Lilian K. Gutiérrez Espinosa de los Monteros

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EDUCATION

Spanish Centre of Cardiovascular Diseases (CNIC) and
Universidad Complutense de Madrid (UCM)
Predoctoral student in Biomedical Research Program 2019 –

- Research project at Cardiac Arrhythmias Laboratory about in-vitro and in-vivo arrhythmogenic implications of ion channel macromolecular complexes, and relation with cardiac inherited diseases such as Andersen-Tawil Syndrome.

Universidad Politécnica de Madrid (UPM)
M. Sc. in Biomedical Engineering 2017 – 2018

- Graduated with Honors, **1st Ranked in Class awarded with "Premio ETSIT-Empresa"** / GPA 3.93
- Master's degree **Class Delegate**, Course 2017-2018
- Master Thesis "Implications of cardiac magnetic resonance resolution in the generation of 3D ventricular models after myocardial infarction." Honors received in final dissertation.
- Scholarship for Master studies in Biomedical Engineering "Fundación Carolina-BBVA".

Universidad Anáhuac México
*B. Sc. Biomedical Engineer*ing 2012 – 2017

- Graduated with Honors, **1st Ranked in Class** / GPA 4.0
- Project Thesis "Development of Android application for electrocardiogram monitoring with 12 simultaneous leads."
- Awards:
  - Academic Excellence Mention in Biomedical Engineering 2012, 2014
  - 1st Place on Engineering Projects "Engineering Week - Universidad Anahuac", 2016
  - Acknowledgment of Excellence Scholarship for Universidad Anahuac.

International Exchange Program in Biomedical Engineering @ UPM 2016

- Telemedicine Itinerary
- Co-writer of "Use of Open Educational Resources as Support for Project-Based. "

EXPERIENCE

Spanish National Centre for Cardiovascular Research
Advanced Development in Arrhythmia Mechanisms and Therapy Laboratory
Early stage Researcher 2018 -2019

- Research project based on delayed-enhancement cardiac MR sequences implications of different image resolutions, studying ventricular tachycardia relations with potential diagnostic and therapeutic targets.
- MR imaging research of post-myocardial infarction patients.
- Development of software tools for medical imaging investigation.

General Electric Healthcare
Commercial Analyst 2017

- Management and control of private and public contracts for maintenance services.
- Responsibility of LCS and on-demand service line; report and control of parts and services to the customers.
- Assistance for the commercial team to achieve new service sales on contracts and on demand products.

General Electric Healthcare
Service Sales Operations Intern 2016 – 2017

- Responsibility of logistics and organization of preventive maintenance, repair and diagnosis of medical equipment. Quotation of extra parts and services to consolidate the maintenance service.

Instituto Nacional de Cardiología "Ignacio Chávez"
Software Developer 2015

- Development of Android interfaces and implementation of wireless ECG leads

SKILLS

- **Languages**: Spanish (Na*tive*), English (*Fluent*), French (*Basic*)
- **Computer Science**: Python, R, Bash, PyMol, RosettaCommons, Matlab, Java, Deep Learning , SPSS, Visual Basic, Arduino IDE, Android Studio,
- **Software Medical Oriented**: LabSystem, DQMass
- **Business**: Oracle, Salesforce, MS Office

AKNOWLEDGMENTS/PARTICIPATION

- Member of Spanish Society of Biomedical Engineering (SEIB) and participation at SEIB XXXIII Congress 2018 with article "
- Universidad Anahuac scholarship for Degree studies in Biomedical Engineering.
- Member of program "University Leadership CIMA" 10th generation.
- Volunteer at Mexican Association to Aid Children with Cancer (AMANC México)

LIST OF PUBLICATIONS

1. Dual Dysfunction of Kir2. 1 at the Sarcolemma and the Sarcoplasmic Reticulum Underlies Arrhythmogenesis in a Mouse Model of the Andersen-Tawil Syndrome Type 1. A Macias, A González-Guerra, AI Moreno Manuel, FM Cruz Uréndez, et al. Circulation 142 (Suppl_3), A14836-A14836

2. Merino-Caviedes Susana, Gutiérrez Lilian K., Alfonso-Almazán Jose Manuel et al. Three-dimensional transmural scar assessment provides clinically relevant substrate characterization in patients with ischemic cardiomyopathy and spontaneous ventricular tachycardia episodes. Journal of Cardiovascular Magnetic Resonance. 2020 (*Under review*)

3. Gutierrez - Espinosa de los Monteros L., León D.G., Filgueiras-Rama D. Implications of magnetic resonance resolution in the generation of 3D patient-specific models after myocardial infarction. XXXVI Congreso Anual de la Sociedad Española de Ingeniería Biomédica. Libro de Actas CASEIB. November 2018. p. 11-14