CIBB 2021 — the 17th International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics — 15-17 November, 2021 — online

time	Monday 15 November 2021	Tuesday 16 November 2021	Wednesday 17 November 2021
09:00	CIBB 2021 Welcome	Second day welcome	Third day welcome
09:10	"Predicting medical complications in intensive care: early recognition of sepsis using machine learning" Karsten Borgwardt keynote	"Successful writing of bioinformatics grant proposals" Olaf Wolkenhauer keynote	"DOME: recommendations for supervised machine learning validation in biology" Dmytro Fishman keynote
	main track:	neurodegenerative diseases session:	DOME session, main track:
09:50	1 "A collaborative training approach for stress detection", Eleonora Ciceri	64 "Percolation-based Stability Analysis of Functional Connectivity in Mild Cognitive Impairment and Alzheimer's Disease", Angela Lombardi	20 "Deep Recurrent Neural Networks for Generating Synthetic Coronavirus Spike Protein Sequences", Lisa Crossman
10:10	14 "Topology-Aware Optimisation of Vaccination Strategy for Minimising Virus Spreading", Pietro Hiram Guzzi	12 "Peeking inside the box: transfer learning vs 3D convolutional neural networks applied in neurodegenerative diseases", Amira Soliman	61 "The need of standardised metadata to encode causal relationships: Towards safer data-driven machine learning biological solutions", Beatriz Garcia Santa Cruz
10:30	53 "Integrating Decision Tree Learning on the Graph Database Neo4j to Analyze Clinical Data", Robert Heyer	54 "Impaired core networks and time-distant reconfiguration patterns in Alzheimer's disease", Kai Du	33 "Toward a standard formal semantic representation of the model card report", Muhammad Amith
10:50	57 "Camera-assisted Motor State Assessment of Patients with Parkinson's Disease", Vassilis Plagianakos	65 "Computer-aided diagnosis system for Alzheimer's disease using principal component analysis and machine learning-based approaches", Lilia Lazli	39 "Predictive modeling for Inflammatory Bowel Disease detection from endoscopic imaging", Marco Chierici
11:10	47 "Table detection in text documents for extracting regulatory interaction from literature of regulation in bacteria", Axel Zagal-Norman	9 "Deep transfer learning for DTI- and MRI- based early diagnosis of cognitive decline and dementia ", Nitsa Herzog	48 "An alternative learning algorithm for tree augmented naive Bayes: an application to facial biotype classification", Gonzalo A. Ruz
11:30	3 "Interpretability methods for differential gene analysis of scRNA-seqclustering models", Ciortan Madalina	4 "Non-linear Clustering of Smell Clinic Data Reliably Differs Parkinson's Disease Patients and Healthy People", Tatiana Anuchina	67 "Deep Learning based Deblocking of Fourier Ptycographic images", Mattia Delli Priscoli
11:50	5 "High-dimensional multi-trait GWAS by reverse prediction of genotypes using machine learning methods", Muhammad Ammar Malik	26 "Stratification of Parkinson's disease patients from the Fox Insight study", Anita Valmarska	32 "Towards Generating Synthetic Pathways for Object Detection", Joshua Thompson
12:10	7 "Identifying SNP associations and predicting disease risk from Genome-wide association studies using LassoNet", Hussain Sajwani	43 "Identifying prototype model patients in Amyotrophic Lateral Sclerosis patients at diagnosis through Archetypal Analysis", Isotta Trescato	22 "Automatic Plankton Detection and Classification on Raw Hologram with a Single Deep Learning Architecture", Romane Scherrer
12:30	"Cellular and gene signatures of tumor-infiltrating dendritic cells and natural-killer cells predict prognosis of neuroblastoma" Ombretta Melaiu keynote	51 "Inspecting Progression Trajectories in Amyotrophic Lateral Sclerosis using Process Mining", Erica Tavazzi	28 "Using Machine Learning to Predict Reading Strategies from fNIRS Data", Matthew Campbell
		15 "End-to-end facial landmark detection to characterise oro-facial impairments in neurological patients: towards innovative techniques for the assessment of dysarthria", Lucia Migliorelli	8 "Convolution and Fast Fourier Transform to Compare Symbol Sequences", Michael Sadovsky
13:10	pause	pause	pause
	main track:	neurogenerative session & modeling session	ML session & main track:
14:00	18 "Cancer-lncRNA: A Database of lncRNAs exploring chromosomal linkages in human cancers", Gaurav Kumar Bhagat	37 "Specialized prognostic models based on disease progression patterns: predicting non-invasive ventilation in ALS patients stratified by progression rate", Andreia Martins	21 "A Machine Learning-Based Efficient Sepsis Detection Using Electronic Health Records", Kai-Cheng Hsu
