

# Conference Committee

## **Conference Chair**

Paolo Bonato, Director of Motion Analysis Lab, Spaulding Rehabilitation Hospital, Assistant Professor, Harvard Medical School, USA.

## **Conference Co-Chair**

Colin Brennan, Director of Strategic Relationships at Center for Integration of Medicine and Innovative Technology (CIMIT), USA

## **Program Chair**

Andrew Laine, Vice-Chair, Professor of Biomedical Engineering and Radiology, Columbia University, USA.

## **Program Co-Chair**

Metin Akay, Founding Chair, Professor of Biomedical Engineering, University of Houston, USA.

## **Tutorials and Workshops Chair**

Atam Dhawan, Associate Dean, Distinguished Professor of Electrical and Computer Engineering, New Jersey Institute of Technology, USA

## **Webmaster**

Ming Jack Po, Department of Biomedical Engineering, Columbia University, USA.

## **Clinical Courses Coordinator**

Caomhe Bennis, Spaulding Rehabilitation Hospital, USA.

## **General Program Coordinator**

Pamela Reynolds, Spaulding Rehabilitation Hospital.

## Clinical Continuing Education Program Chairs

Name	Affiliation
Brian Caulfield	University of Dublin, Ireland
Judith Deutsch	University of Medicine and Dentistry of New Jersey, USA
Emily Keshner	Temple University
Zev Rymer	Northwestern University

## Clinical Program Advisory Board

Name	Affiliation
Rox Anderson	Mass General, Harvard Medical School
Barry Berger	Exact Sciences, Inc.
Massimo Ferrigno	Brigham & Women's Hospital
Roger Fielding	Tufts University
Robert Friedman	Boston University
Joe Giacino	Spaulding, Harvard Medical School
Robert Hillman	Mass General, Harvard Medical School
Winston Kuo	Harvard Dental School
Al Luderer	Integrated Diagnostics
David Paydarfar	University of Massachusetts Medical School
Seward Rutkove	Beth Israel Deaconess, Harvard Medical School
Brian Snyder	Children's Hospital, Harvard Medical School
Will Wharvey	New England Baptist Hospital

## Conference Organization Advisory Board

Name	Affiliation
Ted Conway	National Science Foundation
Andreas Lymberis	European Commission
Grace Peng	National Institute of Health
Ricardo L. Armentano	Favaloro University, Argentina
Jorge E. Monzon	Universidad Nacional del Nordeste, Argentina
Donna Hudson	University of California San Francisco, USA
James L. Patton	University of Illinois at Chicago, USA
Bin He	University of Minnesota, USA
Yongmin Kim	University of Washington, USA
Xiaochuan Pan	University of Chicago, USA
Gregory A. Worrell	Mayo Clinic, USA
Guy Dumont	University of British Columbia, Canada
Jose Principe	University of Florida, USA
Andre Dittmar	INSA, France
John Clark	Rice University, USA
Eric McAdams	INSA, France

## Continuing Medical Education Program Chairs

Name	Affiliation
Gerold Ebenbichler	Medical University of Vienna
Felipe Frengi	Spaulding, Harvard Medical School
Deb Gaebler	Northwestern University
Ary Goldberger	Beth Israel Deaconess, Harvard Medical School

## Industrial Relationships Advisory Board

Name	Affiliation
Rick Casler	iWalk, USA
Gery Colombo	Hocoma, Switzerland
Jon Lourie	Edwards, Angell, Palmer & Dodge
Rick Greenwald	Simbex, USA
Steve Johnson	AMGEN, Inc.
Xuan Kong	IBM, Inc.
Sheena Liu	Philips Research USA
Carolyn McGregor	IBM, Inc.
Joshua Phillips	Catalyst Health and Technology Partners
Bill Warner	Warner Research LLC
Madoo Varma	Intel Corporation
Gundrun Zahimann	Roche, Inc.

## International Committee

### Chair

Name	Affiliation	Country
Yuanting Zhang	Chinese University of Hong Kong	China

### Co-Chairs

Name	Affiliation	Country
Sergio Cerutti	Politecnico di Milano	Italy
Roger Barr	Duke University	USA

### Committee Members

Name	Affiliation	Country
Ziad Abu-Faraj	American University of Science and Technology	Lebanon
Oliver Amft	ETH Zurich	Switzerland
Elsa Angelini	Telecom Paris Tech	France
Ricardo Armentano	Universidad Favaloro	Argentina
Alfredo Arnaud	Universidad Católica del Uruguay	Uruguay
Maria Teresa Arrendondo	Universidad Politecnica de Madrid	Spain
Per Ask	Linköping University	Sweden
Guillermo Avendano	Universidad de Valparaiso	Chile

Jean-Louis Coatrieux	University of Rennes	France
Claudio Cobelli	University of Padua	Italy
Tommaso D'Alessio	University of Roma Tre	Italy
Paolo Dario	Scuola Superiore Sant'Anna	Italy
Ugo Della Croce	University of Sassari	Italy
Danilo Demarchi	Politecnico di Torino	Italy
Atam P. Dhawan	New Jersey Institute of Technology	USA
Olaf Doessel	Karlsruhe Institute of Technology	Germany
Tania Douglas	University of Capetown	South Africa
Guy Dumont	University of British Columbia	Canada
John Enderle	University of Connecticut	USA
Dimitrios I. Fotiadis	University of Ioannina	Greece
James Goh	National University of Singapore	Singapore
Joerg Habetha	Philips	Germany
Bin He	University of Minnesota	USA
Bernard Hudgins	University of New Brunswick	Canada
Donna Hudson	University of California – San Francisco	USA
Mike Hughes	University of Surrey	United Kingdom
Helmut Hutten	Graz University of Technology	Austria
Fatima Ibrahim	University of Malaysia	Malaysia
Richard Jones	University of Otago	New Zealand
Yasemin Kahya	Boğaziçi Üniversitesi	Turkey
Robert Kearney	McGill University	Canada
Yongmin Kim	University of Washington	USA
Eitan Kimmel	Technion – Israel Institute of Technology	Israel
Vinod Kumar	Indian Institute of Technology Roorkee	India
Steffen Leonhardt	RWTH Aachen University	Germany
Zhipei Liang	University of Illinois	USA
Depei Liu	Peking Union Medical College	China
Madeleine Lowery	University College Dublin	Ireland
Andreas Lymberis	European Commission	European Commission
Ratko Magjarevic	University of Zagreb	Croatia
Nicos Maglaveras	Aristotle University of Thessaloniki	Greece
Silvestro Micera	University of Pisa	Italy
Damijan Miklavcic	University of Ljubljana	Slovenia
Fillippo Molinari	Politecnico di Torino	Italy
Jorge E. Monzon	Universidad Nacional del Nordeste	Argentina
Shuming Nie	Emory University	USA
Xiaochuan Pan	University of Chicago	USA
Dorin Panescu	newcardio	USA
Constantinos Pattichis	University of Cyprus	Cyprus
Julien Penders	IMEC	Netherlands
Qiyu Peng	Lawrence Berkeley National Laboratory, UC Berkeley	USA
Jose Principe	University of Florida	USA
Wim Rutten	University of Twente	Netherlands

Niilo Saranummi	VTT Technical Research Centre of Finland	Finland
Kwan Suk Park	Seoul National University	Korea
Ron Summers	Loughborough University	United Kingdom
Kenji Sunagawa	Kyushu University	Japan
Toshiyio Tamura	Chiba University	Japan
Katarzyna Wac	University of Geneva	Switzerland
May Wang	Shenzhen Institutes of Advanced Technology	China
Guangzhong Yang	Imperial College London	United Kingdom
Martha Zequera Diaz	Pontificia Universidad Javeriana	Columbia

## Local Organizing Committee

Name	Affiliation
Brian Tracey	Tufts University
Riccardo Barbieri	Harvard Medical School
Dana Brooks	Northeastern University
Emery Brown	Harvard Medical School
Michael Cima	MIT Technology and Licensing Office
Ted Clancy	Worcester Polytechnic Institute
James Collins	Boston University
Utkan Demirci	Harvard Medical School, Brigham & Women's Hospital
Solomon R. Eisenberg	Boston University
Deniz Erdogmus	Northeastern University
Sergio Fantini	Tufts University
Krystyna Gielo-Perczak	Worcester Polytechnic Institute
Julian Goldman	Mass General – Harvard Medical School
Meredith Knight	Tufts University
Shankar Krishnan	Wentworth
Hermano Igo Krebs	MIT
James Niemi	Wyss Institute – Harvard University
Jeffrey Ruberti	Northeastern University
Maurice Smith	Harvard University
Joe Ternullo	Partners Healthcare
Lucia M. Vaina	Boston University

## Minisymposium Editorial Board

Name	Affiliation
Sergio Cerutti	Politecnico di Milano
Julien Penders	IMEC Netherlands
Carmen Poon	Chinese University of Hong Kong
Sergio Fantini	Tufts University
Utkan Demirci	Harvard Medical School, Brigham & Women's Hospital
Nathalia Peixoto	George Mason University
Paul Sajda	Columbia University
Mehmet Dokmeci	Northeastern University
Madeleine Lowery	University College Dublin

## Student Activities Committee

Name	Affiliation
Lei Ding	University of Oklahoma
Christopher J. James	University of Warwick, UK
Meredith Knight	Tufts University
Lisa Lazareck	Welcome Trust
Cristian A. Linte	Mayo Clinic
Wasim Q. Malik	Harvard University
Michael McShane	Texas A&M University
Matthias K Reumann	IBM Corp.
Ming Jack Po	Columbia University
Brian Tracey	Tufts University
Iris Yan	Penn State

## Women in Engineering Committee

Name	Affiliation
Carolyn McGregor	University of Ontario Institute of Technology

# Conference Editorial Board

I would like to sincerely thank the following members of the Conference Editorial Board. In a period of just under three weeks more than 2700 papers were reviewed with on average three reviewers per paper. Theme editors also made initial “accept/reject” decisions and created a draft scientific program for each theme.

