

# BHI Special Sessions

Paper #	Session	Title	Authors
		<b>Special Session 1: Building the Biggest Challenge in Digital Mammography</b>	
327	1	Crowdsourcing in Biomedical Research: Tapping on the Wisdom of Crowds to Improve the Accuracy of Mammography Screening	Stolovitzky, Gustavo
334	1	Digital Mammography DREAM Challenge: Challenging the Infrastructure with Deep Learning Models	Schaffer, Thomas
335	1	Digital Mammography DREAM Challenge: The Core of Top Performing Methods	Ben-Ari, Rami
342	1	Acquiring Images with Harmonized Outcome Data for Crowdsourced Challenges	Buist, Diana
349	1	Towards Finding the 'Needle in the Haystack': DeepHealth's Entry to the Mammography DREAM Challenge	Lotter, William; Sorensen, Gregory; Cox, David
333	1	The Digital Mammography DREAM Challenge: Spurring the Sharing of Large, Sensitive Data in a Data Challenge	Justin Guinney
		<b>Special Session 2: Intelligent Wellness Sensing</b>	
321	2	Integrated Smart Home System: Detection of Unseen Wellness Parameter in the Activity of Daily Livings of an Elderly for Well-Being Monitoring and Anomaly Discovery	Ghayvat, Hemant; Chen, Wei
328	2	Unobtrusive Sensing for Exercise and Sleep Monitoring	Chen, Runge; Sun, Fangmin; Zhou, Xiaolin; Miao, Fen; Fan, Xiao-Mao; Li, Ye
331	2	Intuitive Visualization of Multimodal Physiological Measurements for a Confident Interaction for P-Health Monitoring Solutions	Vega-Barbas, Mario; Seoane, Fernando
324	2	Innovative Sensing Technologies for Developing Countries	Lo, Benny

329	2	Smart Physical Rehabilitation in IoT Era	Postolache, Octavian
360	2	Weakly-Supervised Classification of Domestic Acoustic Events for Indoor Monitoring Applications	Vuegen, Lode; Karsmakers, Peter; Van hamme, Hugo; Vanrumste, Bart
356	2	Multimodal Sensor Fusion for Unobtrusive Driver State Estimation	Leonhardt, Steffen; Vetter, Pascal; Mathissen, Marcel; Leicht, Lennart
		<b>Special Session 3: Integrating Informatics and Technology for Precision Medicine</b>	
368	3	Advanced Data Analytics from Clinical Informatics to Personal Genomics for Precision Health	Tong, Li; Wu, Hang; Wang, May D.
338	3	Discovery of Novel Mutations in Cancer Development: Cooperative Effects of Accumulation of Multiple Mutations	Tseng, Yan-Yuan; Liang, Jie
343	3	Quantitative Imaging for Precision Medicine	Panayides, Andreas; Pattichis, Marios; Pattichis, Constantinos
354	3	Towards Precise Predictive Modelling of Coronary Artery Disease Elaborating on Omics Data	Georga, Eleni I.; Tachos, Nikolaos; Sakellarios, Antonis; Exarchos, Themis P.; Rocchiccioli, Silvia; Pelosi, Gualtiero; Parodi, Oberdan; Michalis, Lampros; Fotiadis, Dimitrios I.
330	3	Behavioral Informatics in Radiology: Modeling Radiologists Perceptual and Cognitive Behavior During Diagnostic Image Interpretation	Tourassi, Georgia; Yoon, Hong-Jun; Alamudun, Folami
367	3	Real World Assessment of Eldercare Interventions Efficacy	Billis, Antonis; Zilidou, Vasiliki; Bamidis, Panagiotis
379	3	Precision Medicine in the 21st Century: Why Public Health Informatics Will Play an Increasing Role in Disease Prevention	Luis Kun
		<b>Special Session 4: Digital Phenotyping: Towards Data-driven Behavior Change</b>	
351	4	Mobile Sensing to Evaluate Mobile Interventions for Cancer Caregivers	Chow, Philip; Boukhechba, Mehdi; Showalter, Shayna L.; Cohn, Wendy F.; Mohr, David; Gerber, Matthew; Barnes, Laura
361	4	Context-Aware Stress Detection	Janssens, Olivier; Smets, Elena; Schiavone, Giuseppina; Rios Velazquez, Emmanuel; Ongenae, Femke; De Raedt, Walter; Van Hoof, Chris; Van Hoecke, Sofie
374	4	Towards Personalized and Non-Invasive Labour Detection Using Bloomlife Pregnancy Tracker	Altini, Marco; Rooijackers, Michael Johannes; Rossetti, Elisa; Penders, Julien

