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EDUCATION

Ph.D. Bioengineering *2016- 2019*
University of California, Los Angeles
Advisor: Prof. Daniel Ennis

M.S. Bioengineering *2014-2016*
University of California, Los Angeles

B.S. Physics *2008-2012*
University of the Americas, Puebla, Mexico

EXPERIENCE

POSTDOCTORAL SCHOLAR

Stanford University *2019-*
Radiological Sciences Labs
MR Safety: Assessment of implantable devices RF induced heating
Mentor: Dr. Daniel Bruce Ennis

GRADUATE STUDENT RESEARCHER

University of California, Los Angeles *2014-2019*
Radiological Sciences
Magnetic Resonance Research Labs
MR Safety: Assessment of implantable devices RF induced heating
Mentor: Dr. Daniel Bruce Ennis

RESEARCH ASSISTANT

University of Texas, Dallas *2013-2014*
Biomedical Engineering
Biomedical Microdevices and Nanotechnology Lab
Protein Spectroscopy
Mentor: Dr. Shalini Prasad

RESEARCH ASSISTANT

University of Texas, Dallas *2012*
Material Sciences
Nanotech Institute
Organic Light Emitting Diodes
Mentor: Dr. Anvar Zakidov

PUBLICATIONS

PAPERS

- Li, X., Perotti, L. E., **Martinez, J. A.**, Duarte-Vogel, S. M., Ennis, D. B., & Wu, H. H. (2020). Real-time 3T MRI-guided cardiovascular catheterization in a porcine model using a glass-fiber epoxy-based guidewire. *PloS one*, 15(2), e0229711.
- **Martinez, J. A.**, Moulin, K., Yoo, B., Shi, Y., Kim, H. J., Villablanca, P. J., & Ennis, D. B. (2020). Evaluation of a Workflow to Define Low Specific Absorption Rate MRI Protocols for Patients With Active Implantable Medical Devices. *Journal of magnetic resonance imaging: JMRI*, advance online publication
- **Martinez, J. A.**, Serano, P., & Ennis, D. B. (2019). Patient Orientation Affects Lead-Tip Heating of Cardiac Active Implantable Medical Devices during MRI. *Radiology. Cardiothoracic imaging*, 1(3), e190006.
- **Martinez, J. A.**, & Ennis, D. B. (2019). MRI of Patients with Cardiac Implantable Electronic Devices. *Current Cardiovascular Imaging Reports*, 12(7), 27
- Erhardt, J. B., Lottner, T., **Martinez, J.A.**, Özen, A. C., Schuettler, M., Stieglitz, T., Schuettler, M., Stieglitz, T., Ennis, D.B. & Bock, M. (2019). It's the little things: On the complexity of planar electrode heating in MRI. *NeuroImage*, 195, 272-284.
- **Martinez J. A.**, Serano P. & Ennis D.B. A comparison of RF-induced heating at 1.5T and 3T. {In review}

ABSTRACTS

- **Martinez JA**, Moulin K, Ennis DB. A Comparison of RF Induced Heating for a Range of Titanium Rods at 1.5T and 3T. ISMRM Annual Meeting, Montreal, 2019
- Erhardt JB, Lottner T, **Martinez JA**, Özen AC, Schuettler M, Stieglitz T, Ennis DB, Bock M, Influence of the Electrode Diameter on Radio Frequency-induced Heating in MRI. ISMRM Annual Meeting, Montreal, 2019.
- **Martinez JA**, Moulin K, Prosper, A, Ennis DB. Cardiac MRI Exams with Very Low SAR (0.1 W/kg) for Patients with Active Implantable Medical Devices. SCMR, 2019
- Li X, Perotti LE, **Martinez JA**, Ennis DB, Wu HH, Real-Time 3T MRI-Guided Cardiovascular Catherization in a Porcine Model using a Glass-Fiber Based MR Guidewire. SCMR, 2019

- **Martinez JA**, Moulin K, Villablanca P, Ennis DB. Design and Evaluation of Head and Neck Low SAR MRI Protocols for Patients with Implanted Electronic Devices. ISMRM Annual Meeting, Paris, 2018. – *Magna Cum Laude*
- **Martinez JA**, Moulin K, Ennis DB. Comparison of RF Induced Device Heating at 0.35T and 1.5T. ISMRM Annual Meeting, Paris, 2018
- Erhardt J, **Martinez JA**, Cork TE, Gessner I, Mathur S, Stieglitz T, Ennis DB. Assessment of Iron Oxide Nanoparticle Concentration for Distinct Intercranial EEG Electrode Localization in MRI. ISMRM Annual Meeting, Paris, 2018.
- **Martinez JA**, Acikel V, Magrath P, Ennis DB. Comparison of Pacemaker Lead Tip Heating at Different MRI Field Strengths. UCLA Bioengineering Symposium, Los Angeles, California, 2017.
- **Martinez JA**, Ennis DB, Impact of Patient Orientation on Pacemaker Lead Tip Heating During MRI Exams, BMES, FDA, Maryland 2017
- **Martinez JA**, Acikel V, Magrath P, Ennis DB, Comparison of Pacemaker Lead Tip Heating at 1.5 T and 3T, ISMRM, 2017
- **Martinez JA**, Acikel V, Magrath P, Ennis DB, The Effect of Patient Orientation on Pacemaker Lead-Tip Heating at 1.5T, ISMRM, 2017
- **Martinez JA**, Ennis DB. Pacemaker Lead-tip Heating During MRI Exams Depends on Patient Orientation, SCMR, 2017
- **Martinez JA**, Ennis DB. Magnetic Resonance Safety: The Effect of Orientation on Induced Temperature Elevation for Patients with Pacemakers. UCLA Cardiovascular Symposium. Los Angeles, September 2016.

SCHOLARSHIPS AND AWARDS

CONACYT/ UC MEXUS

2014- 2019

Graduate Fellowship

ARTS AND SCIENCES FELLOWSHIP

2008-2012

Undergraduate Fellowship