Hernán F.J. González, PhD

Current Position	MD/PhD Candidate G5 - Vanderbilt University MSTP Program (2014–present)
Address	Vanderbilt University Medical Center Department of Neurological Surgery 1500 21st Avenue South, VAV Suite 4340 Nashville, Tennessee 37212
Email	hernan.gonzalez@vanderbilt.edu; hfjgonzalez@gmail.com
Phone Number	(786) 423-1867

EDUCATION

Vanderbilt University	 Medical Scientist Training Program – MD/PhD Candidate (2014–present) 2014-2015 Medical Didactic Courses 2015-2016 Medical Clerkship Year 2016-2021 PhD Candidate Biomedical Engineering GPA: 3.81 Thesis Proposal Qualifying Exam: Passed February 2019 Thesis Defense Passed March 1, 2021
University of Miami	BS (<i>cum laude</i>), Biomedical Engineering, 2013, GPA: 3.64 - Minor: Mathematics
University of Miami	MS (award of academic merit), Biomedical Engineering, 2013, GPA: 4.0
Universität Tübingen	Study abroad - Methods in Brain Computer Interfaces with incorporated lab work conducted via Florida Atlantic University and in association with Universität Tübingen, Tübingen, DE (Summer 2011)

EXPERIENCE

PhD Candidate in Brain Imaging and Electrophysiology Network (BIEN) Laboratory. 2016-present Vanderbilt University, Department of Biomedical Engineering, Nashville, TN. Mentor: Dario J. Englot MD PhD Project: Multimodal analysis of interictal and ictal brain connectivity in temporal lobe epilepsv. Techniques: Human neuroimaging and electrophysiology. 2014-present Vanderbilt University MSTP program, Nashville, TN. 2013-2014 Biomedical Engineering Internship at HeartWare, Inc. Algorithm Development Team, Miami Lakes. FL. Mentor: Fernando Casas PhD -Project: As a part of the Algorithm Development team for the MVAD pump, I designed and carried out experiments to refine and validate flow estimation algorithms. 2010-2013 Graduate and undergraduate student in Neuroprosthetic Research Group (NRG) Laboratory. University of Miami, Department of Biomedical Engineering, Coral Gables, FL. Mentor: Justin C. Sanchez PhD Undergraduate project: Research in brain computer interfaces investigating electrode biocompatibility and novel neural decoding algorithms. As both an undergraduate & graduate I researched neuroprosthetic rehabilitation. Graduate project: Non-invasive brain computer interfaces for top-down oriented lower limb neurorehabilitation with robotic gait assistance. Graduate project: Integration of a robotic hand prosthetic into brain computer interface architecture. Design of interface using CANbus to serial protocol.

2008-2014	 Self-employed as Mathematics and Science Tutor. Taught mathematics ranging from algebra 1 to multivariable calculus, physics, & chemistry. Increased tutees mathematical organization and conceptual grasp of fundamental concepts, resulting in raising students' grades at least one letter grade.
2012 summer	 Summer Engineering Internship at Texas Instruments Inc., Digital Signals Processing division, Germantown, MD. Performed new user experience evaluation for new Digital Signal Processor MS320C6678. Implemented DSP as naive user and provided feedback about technical and non-technical documentation, and user interaction experience. As part of software development team programmed an industrial imaging demonstration to be used in an international meeting debuting TI's DSP. Assisted in the creation of Linux virtual machines for an online interface that customers can use to test TI's DSP's before purchase. Gained experience in Linux operating system and Linux server operation.
2010 summer	 Summer Internship at Baptist Hospital, Cardiac & Vascular Institute Research, Miami, FL. Maintained records of staff and facility compliance with regulations and staff credentials. Observed implementation of clinical research devices and surgical procedures.