*Nigel Lovell*

Nigel Lovell

Editor in Chief, VP for Conferences, EMBS

## Theme Editors

Theme 1	Sergio Cerutti, Riccardo Barbieri	Theme 7	Bradley Layton
Theme 2	Andreas Hielscher	Theme 8	Jim Patton
Theme 3	Emil Jovanov	Theme 9	Dorin Panescu, Dieter Haemmerich
Theme 4	Socrates Dokos	Theme 10	Ilkka Korhonen
Theme 5	Ramakrishna Mukkamala	Theme 11	Martha Zequera Diaz
Theme 6	Richard Jones, Robert Butera		

## Associate Editors

Theme 1	Luca Faes, Emmanuel Ifeachor, Christopher James, Javier Antonio Jo, Yasemin P. Kahya, Pablo Laguna, Giovanni Magenes, Olivier Meste, Georgios D. Mitsis, Karen Moxon, Issa Panahi, Alberto Porta, Maria G. Signorini, Leif Sornmo, Sabine Van Huffel, Andreas Voss, David Westwick, Yoshiharu Yamamoto, Kazuo Yana
Theme 2	Hisashi Yoshida, Mark Anastasio, Elsa Angelini, Fred Azar, Mirza Faisal Beg, Edward Brown, Patrick Clarysse, Lei Ding, Sergio Fantini, Ernest Feleppa, Blaise Frederick, Alexandre Gramfort, Xuejun Gu, David Hall, Bin He, Jim Xiuquan Ji, Javier Antonio Jo, Chien-Min Kao, Clem Karl, Hyun Keol Kim, Thomas Koehler, Elisa Konofagou, Craig Levin, Hongen Liao, Marius George Linguraru, Sheena Xin Liu, Frederic Noo, Jean-Christophe Olivo-Marin, Keith Paulsen, Homer Pien, Jinyi Qi, Perry Renshaw, David Sarrut, K. Kirk Shung, Emil Sidky, Siddhartha Sikdar, Lawrence H. Staib, Bradley P. Sutton, Thomas Talavage, Claudio Vinegoni, Yi Wang, Steven M. Wright, Ed X. Wu, Leslie Ying
Theme 3	Olga Boric-Lubecke, Gert Cauwenberghs, Catherine Chronaki, Danilo De Rossi, Roozbeh Jafari, Sundaresan Jayaraman, Emil Jovanov, Catherine M. Klapperich, Andreas Lymberis, Emma MacPherson, Aleksandar Milenkovic, Filippo Molinari, Kwang S. Park, Julien Penders, Milutin Stanacevic, Toshiyo Tamura, Steve Warren
Theme 4	Ranjan Dash, Socrates Dokos, Bruce Gardiner, David R. Hose, Jie Liang, Poul Nielsen, Grace Peng
Theme 5	Marco Di Rienzo, Joseph Greenstein, Thomas Heldt, John K-J. Li, Ramakrishna Mukkamala, Thomas Penzel, Masaru Sugimachi, Merryn Tawhai, Edward Vigmond
Theme 6	James Abbas, Laura Astolfi, Fabio Babiloni, Robert Butera, Jose M. Carmena, David Guiraud, Jiping He, Christopher James, Richard D. Jones, Karim Oweiss, Eric Perreault, Chi-Sang Poon, Paul Sajda, George Zouridakis
Theme 7	Markus Buehler, Bradley E. Layton, Alisa Morss Clyne, Bryan Pfister, Michael Regnier, Nathan Sniadecki, Krystyn Van Vliet
Theme 8	Yasin Dhaher, Lorenzo Masia, Silvestro Micera, James Patton, Cameron N Riviere, Herman Van Der Kooij, Martha Lucia Zequera Diaz
Theme 9	William Durfee, Dieter Haemmerich, Dorin Panescu, John Anthony Pearce, Punit Prakash, Elliot B. Sloane, Vesna Zderic
Theme 10	Dimitrios I. Fotiadis, Nikolaos Maglaveras, Raouf Naguib, Chris Nugent, Stephen James Redmond, Harry Tyrer, Mark van Gils
Theme 11	Dinesh Kant Kumar, Ratko Magjarevic, Jorge E. Monzon, William Sandham, Martha Lucia Zequera Diaz

## Paper Reviewers

Aarabi, Ardalan  
Abásolo, Daniel  
Abba, Mohammed  
Abdel Fatah, Emam ElHak  
Abdel-Dayem, Amr  
abdessalem, salem  
Abe, Makoto  
Abolhassani, Mohammad  
Abu-Faraj, Ziad  
Accoto, Dino  
Ackermann, D. Michael  
Ackermann, Marko  
Agarwal, Rajeev  
Aggarwal, Vikram  
Aguado-Sierra, Jazmin  
Aguilar-Pelaez, Eduardo  
Ahmad Fadzil, Mohamad Hani  
Ahmadi Noubari, Hossain  
Ahmadian, Alireza  
Ai, Zhuming  
Akalin Acar, Zeynep  
Akan, Aydin  
Akhtar, Muhammad Tahir  
Akrofi, Kwaku  
Al-Abed, Mohammad  
Al-Ahmad, Amin  
Al-Ani, Tarik  
Al-Diri, Bashir  
Alemzadeh, Kazem  
Aletti, Federico  
Ali, Ali  
Alimenti, Federico  
Al-Jumaily, Adel  
Allin, Sonya  
Almeida, Rute  
Aloise, Fabio  
Altuve, Miguel  
Alty, Steve  
Álvarez, Daniel  
Alvarez, Juan Carlos  
Amano, Akira  
Anastasiou, Athanasios  
Andersson, Sean  
Ando, Takeshi  
Andresen, Daniel  
Androulakis, Ioannis  
Ang, Kai Keng  
Antonios, Vera  
aouadi, souha  
Apollonio, Francesca  
Applegate, Brian  
Araujo, Alvaro  
Aravind, Alex  
Arce-Diego, José L.  
Arcelus, Amaya  
Arcese, Laurent  
Armentano, Ricardo Luis  
Arredondo, María Teresa  
Artemiadis, Panagiotis  
Aruga, Masahiro  
Asadian, Ali  
Asfour, Aktham  
Asghari Oskoei, Mohammadreza  
Astaras, Alexander  
Astolfi, Laura  
Athina, Kokonozi  
Atienza, Jose  
Attygalle, Suneth  
Auger, François  
August, Katherine  
Auvinen, Ari-Matti  
Avolio, Alberto  
Azevedo-Coste, Christine  
Azevedo-Marques, Paulo  
Mazzoncini  
Azhim, Azran  
Azpiroz-leeahan, Joaquin  
Azza, Ouled Zaid  
Babouri, Abdesselam  
Baheti, Pawan  
Bai, Ou  
Bai, Xiaoxiao  
Bajic, Dragana  
Bajracharya, Aman  
Balasubramanian, Sivakumar  
Balestra, Gabriella  
Bali, Rajeev Kumar  
Bamberg, Stacy J Morris  
Bansal, Deivya  
BAO, Shu-Di  
Barbieri, Riccardo  
Barbosa, Talles  
Barbour, Randall  
Bardakjian, Berj Luther  
Barralon, Pierre  
Barrett, Alan  
Baselli, Giuseppe  
Basilakis, Jim  
Baskent, Deniz  
Bastianini, Flavia  
Basu, Amar  
Batzel, Jerry  
Baumert, Mathias  
Becq, Guillaume  
Beda, Alessandro  
Begg, Rezaul  
Bellazzi, Riccardo  
Bellemare, Marc-Emmanuel  
Bénar, Christian G.  
Benitez, Raul  
Benoussaad, Mourad  
Bernus, Olivier  
Bertoldo, Alessandra  
Besio, W. G.  
Beyer, Christian  
Bhattacharjee, Tapomayukh  
Bhuvanendran, Shivaprasad  
Bian, Junguo  
Bianchi, Anna Maria  
Biasiucci, Andrea  
Bien, Harold  
Billoint, Olivier  
Birlea, Sinziana Iulia  
Bisazza, Agnese  
Blanco-Velasco, Manuel  
Bocchi, Leonardo  
Bodenreider, Olivier  
Bonato, Paolo  
Bonizzi, Pietro  
Bonjean, Maxime  
Boric-Lubecke, Olga  
Boroczky, Lilla  
Borton, David  
Bouchard, Matthew  
Boudaoud, Sofiane  
Brace, Christopher  
Bradley, Andrew Peter  
Bragos, Ramon  
Brankov, Jovan G  
Braun, Christoph  
Bressan, Nadja  
Bridal, Lori  
Brieva, Jorge  
Brinegar, Cornelius  
Brochhausen, Mathias  
Brown, Lindsay  
Brunel, Helena  
Bruns, Tim M.  
Buchner, Theodor  
Buchowski, Mac  
Buist, Martin Lindsay  
Bunyak, Filiz  
Butera, Robert  
Byrd, Israel  
Cadena, Miguel  
Cai, Weidong  
Caiani, Enrico  
Calabrese, Barbara  
campbell, paul  
Campo, Eric  
Cao, Hong  
Cao, Hua  
Cao, Youfang  
Carey, Carole C.  
Carlson, Brian  
Carpaneto, Jacopo  
Carvalho, Hervaldo Sampaio  
Carvalho, Joao Luiz Azevedo de  
casadio, maura  
Casson, Alexander James  
Castellanos-Dominguez, Germán  
Castiglioni, Paolo  
Causevic, Elvir  
Cauwenberghs, Gert  
Cavaro-Ménard, Christine  
Cazuguel, Guy  
Celebi, M. Emre  
Celenk, Mehmet  
Cerutti, Sergio  
Chah, Ehsan  
Chaimanonart, Nattapon  
Chakravarty, M. Mallar  
Chan, Adrian  
Chan, Chung  
Chan, Gregory S H  
Chan, Kevin C.  
Chan, Lai-Hang Leanne  
Chan, Rosa H. M.  
Chang, Chieh-Wei  
Chang, H. J.  
Chang, Shey-Sheen  
Charleston-Villalobos, Sonia  
Chavarriaga, Ricardo  
Chen, Cheng-Hung  
Chen, Fei  
Chen, Hong  
Chen, Liangyou  
Chen, Sheng  
Chen, Tung-Chien  
Chen, Wen-Shiang  
Chen, Wenxi  
Chen, Xiaoxiao  
Chen, Xin  
Cheng, Teddy Man Lai  
Cheng-Liao, Jinxiu  
Chestek, Cynthia  
Chiarugi, Franco  
Chib, Vikram  
Chin, Zheng Yang  
Chinander, Michael  
Chiu, Hung-Wen  
Chiu, Pearl  
Cho, Jaegeol  
Cho, Jongman  
Cho, Seungryong  
Chodavarapu, Vamsy  
Chou, Cheng-Ying  
Chou, Nee-Yin  
Chouvarda, Ioanna  
Christoforou, Christoforos  
Chronaki, Catherine  
Chua, Eric Chern-Pin  
Chua, Kuang Chua  
Chung, Albert C. S.  
Ciani, Oriana  
Cikajlo, Imre  
Cipriani, Christian  
Citi, Luca  
Clark, John Tobey  
Clark, John W.  
Clarke, Malcolm  
Claus, Piet  
Clerc, Maureen  
Cloherty, Shaun L.  
Cluitmans, Pierre J.M.  
Coelho A Pereira, Wagner  
Cohen, Maurice  
Coimbra, Miguel  
Colantuoni, Antonio  
Colas, Fabrice  
Conforto, Silvia  
Corbi, Graziamaria  
Corley, Gavin  
Correia, Carlos  
Correia, Miguel  
Costa, Marly G. F.  
Cota, Navin Gupta  
Courtois, Bernard  
Culjat, Martin O.  
Cullen, Kacy  
Curone, Davide  
Cvetkovic, Dean  
Cysarz, Dirk  
da Rocha, Adson F.  
Dai, Tao  
Dai, Yakang  
Dai, Yang  
d'alesio, Tommaso  
Dalla Man, Chiara  
D'Angelo, Lorenzo Tancredi  
Dao, Tien-Tuan  
Dash, Ranjan  
Datta, Sushmita  
Dauwels, Justin  
Davalos, Rafael  
D'Avenio, Giuseppe  
de Araujo, Renato Evangelista  
de Carvalho, Paulo  
De Jonckheere, Julien  
de Jongh Curry, Amy  
De Marchi, Luca  
De Rossi, Danilo  
De Toledo, Paula  
De Vico Fallani, Fabrizio  
Dehollain, Catherine  
Del Gaudio, Costantino  
De-Miguel, Francisco F  
Deng, Zhi-De  
Desai, Tejal  
Di Pino, Giovanni  
Di Rienzo, Marco  
Dibazar, Alireza  
DiGiovanna, Jack  
Dillenseger, Jean-Louis  
Ding, Lei  
D'Inzeo, Guglielmo  
Diong, Bill  
Djilas, Milan  
Doessel, Olaf  
Dokmeci, Mehmet R.  
Dokos, Socrates  
Dommel, Norbert Brian  
Donnelly, Mark  
Dorantes, Guadalupe  
Dorval, Thierry  
dos Santos, Wellington  
Druzgalski, Christopher  
Duplaga, Mariusz  
Durand, Dominique  
Durfee, William  
Dutta, Ashish  
Eberl, Stefan  
Eberle, Wolfgang  
Eggen, Michael  
Ellmore, Timothy  
Elson, Daniel S.  
Emiris, Ioannis  
Englehart, Kevin  
Engler, Adam  
Epps, Julien  
Erfanian, Abbas  
Erickson, Jon  
Eriksen, K Jeffrey  
Erokhin, Victor  
Erson, E. Zeynep  
Escalona, Omar Jacinto



