

BIOMESIP 2021

Gran Canaria (Spain)

19th-21th July



BIOMESIP-2021 COVID-19 Workshop

PROGRAM

**19th-21th July, 2021
Gran Canaria (SPAIN)**

BIOMESIP & COVID-19 W. Program

Monday, July 19th, 2021		
9:00	REGISTRATION DESK <i>(start at 9:00h but it is opened during all the conference)</i>	
	Sessions A: face-to-face sessions (some on-line). Sessions B: will be held on-line	
9:00-10:00	Session A.1: Disease control and diagnosis	Session B.1: Neuroimaging
10:00- 11:30	Session A.2: Pattern Recognition & Machine Learning for Biosignal Data	Session B.2: Biomedical Computing and Applications
11:30-12:00	COFFEE BREAK	
12:00-13:05	Session A.P1: Opening & Plenary Lecture. Dr. Sivarama Krishnan Rajaraman, Research scientist at the National Library of Medicine (NLM)	
13:05-14:00	Session A.3: Biomedical Computing and Applications	Session B.3: Biomedical Signal Measurement, Acquisition and Processing
14:00-16:00	REST BREAK	
16:00-17:00		Session B.4: COVID-19.Clinical
17:05-18:10	Session A.P2: Plenary Lecture. Prof. Min Xu Carnegie Mellon University	
18:15-19:40		Session B.5: COVID-19.General

NOTES:

All **Sessions A** will be held in Hotel Lopesan Villa del Conde Resort. They are **face-to-face sessions** (some on-line/virtual), and they will also be broadcast by Zoom.

All the **plenary lecture** are broadcast by Zoom.

All **Sessions B** will be held on-line (virtual) using Zoom.

Tuesday, July 20th, 2021		
9:00	REGISTRATION DESK <i>(start at 8:30h but it is opened during all the conference)</i>	
9:00-10:30	Session A.4: Biomedical Signal Measurement, Acquisition and Processing.	Session B.6: COVID-19. Disease. (Part.I)
10:30-11:00	COFFEE BREAK	
11:00-12:05	Session A.P3: Plenary Lecture. Prof. Hamidreza Namazi, Monash University	
12:05- 13:05	Session A.5: COVID-19. Disease. (Part.II)	Session B.7: 2D/3D/4D images Trends and Techniques.
13:05-14:00	Session A.6: COVID-19. Health. (Part.I)	Session B.8: Clinical engineering and Personalized medicine.
14:00-16:00	REST BREAK	
16:00-17:10		Session B.09: COVID-19. Health. (Part.II)
17:10-18:15	Session A.P4: Plenary Lecture. Dr. Eng. Lucia Billeci National Research Council of Italy (CNR)	
18:15		Session B.10: Advanced in Biomedical Engineering and COVID-19. (Part. I)
21:00	GALA DINNER Hotel Lopesan Villa del Conde Resort	

Wednesday, July 21th, 2021

9:00	REGISTRATION DESK <i>(start at 9:00h but it is opened during all the conference)</i>	
9:00-10:15	Session A.07: Computerized medical imaging.	Session B.11: COVID-19.General and Lockdown.
10:15- 11:20	Session A.P5: Plenary Lecture. Dr. Indrani Roy University College London	
11:30-12:00	COFFEE BREAK	
12:00-13:00	Tutorial: Inverse problems, from devices to signal and image processing, with application to ultrasound imaging. By Prof. Denis KOUAME	Session B.12: Medical Imaging and Computational support for clinical decisions
13:00-14:15		Session B.13: Advanced in Biomedical Engineering and COVID-19. (Part. II)
14:15	REST BREAK	

BIOMESIP 2021 PROGRAM

Monday, July 19th 2021

(9:00-10:00) Session A.1: Disease control and diagnosis

Chairman: Dr. Francisco Carrillo- Perez

Functional Connectivity derived from EEG in initial stages of Parkinson's disease. **(Ref: 105)**

Alejandro Armando Pelaez Suarez, Sheila Berrillo Batista, Ivonne Pedroso Ibañez, Marinet Fuentes Campos and Lilia Morales Chacón