HONORS AND AWARDS

2020 T	op 6 Abstract in	Basic Science	Research, 38 th	Annual VUMC	Research Forum,	Nashville, TN	Ν.
--------	------------------	---------------	----------------------------	-------------	-----------------	---------------	----

- 2020 Travel Award, Curing the Epilepsies Conference, Bethesda, MD.
- 2019 Young Investigator Award, American Epilepsy Society Annual Meeting, Baltimore, MD.
- 2019 Strongest Abstract in Systems Neuroscience, Vanderbilt Kennedy Center Science Day, Nashville, TN.
- 2019 Awarded Earl Bakken Young Researcher's Travel Grant, NANS Annual Meeting, Las Vegas NV.
- 2019 Awarded MSTP Travel Grant to Present Research, Vanderbilt University, Nashville, TN.
- 2018 Awarded Graduate Student Travel Grant to Present Research, Vanderbilt University, Nashville, TN.
- 2018 Best Poster Award, North American Neuromodulation Society (NANS) Annual Meeting, Las Vegas, NV.
- 2018 Travel Fellowship Award, NANS Annual Meeting, Las Vegas, NV.
- 2013 Graduated with Award of Academic Merit, M.S. Biomedical Engineering, University of Miami, Miami, FL.
- 2013 Graduated *cum laude*, B.S. Biomedical Engineering, University of Miami, Miami, FL.
- 2010- Water Polo Scholar-Athlete Team.
- 2012
- 2012 Second Place Poster Award, Research Creativity Innovation Forum, Undergraduate Students Engineering Division, University of Miami, Miami, FL.
- 2011 Third Place Poster Award, Research Creativity Innovation Forum, Undergraduate Students Engineering Division, University of Miami, Miami, FL.
- 2010- Provost's Honor Roll, (Spring 2012, Fall 2011, Spring 2011, Fall 2010), University of Miami, Miami,
- 2012 FL.
- 2008- Dean's List, (Fall 2011, Spring 2011, Fall 2010, Spring 2010, Fall 2008), University of Miami,
- 2011 Miami, FL.
- 2010 President's Honor Roll, (Fall 2010), University of Miami, Miami, FL.
- 2008- University Scholarship for Undergraduate Studies, University of Miami, Miami, FL.
- 2012

Principal Investigator (PI)

10/01/2018-	NRSA Individual Predoctoral Fellowship (F31), NIH (F31NS106735-01A1)
present	- "Multimodal analysis of interictal and ictal brain connectivity in temporal lobe epilepsy."
	- Role: PI; Mentors: Dr. Dario J. Englot, Dr. Michael I. Miga; Award: \$29,218 per year.

ACTIVITIES

2020-	NANS Social Media Task Force Member
present 2019-	VISE Vision committee member.
present 2014- present	Spanish language patient interpreter at Shade Tree Clinic.
2012- present	Volunteer with Art for a Cause fundraising for St. Jude Children's Research Hospital & community outreach.
2015- 2016	Co-Founder and Leadership Board of Vanderbilt Medical Innovation Lab.
2014- 2016	Vanderbilt MSTP Student Advisory Committee Representative for M1 class.
2010- 2012	 Club Water Polo, University of Miami, Miami, FL. State Champions October 2012 Tournament Location: Florida Gulf Coast University, Fort Myers, FL. 8th Place Nationals November 2012 Tournament Location: Oregon State University, Corvallis, OR. 4th place nationals November 2010 National Tournament Location: University of Southern Utah, Cedar City, UT. State Champions October 2010 Tournament Location: University of Florida, Gainesville, FL.

INVITED INTRAMURAL LECTURES

05/2020	Vanderbilt University, AANS Vanderbilt Chapter Neurosurgery Research Panel
09/2019	Vanderbilt University, VUIIS fMRI Focus Group Meeting Nucleus Basalis MRI Functional Connectivity Abnormalities in Patients with Temporal Lobe Epilepsy
10/2018	Vanderbilt University, MSTP Seminar Series- Research in Progress Multimodal Analysis of Interictal and Ictal Brain Connectivity in Temporal Lobe Epilepsy
08/2017	Vanderbilt University, VISE Seminar Series – Research in Progress Multimodal Analysis of Interictal and Ictal Brain Connectivity in Temporal Lobe Epilepsy

EXTRAMURAL SERVICE ACTIVITIES: REVIEW SERVICE

- Reviewing details at: https://publons.com/researcher/3508789/hernan-fj-gonzalez/
- Journals: Epilepsy Research Neuroscience Letters

