

**Foundation for SMFM
2020 Garite Mini-Sabbatical Recipient**

“Surgical Approaches and Outcomes of Minimally Invasive
Fetoscopic Surgery”

Jessian L. Muñoz MD, PhD, MPH
MFM Fellow
University of Texas Health San Antonio



The beauty of Maternal-Fetal Medicine as a subspecialty lies in the diverse pathways within the field and the opportunities to learn while you grow as a young physician. I myself was a patient of life-saving pediatric surgery and knowing the impact of this on my life has led me to pursue a career in fetal medicine and surgery. Fetal surgery requires continued mentorship and support. The Foundation for SMFM’s Garite Mini-Sabbatical Grant allowed me the privilege to work alongside the elite team of fetal surgeons at Texas Children’s Hospital (TCH).



The purpose of this sabbatical was to acquire knowledge and skills as it pertains to the care and management of complex fetal cases. While at TCH, I became an integral member of the Fetal Intervention team. This included team rounding, clinic consults, didactic lectures, surgical planning/coordination meetings as well as intra-operative and postoperative management of these complex cases. The team at TCH is extremely diverse and while my primary mentor was Dr. Alireza Shamshirsaz, I was able to learn from the entire team including Drs. Belfort, Donepudi, Espinoza, Krispin, Nassr, and Sanz Cortes. Dr. Sanz Cortes also manages

the fetal neurosonology clinic at TCH which was a powerful tool to observe and learn.

My first day at 0800, we had a fetoscopic repair of a second trimester myelomeningocele. This case was a prime example of interdisciplinary care between Maternal-Fetal Medicine, Pediatric Surgery, Neurosurgery, and Obstetric Anesthesia. In addition, the elements of innovation from TCH were ever present, the introduction of fetoscopy for this surgery (instead of open), 2 port utilization (vs. 3) and the variations in dissection methods which can only be achieved by repetition at a high surgical volume center.

One of the greatest skills one must develop as a surgeon is knowing when not to operate. Through the dozens of fetal care consults we had each week; we discussed their interventional options and potential benefits but also who would not be a candidate for surgery or who may not benefit from an intervention. I also learned during the evaluation of these cases that a greater understanding of ultrasound and MRI as antenatal tools for evaluation was essential. I had the opportunity to practice my sonography skills with a number of fetal anomalies and conditions.



In addition to the amazing exposure to fetal surgery, I was also able to directly participate in the TCH Placenta Accreta Spectrum (PAS) program. At my current institution, my research is focused on the molecular diagnostics and surgical management of PAS cases. Thus, it was an added bonus to the sabbatical –being able to see how the PAS program at TCH functions and learn from their approaches to PAS care.

My fellowship institution does not currently offer Fetal Surgery to our patients. Through the [Garite Mini-Sabbatical](#) I was able to explore my interest in Fetal Surgery at an elite center in the country. I would like to thank the [Foundation for SMFM](#), Dr. Garite, and Dr. Shamshirsaz for this incredible learning opportunity during my MFM fellowship. This opportunity has greatly impacted my career, and as a direct result, I will be joining the TCH division as a Fetal Surgery fellow in Summer 2022.