Analysing large repositories of medical images **(Ref: 152)**

Ivan Štajduhar, Teo Manojlović, Franko Hrzić, Mateja Napravnik, Goran Glavaš, Matija Milanič, Sebastian Tschauer, Mihaela Mamula Saračević and Damir Miletić

Comparison of fusion methodologies using CNV and RNA-Seq for cancer classification: a case study on Non-Small-Cell Lung Cancer **(Ref: 165)**

Francisco Carrillo-Perez, Juan Carlos Morales Vega, Daniel Castillo-Secilla, Alberto Guillen, Ignacio Rojas and Luis Javier Herrera

(9:00-10:00) Session B.1: Neuroimaging

Chairman: Dr. Giuseppe Placidi

Modern Neurophysiological Research of the Human Brain in Clinic and Psychophysiology **(Ref: 33)**

Sergey Lytaev

Application of Resting Brain Frontal Lobe Complexity in Depression Screening **(Ref: 42)**

Zhilin Gao, Wang Wan, Zhongze Gu and Xingran Cui

Local Contrast Normalization to Improve Preprocessing in MRI of the Brain **(Ref: 49)**

Giuseppe Placidi and Matteo Polsinelli

Morphological Characteristics Analysis of Working Memory Tracts Using BOLD-fMRI and HARDI based Tractography in Healthy Human Brains (**Ref: 52**)

Abir Troudi, Ines Ben Alaya and Salam Labidi

(10:00- 11:30) Session A.2: Pattern Recognition and Machine Learning for Biosignal Data

Chairman: Dr. GANGHOFFER Jean-François and Dr. Ivan Štajduhar Štajduhar

Analysis of Accuracy and Timing in Decision-Making Tasks (on-line) (**Ref: 32**)

Olga Georgieva, Nadejda Bocheva, Miroslava Stefanova and Bilyana Genova

Recurrent Neural Networks and Efficiency in High-Dimensional EEG Classification (**Ref: 155**)

Javier León, Juan José Escobar, Jesús González, Julio Ortega, Francisco Manuel Arrabal-Campos, Andrés Ortiz and Miguel Damas

Energy-time Profiling for Machine Learning Methods to EEG Classification (**Ref: 156**)

Juan Carlos Gómez-López, Juan José Escobar, Jesús González, Francisco Gil-Montoya, Julio Ortega, Mike Burmester and Miguel Damas

Performance Study of Ant Colony Optimization for Feature Selection in EEG Classification (**Ref: 164**)

Alberto Ortega, Juan José Escobar, Julio Ortega, Jesús González, Alfredo Alcayde, Jorge Munilla and Miguel Damas

(10:00- 11:30) Session B.2: Biomedical Computing and Applications

Chairman: Dr. Davide Crivelli

Image motion correction of GATE simulation in dedicated PET scanner with open geometry (**Ref: 37**)

Hector Espinos-Morato, David Cascales-Picó, Marina Vergara and María José Rodríguez-Álvarez

Relationships between vertical jump and composite indices of femoral neck strength in a group of young women (**Ref: 98**)

Anthony Khawaja, Pierre Kamle, Elie Maliha, Ghassan Maalouf, Hechmi Toumi, Antonio Pinti and Rawad El Hage

Automatic classification of valve diseases through natural language processing in Spanish and active learning (**Ref: 108**)

Pablo Pérez-Sánchez, Víctor Vicente-Palacios, Manuel Barreiro-Pérez, Elena Díaz-Peláez, Antonio Sánchez-Puente, Jesús Sampredo-Gómez, Alberto García-Galindo, P. Ignacio Dorado-Díaz and Pedro L. Sánchez

Optimizing Photoacoustic Tomography: Lymphatic Drainage from the Brain in Pigmented Mice (**Ref: 111**)

Balal Mian, Vladislav Toronov, Xun Zhou and Yeni Yucel

Deep Learning-based Classification of Cancer Cell in Leptomeningeal Metastasis on Cytomorphologic Features of CSF (**Ref: 168**)

Wenjin Yu, Guoxun Zhang, Guillermo Ayuso Izquierdo and Gang Zhao

(12:00-13:05) Plenary Talk (virtual/on-line):

Dr. Sivarama Krishnan Rajaraman,

Research scientist at the National Library of Medicine
(NLM)