PAPERS

- Whitten A, Jacobs ML, Englot DJ, Rogers BP, Levine KK, González HFJ, Morgan VL. Resting-State Hippocampal-Language Networks Reveal Unique Patters in Temporal Lobe Epilepsy. *Epilepsy & Behavior*. 117 (2021): 107834. DOI: 10.1016/j.yebeh.2021.107834.
- González HFJ, Narasimhan S, Graham JW, Wills KE, Haas KF, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Role of the nucleus basalis as a key network node in temporal lobe epilepsy. *Neurology*. 96.9 (2021). DOI: 10.1212/WNL.00000000011523.
- Wills KE, González HFJ, Johnson GW, Haas KF, Morgan VL, Narasimhan S, Englot DJE. People with mesial temporal lobe epilepsy have altered thalamo-occipital brain networks. *Epilepsy & Behavior*. (2020): 107645. DOI: 10.1016/j.yebeh.2020.107645.
- 4) Narasimhan S, Kundassery KB, Gupta K, Johnson GW, Wills KE, Goodale SE, Haas KF, Rolston JD, Naftel RP, Morgan VL, Dawant BM, González HFJ, Englot DJ. Seizure-onset regions demonstrate high inward directed connectivity during resting-state: a SEEG study in focal epilepsy. *Epilepsia*. 61.11 (2020): 2534-2544. DOI: 10.1111/epi.16686.
- Goodale SE, González HFJ, Johnson GW, Gupta K, Rodríguez WJ, Shults Robert, Rogers BP, Rolston JD, Dawant BM, Morgan VL, Englot DJ. Resting-state SEEG may help localize epileptogenic brain regions. *Neurosurgery*. 86.6 (2020): 792-8081. DOI: 10.1093/neuros/nyz351.
- Morgan VL, Rogers BP, González HFJ, Goodale SE, Englot DJ. Characterization of post-surgical functional connectivity changes in temporal lobe epilepsy. *Journal of Neurosurgery*. 133.2 (2019): 392-402. DOI: 10.3171/2019.3.Jns19350.
- 7) González HFJ, Chakravorti S, Goodale SE, Gupta K, Claassen DO, Dawant BM, Morgan VL, Englot DJ. Thalamic arousal network disturbances in temporal lobe epilepsy and improvement after surgery. *Journal of Neurology, Neurosurgery & Psychiatry*. 90.10 (2019): 1109-1116. DOI: 10.1136/jnnp-2019-320748.
- González HFJ, Goodale SE, Jacobs ML, Haas KF, Landman BA, Morgan VL, Englot DJ. Brainstem functional connectivity disturbances in epilepsy may recover after successful surgery. *Neurosurgery*. 86.3 (2020): 417-428. DOI: 10.1093/neuros/nyz128.
- 9) González HFJ, Yengo-Kahn A, Englot DJ. Vagus Nerve Stimulation for the Treatment of Epilepsy. *Neurosurgery Clinics.* 30.2 (2019): 219-230. DOI: 10.1016/j.nec.2018.12.005.
- 10) Narasimhan S, Weis JA, **González HFJ**, Thompson RC, Miga MI. In vivo modeling of biphasic mechanics in the brain: a poroelastic constitutive model with enhance structural description. *Journal of Medical Imaging* 5.4 (2018): 045002. DOI: 10.1117/1.JMI.5.4.045002.
- 11) Englot DJ, González HFJ, Reynolds BB, Konrad PE, Jacobs ML, Gore JC, Landman BA, Morgan VL. Relating structural and functional brainstem connectivity to disease measures in epilepsy. *Neurology*. 91.1 (2018): e67-e77. DOI: 10.1212/WNL.000000000005733.
- 12) Kressler J, Thomas CK Field-Fote EC, Sanchez J, Widerström-Noga E, Cilien DC, Gant K, González HFJ, Martinez A, Anderson KD, Nash MS. "Understanding therapeutic benefits of overground bionic ambulation: Exploratory case series in persons with chronic, complete spinal cord injury," *Arch. Phys. Med. Rehabil.*, vol. 95, no. 10, pp. 1878–1887, 2014.
- 13) Roset SA, González HFJ, Sanchez JC. Development of an EEG Based Reinforcement Learning Brain-Computer Interface System for Rehabilitation. (35th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, 2013).