Escolano-Ruiz, Francisco	González, Francisco Javier	Hudgins, Bernard	Katehakis, Dimitrios
Escudero, Javier	Gonzalez, Rafael C.	Hudson, Donna L	Kato, Kazuo
ESPIAU, BERNARD	Gonzalez-Camarena, Ramon	Huerta, Mónica	Kato, Yasuhiro, X
Esposti, Federico	Gorce, Philippe	Hughes, Glen	Kawada, Toru
Eswaran, Hari	Goujon, Jean-Marc	Huo, Xueliang	Kay, Matthew
Evans, Daniel	Gouveia, Sónia	Hwang, In Duk	Kazanzides, Peter
Everett, Thomas	Grebe, Reinhard	Hwang, Seong-min	Kearney, Robert Edward
Ezenwa, Bertram	Greene, Barry R.	Iadanza, Ernesto	Keller, Thierry
Fadini, Tommaso	Grigoras, Carmen	Iaizzo, Paul	Kelly, Shawn
Faes, Luca	Grisan, Enrico	IDIER, Jérôme	Kenney, Laurence
Fakhry, Morkos	Grosberg, Lauren	Iftimia, Nicusor	Kerckhoffs, Roy
Farahmand, Farzam	Gu, Dong-Yun	Igal Garcia, Jorge	Khalifa, Ayman
Farooq, Omar	Gu, Lixu	Ihtatho, Dani	Khandoker, Ahsan Habib
Fatourechí, Mehrdad	Guan, Cuntai	Ilbay, Gul	Kharche, Sanjay
Fayn, Jocelyne	Gubbi, Jayavardhana	Inagaki, Masashi	Khmelniskii, Artem
Fazel-Rezai, Reza	Guénard, Hervé	Inan, Omer	Khodam Hazrati, Mehrnaz
Fedder, Gary K.	Guerreiro, Ana Maria G.	Ince, Nuri Firat	Kiefer, Michael
Feng, Mengling	Guglielmelli, Eugenio	Innes, Carrie R. H.	Kiguchi, Kazuo
Fenster, Aaron	Guillen, Sergio	Iordachita, Iulian	Kim, Desok
Fernández-Breis, Jesualdo Tomás	Guiot, Caterina	Iqbal, Kamran	Kim, Hyejung
Fernandez-Leal, Angel	Guiraud, David	Iramina, Keiji	Kim, Jinman
Fernandez-Luque, Luis	Guo, Ying	Itiki, Cinthia	Kim, Jungchae
Ferrandez, Jose M.	Gupta, Disha	Ito, Koichi	Kim, Keun Ho
Ferrari, Vincenzo	Gusmao, Cristine	Iturrate, Iñaki	Kim, Sohee
Ferrario, Manuela	Gutierrez, Mario Ibrahim	Iwahashi, Masakuni	Kim, Sung June
Ferrigno, Rosaria	Ha, Kiryong	Iwasaki, Kiyotaka	Kimura, Yuichi
Finkelstein, Stanley	Haab, Lars	Iyer, Darshan	King, Kevin
Finley, James	Hadjileontiadi, Leontios	Jaffrezic-Renault, Nicole	Kirlangic, Mehmet Eylem
Fitzgerald, Diarmaid	Haemmerich, Dieter	Jahed, Mehran	Klinder, Tobias
Fletcher, Richard Ribon	Haldar, Justin	Jamieson, Brian	Klingbeil, Lasse
Fleury, Anthony	Hallberg, Josef	Jan, Jiri	Knaflitz, Marco
Flexman, Molly	Hamadicharef, Brahim	Jané, Raimon	Ko, Li-Wei
Flores-Tapia, Daniel	Hamamoto, Kazuhiko	Jansen, Bart	Kobayashi, Yo
Fluet, Gerard	Han, Chengzong	Jara, Antonio	Koehler, Thomas
Foong, Kelvin Weng Chiong	Hannula, Markus	Jaramillo Garzón, Jorge Alberto	Komandur, Sashidharan
Formica, Domenico	Hara, Takeshi	Jean Christophe, Nebel	Komorowski, Dariusz, Waldemar
Fortune, Emma	Hargrove, Levi	Jelinek, Herbert Franz	Kong, Jun
Fotiadis, Dimitrios I.	Hariz, Mossaab	Jennane, Rachid	Konnis, Georgios
Fragomeni, Gionata	Harris, Arief R.	Jensen, Erik Weber	Korhonen, Ilkka
Fraisse, Philippe	Hassan, Mahmoud	Jeong, Hie-yong	Kortelainen, Jukka
Frassica, Joseph	Hayami, Takehito	Jeong, Incheol	Kostka, Pawel Stanislav
Frenea-Robin, Marie	Hayashibe, Mitsuhiko	Jhunjhunwala, Priyavrat	Kota, Srinivas
Friboulet, Denis	Hayes, Jer	Jia, Zhiheng	Koutkias, Vassilis
Friedrich, Christoph M.	Hayn, Dieter	Jimbo, Yasuhiko	Kovacs, Levente
Fripp, Jurgen	He, Renjie	Jimenez-Alaniz, Juan Ramon	Kretowski, Marek
Froehlich, Juerg	Hedjazi Moghari, Mehdi	Jimenez-Fernandez, Silvia	Kroll, Mark
FROUIN, Frederique	Heldt, Thomas	Jimenez-Gonzalez, Aida	Kuhn, Michael
Fujie, Masakatsu G.	Hélot, Rodolphe	Jimenez-Morales, David	Kumar, Dinesh
Fukayama, Osamu	Hemm, Simone	Jimison, Holly	Kurita, Yuichi
Fukuoka, Yutaka	Hemmati Berivanlou, Nima	Jin, Zhanpeng	Kursun, Olcay
Fung, Andrew	Hemzal, Dusan	Jo, Cheolwoo	Kurugollu, Fatih
Gabran, Salam	Heneghan, Conor	Jo, Javier Antonio	Kyriacou, Efthyvoulos
Gaetano, Laura	Herman, Pawel	Johansen, Peter	Laguna, Pablo
Gale, Timothy John	Hermann, Sonja	Johnson, Peter	Lai, Nicola
Gambino, Orazio	Hernández, Alfredo I	Johnston, Leigh A.	Lai, Tze Huei, Daniel
Gao, Shangkai	Hernandez-Matos, Enrique	Jones, Richard D.	Lal, Amit
Garcia Moros, Jose	Herreros López, Alberto	Jovanov, Emil	Lam, Tai Ning
Garcia, Julio	Hevia-Montiel, Nidiyare	Joye, Neil	Lanata', Antonio
Garcia, Maria	Hey, Stefan	Ju, Ming-Shung	Lang, Andrew
Garcia, Pablo Andrés	Higa, Hiroki	Judy, Jack	Lang, Elmar W.
Garcia-Casado, Javier	Ho, Cheng-Shiao	Juhola, Martti	Lau, Condon
Garcia-Molina, Gary Nelson	Hoffmann, Kenneth	Jung, Tzyy-Ping	Lau, Phooi Yee
Garde, Ainara	Hofmann, Ulrich G.	Jutten, Christian	Laugier, Pascal
Gefen, Amit	Honda, Yuichiro	K., Rajgopal	Lay-Ekuakille, Aime'
Gelpi, Ricardo	Hong, Bo	Kaartinen, Jouni	Layton, Bradley E.
Gentili, Rodolphe	Hong, Xin	Kadem, Lyes	le Feber, Joost
Georga, Eleni I.	Hori, Junichi	Kaji, Hirokazu	Le, Xuan Hoa Binh
Ghoraani, Behnaz	Hornero, Roberto	Kamalakaran, Sitharthan	Lecornu, Laurent
Ghovanloo, Maysam	Horowitz, Justin	Kamath, Vidya	Leder, Ron
Giannakeas, Nikolaos	Hou, Chun-Ju	Kamel, Nidal	Lee, Chang Won
Giordano, Daniela	Hradetzky, David	Kamiya, Atsunori	Lee, Jiann-Der
Giorgino, Toni	Hsiao, Min-Chi	Kanai, Yasushi	Lee, Jong-Ha
Giraldo, Beatriz	Hsiao, Tzu-Chien	Kang, Ji Yoon	Lee, Khuan Y.
Giritharan, Balathasan	Hu, Sijung	Kang, Sang Hoon	Lee, Ray
Glos, Martin	Hu, Xiao	Kanoh, Shin'ichiro	Lee, Sang Wook
Goevercin, Mehmet	Hu, Xiaoling	Kant Kumar, Dinesh	Lee, SangJoon
Golemati, Spyretta	Hu, Yaoping	Karampinos, Dimitrios	Lee, Shuenn-Yuh
Golz, Martin	Huang, Chi-Yu	Karanasiou, Irene	Lee, Shyh-Yuan
Gomez, Carlos	Huang, Feng	Karavatselou, Evy	Lee, Soo Yeol
Gomis, Pedro	Huang, Lei	Karlen, Walter	Lee, Young-Dong
Gonzalez Ballester, Miguel Angel	Huang, Qinghua	Karmakar, Chandan K.	Leistritz, Lutz
González, César A	Huang, Yanping	Karnowski, Thomas	Leitgeb, Rainer A.

