

**CONCURSO ESTUDIANTIL 2024  
LICENCIATURA Y POSGRADO  
“DRA. VERÓNICA MEDINA BAÑUELOS”**

**National Student Contest on Biomedical Engineering “Dra. Veronica Medina Bañuelos”  
Undergraduate Finalist**

17	Humberto A. Salinas-Cortes, José M. Martínez-Serrato, Vianney Muñoz-Jiménez and Marco Ramos	A Machine Learning approach to breast cancer detection in mammograms
34	Roberto Hernández Chávez, Yair Leonardo Grijalva González, Bernardo Octavio Enríquez Guillen, Javier Camarillo Cisneros, Natalia Gabriela Sámano Lira and Abimael Guzmán Pando	Maternal Risk Prediction During Pregnancy Through Machine Learning Using Mexican Women’s Data
75	Luis Valtierra, Jesus Villavicencio-Navarro, Cynthia B. Perez, Luis A. Castro, Abel Esquer and Mario-Ivan Ramirez	Design Sprint Methodology for Developing a Mobile App for Real-Time Remote ECG
57	Joselinne Alicia Valdez Mendoza, German Hoyos Conteras, América Jollette Ortiz Castillo, Maricruz Rocha Rubio, Jazmín Cristina Stevens Barrón and Christian Chapa González	Synthesis of gold nanoparticles using extracts or biomolecules contained in pecan nut for potential applications in the treatment of acute lymphoblastic leukemia

**National Student Contest on Biomedical Engineering “Dra. Veronica Medina Bañuelos”  
Graduate Finalist**

32	Juan Dionisio Merida, Citlalli Jessica Trujillo-Romero, Arturo Vera Hernández, Lorenzo Leija-Salas, Carlos Alvarado Serrano and Josefina Gutiérrez Martínez	Arrays of a micro-coaxial triple-slot antenna to treat bone tumors: FEM thermal evaluation
84	Enrique Hernandez-Laredo, Marco Antonio Hernández-Galicia, René Arnulfo García-Hernández and Yulia Ledeneva	Detecting Confusing Drug Names Based on the Phonetic Characteristics of Mel-Frequency Cepstral Coefficient and Evolutionary Computation
86	Marco Antonio Hernández-Galicia, Enrique Hernandez-Laredo, Yulia Ledeneva and René Arnulfo García-Hernández	Detection of Plant–Disease Relationship Using Long Short-Term Memory Networks
7	María Fernanda López-Arámbruro, Stewart René Santos-Arce, Natanael Hernández-Vázquez, Ricardo A Salido-Ruiz, Sulema Torres-Ramos and Israel Román-Godínez	Statistical and Texture Features to Characterize DILD Radiological Findings
13	Daniela Suárez-Hernández, Stewart R. Santos-Arce, Sulema Torres-Ramos, Ricardo A. Salido-Ruiz and Israel Román-Godínez	Amyotrophic Lateral Sclerosis Detection using Facial Symmetry Analysis with Machine Learning Techniques
82	Evelin Ramírez-Ponce, Oscar Ramos-Quezada, Eduardo Macias-Naranjo, Alioth Guerrero-Aranda, Hugo Vélez-Pérez and Rebeca Romo-Vázquez	Comparison of Entropy Values in EEG of Patients with Juvenile Myoclonic Epilepsy and Healthy Individuals