ORAL PLATFORM PRESENTATIONS

- González HFJ, Narasimhan S, Johnson GW, Goodale SE, Wills KE, Konrad PE, Morgan VL, Chang C, Englot DJ. FMRI Directional Connectivity Abnormalities of Cortical and Subcortical Arousal Regions in Temporal Lobe Epilepsy. North American Neuromodulation Society; 2021 January; Orlando, FL, USA. (Online due to COVID-19).
- 2) González HFJ, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Basal Forebrain is a Central Network Hub of Perturbed Functional Connections in Temporal Lobe Epilepsy. 38th Annual VUMC Research Forum, 2020 May; Nashville, TN. (Differed to online presentation due to COVID-19).
- 3) **González HFJ**, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Basal Forebrain is a Central Network Hub of Perturbed Functional Connections in Temporal Lobe

Epilepsy. American Society for Stereotactic and Functional Neurosurgery; 2020 June; Boston, MA, USA. (Conference cancelled due to COVID-19).

- 4) **González HFJ**, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Rubinov M, Morgan VL, Englot DJ. The nucleus basalis as a key network hub of aberrant connectivity in temporal lobe epilepsy. North American Neuromodulation Society Annual Meeting; January 23-26, 2020; Las Vegas, NV, USA.
- 5) González HFJ, Narasimhan S, Gupta K, Johnson GW, Kundassery KB, Wills KE, Morgan VL, Englot DJ. Nucleus basalis MRI functional connectivity abnormalities in patients with temporal lobe epilepsy. American Epilepsy Society Annual Meeting; December 6-10, 2019; Baltimore, MD, USA.
- 6) González HFJ, Narasimhan S, Gupta K, Johnson GW, Kundassery KB, Wills KE, Morgan VL, Englot DJ. Nucleus basalis MRI functional connectivity abnormalities in patients with temporal lobe epilepsy. Vanderbilt Kennedy Center Science Day; September 17, 2019; Nashville, TN, USA.
- 7) **González HFJ,** Goodale SE, Chakravorti S, Gupta K, Konrad PE, Dawant BM, Morgan VL, Englot DJ. Thalamo-occipital Resting State Functional-Connectivity Perturbations in Temporal Lobe Epilepsy. North American Neuromodulation Society Annual Meeting; January 17, 2019; Las Vegas, NV, USA.
- 8) **González HFJ**, Chakravorti S, Goodale SE, Gupta k, Konrad PE, Dawant BM, Morgan VL, Englot DJ. The effects of successful epilepsy surgery on thalamic network connectivity in patients with temporal lobe epilepsy. South Eastern Medical Scientist Symposium Meeting; November 11, 2018; Nashville, TN, USA.
- González HFJ, Konrad PE, Morgan VL, Englot DJ. The effects of epilepsy surgery on deep arousal structure functional connectivity in temporal lobe epilepsy. American Society for Stereotactic and Functional Neurosurgery; 2018 June; Denver, CO, USA.

CONFERENCE ABSTRACTS & POSTERS

- Narasimhan S, González HFJ, Johnson GW, Wills KE, Konrad PE, Morgan VL, Englot DJ. Relating Effective Connectivity in Resting State fMRI and SEEG in Unilateral Mesial Temporal Lobe Epilepsy. North American Neuromodulation Society; 2020 January; Orlando, FL, USA. (Accepted for Platform Presentation).
- González HFJ, Narasimhan S, Johnson GW, Goodale SE, Wills KE, Konrad PE, Morgan VL, Chang C, Englot DJ. FMRI Directional Connectivity Abnormalities of Cortical and Subcortical Arousal Regions in Temporal Lobe Epilepsy. North American Neuromodulation Society; 2020 January; Orlando, FL, USA. (Accepted for Platform Presentation).
- 3) Wills KE, González HFJ, Johnson GW, Hass KF, Morgan VL, Narasimhan S, Englot DJ. Altered Thalamo-Occipital Brain Networks Exist in People with Temporal Lobe Epilepsy. North American Neuromodulation Society; 2020 January; Orlando, FL, USA. (Accepted for Platform Presentation).
- 4) Johnson GW, Cai LY, Narasimhan S, **González HFJ**, Wills KE, Morgan VL, Englot DJ. Using Diffusion Imaging to Predict Unilateral vs. Bilateral Mesial Temporal Lobe Epilepsy. North American Neuromodulation Society; 2020 January; Orlando, FL, USA.
- 5) González HFJ, Narasimhan S, Goodale SE, Wills KE, Johnson GW, Konrad PE, Morgan VL, Chang C, Englot DJE. FMRI Functional Connectivity Perturbations Between Arousal Structures and Resting-State Networks in Persons with Temporal Lobe Epilepsy. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 9, 2020; Nashville, TN, USA.
- 6) Narasimhan S, González HFJ, Johnson GW, Wills KE, Konrad PE, Morgan VL, Englot DJE. Multimodal Directed Connectivity in Mesial Temporal Lobe Epilepsy Patients. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 9, 2020; Nashville, TN, USA.
- 7) Johnson GW, Cai LY, Narasimhan S, González HFJ, Wills KE, Morgan VL, Englot DJ. Predicting Temporal Lobe Epilepsy Laterality and Surgical Outcome with Interpretable Diffusion Imaging Features. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 9, 2020; Nashville, TN, USA.