LeMoynes, Robert	Marschollek, Michael	Mougiakakou, Stavroula	Parent, David
Leonhardt, Steffen	marsousi, mahdi	Moxon, Karen	Parini, Sergio
Leroux, Paul	Martel, Sylvain	Muehlsteff, Jens	Park, Kwang S.
Levinger, Pazit	Martin Moreno, Javier	Mukkamala, Ramakrishna	parker, philip
Levy, Pierre	Martinez, Angel	Müller, Bertram	Parnandi, Avinash Rao
Lhotska, Lenka	Martinez, Juan Pablo	Müller-Putz, Gernot	Parry, R. Mitchell
Li, Bing Keong Joe	Martinez-Licona, Fabiola	Mulqueeny, Qestra Camille	Passariello, Gianfranco
Li, Changzhi	Martin-Landrove, Miguel	Muñoz-Barrutia, Arrate	Patel, Shyamal
Li, Guanglin	Masè, Michela	Muñoz-Diosdado, Alejandro	Patriciu, Alexandru
Li, Huiqi	Masia, Lorenzo	Mustaffa, Izadora	Patrick, Erin
Li, Jintao	Mason, Andrew	Myers, Lance J	Patronik, Nicholas
Li, John K-J.	Mason, David Glen	Mynard, Jonathan	Pattichis, Constantinos
Li, Le	Mastrangelo, Carlos	Nagaoka, Tomoaki	Pattichis, Marios
Li, Wen-Tyng	Masuda, Kohji	Naguib, Raouf	Pattini, Linda
Li, Xu	Mat Sakim, Harsa Amylia	Naik, Ganesh R	Payne, Stephen John
Li, Zhi-Yong	Matani, Ayumu	Nakao, Mitsuyuki	Pearce, John Anthony
Lian, Jie	Matos, Luis	Nandakumar, Hari Prasad	Pécreaux, Jacques
Liang, Dong	Matsopoulos, George K	Narasimhan, Seetharam	Peiris, Malik T. R.
Liao, Hongen	Matsuda, Tetsuya	Nau, William	Peltier, Scott James
Liao, Yuan-Lin	Matthäus, Lars	Nava, Patricia A.	Penders, Julien
Liberati, Diego	Mattila, Elina	Naveed, Hammad	Peng, Yahui
Liberti, Micaela	Mavoungou, Philippe	Nawab, Syed Hamid	Pennis, Cristian Pablo
Lim, Ik Soo	McDaniel, Wayne	Nazeran, Homayoun	Penzel, Thomas
Lim, Joon-Ho	McGrath, Michael James	Nelson, John	Percival, Jennifer
Lima, Carlos Manuel Gregorio Santos	McGregor, Carolyn	Nescolarde, Lexa	Perera, Alexandre
Lin, Chii-Wann	McShane, Mike	Neves, Herc	Pernot, Mathieu
Lin, Chin-Teng	Mehnert, Andrew James Heinrich	Ng, Hsiao Piau	Peterchev, Angel V
Lin, Chou-Ching	Mehra, Rahul	Nguyen, Anthony	Peterka, Robert
Lindcrantz, Kaj	Meijering, Erik	Nguyen, David	Peterlik, Igor
Lingley, Andrew	Mello, Carlos	Nguyen, Hung T.	Petroff, Neil
Linte, Cristian A.	Melo, Marco	Nguyen, Quynh	Pham, Minh Tu
Lipping, Tarmo	Menárguez-Tortosa, Marcos	Nguyen, Thanh	Phlypo, Ronald
Liu, Chao	Menciassi, Arianna	Ni, Quan	Phothisonothai, Montri
Liu, Chenguang	Mendes, Joaquim	Nicolaou, Nicoletta	Pichler, Elgar
Liu, Feng	Mendes, Paulo M.	Nicolier, Frédéric	Pilitsis, Julie
Liu, Huaifeng	Mendez, Martin Oswald	Nikita, Konstantina	Pinheiro, Eduardo
Liu, Jianbo	Meneu, Teresa	Nitta, Naotaka	Pinna, Gian Domenico
Liu, Jianguo	Meng, Ellis	Noghanian, Sima	Pirogova, Elena
Liu, Logan	Meng, Max Q.-H.	Nollo, Giandomenico	Platzer, Dieter
Liu, Ruigang	Meraz, Erika	Noori Hosseini, Mona	Pohl, Mauricio
Liu, Tao	Meriaudeau, Fabrice	Noshiro, Makoto	Pohlmeyer, Eric
Liu, Tian	Merilahti, Juho Markus	Noury, Norbert	Pollonini, Luca
Liu, Xin	Merzagora, Anna Caterina	Nugent, Chris	Poon, Carmen CY
Liu, Xinyu	Mesbah, Mostefa	Nygren, Anders	Poosapadi Arjuman, Sridhar
Liu, Yinan	Mescam, Muriel	Obeid, Iyad	Popescu, Mihail
Llamedo, Mariano	Meste, Olivier	Obinata, Goro	Porée, Fabienne
Lo, Benny	Meunier, Jean	Oehler, Martin	Porta, Alberto
Loncar-Turukalo, Tatjana	Micera, Silvestro	Oelze, Michael	Potkay, Joseph
Lopes, Renaud	Mihaylova, Lyudmila	Oguri, Koji	Poudel, Govinda
Louis-Dorr, Valerie	Mikaili, Mohammad	Oh, JungHwan	Poujaud, Julien
Low, Yin Fen	Milenkovic, Aleksandar	Ohta, Jun	Pouletaut, Philippe
Lowery, Madeleine	Millán, José del R.	Okumura, Hiroshi	Poza, Jesús
Lu, Bao-Liang	Ming, Dong	Olivo-Marin, Jean-Christophe	Pradhan, Ranjan
Lu, Hui-Hsin	minguez, javier	Olufsen, Mette	Prado-Velasco, Manuel
Lu, Kongkuo	Miniati, Roberto	O'Neill, Sonja	Prakash, Punit
Lu, Ude	Mino, Hiroyuki	Op Den Buijs, Jorn	Prasad, Girijesh
Lubecke, Victor	Mirfakhrai, Tissaphern	Orglmeister, Reinhold	Preatoni, Ezio
Lun, Daniel	Mischi, Massimo	Orini, Michele	Preissl, Hubert
Lymberopoulos, Dimitrios	Mishra, Akshaya Kumar	Ortega-Quijano, Noé	Prentice, Paul
Lyu, SuPing	Mitobe, Kazutaka	Ortiz-Posadas, Martha R.	Prieto Guerrero, Alfonso
Ma, Bing	Mitsis, Georgios D.	Otero, Abraham	Puentes, John
Ma, Chao	Moffitt, Richard A.	Ouyang, Cheng	Pun, Sio Hang
Ma, Heather Ting	Mohd Addi, Mitra	Ouyang, Gaoxiang	Qi, Feng
MacAskill, Michael	Mohseni, Pedram	Ovreiu, Mirela	Qing, Wei
MacPherson, Emma	Mokwa, Wilfried	Owen, Neil	Qiu, Jiaoming
Maestri, Roberto	Molinari, Filippo	Ozcan, Aydogan	Qiu, Qinyin
Magenes, Giovanni	Mollazadeh, Mohsen	Padfield, Dirk	Qiu, Yihong
Maggi, Norbert	Momose, Keiko	Padhye, Nikhil	Quitadamo, Lucia Rita
Maglaveras, Nikolaos	Monaco, Vito	Padilha Lanari Bó, Antônio	Rabotti, Chiara
Magosso, Elisa	Moner, David	Paglialonga, Alessia	Rahimi, Fariborz
Mahdavi, Seyedeh Sara	Montoro, Alegria	Palaniappan, Ramaswamy	Rahman, Tofizur
Mahmoudi, Said	Monzon, Jorge E.	Palerm, Cesar C.	Raiesdana, Somayeh
Mak, Peng Un	Moore, John	Palladino, Joseph	Raiteri, Roberto
Maldonado, José Alberto	morbiducci, umberto	Panagiotakopoulos, Theodor	Rajaraman, Swami
Marchal, Maud	Moreau, Richard	Panahi, Issa	Ramat, Stefano
Marcos, J. Victor	Morgenstern, Christian	Pandey, Santosh	Ramos, Miguel
Marin, Thibault	Moriguchi, Hiroyuki	Panescu, Dorin	Ranta, Radu
Marnane, Liam	Morin, Evelyn	Pantelopoulos, Alexandros	Ranta-aho, Perttu
Marozas, Vaidotas	Morrison, Barclay	Panzica, Ferruccio	Rativa, Diego J.
Marque, Catherine	Morss Clyne, Alisa	Papageorgiou, Elpiniki	Ravazzani, Paolo
Marquez, Jorge Alberto	Motie Nasrabadi, Ali	Paquit, Vincent	Reato, Davide
	Moturu, Sai Thejasvee	Paralikar, Kunal	Redarce, Tanneguy

