Thursday - October 5

10:00 am – 11:20 am

Digital Pathology

Quantifying Expert Diagnosis Variability when grading Tumor-Infiltrating Lymphocytes
Paula Toro, Germán Corredor, Xiangxue Wang, Viviana Arias, Anant Madabhushi and Eduardo Romero Castro
Universidad Nacional de Colombia, Case Western Reserve University, Cleveland-OH, USA.
A lymphocyte spatial distribution graph based method for automated classification of recurrence risk on lung cancer images
Eduardo Romero Castro, Juan D García-Arteaga, Germán Corredor, Anant Madabhushi, Xiangxue Wang and Vamsidhar Velcheti
Universidad Nacional de Colombia, Case Western Reserve University, Cleveland-OH, USA.
A Sparse Representation of the Pathologist's Interaction with Whole Slide Images to Improve the assigned Relevance of Regions of Interest
Eduardo Romero Castro, Germán Corredor and Daniel Santiago
Universidad Nacional de Colombia,
Scoring nuclear pleomorphism using a visual BoF modulated by a graph structure
Eduardo Romero Castro, Ricardo Moncayo Martínez and David Romo-Bucheli
Universidad Nacional de Colombia.

Other modalities

Modelling and Validation of Diffuse Reflectance of the Adult Human Head for fNIRS: Scalp sub-layers Definition
Javier Herrera-Vega, Samuel Montero-Hernádez, Ilias Tachtsidis, Carlos G Treviño-Palacios and Felipe Orihuela-Espina
Instituto Nacional de Astrofsica Optica y Electrónica, México, University College London, UK
Supporting the potential of quantitative ultrasonic techniques for the evaluation of platelet concentrates
Edgar Gutierrez, Tatiana Molano, Yady Jimenez and Julian Villamarin
Universidad Antonio Nariño, Colombia
Tumor angiogenesis assessment using multi-fluorescent scans on murine slices by Markov random field framework
Oumeima Iaifa, Delphine Delphine. Le Guillou-Buffelloa and Daniel Racoceanu
Pontifícia Universidad Católica Del Perú

2:30 pm – 3:50 pm

Medical Software Development

Sensitivity of flow diverter simulation to segmentation: preliminary results and assessment
Raquel Kale Moyano, Ana Paula Narata, Hector Fernandez, Juan M Macho, Jordi Blasco, Luis San Roman and Ignacio Larrabide
Galgo Medical S.L.Pladema, CONICET, UNICEN. University Hospital of Tours, France
NecroQuant: Quantitative Assessment of Radiological Necrosis
Darryl H Hwang, Passant Mohamed, Steven Y Cen, Bino A Varghese and Vinay Duddalwar
University of Southern California
Open-source software platform for medical image segmentation applications
Rafael Namias, Juan P D'Amato and Mariana Del Fresno
Universidad Nacional del Centro, Tandil, Argentina
A quantitative reconstruction software suite for SPECT imaging
Mauro Namías and Robert Jeraj
Fundación Centro Diagnóstico Nuclear

Brain

Examination of corticothalamic fiber projections in United States service members with mild traumatic brain injury
Faisal Rashid, Emily L Dennis, Julio E Villalon-Reina, Yan Jin, Jeffrey D Lewis, Gerald E York, Paul M Thompson and David F Tate
Keck USC School of Medicine, CA, USA
Volumetric Multimodality Neural Network For Brain Tumor Segmentation
Laura Castillo, Laura A Daza, Luis C Rivera and Pablo A Arbeláez
Universidad de los Andes, Colombia
Gaussian Mixture Models for detection of Autism Spectrum Disorders (ASD) using magnetic resonance imaging.
Eduardo Romero Castro, Javier Andrés Almeida Moreno, Nelson Fernando Velasco Toledo and Charlens Alvarez
Universidad Nacional de Colombia
Brain cortical structural differences between non-central nervous system cancer patients treated with and without chemotherapy compared to non-cancer controls: a cross-sectional pilot MRI study using clinically-indicated scans
Mark Shiroishi, Vikash Gupta, Bavrina Bigjahan, Steven Y Cen, Faisal Rashid, Darryl H Hwang, Alexander Lerner, Orest B Boyko, Chia-Shang J Liu, Meng Law, Paul M Thompson, Neda Jahanshad
Keck School of Medicine of USC, CA USA

4:00 pm – 5:20 pm

Alzheimer

Quantifying cognition and behavior in normal aging, mild cognitive impairment, and Alzheimer's disease
Diana L Giraldo, Jan Sijbers and Eduardo Romero Castro
Universidad Nacional de Colombia
Characterizing brain patterns in conversion from mild cognitive impairment (MCI) to Alzheimer's disease
Santiago S. Silva R., Diana L. Giraldo and Eduardo Romero Castro
Universidad Nacional de Colombia
Deep learning based classification of FDG-PET data for Alzheimer's disease categories
Shibani Singh, Anant Srivastava, Liang Mi, Richard J Caselli, Kewei Chen, Dhruman Goradia, Eric M Reiman and Yalin Wang
Arizona State University
Detection of the Default mode Network by an anisotropic analysis
Eduardo Romero Castro and Aura Forero
Universidad Nacional de Colombia

E health and patient empowerement

Empowerment of diabetic patients through mHealth technologies and education : development of a pilot self-management application
Guillaume Gustin, Benoit Macq, Damien Gruson and Suzanne Kieffer
Universite Catholique de Louvain, Belgium
FCEstimator: self-monitoring foot clearance app to assess risk of falls using a smartphone
Maria Yousefian, K.S van Schooten, Parmit Chilana and Stella Atkins
Simon Fraser University, University of British Columbia, Vancouver, Canada
Phase-based motion magnification video for monitoring of vital signals using the Hermite transform
Jorge Brieva and Ernesto Moya
Universidad Panamericana. México
Brain-computer interface based on detection of movement intention as a means of brain wave modulation enhancement
Sergio David Pulido Castro and Juan M López
Escuela Colombiana de Ingeniería Julio Garavito