- 8) Wills KE, Paulo D, Johnson GW, González HFJ, Rolston JD, Naftel RP, Morgan VL, Narasimhan S, Englot DJ. Evaluating the Effect of Anti-Epileptogenic Drugs on Functional Connectivity Measures in Stereo-Electroencephalography. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 9, 2020; Nashville, TN, USA.
- Levine KK, Jacobs ML, González HFJ, Englot DJ, Whitten A, Morgan VL. The impacts of temporal lobe epilepsy on Rey Complex Figure Test performance. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 9, 2020; Nashville, TN, USA.
- 10) Wills KE, González HFJ, Johnson GW, Haas KF, Morgan VL, Narasimhan S, Englot DJ. People with Mesial Temporal Lobe Epilepsy Have Altered Thalamo-Occipital Brain Networks. American Epilepsy Society; 2020 December; Seattle, WA, USA. (Virtual conference).
- 11) **González HFJ**, Narasimhan S, Treuting RL, Johnson GW, Wills KE, Chang C, Morgan VL, Englot DJ. Examination of subcortical fMRI causal connectivity patterns in temporal lobe epilepsy. American Epilepsy Society; 2020 December; Seattle, WA, USA. (Virtual conference).
- 12) Johnson GW, Cai LY, Narasimhan S, González HFJ, Wills KE, Morgan VL, Englot DJ. Structural Connectivity of Unilateral vs. Bilateral mTLE: Automated ICA-Based Feature Extraction Predictive White-Matter Patterns. American Epilepsy Society; 2020 December; Seattle, WA, USA. (Accepted for platform Presentation. Virtual conference).
- 13) Narasimhan S, **González HFJ**, Johnson GW, Wills KE, Morgan VL, Englot DJ. Epileptic Zone Identification Using fMRI Metrics Model Fit to SEEG Metrics. American Epilepsy Society; 2020 December; Seattle, WA, USA. (Virtual conference).
- 14) Wills KE, González HFJ, Johnson GW, Morgan VL, Narasimhan S, Englot DJ. Temporal Lobe Epilepsy Exhibits Differing Effects on Thalamic Arousal Nuclei Functional Connectivity. American Society for Stereotactic and Functional Neurosurgery; 2020 June; Boston, MA, USA. (Conference cancelled due to COVID-19).
- 15) González HFJ, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Basal Forebrain is a Central Network Hub of Perturbed Functional Connections in Temporal Lobe Epilepsy. American Society for Stereotactic and Functional Neurosurgery; 2020 June; Boston, MA, USA. (Accepted for Platform Presentation). (Conference cancelled due to COVID-19).
- 16) Narasimhan S, Kundassery KB, Gupta K, Johnson GW, Wills KE, Goodale SE, Haas K, Rolston JD, Naftel RP, Morgan VL, Dawant BM, González HFJ, Englot DJ. Resting-State SEEG Analysis of Directed Network Connectivity to Map Epileptic Networks. American Society for Stereotactic and Functional Neurosurgery; 2020 June; Boston, MA, USA. (Conference cancelled due to COVID-19).
- 17) Johnson GW, Narasimhan S, González HFJ, Wills KE, Konrad PE, Haas K, Naftel RP, Rolston JD, Dawant BM, Morgan VL, Englot DJ. Improved Epileptogenic Zone Detection in Focal Epilepsy by Combining SEEG Functional Connectivity with White-Matter Structural Connectivity. American Society for Stereotactic and Functional Neurosurgery; 2020 June; Boston, MA, USA. (Conference cancelled due to COVID-19).
- 18) González HFJ, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Basal Forebrain is a Central Network Hub of Perturbed Functional Connections in Temporal Lobe Epilepsy. 38th Annual VUMC Research Forum, 2020 May; Nashville, TN. (Differed to online presentation due to COVID-19).
- 19) Narasimhan S, Kundassery KB, Gupta K, Johnson GW, Wills KE, Goodale SE, Rolston JD, Naftel RP, Morgan ML, Dawant BM, **González HFJ**, Englot DJ. Resting-State Stereo-EEG Analysis of Directed Network Connectivity to Map Epileptic Networks. 38th Annual VUMC Research Forum, 2020 May; Nashville, TN. (Visual Abstract).
- 20) González HFJ, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Chang C, Morgan VL, Rubinov M, Englot DJ. Nucleus basalis is a central network structure of perturbed functional connections in temporal lobe epilepsy. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 11, 2019; Nashville, TN, USA.
- 21) Wills KE, **González HFJ**, Johnson GW, Morgan VL, Narasimhan S, Englot DJ. Differential effects of temporal lobe epilepsy on the functional connectivity of key thalamic arousal nuclei. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 11, 2019; Nashville, TN, USA.