Title: Chest X-Ray Bone Suppression for Improving Classification of Tuberculosis-Consistent Findings

(13:05-14:00) Session A.3: Biomedical Computing and Applications

Chairman: Dr. Alberto Rossi

Homogenized strain gradient remodeling model for trabecular bone microstructures based on 3D CT scans (**Ref: 43**)

Jean-François Ganghoffer, Ibrahim Goda and Zineddine Louna

Are the paramagnetic properties of melanin in melanoma metastases the key to detect invaded lymph nodes with artificial intelligence? (**Ref: 107**)

Carola Brussaard, Johan de Mey, Yanina Jansen, Bart Neyns and Inneke Willekens

(13:05-14:00) Session B.3: Biomedical Signal Measurement, Acquisition and Processing

Chairman: Dr. Víctor Vicente-Palacios

Modelling Brain Connectivity Networks by Graph Embedding for Dyslexia Diagnosis (**Ref: 17**)

Marco A. Formoso and Andrés Ortiz

Causal coupling of low frequency oscillations during movement imagination – a multimodal study (**Ref: 31**)

Katarzyna Blinowska, Piotr Lachert, Maciej Kaminski, Jaroslaw Zygierewicz and Adam Liebert

Methodological approaches to the comparison of left ventriculum stroke volume values measured by ultrasonic technique or estimated via transfer functions (**Ref: 44**)

Andrey Pugovkin, Valerii Yerkudov and Sergey Lytaev

Investigation of Gastroparesis using Multichannel Electro Gastro Gram – A study (**Ref: 68**)

Chandrasekaran R, Vijayaraj S and Jothi Lakshmi G.R

Application of neurometrics to the assessment of attention regulation skills for peak performance in sports: a multi-method neuroassessment protocol (**Ref: 143**)

Davide Crivelli and Michela Balconi

(16:00-17:00) Session B.4: COVID-19. Clinical

Chairman: Dr. Ana Jovančević

Alternative antiviral treatment for COVID-19 (**Ref: 82**)

Carlos Parga-Lozano

The Emotional and Psycho-social Consequences of Coronavirus Disease-19 Pandemic – A Glimpse into the Post-pandemic Society (**Ref: 114**)

Smrithi Chhabra

Early Recovery of COVID-19 Patients by Using Immunoglobulins Present in Cow Colostrum Food Supplement-A Clinical Study (**Ref: 132**)

Dr. Swati Khartode

COVID-19 Biomarkers Detection Using 'KnowSeq' R Package (**Ref: 166**)

Javier Bajo-Morales, Daniel Castillo-Secilla, Luis Javier Herrera and Ignacio Rojas

(17:05-18:10) Plenary Talk (virtual/on-line):

Prof. Min Xu,

Carnegie Mellon University

Title: Automatic analysis of cryo-electron tomography using computer vision and machine learning

(18:15-19:40) Session B.5: COVID-19. General

Chairman: Dr. Ignacio Rojas and Dr. Daniel Castillo Secilla

Impact of COVID-19 pandemic and related isolation measures on violence against children in Egypt (**Ref: 81**)

Seham Abo Kresha, Rasha Ali and Elsayed Abdelkreem

Domination γ -Domination Topological Indices and P-Polynomial of Some Chemical Structures Applied for the Treatment of COVID-19 Patients (**Ref: 128**)

Hanan Ahmed, Anwar Alwardi, Ruby Salestina M and Soner N.D

Implementation of Antimicrobial Stewardship standards in an Italian Hospital during the Covid-19 emergency (**Ref: 136**)

Antonio Madaia, Antonio Marco Miotti, Paola Giuriato, Giampaola Basso, Davide Bonaldo, Maria Giovanna Fraccaro, Francesco Onelia, Alessia Arseni, Emanuela Salvatico and Emanuela Zilli

Information sources and conspiracy theories as predictors of vaccination intention (**Ref: 141**)

Ana Jovančević, Nebojša Milićević and Stefan Đorić

Optimizing COVID-19 Interventions through Machine Learning (**Ref: 100**)

Risto Miikkulainen

Tuesday, July 20th, 2021

(9:00-10:30) Session A.4: Biomedical Signal Measurement, Acquisition and Processing.