Redmond, Stephen James	Shi, Lichen	Tarvainen, Mika	Wan Harun, Wan Abdul Rahman
Reed, Todd R.	Shibata, Masahiro	Tavakoli, Vahid	Wan, Justin
Regnier, Stéphane	Shin, Kunsoo	Tavakolian, Kouhyar	Wang, Bo
Reni, Gianluigi	Shiraishi, Yasuyuki	Tavanapong, Wallapak	Wang, Chun
Reumann, Matthias	Shou, guofa	Tehrani, Fleur	Wang, Dafang
Reuss, James	Shukla, Ashish	Telló, Marcos	Wang, Furuí
Rezatofighi, Seyed Hamid	Shung, K. Kirk	Tessarolo, Francesco	Wang, Guangzhi
Ribeiro, Anna Giselle	Shungu, Dikoma C.	Thakor, Nitish	Wang, Hua
Rieta, J. J.	Sidky, Emil	Tian, Jie	Wang, Jiang
Rissacher, Dan	Signorini, Maria G.	Tkacz, Ewaryst	Wang, Junping
Rizzi, Barbara	Sikdar, Siddhartha	tognetti, alessandro	Wang, Kun
Rocha, Ana Paula	Silveira, Margarida	Tognola, Gabriella	Wang, May Dongmei
Rodger, Damien C.	Singh, V.R.	Tokuda, Takashi	Wang, Mei
Rodriguez, Jose Felix	Situ, Ning	Tolkacheva, Elena	Wang, Peng
Rolkosky, David	Skubic, Marjorie	Tome, Ana Maria	Wang, Shyh-Hau
Rougier, Caroline	Slavens, Brooke	Tong, Kai Yu, Raymond	Wang, Yi
Rousseau, François	Smtih, Curtis	Tong, Shanbao	Wang, Yijun
Rozario, Sylvester Vijay	Sniadecki, Nathan	Toporikova, Natalia	Wang, Zhanhui
Ruan, su	Sodagar, Amir M.	Torkaman, Giti	Warrick, Philip A.
Rufer, libor	Sola, Josep	Torres, Abel	Weber, Ewald
Ruggeri, Alfredo	Sola-Soler, Jordi	Touyama, Hideaki	Weber, Stefan
Ruggiero, Carmelina	Son, Hyoung Il	Townsend, Daphne	Webster, John
Ruiz Fernandez, Daniel	Song, Dong	Toyoda, Shuichi	Weiland, James
Ruiz-Correa, Salvador	Song, Sa-kwang	Tracey, Brian	Weinstein, Randy
Ruther, Patrick	Song, Yoon-Kyu	Tran, Yvonne	Weir, Victor
Rymer, William Zev	Sonkusale, Sameer	Traver, Vicente	Wen, Lingfeng
Saavedra Mercado, Erwin John	Sornmo, Leif	Trenado, Carlos	Wessel, Niels
Sacristan, Emilio	Sotthivirat, Saowapak	Triantafyllidis, Andreas	Westwick, David
Sadjedi, Hamed	Soulier, Fabien	Tripoliti, Evanthia	Wiard, Richard M.
Sahba, Farhang	Sousa, André	Trumbower, Randy	Widjaja, Ferdinan
Sahin, Deniz	Spincemaille, Pascal	Tsiaras, Vassilis	Wijesuriya, Nirupama
Sahin, Ismet	Spyropoulos, Basile	Tsiknakis, Manolis	Wilson, Noah A.
Sahin, Mesut	Srinivasan, Subhadra	Tsukamoto, Sosuke	Wilson, Stephen
Saijo, Yoshifumi	Stadnik, Paul	Tutac, Adina	Witte, Russell
Sajda, Paul	Stalidis, George	Tyrer, Harry	Wolf, Didier
Sakkalis, Vangelis	Stewart, R. Malcolm	Uchiyama, Takanori	Wolf, Werner
Salazar Afanador, Addisson	Stieglitz, Thomas	Umapathy, Karthikeyan	Wollny, Gert
Salinari, Serenella	Stienen, Arno	Ungureanu, Mihaela	Wolpert, Seth
Salvado, Olivier	Stitt, Joseph	Vacher, Michel	Won, Chang-Hee
Sam, House	Stokes, Todd	Vaillant, Régis	Wong, Yan Tat
Samur, Evren	Stoyanov, Danail	Valdastri, Pietro	Woo, Eung Je
Sanches, J. Miguel	Su, Eileen Lee Ming	Valdes-cristerna, Raquel	Woo, Jonghye
Sánchez, Clara I.	Su, Steven Weidong	Valencia Murillo, Jose Fernando	Woodfield, Tim
Sanchez, Justin C.	Su, Ting-Wei	Valencia-Garcia, Rafael	Worrell, Gregory A.
Sander-Thömmes, Tilmann H.	Suaning, Gregg	Valentinuzzi, Max E.	Wright, Steven M.
Sanei, Saeid	Suarez-Antola, Roberto	Vallverdu, Montserrat	Wu, Changfu
Sanguineti, Vittorio	Sugimachi, Masaru	Valter McConville, Kristiina M.	Wu, Ed X.
Sankar, Viswanath	Sugita, Norihiro	Van de Sompel, Dominique	Wu, Fan
Sankaranarayanan, Meena	Sulzer, James	van Gils, Mark	Wu, Fang Xiang
Santos, Andres	Summers, Ronald	Van Veen, Barry	Wu, Hsien-Tsai
Sarela, Antti	Sun, Lei	Van, Anh	Wu, RenHua
Sassi, Roberto	Sun, Mingui	Vanrumste, Bart	Wu, Wei
Sasso, magali	Sunagawa, Kenji	Varadan, Vinay	Wu, Winston
Sawan, Mohamad	Sund, Torbjørn	Varghese, Rency	Wu, Yicong
Sazonov, Edward	Suresh, Nina	Varghese, Tomy	Wu, Yin
Schaefer, Gerald	Surovyatkina, Elena	Värri, Alpo	Wu, Yi-Ning
Scheffer, Cornie	Sutton, Bradley P.	Varsavsky, Andrea	Wu, Yunfeng
Schelter, Bjorn	Suzuki, Kenji	Vecchiato, Giovanni	Xanthopoulos, Petros
Schiek, Michael	Suzuki, Takuji	Vega-Alvarado, Leticia	Xiong, Wei
Schizas, Christos	Swingen, Cory	Velazquez, Ramiro	Xu, Da
Schlotthauer, Gaston	Szlavik, Robert	Veltink, Peter	Xu, Jianwu
Schmid, Alexandre	Tadipatri, Vijay Aditya	Venkatasubramanian, Ramji	Xu, Juan
Schreier, Guenter	Tafreshi, Reza	Venkatraman, Subramaniam	Xu, Lisheng
Schrlau, Michael	Tahayori, Bahman	Ventouras, Errikos	Xu, Qiaofeng
Schumann, Steffen	Tahmasebi, Amir	Ventura, Rodrigo	Yadav, Rajeev
Scilingo, Enzo Pasquale	Takada, Hiroki	Venture, Gentiane	Yan, Gwo-Lang
Scotney, Bryan	Takahashi, Kazutaka	Verdú, Gumersindo	Yan, Pingkun
Seker, Huseyin	Takayama, Shuichi	Vesin, Jean-Marc	Yana, Kazuo
Sekino, Masaki	Takeda, Sunao	Vialatte, Francois	Yanez-Suarez, Oscar
Sene Jr, Iwens G.	Taki, Hirofumi	Vicini, Paolo	Yang, Chang-Ming
Seo, Chi Hyung	Takizawa, Kenichi	Vidaurre, Carmen	Yang, Jin
Seo, Na Jin	Talavage, Thomas	Vides, Silvia	Yang, Ping
Seppänen, Tapio	Tamura, Toshiyo	Viik, Jari	Yang, Xifei
Sergi, Fabrizio	Tan, U-Xuan	Villalba, Elena	Yang, Zhi
Serrano, Luis	Tana, Maria Gabriella	Vinjamuri, Ramana	Yano, Kenichi
Sevestre-Ghalila, Sylvie	Tanaka, Shinobu	Vinnakota, Kalyan	Yao, Jianchu
Seydnejad, Saeid	Tanaka, Yoshiyuki	Virkkala, Jussi	Yao, Ning
Shahidi Zandi, Ali	Tang, Meng-Xing	Voss, Andreas	Yeh, Chih-Kuang
Shamsollahi, Mohammad Bagher	Tang, Yingying	Vozzi, Giovanni	Yetik, Imam Samil
Sharp, Ian	Tange, Yutaka	Vullings, Rik	Yilmazer, Nuri
Shastri, Dvijesh	Tanskanen, Jarmo Mika Antero	Wada, Yasuhiro	Yin, Bin
Shewokis, Patricia A	Tarín, Cristina	Waluyo, Agustinus Borgy	Yokoyama, Kiyoko

