings I have had with him at arrival and at departure, he provided me with many information about the department and encouraged me to benefit the most from this experience and for the future.

As part of the program I have had the unique opportunity to do a presentation in the hospital's conference hall about my homeland and hospital. At the end of this period we have established a formal cooperation agreement between our departments that I hope will be fruitfull in the future.

I am aware that in medicine we are engaged in a lifetime-long training and this period I have spent here was a unique opportunity for accelerating this process. Fortunately there is an online globalisation of information, and weekly there are many webinars, case discussion groups so now the teaching and the science is more available than ever for everybody.

In Tübingen I have found a great environment for learning, starting with a nice place to live in a green and quiet neighbourhood ending in the "state of the art" department of neurosurgery. I would recommend this fellowship or any other "Tübingen neurosurgical experience" to any of the young neurosurgeons willing to push things further in their practice. Even if one doesn't have the chance to visit, thanks for the detailed and very well structured database, almost all the activity is published in the biggest neurosurgical journals and it is presented yearly in many congresses and conferences.

Now I am back to work at my hospital in Romania with a refreshed energy. I have already successfully used some of the technical tips I have learned in Tübingen. I hope this fellowship was an extra engine for getting me to the next level in the paediatric neurosurgery career.

So this is why I am thankful for this Tübingen neurosurgical summer. This is just a resume of what I have learned from Prof. Schuhmann, Prof. Tatagiba and from their department. I hope that many more like me will have the chance of attending this fellowship.

Best Regards,

Sory Ibrahim Fofana, MD