Chairman: Dr. Michal Petru and Dr. Valentina Markova

Automated Annotation of Valence and Arousal during Cognitive Activity (on-line) **(Ref: 48)**

Valentina Markova, Todor Ganchev and Miroslav Markov

Focal and Generalized Seizures Distinction by Rebalancing Class Data and Random Forest Classification (on-line) **(Ref: 124)**

Lina Abou-Abbas, Imene Jemal, Khadidja Henni, Amar Mitiche and Neila Mezghani

Event Related Potential Analysis Using Machine Learning to predict Diagnostic Outcome of Autism Spectrum Disorder (on-line) **(Ref: 125)**

Lina Abou-Abbas, Stefon van Noordt and Mayada Elsabbagh

Natural Cellulosic Fiber Reinforced Bio-Epoxy Based Composites and Their Mechanical Properties **(Ref: 169)**

Rajesh Mishra and Michal Petru

(9:00-10:30) Session B.6: COVID-19. Disease (Part.I)

Chairman: Dr. Daniel Castillo Secilla

Forecasting the Nigerian COVID-19 Epidemic: An Application of ARIMA Time Series Model **(Ref: 126)**

Oluwadamilola Aiyewumi and Malachy Okeke

Parameter estimation for COVID-19 outbreak with help of compartmental model **(Ref: 129)**

Csaba Farkas, Dávid Iclănzan, Boróka Olteán-Péter and Géza Vekov

Prevalence of COVID-19 amongst Arizona First Responders **(Ref: 139)**

Vershalee Shukla, Jared Johns, Christine Lau, Sharon Kanya, Kara Kalkbrenner, Felicia Washington and Pablo Prichard

Interpretable COVID-19 Classification leveraging Ensemble Neural Network and XAI **(Ref: 148)**

Shakib Mahmud Dipto, Irfana Afifa, Mostofa Kamal Sagor, Md. Tanzim Reza and Md. Ashrafal Alam

CoroPy : A Deep Learning Based Comparison Between X-ray and CT Scan Images in Covid-19 Detection and Classification. **(Ref: 151)**

Md. Jamilur Rahman, Ahashan Habib Niloy, Shammi Akhter Shiba, S.M. Farah Al Fahim, Faizun Nahar Faria, Emtiaz Hussain and Mohammad Zavid Parvez

Tomographic identification and evaluation of pulmonary involvement due to SARS-CoV-2 infection using artificial intelligence and image segmentation technique **(Ref: 157)**

Ariela Stefanini, Taylor Fidelis, Gustavo Penna, Gabriel Pessanha, Reinaldo Marques and Deive Oliveira

(11:00-12:05) Plenary Talk (virtual/on-line):
Prof. Hamidreza Namazi,
Monash University

(12:05- 13:05) Session A.5: COVID-19. Disease (Part.II)

Chairman: Dr. Javier Diez Gonzalez

Risk Group Determination in Case Of COVID-19 Infection **(Ref: 134)**

Borys Biletskyi and Anatolii Gupal

A computational pipeline to identify potential SARS- CoV-2 vaccine targets **(Ref: 138)**

Giulia Russo, Valentina Di Salvatore, Giuseppe Sgroi, Giuseppe Alessandro Parasiliti Palumbo and Francesco Pappalardo

PEAK: a clever Python tool for exploratory, regression, and classification data. A case study for COVID-19 **(Ref: 149)**

Giuseppe Sgroi, Giuseppe Alessandro Parasiliti Palumbo, Valentina Di Salvatore, Giulia Russo and Francesco Pappalardo

(12:05- 13:05) Session B.7: 2D/3D/4D images Trends and Techniques.