- 22) Narasimhan S, Kundassery KB, Gupta K, Johnson GW, Wills KE, Rolston JD, Naftel RP, Morgan VL, Dawant BM, González HFJ, Englot DJ. Identification of epileptogenic zones using directed network properties in resting-state SEEG. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 11, 2019; Nashville, TN, USA.
- 23) Kundassery KB, **González HFJ**, Johnson GW, Wills KE, Narasimhan S, Englot DJ. Overview of Brain Imaging and Electrophysiology Network (BIEN) Lab. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 11, 2019; Nashville, TN, USA.
- 24) **González HFJ**, Narasimhan S, Johnson GW, Wills KE, Konrad PE, Rubinov M, Morgan VL, Englot DJ. The nucleus basalis as a key network hub of aberrant connectivity in temporal lobe epilepsy. North American Neuromodulation Society Annual Meeting; January 23-26, 2020; Las Vegas, NV, USA. (Accepted for Platform Presentation).
- 25) Narasimhan S, Kundassery KB, Gupta K, Johnson GW, Wills KE, Goodale SE, Rolston JD, Naftel RP, Morgan VL, **González HFJ**, Englot DJ. Analysis of directed network properties may identify seizure onset zones in resting-state stereo-EEG. North American Neuromodulation Society Annual Meeting; January 23-26, 2020; Las Vegas, NV, USA. (Accepted for Platform Presentation).
- 26) **González HFJ**, Narasimhan S, Gupta K, Johnson GW, Kundasserý KB, Wills KE, Morgan VL, Englot DJ. Nucleus basalis MRI functional connectivity abnormalities in patients with temporal lobe epilepsy. American Epilepsy Society Annual Meeting; December 6-10, 2019; Baltimore, MD, USA. (Accepted for Platform Presentation).
- 27) Brown MG, Ernst LD, Spencer DC, Englot DJ, **González HFJ**, Drees C. Brain-Responsive Stimulation (RNS) and Vagus Nerve Stimulation (VN) in combination for the treatment of drug-resistant focal epilepsy. American Epilepsy Society Annual Meeting; December 6-10, 2019; Baltimore, MD, USA.
- 28) Gupta K, González HFJ, Johnson GW, Goodale SE, Kundassery KB, Wills KE, Rolston JD, Dawant BM, Morgan VL, Englot DJ. Localization of epileptogenic zones using network analysis of resting-state stereo-EEG data. American Epilepsy Society Annual Meeting; December 6-10, 2019; Baltimore, MD, USA.
- 29) **González HFJ**, Narasimhan S, Gupta K, Johnson GW, Kundassery KB, Wills KE, Morgan VL, Englot DJ. Nucleus basalis MRI functional connectivity abnormalities in patients with temporal lobe epilepsy. Vanderbilt Kennedy Center Science Day; September 17, 2019; Nashville, TN, USA. (Accepted for Platform Presentation).
- 30) González HFJ, Chakravorti S, Goodale SE, Gupta K, Claassen DO, Dawant BM, Morgan VL, Englot DJ. Effects of successful epilepsy surgery on thalamic arousal network functional connectivity disturbances in patients with temporal lobe epilepsy. Biennial Meeting of WSSFN; June 24-27, 2019; New York, NY, USA. (Accepted for Platform Presentation).
- 31) Goodale SE, González HFJ, Johnson GW, Gupta K, Rodriguez W, Shults R, Rogers BP, Rolston JD, Dawant BM, Morgan VL, Englot DJ. Resting-state SEEG may help localize epileptogenic brain regions. Biennial Meeting of WSSFN; June 24-27, 2019; New York, NY, USA. (Accepted for Platform Presentation).
- 32) Morgan V, Rogers B, González HFJ, Goodale S, Englot D. Contralateral functional connectivity changes after temporal lobe epilepsy surgery. Organization for Human Brain Mapping Annual Meeting; June 9-13, 2019; Rome, Italy.
- 33) González HFJ, Goodale SE, Chakravorti S, Gupta K, Dawant BM, Morgan VL, Englot DJ. Thalamic arousal network disturbances in patients with temporal lobe epilepsy and improvement after epilepsy surgery. Southern Neurological Society Annual Meeting; February 20, 2019; Key Largo, FL, USA.
- 34) **González HFJ,** Goodale SE, Chakravorti S, Gupta K, Konrad PE, Dawant BM, Morgan VL, Englot DJ. Thalamo-occipital resting state functional-connectivity perturbations in temporal lobe epilepsy. North American Neuromodulation Society Annual Meeting; January 17-20, 2019; Las Vegas, NV, USA.
- 35) Goodale SE, **González HFJ**, Gupta K, Shults R, Rodriguez W, Dawant BM, Yu H, Rolston JD, Morgan VL, Englot DJ. Localizing epileptogenic networks using resting-state stereo-EEG analysis. North American Neuromodulation Society Annual Meeting; January 17-20, 2019; Las Vegas, NV, USA. (Accepted for Platform Presentation).
- 36) **González HFJ,** Goodale SE, Chakravorti S, Gupta K, Konrad PE, Dawant BM, Morgan VL, Englot DJ. Resting-state thalamic network connectivity in patients with temporal lobe epilepsy before and after epilepsy surgery. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 12, 2018; Nashville, TN, USA.