14:20	19 "Summarizing Global SARS–CoV–2 Geographical Spread by Phylogenetic Multitype Branching Models", Hao Chi Kiang	25 "A statistical analysis of multiple sclerosis risk factor interaction with Bayesian networks", Morghan Hartmann	40 "Linear regression modelling to assess the impact of socio-economic, demographic and health-related variables on wellbeing in the elderly population", Isotta Trescato
14:40	23 "Batch Effect Detection in RNA-Seq Data using Machine-Learning-Based Automated Assessment of Quality", Maximilian Sprang	16 "Knowledge Graph-based Neurodegenerative Diseases and Diet Relationship Discovery", Yi Nian	42 "A statistical network method to identify relevant genes for pathway enrichment analysis", Giuseppe Agapito
15:00	27 "Structural Classification of RNA Molecules using ASPRA Distance", Michela Quadrini	45 "In silico clinical trials for Relapsing-Remitting Multiple Sclerosis with MS TreatSim", Fianne Sips	60 "Interlead Conversion of Single-Lead Blindly-Segmented Electrocardiogram Signals", João Ribeiro Pinto
15:20	38 "Improving bacterial sRNA identification by combining genomic context and sequence-derived features", Moustafa Elsisy	10 "Genetic Algorithms for the identification of marker panels in single-cell RNA Data", Andrea Tangherloni	62 "X-AI-Covid-19 Diagnosis System based Multi-Datasets", Aicha Boutorh
15:40	44 "Improved prediction of H3K27ac histone marks in time-series experiments at one time-point using deep learning and novel DNA sequence features extracted from a reference time-point.", Mohammad Hallal	49 "Combining Denoising and Flux Balance Analysis for Single-cellCluster Analysis", Bruno Giovanni Galuzzi	66 "Soft brain ageing indicators based on light-weight LeNet-like neural networks and localized 2D brain age biomarkers.", Francesco Bardozzo
16:00	56 "Feature Relevance in lncRNA Microarray Data", Emanuel Di Nardo	31 "The First In-silico Model of Leg Movement Activity During Sleep", Matteo Italia	58 "RNA Secondary Structure Factorization in Prime Tangles", Daniele Marchei
16:20	"A new concordant partial AUC and partial c statistic for imbalanced data in the evaluation of machine learning algorithms" Andre Carrington keynote	"The prevalence threshold metric and its application to obstetrics and gynecology screening tests" Jacques Balayla keynote	"Interdisciplinary research and scientific journals: how to get the best out of both" Stefano Tonzani keynote
	main track:	modeling session & main track	main track:
17:00	24 "RF-Isolation: a Novel Representation of Structural Connectivity Networks for Multiple Sclerosis Classification", Antonella Mensi	46 "A multi-objective optimisation approach for the linear modelling of cerebral autoregulation system", Felipe-Andrés Bello Robles	11 "Chemical Language Transformer for Drug-Target Binding Affinity", Alessio Ferone
17:20	35 "Boolean Network Inference at Different Levels of Logical Complexity", Eline van Mantgem	52 "OG-SPACE: Optimized Stochastic Simulation of Spatial Models of Cancer Evolution", Fabrizio Angaroni	30 "A Non-Negative Matrix Tri-Factorization based Method for Predicting Antitumor Drug Sensitivity", Pietro Pinoli
17:40	50 "BRANET: Graph-based Integration of Multi-omics Data with Biological a priori for Regulatory Network Inference", Surabhi Jagtap	63 "Environment perception in biochemical reactions", Stefano Maestri	41 "Synthetic cell biotechnology as a useful platform for chemical AI", Pasquale Stano
18:00	36 "Text mining enhancements for image recognitions of gene names and gene relations", Yijie Ren	68 "What architectures could lead next generation single cell analysis pipelines?", Zhengyu Chen	Instructions for supplements and post-proceedings and farewell
18:20	59 "Recent Dimensionality Reduction Techniques for High-Dimensional COVID-19 Data", Sotirios Tasoulis		

http://www.isa.cnr.it/cibb2021/

Each number represents the article EasyChair #ID

Legend:
- keynote & invited speakers
- pause
- chairs
- main track
- "Towards standardizing machine learning in life sciences: the FAIR principles and the DOME recommendations" session
- "Artificial intelligence and statistical methods for neurodegenerative diseases" session
- "Modeling and simulation methods for computational biology and systems medicine" session
- "Machine learning in healthcare informatics and medical biology" session