Chairman: Dr. Daniel Castillo Secilla

Correlation between the Findings of Magnetic Resonance Imaging Shoulder and Shoulder Arthroscopy (**Ref: 65**)

Zubair Ringshawl, Ajaz Bhat and Zahid Bashir

Silent MRI – Opportunities and Challenges (**Ref: 66**)

Boguslaw Tomanek

3D Tomosynthesis evaluation of pixel intensity values of breast masses. (**Ref: 115**)

Sneha Ravichandran and Avantsa Rohini

COVID-19 detection method from chest CT scans via the fusion of slice information and lung segmentation (**Ref: 167**)

Jesús Toledano Pavón, Juan Carlos Morales Vega, Francisco Carrillo-Perez, Luis Javier Herrera Maldonado and Ignacio Rojas Ruiz

(13:05-14:00) Session A.6: COVID-19. Health. (Part.I)

Chairman: Dr. Juan José Escobar

Effect of COVID-19 lockdown on adherence to the Mediterranean Diet among participants in a health-promotion program (**Ref: 102**)

Evelia Franco Álvarez and Rubén Barakat

Memory Chains for Optimizing the Table Disposition during the COVID-19 Pandemic (**Ref: 146**)

Rubén Ferrero Guillén, Javier Díez-González, Paula Verde, Alberto Martínez-Gutiérrez, José Manuel Alija and Hilde Perez

(13:05-14:00) Session B.8: Clinical engineering and Personalized medicine.

Chairman: Dr. Antonio PINTI

Fat mass is negatively associated with composite indices of femoral neck strength in elderly Lebanese subjects (**Ref: 29**)

Amal Antoun, Antonio Pinti, Hayman Saddik, Emneh Hammoud, Eric Watelain and Rawad El Hage

Antimicrobial Resistance in Agri-food chain in LMICs: Added complexity during post-COVID (**Ref: 80**)

Indranil Samanta

Artificial corneal transplantation and the safe recovery of vision in the COVID-19 pandemic (**Ref: 133**)

Carlos Eduardo Ximenes da Cunha, Marina Viegas Moura Rezende Ribeiro, Laís Rytholz Castro, Marina Maria Gonzaga Moreira, Paloma da Silva de Santana, Luciano Timbó Barbosa, Eugênia Mirza Queiroz Ferreira Barboza da Silveira and Ana Ramalho Gameleira Soares

Electrophysiological markers of excessive Internet use: evidence from an ERP study (**Ref: 140**)

Laura Angioletti and Michela Balconi

(16:00-17:10) Session B.9: COVID-19. Health. (Part.II)

Chairman: Dr. Luis Javier Herrera

The magnitude of hematological abnormalities among COVID-19 patients in Addis Ababa, Ethiopia (**Ref: 86**)

Moges Wordofa, Shambel Araya, Mintesnot Mamo, Yakob Tsegaye, Abebe Hordofa, Abebe Negeso, Tewodrosx Tewodros Fasil, Betlhem Berhanu, Hermelax Begashaw, Asegdew Atlaw, Tirhas Niguse, Mahlet Cheru and Zemenu Tamir

Multi-Organ System Dysfunction in Covid-19—A Review. (**Ref: 96**)

Pooja Bhadoria

Protected discharge model for mild-moderate Covid patients (**Ref: 145**)

Emanuela Zilli, Antonio Madia, Paola Giuriato, Sofia Barbar, Francesca Cassutti, Eleonora Bertoli, Guido Di Gregorio, Luca Cancian, Claudio Bozzoli and Maria Rita Marchi

Exploring the Effects of Loneliness, Internet Addiction on Adults' Well-being During COVID-19 Quarantine (**Ref: 150**)

Loulwah Alsumait, Hasah Alheneidi and Andrew Smith

(17:10-18:15) Plenary Talk (virtual/on-line):

Dr. Eng. Lucia Billeci,

National Research Council of Italy (CNR)

(18:15-) Session B.10: Advanced in Biomedical Engineering and COVID-19 (Part. I)

Chairman: Dr. Ignacio Rojas and Dr. Daniel Castillo Secilla

Limb Alignment Changes With Knee Flexion: A Retrospective Study Based On CAS Data (**Ref: 34**)

Alvise Saracco, Charles Riviere and Loic Villet

Single-lead ECG-based Subject Authentication using Filter Bank Common Spatial Pattern and SVM (**Ref: 38**)

Turki Alotaiby, Saleh A. Alshebeili and Waleed M. Alsabhan

Preoperative imaging of the inferior alveolar nerve canal by cone-beam computed tomography and 1-year neurosensory recovery following mandibular setback through bilateral sagittal split ramus osteotomy: a randomized clinical trial (**Ref: 39**)