<b>Special Session 5: The Development of Technologies for Modern Medicine: Overcoming Barriers and Pragmatic Implementation</b>			
336	5	Data Analytics and Tools: Developing Clinical Scales	Eskofier, Bjoern M; Klucken, Jochen
339	5	Delivering Value from Healthcare Technology: A Proposed Benefits Realisation Framework	Casey, Rebecca; Godfrey, Alan
340	5	Wearable Technologies: From Theory to Clinical Practice	Mancini, Martina; Stuart, Samuel; King, Laurie; El-Gohary, Mahmoud; Horak, Fay
345	5	Future Technologies for Modern Medicine: Impact and Legacy	James, Christopher; Amor, James
353	5	Moving Mhealth to Free-Living Deployment Has Challenges and Opportunities: Lessons from the PreventIT Project	Todd, Chris; Boulton, Elisabeth
364	5	The Role of the IoT in Modern Medicine: Ubiquitous Bioinformatics for Healthcare Professionals	Bamidis, Panagiotis
<b>Special Session 6: Biomedical Informatics across the Cancer Continuum</b>			
344	6	Embracing Diversity in Health Data Management	Kondylakis, Haridimos; Koumakis, Lefteris; Marias, Kostas; Tsiknakis, Manolis
377	6	Bridging the Gap between Computational Biomodelling and Clinical Practice	Sfakianakis, Stelios; Graf, Norbert; Marias, Kostas; Stamatakos, Georgios
378	6	Patient Empowerment with the Help of ICT in the Imanagecancer Project	Graf, Norbert; Kondylakis, Haridimos; Koumakis, Lefteris; Tsiknakis, Manolis; Marias, Kostas; Bucur, Anca; Braun, Yvonne; David, Ruslan; McVie, Gordon; Dong, Feng; Renzi, Chiara; Hoffmann, Stefan; Schera, Fatima; Kiefer, Stephan
381	6	Heterogeneous Multi-Scale Framework for Cancer Systems Models and Clinical Applications	Ghosh, Alokendra; Radhakrishnan, Ravi
382	6	Clinically Specified Cancer Multiscale Hypermodeling for in Silico Oncology: The Transatlantic CHIC Project and Beyond	Stamatakos, Georgios; Graf, Norbert
475	6	Workflow Framework to Support Data Analytics Pipelines	Bucur, Anca; Vdovjak, Richard

<b>Special Session 7: Disruptive Use Cases Empowered by IoT and Collaborative Technologies</b>			
314	7	Disruptive use cases empowered by IoT and Collaborative Technologies	Behmann, Fawzi
318	7	Disruptive use cases empowered by IoT and Collaborative Technologies	Bhargava, Ajay
350	7	Graphene Electronic Tattoo Sensors	Kabiri Ameri, Shideh
369	7	Movement Tracks Moving towards greater user impact and potentials within local and global IoT ecosystem	Young, Hope
<b>Special Session 8: Computer Modelling of Cardiovascular Disease</b>			
332	8	Computational modeling for plaque progression in the coronary artery	Filipovic, Nenad; Saveljic, Igor; Nikolic, Dalibor; Milosevic, Zarko; Nikolic, Milica; Sakellarios, Antonis; Exarchos, Themis P.; Parodi, Oberdan
341	8	Distribution of drug in tissue of heart as a function of concentration in coronary arteries	Kojic, Milos; Vukicevic, Arso; Milosevic, Miljan; Simic, Vladimir; Saveljic, Igor; Filipovic, Nenad
357	8	User friendly two- and three-dimensional brain tumor visualization	Sustersic, Tijana; Peulic, Aleksandar; Peulic, Miodrag; Filipovic, Nenad
362	8	Computational platform for peripheral artery stent testing	Krsmanovich, Dan; Saveljic, Igor; Nikolic, Dalibor; Filipovic, Nenad
365	8	Computational Analysis of Stented Abdominal Aortic Aneurysm	Djorovic, Smiljana; Koncar, Igor; Davidovic, Lazar; Filipovic, Nenad
375	8	Nanoconstructs for precision medicine: The in silico drives the in vivo	Decuzzi, Paolo
<b>Special Session 9: Machine Learning for Clinical Informatics</b>			
319	9	Deep learning for fighting antimicrobial resistance	Yang, Yang; Crook, Derrick; Walker, Timothy; Walker, Sarah; Clifton, David
326	9	Bayesian Fusion of Sensory Estimates for Personalised Physiological Time-series	Zhu, Tingting; Clifton, David
373	9	Clinical Machine Learning for Risk Prediction	Katherine Heller

358	9	Automatic Detection of Angiectasia: Evaluation of Deep Learning and Handcrafted Approaches	Pogorelov, Konstantin; Ostroukhova, Olga; Petlund, Andreas; Halvorsen, Pål; Espeland, Håvard Nygaard; Kupka, Tomas; De Lange, Thomas; Griwodz, Carsten; Riegler, Michael
		<b>Monday:</b>	
		Special Session 1- 9:35-11:05 Building the Biggest Challenge in Digital Mammography	
		Special Session 2- 11:20-12:50 Intelligent Wellness Sensing	
		<b>Tuesday:</b>	
		Special Session 3: 11:10-12:40 Integrating Informatics and Technology for Precision Medicine	
		Special Session 4- 14:15-15:45 Digital Phenotyping: Towards Data-driven Behavior Change	
		<b>Wednesday:</b>	
		Special Session 5- 8:50-10:20 The Development of Technologies for Modern Medicine: Overcoming Barriers and Pragmatic Implementation	
		Special Session 6- 13:15-14:45 Biomedical Informatics across the Cancer Continuum	
		Special Session 7- 14:50-16:20 Disruptive Use Cases Empowered by IoT and Collaborative Technologies	
		Special Session 8- 14:50-16:20 Computer Modelling of Cardiovascular Disease	
		Special Session 9- 16:25-17:55 Machine Learning for Clinical Informatics	