Yoshida, Hisashi  
Yoshida, Ken  
Yoshida, Masaki  
Yoshizawa, Nobuyuki  
You, Fusheng  
Yousefi, Ali  
Yu, Alfred  
Yu, Wenwei  
Yu, Yih-Choung  
Yuan, Han  
Yuan, Xiaohui  
Yuan, Xiaojing  
Yuan, Yading  
Yuce, Mehmet Rasit

Zanos, Theodoros  
Zariffa, Jose  
Zarifi, Mohammad Hossein  
Zarzoso, Vicente  
Zastrow, Earl  
Zayed, Nourhan  
Zderic, Vesna  
Zebrowski, Jan  
Zecca, Massimiliano  
Zemiti, Nabil  
Zequera Diaz, Martha Lucia  
Zervakis, Michalis  
Zhang, Dingguo  
Zhang, Jian

Zhang, Junhua  
Zhang, Songmao  
Zhang, Ying  
Zhang, Yingchun  
Zhang, Yong  
Zhao, Bo  
Zhao, Jianhua  
Zhao, Jichao  
Zheng, Guoyan  
zheng, Hairong  
Zheng, Xiaohan  
Zhou, Huiyu  
Zhou, Jinghao  
Zhou, Kuan

Zhou, Ping  
Zhou, Xiang  
Zhu, Hongjie, Matt  
Zhu, Shan'an  
Zhu, Xin  
ZHU, Yuemin  
Zollo, Loredana  
Zoltowski, Mariusz, Leslaw  
Zou, Xiaoqin  
Zouridakis, George  
Zrimec, Tatjana  
Zuo, Wangmeng  
Zwiggelaar, Reyer  
Zysk, Adam

# Program Themes and Tracks

## Theme I. Biomedical Signal Processing

### Theme Chairs

Riccardo Barbieri	Harvard Medical School, Boston, USA
Sergio Cerutti	Politecnico di Milano, Milano, Italy
Yasemin P. Kahya	Bogazici University, Istanbul, Turkey
Jay Tian	Chinese Academy of Sciences, Beijing, China

### Tracks and Track Chairs

#### Track I.1 Time-Frequency and Time-Scale Analysis

Co-Chair	Anna M Bianchi	Politecnico di Milano, Italy
Co-Chair	Marcelo Risk	Instituto Tecnológico de Buenos Aires, Argentina

#### Track I.2 Signal Processing and Physiological System Modeling

Co-Chair	Yoshi Yamamoto	University of Tokyo, Japan
Co-Chair	Leif Sörnmo	Lund University, Sweden

#### Track I.3 Nonlinear Dynamic Analysis of Biomedical Signals

Co-Chair	Vasilis Z Marmarelis	University of Southern California, USA
Co-Chair	Maria G Signorini	Politecnico di Milano, Italy

#### Track I.4 Signal Pattern Classification

Co-Chair	Dimitrios Fotiadis	University of Ioannina, Greece
Co-Chair	Shanbao Tong	Shanghai Jiao Tong University, China

#### Track I.5 Connectivity, Directionality and Causality

Co-Chair	Ramakrishna Mukkamala	Michigan State University, USA
Co-Chair	Luca Faes	University of Trento, Italy

#### Track I.6 Adaptive and Parametric Filtering

Co-Chair	Pablo Laguna	Universidad de Zaragoza, Spain
Co-Chair	Mika Tarvainen	University of Eastern Finland, Finland

#### Track I.7 Neural Networks and Support Vector Machine Applied to Biomedical Signal Processing and Classification

Co-Chair	Karen Moxon	Drexel University, USA
Co-Chair	Rezaul K. Begg	Victoria University, Melbourne, Australia
Co-Chair	Dario Farina	University of Gottingen, Germany

#### Track I.8 Coupling and Synchronizations

Co-Chair	Ki H Chon	Worcester Polytechnic Institute, USA
Co-Chair	Andreas Voss	University of Applied Sciences Jena, Germany

#### Track I.9 Algorithms for Data Mining and Data Processing

Co-Chair	Olivier Meste	UNSA-CNRS, France
Co-Chair	Konstantina Nikita	National Technical University of Athens, Greece

#### Track I.10 Principal Component Analysis and Independent Component Analysis

Co-Chair	Christopher J. James	University of Warwick, UK
Co-Chair	Issa M.S. Panahi	University of Texas at Dallas, USA

## Theme 2. Biomedical Image and Image Processing

### Theme Chairs

Elsa Angelini	Institut Telecom, Telecom ParisTech
Sergio Fantini	Tufts University
Andreas Hielscher	Columbia University
Homer Pien	Massachusetts General Hospital

### Tracks and Track Chairs

#### Track 2.1 Magnetic Resonance Imaging

Co-Chair	Perry Renshaw	University of Utah, USA
Co-Chair	Blaise Frederick	McLean Hospital, USA

#### Track 2.2 Ultrasound Imaging

Chair	Elisa Konofagou	Columbia University, USA
-------	-----------------	--------------------------

#### Track 2.3 Optical Imaging and Microscopy

Co-Chair	David Hall	UC San Diego, USA
Co-Chair	Edward Brown	University of Rochester, USA

#### Track 2.4 X-ray, CT, PET, and SPECT

Co-Chair	David Sarrut	CREATIS, France
Co-Chair	Homer Pien	Massachusetts General Hospital, USA

#### Track 2.5 Electrical Source and Impedance Imaging

Co-Chair	Bin He	University of Minnesota, USA
Co-Chair	Keith Paulsen	Dartmouth College, USA

#### Track 2.6 Image Reconstruction and Enhancement

Co-Chair	Clem Karl	Boston University, USA
Co-Chair	Hyun Keol Kim	Columbia University, USA

#### Track 2.7 Image Registration, Segmentation, Compression and Visualization

Co-Chair	Fred Azar	Becton Dickinson & Co, USA
Co-Chair	Mirza Faisal Beg	Simon Fraser University, Canada

#### Track 2.8 Image Analysis and Classification

Co-Chair	Patrick Clarysse	CREATIS, France
Co-Chair	Sheena Xin Liu	Philips Research, USA

#### Track 2.9 Molecular, MEG, Infrared and Other Novel Imaging Modalities

Co-Chair	Claudio Vinegoni	Massachusetts General Hospital, USA
Co-Chair	Alexandre Gramfort	Harvard University, USA

### Theme 3. Bioinstrumentation: Sensors, Micro, Nano and Wearable Technologies

#### Theme Chairs

Utkan Demirci	Harvard Medical School
Andreas Lymberis	Information Society and Media Directorate General, European Commission
Nathalia Peixoto	George Mason University
Sam Sia	Columbia University
Toshiyo Tamura	Chiba University

#### Track 3.1 Physical Sensors and Sensor Systems

Chair	Ellis Meng	USC, USA
Co-Chair	Melik Demirel	PSU, USA

#### Track 3.2 Bioelectric Sensors

Chair	Mehmet Dokmeci	NEU, USA
Co-Chair	Ellis Meng	USC, USA

#### Track 3.3 Biological and Chemical Sensors and Systems

Chair	Sam Sia	Columbia University, USA
Co-Chair	Sethu Palaniappan	University of Louisville, USA

#### Track 3.4 Physiological Monitoring: Instrumentation, Technology and Integrated Systems

Chair	Toshiyo Tamura	Chiba University, Japan
Co-Chair	Andreas Lymberis	EC, Belgium
Co-Chair	Nicos Maglaveras	Aristotle University, Greece

#### Track 3.5 Implantable Technologies and Systems

Chair	Nathalia Peixoto	George Mason University, USA
Co-Chair	Sam Sia	Columbia University, USA
Co-Chair	Enrique Claverol Tinture	Aleria Biodevices, Spain

#### Track 3.6 Wearable Sensors Technology and Instrumentation

Chair	Andreas Lymberis	EC, Belgium
Co-Chair	Toshiyo Tamura	Chiba University, Japan

#### Track 3.7 Integrated Wearable and Portable Systems

Chair	Qiao Lin	Columbia University, USA
Co-Chair	Sundaresan Jayaraman	Georgia Tech, USA
Co-Chair	Guillemaud Regis	CEA, France
Co-Chair	Marco Di Rienzo	Don Gnocchi, Italy

#### Track 3.8 Microfluidics

Chair	Sam Sia	Columbia University, USA
Co-Chair	Rafael Davalos	Virginia Tech, USA
Co-Chair	Aman Russom	KTH, Sweden
Co-Chair	Toshiyo Tamura	Chiba University, Japan

#### Track 3.9 Nano-Bio Technology

Chair	Utkan Demirci	Harvard University, USA
Co-Chair	Nathalia Peixoto	George Mason University, USA

## Theme 4. Bioinformatics and Computational Biology; Systems Biology, Modeling Methodologies

### Theme Chairs

Shahram Ebadollahi	International Business Machines (IBM)
John Gohagan	National Institutes of Health (NIH)
Bruce Tidor	Massachusetts Institute of Technology (MIT)
Lipo Wang	Nanyang Technical University, Singapore

### Tracks and Track Chairs

#### Track 4.1 Systems Biology and Cancer Prevention

Chair Peter Greenwald NIH, USA

#### Track 4.2 Synthetic Biology and Artificial Cell Technology

Chair Ron Weiss MIT, USA

#### Track 4.3 Synthetic Control Systems in Biomedical Applications

Chair Timothy Lu MIT, USA

#### Track 4.4 Systems Modeling for Therapeutics and Medical Decision Making

Co-Chair Jeffrey Saltzman Merck Research Laboratories, USA

Co-Chair Hongyue Dai Merck Research Laboratories, USA

#### Track 4.5 Model Building for Experimental and Therapeutic Study Design

Chair Jacob White MIT, USA

#### Track 4.6 Bioinformatics and Computational Modeling of Complex 'Omic Data

Chair Forest White MIT, USA

#### Track 4.7 Mining clinical Data – Applications in Comparative Effectiveness Research

Co-Chair Jimeng Sun IBM T.J. Watson, USA

Co-Chair Marianthi Markatou IBM T.J. Watson, USA

#### Track 4.8 Information Visualization for Discovery and Insight Generation in the Biomedical Domain

Co-Chair David Gotz IBM T.J. Watson, USA

Co-Chair Meirav Maimon Ben Gurion University, Israel

## Theme 5. Cardiovascular and Respiratory Systems Engineering

### Theme Chairs

Nicholas Chbat	Philips Research North America
Michael Khoo	University of Southern California (USC)
Kenji Sungawa	Kyushu University, Japan
Natalia Trayanova	Johns Hopkins University