Hamidreza Mahaseni Aghdam

An Insight into Computer Vision and Machine Learning Techniques Used For Facial Mask and Social Distance Monitoring System to prevent COVID-19 Transmission (**Ref: 40**)

Iram Javed, Samina Khalid, Tehmina Shehryar and Farah Karim

A comparative study of clinical efficacy and ECG changes with lithium carbonate versus verapamil in patients of acute mania (**Ref: 46**)

Dr Gurvinder Pal Singh, Dr Mukhtiar Singh and Dr Ashish Puri

White matter volume changes in the corpus callosum as a result of direct vs. indirect injury to paediatric brain (**Ref: 50**)

Shubham Kaushal, Dr. Dhananjaya I Bhat, Dr. Dhaval P Shukla, Dr. Mini Jayan and Dr. Indira Devi Bhagavatula

Medical Image visualizer with open source repository software (**Ref: 51**)

Hirak Jyoti Hazarika and S Ravikumar

Evaluation of Glenoid fossa morphology in different facial growth patterns: A cone beam computed tomography study (**Ref: 67**)

Maryam Karandish, Maryam Paknahad, Somayyeh Farmani and Bahar Khademi

Estimating Tibia Length: An Anatomical landmarks Evaluation from Bones and Radiographs using Regression Equations (**Ref: 69**)

Sunday Elijah, Aniekan Peter and Akpan Ekanem

Computed tomography (CT) imaging features of patients with COVID-19: Systematic review and Meta-analysis (**Ref: 70**)

Ephrem Awulachew, Kuma Diriba, Asrat Anja and Firehiwot Belayneh

Retinal nerve fibre layer as a biomarker in multiple sclerosis using machine learning techniques (**Ref: 71**)

Alberto Montolío, José Cegoñino, Elena Garcia-Martin and Amaya Pérez del Palomar

Impact of Music Therapy on COVID-19 Patients among Adults (**Ref: 72**)

Ankita Kumari

Impact of 2020 COVID-19 lockdown on environmental education and leatherback sea turtle (*Dermochelys coriacea*) nesting monitoring in Pacuare Reserve, Costa Rica (**Ref: 83**)

Claudio Quesada-Rodriguez

Disposable face masks - Analysis of the release of synthetic micro and nano particles and chemical contaminants - linked to the COVID-19 pandemic (**Ref: 85**)

Sarper Sarp

Vertical Transmission of Coronavirus Disease 19 (COVID-19) from Infected Pregnant Mothers to Neonates: A Review (**Ref: 87**)

Hajar Abbasi, Seyed Alireza Dastgheib, Mojgan Karimi-Zarchi, Hossein Neamatzadeh, Seyed Reza Mirjalili, Athena Behforouz, Farzad Ferdosian and Reza Bahrami

Wednesday, July 21th, 2021

(9:00-10:15) Session A.7: Computerized medical imaging.

Chairman: Dr. Pauly Ossenblok and Dr. WOFF Erwin

Computed Tomography Imaging Characteristics of Disseminated BCG Disease (**Ref: 35**)

Dina Jalalvand and Ina Shaw

Determination of Multi-Drug-Resistant Tuberculosis vs Extreme Drug-Resistant Tuberculosis Using Computerized Tomography Scanning (**Ref: 36**)

Dina Jalalvand and Brandon Shaw

Baseline Cell-free DNA and Whole-Body Metabolically Active Tumor Volume Independently Predict Outcome in Metastatic Chemorefractory Colorectal Cancer (**Ref: 45**)

Erwin Woff, Pashalina Kehagias, Caroline Vandeputte, Lieveke Ameye, Thomas Guiot, Alain Hendlisz and Patrick Flamen

Image fusion to guide decision-making towards minimally invasive epilepsy treatment (**Ref: 131**)

Pauly Ossenblok, Stephan Meesters, Raf van Hoof, Albert Colon and Louis Wagner

(9:00-10:15) Session B.11: COVID-19.General and Lockdown.