- 37) González HFJ, Goodale SE, Jacobs ML, Haas KV, Landman BA, Morgan VL, Englot DJ. Resting-state Effects of successful epilepsy surgery on altered structural and functional connectivity of brainstem in temporal lobe epilepsy. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 12, 2018; Nashville, TN, USA.
- 38) Goodale SE, González HFJ, Johnson GW, Gupta K, Rodriguez W, Shults R, Rogers BP, Rolston JD, Dawant BM, Morgan VL, Englot DJ. Stereo-EEG resting-state functional connectivity helps identify epileptogenic brain regions. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 12, 2018; Nashville, TN, USA.
- 39) Gupta K, Goodale SE, González HFJ, Johnson GW, Morgan VL, Englot DJ. Comparing SEEG and fMRI connectivity in temporal lobe epilepsy. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 12, 2018; Nashville, TN, USA.
- 40) **González HFJ**, Goodale SE, Jacobs ML, Haas KF, Landman BA, Morgan VL, Englot DJ. Brainstem functional connectivity improvement after epilepsy surgery is related to preoperative disease severity. American Epilepsy Society 2018 Annual Meeting; December 1-4, 2018; New Orleans, LA, USA.
- 41) Englot DJ, González HFJ, Goodale SE, Jacobs ML, Haas KF, Landman BA, Morgan VL. Unlike brainstem functional connectivity improvement, functional MRI signal fluctuations and structural connectivity do not change after epilepsy surgery. American Epilepsy Society 2018 Annual Meeting; December 30-4, 2018; New Orleans, LA, USA.
- 42) Morgan VL, **González HFJ**, Goodale SE, Englot DJ. Do functional networks evolve after TLE surgery? American Epilepsy Society 2018 Annual Meeting; December 1-4, 2018; New Orleans, LA, USA.
- 43) Goodale SE, **González HFJ**, Gupta K, Rolston JD, Morgan VL, Englot DJ. Resting-state functional connectivity using stereo-EEG helps identify epileptogenic brain regions. American Epilepsy Society 2018 Annual Meeting; December 1-4, 2018; New Orleans, LA, USA.
- 44) **González HFJ**, Chakravorti S, Goodale SE, Gupta k, Konrad PE, Dawant BM, Morgan VL, Englot DJ. The effects of successful epilepsy surgery on thalamic network connectivity in patients with temporal lobe epilepsy. South Eastern Medical Scientist Symposium Meeting 2018. November 10-11, 2018; Nashville, TN, USA.
- 45) **González HFJ**, Konrad PE, Morgan VL, Englot DJ. The effects of epilepsy surgery on deep arousal structure functional connectivity in temporal lobe epilepsy. American Society for Stereotactic and Functional Neurosurgery; 2018 June; Denver, CO, USA.
- 46) Englot DJ, **González HFJ**, Reynolds BB, Konrad PE, Jacobs ML, Gore JC, Landman BA, Morgan VL. Altered structural and functional connectivity of brainstem arousal centers in temporal lobe epilepsy. North American Neuromodulation Society Annual Meeting; 2018 January; Las Vegas, NV, USA.
- 47) **González HFJ**, Konrad PE, Yu H, Miga MI, Morgan VL, Englot DJ. Disturbances of brainstem functional connectivity in temporal lobe epilepsy patients may recover after successful epilepsy surgery. North American Neuromodulation Society Annual Meeting; 2018 January; Las Vegas, NV, USA.
- 48) González HFJ, Goodale SE, Konrad PE, Yu H, Miga MI, Morgan VL, Englot DJ. Disturbances of brainstem functional connectivity in temporal lobe epilepsy patients may recover after successful epilepsy surgery. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 13, 2017; Nashville, TN, USA.
- 49) Narasimhan S, Weis JA, **González HFJ**, Thompson RC. In Vivo Modelling of Biphasic Mechanics in the Brain: A Poroelastic Constitutive Model with Enhanced Structural Description Approach. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 13, 2017; Nashville, TN, USA.
- 50) Goodale SE, **González HFJ**, Morgan VL, Englot DJ. Comparing functional MRI low frequency fluctuations and connectivity in brainstem regions in temporal lobe epilepsy. Vanderbilt Institute for Surgery and Engineering Annual Symposium; December 13, 2017; Nashville, TN, USA.
- 51) Englot DJ, **González HFJ**, Reynolds BB, Konrad PE, Jacobs ML, Gore JC, Landman BA, Morgan VL. Altered structural and functional connectivity of brainstem arousal centers in temporal lobe epilepsy. American Epilepsy Society 2017 Annual Meeting; December 1-5, 2017; Washington, D.C., USA.
- 52) Roset SA, Prins NW, Geng S, **González HFJ**, Mahmoudi B, Pohlmeyer EA, Sanchez JC. Using multiple reward related signals in the adaptation of neuroprosthetic decoders. (5th International BCI meeting 2013).