### Tracks and Track Chairs

#### Track 5.1 Cardiac Mechanics, Function, and Modeling

Chair Fritz Prinzen U Maastricht, Holland

Co-Chair Nasaru Sugimachi National Cardiovascular Center, Japan

#### Track 5.2 Vascular Disease, Mechanics, and Hemodynamics

Chair Nikos Stergiopoulos Ecole Polytechnique Federale de Lauzanne, Switzerland



<b>Track 5.3</b>	<b>Pulmonary and Critical Care</b>	
Chair	Adam Seiver	Respironics, Philips, USA
<b>Track 5.4</b>	<b>Coronary Blood Flow Dynamics and Measurement</b>	
Chair	Dan Dragomir-Daescu	Mayo Clinic, USA
<b>Track 5.5</b>	<b>Cardiovascular and Pulmonary Modeling</b>	
Chair	Mauro Ursino	U Bologna, Italy
<b>Track 5.6</b>	<b>Respiratory Mechanics and Control</b>	
Chair	Jason Bates	U Vermont, USA
<b>Track 5.7</b>	<b>Cardiovascular and Pulmonary Signal Processing</b>	
Chair	Chi-Sang Poon	MIT, USA
<b>Track 5.8</b>	<b>Cardiac Electrophysiology</b>	
Chair	Edward Vigmond	U Calgary, Canada
<b>Track 5.9</b>	<b>Cardiovascular Regulation</b>	
Chair	Riccardo Barbieri	MIT, USA
Co-Chair	Toru Kawada	National Cardiovascular Center, Japan
<b>Track 5.10</b>	<b>Sleep Disorders and Respiratory Engineering</b>	
Chair	Ron Leder	UNAM, Mexico
Co-Chair	Andrew Wellman	Harvard Medical School, USA
<b>Track 5.11</b>	<b>Cellular &amp; Molecular Cardiorespiratory Engineering</b>	
Chair	Joseph Greenstein	Johns Hopkins University, US

## Theme 6. Neural Engineering, Neuromuscular Systems and Rehabilitation Engineering

### Theme Chairs

Silvestro Micera	Scuola Superiore Sant'Anna, Italy
Sandro Mussa-Ivaldi	Northwestern University
Paul Sajda	Columbia University
Maurice Smith	Harvard Medical School

### Tracks and Track Chairs

<b>Track 6.1</b>	<b>Neural Interfaces and Regeneration</b>	
Co-Chair	Dominique Durand	Case Western University, USA
Co-Chair	Thomas Stieglitz	University of Freiburg, Switzerland
<b>Track 6.2</b>	<b>Brain Computer / Machine Interfaces</b>	
Co-Chair	Jose Carmena	Berkeley, USA
Co-Chair	Jose Milan	EPFL, Switzerland
<b>Track 6.3</b>	<b>Motor NeuroProstheses</b>	
CO-Chair	Douglas Weber	University of Pittsburgh, USA
Co-Chair	Dustin Tyler	Case Western University, USA

<b>Track 6.4</b>	<b>Sensory Neuroprostheses</b>	
Co-Chair	Dan Merfeld	Harvard University, USA
Co-Chair	Mohamad Sawan	Poly Montreal, Canada
Co-Chair	Gregg J. Suaning	University of South Wales, Australia
<b>Track 6.5</b>	<b>Deep Brain Stimulation</b>	
Co-Chair	Cameron McIntyre	Cleveland Clinic, USA
Co-Chair	Wassilios Meissner	University of Bordeaux, France
<b>Track 6.6</b>	<b>Motor Learning and Neural Control</b>	
Co-Chair	John Krakauer	Johns Hopkins University, USA
Co-Chair	Vittorio Sanguineti	University of Genova, Italy
<b>Track 6.7</b>	<b>Virtual Reality in Rehabilitation</b>	
Co-Chair	Robert Kenyon	University of Illinois Chicago, USA
Co-Chair	Paul Vershure	Universitat Pompeu Fabra, Barcelona
<b>Track 6.8</b>	<b>Wearable Systems for Neurohabilitation</b>	
Co-Chair	Patrick Boissy	University of Sherbrooke, Canada
Co-Chair	Danilo De Rossi	University of Pisa, Italy
Co-Chair	Peter Veltink	University of Twente, Netherlands
<b>Track 6.9</b>	<b>Brain physiology and modeling</b>	
Co-Chair	Robert Butera	Georgia Institute of Technology, USA
<b>Track 6.10</b>	<b>Neural Signal Processing</b>	
Co-Chair	Karim G. Oweiss	Michigan State University, USA
Co-Chair	Lucas C. Parra	City University of New York, USA
<b>Track 6.11</b>	<b>Neurological Disorders</b>	
Chair	Richard Jones	University of Otago, New Zealand
<b>Track 6.12</b>	<b>Brain functional imaging</b>	
Co-Chair	Fabio Babiloni	University La Sapienza, Rome
Co-Chair	George Zouridakis	University of Houston, USA
<b>Track 6.13</b>	<b>Human performance</b>	
Chair	Richard Jones	University of Otago, New Zealand

## Theme 7. Molecular and Cellular Biomechanics, Tissue Engineering, Biomaterials

### Theme Chairs

Karen Christman	UCSD
Esmail Jabbari	University of South Carolina
Ali Khademhosseini	Harvard Medical School
Helen Lu	Columbia University
Milica Radisic	University of Toronto

### Tracks and Track Chairs

#### Track 7.1 Biomaterials Cell Interactions

Co-Chair	Hojae Bae	Brigham and Women's Hospital / Harvard University, USA
Co-Chair	Ehsan Jabbarzadeh	University of South Carolina, USA
Co-Chair	Ebru Oral	Massachusetts General Hospital / Harvard University, USA

#### Track 7.2 Scaffolds in Tissue Engineering

Co-Chair	Aaron Goldstein	Virginia Tech, USA
Co-Chair	Mariah Hahn	Texas A&M University (College Station), USA

#### Track 7.3 Biomimetic, Bioinspired, and patterned Biomaterials

Co-Chair	Michael Davis	Emory University, USA
Co-Chair	Brandan Harley	UIUC, USA

#### Track 7.4 Cellular Force Transduction

Co-Chair	Adam Engler	UCSD, USA
Co-Chair	Jeff Jacot	Rice University, USA

#### Track 7.5 Stem Cells in Regenerative Medicine

Co-Chair	Todd McDevitt	Georgia Tech, USA
Co-Chair	Bill Murphy	University of Wisconsin, USA

#### Track 7.6 Gene and Drug Delivery

Co-Chair	Chun Wang	University of Minnesota, USA
Co-Chair	Jianjun Cheng	UIUC, USA

#### Track 7.7 Electrical Fields at the Cell and Protein Scale

Co-Chair	Milica Radisic	University of Toronto, Canada
Co-Chair	Gordana Vunjac-Novakovic	Columbia University, USA

#### Track 7.8 Biomaterials for Sensing and Actuation

Co-Chair	Utkan Demirci	Brigham and Women's Hospital / Harvard University, USA
Co-Chair	Mike McShane	Texas A&M, USA
Co-Chair	Vassilios Sikavitsas	University of Oklahoma, USA

#### Track 7.9 BioMEMS/NEMS in Tissue Engineering and Biomaterials

Co-Chair	Jeff Borenstein	Draper Lab, USA
Co-Chair	Sam Sia	Columbia University, USA

#### Track 7.10 Translational Issues in Tissue Engineering

Co-Chair	Karen Christman	UCSD, USA
Co-Chair	Yunzhi Yang	University of Texas HSC, USA

## Theme 8. Bio-Robotics, Surgical Planning and Orthopedic Biomechanics

### Theme Chairs

Ugo Della Croce	University of Sassari
Alexander König	ETH Zurich, Switzerland
Marko Popovic	Worcester Polytechnic Institute

### Tracks and Track Chairs

#### Track 8.1 Orthotic Biomechanics and Robotics

Co-Chair	Sunil Agrawal	University of Delaware, USA
Co-Chair	Elizabeth Hsiao-Wecksler	University of Illinois at Urbana-Champaign, USA
Co-Chair	Rita Stagni	University of Bologna, Bologna

#### Track 8.2 Prosthetic Biomechanics and Robotics: Artificial Organs/Limbs

Co-Chair	Hartmut Geyer	Carnegie Mellon University, USA
Co-Chair	Hugh Herr	Massachusetts Institute of Technology, USA

#### Track 8.3 Rehabilitation Robotics and Biomechanics: Therapy, Assistance and Clinical Evaluation

Co-Chair	Lorenzo Chiari	University of Bologna, Bologna
Co-Chair	Hermano Igo Krebs	Massachusetts Institute of Technology, USA
Co-Chair	Olivier Lambercy	ETH – Swiss Federal Institute of Technology, Switzerland

#### Track 8.4 Human-Robot Interaction and Robot-aided Living for a Healthier Tomorrow

Co-Chair	Charlie Kemp	Georgia Institute of Technology, USA
Co-Chair	Katherine Kuchenbecker	University of Pennsylvania, USA
Co-Chair	Cara Stepp	University of Washington, USA

#### Track 8.5 Sports, Exercise and Games: Biomechanics and Robotics

Co-Chair	Emanuele Ruffaldi	Scuola Superiore Sant'Anna, Santa Anna
Co-Chair	Peter Wolf	ETH – Swiss Federal Institute of Technology, Switzerland

