

2019 ISPAD “Allan Drash” Clinical Fellowship Report

Recipient: Tiago Jeronimo Dos Santos, MD, MPH - Brazil/Spain

Duration of the program: November 4th to December 6th, 2019

Host center: Rainbow Babies and Children's Hospital (University Hospitals) - Cleveland, OH, USA

Host coordinator: Dr. Jamie R Wood

Personal note: My rotation in Cleveland was a mix of clinical and research experiences. The main proposal of this program is to attain optimal clinical expertise in a specific field of pediatric diabetes. My first goal of the program was to have contact with all the innovative diabetes technologies, some of which are only available in the US. My second goal was to perform a research project to help me conclude my PhD program in Spain where I study type 1 diabetes and health inequalities. As a result, in approximately six weeks, I had the opportunity to join both clinical and research experiences. Thus, I see this fellowship program as a unique moment in my medical training, and one in which has prepared me to indicate, set, and follow a patient with type 1 diabetes on pumps and sensors.

Activities: I followed Dr. Wood’s routine and she prepared a schedule for us during the six weeks of our rotation, which included activities at three different clinics: Westlake Health Center, Deforia Lane Clinic, and Landerbrook Pediatric Specialties Clinic on Mondays, Tuesdays, and Thursdays, respectively. All of them belong to the University Hospitals - Rainbow Babies and Children’s. In general, the activities at each of the clinics were very similar in that they were based on seeing patients wearing a diverse modality of pumps and sensors. Mostly at the beginning of the visits, patients were seen with nurses and after the visit, we had brief discussions to plan patient’s recommendations. On Wednesday mornings, we had small conferences where the on-call doctor and fellow from the unit presented every patient who was admitted and asked for advice for both

diabetes and general endocrine conditions. Also, one of the fellows or faculty members would present an article or a protocol, as an open space to debate and exchange interchange information and experience. On Wednesday afternoons, we had different workshops with nurses, fellows and delegates from *Omnipod, Tandem, Dexcom and Medtronic*. On Fridays, we had an office day where we could develop and implement the research project. As a plus, we were able to shadow Dr. Wood's routine throughout her entire week of the faculty person on call. During this time, we had the opportunity to see patients from the Emergency Department (pump issues), Intensive Care (with more than one overt onset of diabetes) and their follow-ups on the floor.

Research experience: During my stay, we developed a survey based on the observation of health disparities among patients wearing versus not wearing diabetes technologies and used it as examples to the vignettes presented in the survey. This survey was planned to reach ISPAD and non-ISPAD members to identify viewpoints of health-care professionals who are involved with the decision to start a patient on diabetes technology. We had the full support of the ISPAD Committee, and it was recently disseminated for its members on ISPAD's monthly newsletter. The aim with this research is to have a comprehensive picture of the reasons why providers prescribe or refuse diabetes technology and present it as part of my doctorate study. The access of different providers' profiles will give us clues to associate providers' personal sociodemographic characteristics, work profile and personal thoughts about their uptake when considering the use of diabetes technology. We think that the results of the survey might be helpful for future guidelines on diabetes technology to endorse current evidence in reference to different regions of the world, levels of access to technologies, and personal thoughts.

Highlights: Besides having seen several children and adolescents with type 1 diabetes - some of whom used pump and sensors that I had never witnessed before -, we saw a considerable number of patients with type 2 diabetes, some of whom also enrolled in clinical trials for new drugs for patients with type 2 diabetes. Although being treated in the same clinic, some patients were

wearing the most state-of-the-art diabetes devices in the world, while others struggled to even get insulin due of the US high-price issues. It was a two-sided coin and allowed me to see that, even in the most excellent of centers, difficulties will exist.

What I learned from the fellowship: I learned from a consistent and uniform group of professionals, that ranged from medical staff to registered nurses, dieticians, physical assistants and administrative staff, all of whom are in tune with the fact that diabetes decision-making is important for the success of a diabetes unit. It is hard to do it without all the health-care professional support that I received at this clinic.

How will the knowledge gained from the fellowship help me to manage patients when I get back to my country? I am concluding my doctorate program in Spain this year and have a job offer to start a diabetes clinic in the south of Spain. I am certain that everything I learned from Dr. Wood and her colleagues has paved the way for me to be a successful member of a committed team that assists patients with pediatric diabetes.

Acknowledgments: I am very thankful to have met Dr. Wood and her colleagues, the medical staff from the Rainbow's Pediatric Endocrinology Unit - Dr Rose Gubitosi-Klug, Dr Sarah MacLeish, Dr Katherine Kutney , Dr Naveen Uil, Dr Ryan Farrell, Dr Anuradha Vishwanathan, Dr Sarah Dabaah, Dr Beth Kaminski, and Dr Teresa Zimmerman. A special acknowledgment to the nurses Janet, Kim, Julie, Kerry, Wendy, Anna, and John for all their kindness and willingness to be with us during diabetes lessons and visits. Also, my acknowledgment to the endocrine fellows Saima, Rawah, Padma, Shashi, and Erika, and the physician assistants Felicia and Shay for their welcoming and kind spirit that they showed me throughout my stay. I also include my acknowledgment for Dr Chetan Dave, the other ISPAD fellow with whom I shared the rotation and who made my time in Cleveland at the Rainbow Children's more special than ever. Last, but certainly not least, my acknowledgments to my doctorate coordinators in Spain Prof. Jesús Argente and Prof. Fernando Artalejo for their support since the very moment I applied for this

program. And finally, to ISPAD Committee and KIT who made real the opportunity to work as a fellow in this important diabetes training program and to disseminate our research project among ISPAD members so successfully.

Personal note for Dr. Wood: Dr. Jamie Wood was very reachable from my first contact to be a fellow in her center. We met personally at the ISPAD Annual Meeting in Boston and since then we started to plan my rotation. She introduced Chetan and me to all the faculty and took us to great events held by Endocrine Unit such as Halloween and Thanksgiving party. She was there for everything and anything we needed and recommended many places to visiting and the best places to eat around Cleveland. Her enthusiastic spirit is something I will take with me forever.

Madrid, February 11th, 2020



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