- 53) **González HFJ,** Sanchez JC. Novel approaches in biocompatibility and neuronal decoding for Neuroprosthetics. RCIF; March 2011; Coral Gables, FL, USA.
- 54) **González HFJ**, Roset SA, Sanchez JC. Innovative techniques in neuronal decoding for non-invasive Neuroprosthetics. RCIF; March 2012; Coral Gables, FL, USA.
- 55) **González HFJ**, Roset SA, Sanchez JC. Design of neural controlled exoskeleton for SCI rehabilitation. Master's Design Project Semester 1; December 2012; Coral Gables, FL, USA.
- 56) **González HFJ**, Roset SA, Sanchez JC. Design of neural controlled exoskeleton for SCI rehabilitation (Results). Master's Design Project Semester 2; May 2013; Coral Gables, FL, USA.

PROFESSIONAL ORGANIZATIONS, CURRENT MEMBERSHIPS

American Society for Stereotactic and Functional Neurosurgery (ASSFN) – Student Member – (Since 2019) American Association of Neurological Surgeons (AANS) – Student Member – (Since 2018) North American Neuromodulation Society (NANS) – Student Member – (Since 2017) American Epilepsy Society (AES) – Member – (Since 2017) American Psychiatric Association – Medical Member – (Since 2016) American Academy of Neurology (AAN) – Member- (Since 2016) American Academy of Family Physicians (AAFP) – Student Member – (Since 2015) American Academy of Family Physicians (AAFP) – Student Member – (Since 2015) American Medical Association (AMA) – Member – (Since 2014) Member of Alpha Eta Mu Beta, National Biomedical Engineering Honor Society