Chairman: Dr. Francisco Carrillo- Perez and Dr. Juan Carlos Morales

The Carnival of Animals: a dancing tele-intervention to cope with the Covid-19 lockdown (**Ref: 127**)

Monica Re

Political and ideological parallels around COVID-19: analysis of the opinions of the governmental actions of the Méxican government (**Ref: 170**)

Francisco Javier Navarro Campos and Bryan Eduardo Rivera Villalobos

Neuroscientific hyperscanning and digital-caregiving system for monitoring and prevention of relational deprivation in dyad frail people-caregiver (**Ref: 144**)

Davide Crivelli and Michela Balconi

(10:15- 11:20) Plenary Talk (virtual/on-line):**Dr. Indrani Roy,**

University College London

Title: Exit Strategy from COVID-19: Vaccination and an Alternative Solution

(13:00-14:15) Tutorial: Inverse problems, from devices to signal and image processing, with application to ultrasound imaging. By Prof. Denis KOUAME. Universite Paul Sabatier Toulouse

(12:00-13:00) Session B.12: Medical Imaging and Computational support for clinical decisions

*Chairman: Dr. Francisco Carrillo- Perez and Dr. Juan Carlos Morales*DenseNet for Breast Tumor Classification in Mammographic Images (**Ref: 30**)*Yuliana Jimenez Gaona, María Jose Rodriguez-Alvarez, Hector**Espinos-Morato, Darwin Castillo Malla and Vasudevan Lakshminarayanan*Trident U-Net: An Encoder Fusion for Improved Biomedical Image Segmentation (**Ref: 41**)*Rajdeep Chatterjee, Sohom Roy and Sk Hafizul Islam*Computed Tomography Scan Assessment of the Anatomy of the Pterygomaxillary Junction and Its Relevance in Le Fort I Osteotomy (**Ref: 109**)*Bridget Neema, Beda Otieno Olabu, Fawzia Butt, Pamela Mandela**Ideny, Musa Misiani and Isaac Cheruiyot*The prognostic value of 18-FDG Positron Emission Tomography/Computed Tomography in Resectable Pancreatic Cancer (**Ref: 113**)*Lucia Moletta, Simone Serafini and Cosimo Sperti*An AI Model for Melanoma Detection Through Convolutional Neural Networks (**Ref: 154**)*Gabriel R. G. Pessanha and Eleanderson Campos*

(13:00-14:15) Session B.13: Advanced in Biomedical Engineering and COVID-19 (Part. II)

Chairman: Dr. Daniel Castillo Secilla

COVID 19-A Novel Zoonotic Disease: Origin, Prevention and Control (**Ref: 94**)

Ozdan Akram Ghareeb and Samed Abduljabbar Ramadhan

Orbital Cellulitis-When Computed Tomography Imaging Is Falsely Reassuring (**Ref: 95**)

Arsany Basily

DeepMedNet: Deep Learning based Medical Image Segmentation Model (**Ref: 97**)

Bekhzod Olimov and Jeonghong Kim

Phase 3 of COVID-19: Treat your patients and care for your radiographers. A designed projection for an aware and innovative radiology department (**Ref: 103**)

Chiara Martini, Marco Nicolò, Alessandro Tombolesi, Jacopo Negri, Oscar Brazzo, Daniele Di Feo, Angie Devetti, Irene Gertrud Rigott, Camilla Risoli, Giuseppe Walter Antonucci and Matteo Migliorini

Comparative analysis of emergency neurological care during lockdown due to COVID-19 (**Ref: 106**)

Sara Ballesta Martínez, María Pilar Navarro Pérez, Judith Espinosa Rueda, Marta Marín Gracia, Eduardo Jiménez Jara and Elena Muñoz Farjas

A combination of feature extraction methods and deep learning for brain tumor detection (**Ref: 112**)

Masoumeh Siar

Mathematical modeling of the spread of COVID-19 among different age groups in Morocco: Optimal control approach for intervention strategies (**Ref: 121**)

Driss Kada, Abdelfatah Kowidre, Omar Balatif, Mustafa Rachik and El Houssin Lbriji

Seroepidemiological surveillance of the circulation of the SARS-CoV-2 in Honduras from June 16-23, 2020. (**Ref: 122**)

Mario Mejía, José Lara and Sandra Araujo Pleitez

Technology in COVID-19 primary care management. Experience from Italy (**Ref: 130**)

Silvia Bressy

Role of portable chest radiography in management of COVID-19: Experience of 422 patients from a tertiary care center in India (**Ref: 153**)

Dr Meenu Bagarhatta