#### Track 8.6 Robot-aided Surgery

Co-Chair	Gregory Scott Fischer	Worcester Polytechnic Institute, USA
Co-Chair	Masakatsu G. Fujie	Waseda University, Japan

#### Track 8.7 Biologically Inspired Robotics and Micro-(bio)robotics

Co-Chair	Sarah Bergbreiter	University of Maryland, USA
Co-Chair	Fumyia Iida	ETH – Swiss Federal Institute of Technology, Switzerland
Co-Chair	Sangbae Kim	Massachusetts Institute of Technology, USA

#### Track 8.8 New Technologies and Methodologies in Medical Robotics and Biomechanics

Chair	Ziad Abu-Faraj	American University of Science and Technology, Belriut
-------	----------------	--

#### Track 8.9 Neural Control of Movement and Robotics Applications

Co-Chair	Eric Perreault	Northwestern University, USA
Co-Chair	Erwin de Vlugt	Delft University of Technology, Netherlands

#### Track 8.10 Applied Musculoskeletal Models and Human Movement Analysis

Co-Chair	Michael Gennert	Worcester Polytechnic Institute, USA
Co-Chair	Claudia Mazzà	University of Rome “Foro Italico”, Italy

## Theme 9. Therapeutics and Diagnostic Systems, Devices and Technologies, Clinical Engineering

### Theme Chairs

Jennifer Jackson	Ospedale Pediatrico Bambino Gesù
Elliot Sloane	Drexel University

### Tracks and Track Chairs

#### Track 9.1 Clinical Engineering and Health Technology Management

Co-Chair	Jennifer Jackson	Ospedale Pediatrico Bambino Gesù
Co-Chair	Yadin David	Biomedical Engineering Consultants, USA

#### Track 9.2 Diagnostic and Therapeutic Devices, Ambulatory, Home/Personal/Independent Living

Co-Chair	William Durfee	University of Minnesota, USA
Co-Chair	Antonio Hernandez	Center for Healthcare Information Research, USA

#### Track 9.3 Diagnostic Devices and Instrumentation, General

Chair	John Pearce	University of Texas at Austin, USA
-------	-------------	------------------------------------

#### Track 9.4 External Therapeutic Devices, General

Chair	Dorin Panescu	New Cardio, Inc., USA
-------	---------------	-----------------------

#### Track 9.5 Health Technology Policy, Economics, Ethics, and Health Technology Assessment

Co-Chair	Wayne McDaniel	University of Missouri, USA
----------	----------------	-----------------------------

#### Track 9.6 Image-Guided Devices and Therapies

Chair	Jennifer Jackson	Ospedale Pediatrico Bambino Gesù
-------	------------------	----------------------------------

#### Track 9.7 Medical Device and System Design and Manufacturing

Chair	Michael McShane	Texas A&M University, USA
-------	-----------------	---------------------------

#### Track 9.8 Safety and Human Factors Engineering for Medical Devices and Systems

Chair	Dustin Tyler	Case Western Reserve University, USA
-------	--------------	--------------------------------------

#### Track 9.9 Therapeutic Devices, Internal/Implanted

Chair	Elliot Sloane	Drexel University, USA
-------	---------------	------------------------

## Theme 10. Healthcare Information Systems, Telemedicine

### Theme Chairs

Illkka Korhonen	Tampere University of Technology
Julien Penders	IMEC Netherlands
Carmen Poon	Chinese University of Hong Kong, China
May Dongmei Wang	Georgia Institute of Technology (Georgia Tech) and Emory University

### Tracks and Track Chairs

#### Track 10.1 Personal, Pervasive, Preventive, and Participatory Health Systems

Chair	Nicos Maglaveras	Aristotle University, Greece
Co-Chair	Elina Mattila	VTT, Finland

#### Track 10.2 Wireless Health Technologies and Body Sensor Networks

Chair	Emil Jovanov	University of Alabama, USA
Co-Chair	Hari Garudadri	Qualcomm Incorporated, USA
Co-Chair	William Kaiser	UCLA, USA

#### Track 10.3 mHealth

Chair	Sergio Guillen	Universidad Politecnica de Valencia, Spain
Co-Chair	Ye Li	SIAT-Inst. Biomed & Health Eng, China

#### Track 10.4 eHealth, Telehealth

Chair	Costas Pattichis	University of Cyprus, Cyprus
Co-Chair	Joseph Cafazzo	University of Toronto, Canada

#### Track 10.5 Ambient Assisted Living, Smart Homes

Chair	Vicente Traver	Universidad Politecnica de Valencia, Spain
Co-Chair	Oliver Amft	TU Eindhoven, Netherlands

#### Track 10.6 Health Information Management, Electronic Health Record

Chair	HR. Zheng	SIAT-Inst. Biomed & Health Eng, China
Co-Chair	Gouenou Coatrieux	TELECOM Bretagne, France

#### Track 10.7 Data Mining, Information Processing, and Decision Support Systems

Chair	Dimitris Fotiadis	University of Ioannina, Greece
-------	-------------------	--------------------------------

#### Track 10.8 Emerging Topics: Low Cost Delivery, Public and Environmental Health Surveillance

Chair	Ahmed Morsy	Cairo University, Egypt
Chair	Steffen Leonhardt	RWTH, Germany

## Theme II. Technology Commercialization, Education, Industry and Society

### Theme Chairs

Jim Niemi	Harvard Medical School
Martha Zequera Diaz	Pontificia Universidad Javeriana

### Tracks and Track Chairs

#### Track II.1 Technology Development, Commercialization, Assessment and Management

Chair	Ratko Magjarevic, Ph.D.	University of Zagreb, Faculty of Electrical Engineering
-------	-------------------------	---

#### Track II.2 Biomedical Engineering Education

Chair	Ratko Magjaverick, Ph.D.	University of Zagreb, Faculty of Electrical Engineering
-------	--------------------------	---

#### Track II.3 Career Development in Biomedical Engineering

Chair	Miguel Cadena	Universidad Metropolitana de México D.F.
-------	---------------	--

#### Track II.4 Instruction and Learning

Chair	Martha Lucía Zequera Díaz, Ph.D	Pontificia Universidad Javeriana
-------	---------------------------------	----------------------------------

#### Track II.5 Minisymposium: People, Places and Companies Involved in the Early History of Biomedical Devices and Instrumentation

Chair	Teodiano Freyre Bastos, Ph.D	Universidad Federal Espíritu Santo
-------	------------------------------	------------------------------------

#### Track II.6 Technology Development, Assessment and Management

Chair	Dinesh Kant Kumar, Ph.D.	RMIT University
-------	--------------------------	-----------------

#### Track II.7 Recent Advances in Novel Optical Imaging Technologies

Chair	William Sandham	Strathclyde University U.K.
-------	-----------------	-----------------------------

# Invited Session and Minisymposia Organizers

## Invited Sessions

Title	Organizer(s)
Adaptive and Parametric Filtering of Cardiovascular Signals	Pablo Laguna*, Mika Tarvainen (Spain)
Addressing Complexity in Biomedical Research: Data Processing and Mining for Large Biomedical Datasets	Aristotelis Chatziioannou*, Ilias Maglogiannis (Greece)
Advanced Lab on Chip systems for In Vitro Testing	Andreas Lymberis* (Belgium)
Advances in Signal Processing for Atrial Fibrillation Analysis	Vicente Zanzoso* (France)
Algorithms for Seizure Prediction: Towards Wearable Devices to Support Epileptic People	António Dourado* (Portugal)
Assistive Technology for Human Communication	Cara Stepp* (USA)
Ballistocardiography: Advancements and New Perspectives from Space Missions	Marco Di Rienzo*, Pierre-François Migeotte (Italy)
Bioinformatics for Integrated Genomics	Hsun-Hsien Chang* (USA)
Biomedical Engineering Education – Mobility, Harmonization, Innovation.	Ratko Magjarevic*, Martha Lucia Zequera Diaz (Croatia)
Brain-Machine Interfaces, Non-Invasive Approaches	José del R. Millán* (Switzerland)
Cardiovascular and Pulmonary Modeling	Nicolas Chbat* (USA)
Cardiovascular and Pulmonary Modeling	Nicolas Chbat*, Kenji Sunagawa (USA)
Cardiovascular Signal Processing & Modeling: Intraoperative Haemodynamic Monitoring	Sergio Cerutti* (Italy)
Cardiovascular Signal Processing & Modeling: Monitoring in Critical Care Applications	Manuela Ferrario* (Italy)
Causality in Brain Dynamics and Cardiovascular Control	Luca Faes* (Italy)
Cell Membrane Electroporation and Electroporation Based Therapies	Damijan Miklavcic*, Rafael Davalos (Slovenia)
Closing the Loop in PHS Telemonitoring Systems: How Far Have We Gone?	Nikolaos Maglaveras* (Greece)
Cognitive State Assessment Competition 2011	Justin Estep* (USA)
Comparison between Embryonic Stem Cell- and Adult Bone Marrow-Derived Mesenchymal Stem Cells for Chondrogenesis	Wan-Ju Li* (USA)
Computational Approaches for Studying Neural Mechanisms in Anesthesia and Sleep	ShiNung Ching*, Zhe Chen (USA)
Data Mining, Information Processing, and Decision Support Systems	Dimitrios I. Fotiadis* (Greece)
Deep Brain Stimulation: New Technical Developments and Perspectives	Wassilios Meissner* (France)
Extending the Benefits of Virtual Reality to Rehabilitation Through Technology and Methodology Combinations	Emily Keshner* (USA)
Gene and Drug Delivery	Chun Wang* (USA)
Home Based Systems for Telerehabilitation	Emily Keshner* (USA)
How to Measure Ventricular Function and how to Translate it into Myocardial or Circulatory Function	Nicolas Chbat*, Kenji Sunagawa (USA)
Impact of Wireless Health on Proactive Loss Control and Wellness Strategies	Mary Rose Reaston*, Adam Seidner (USA)
Implantable Biochips	Mohamad Sawan* (Canada)
Innovative Measurements and Processing for Sleep Studies	Sergio Cerutti* (Italy)
Massively Parallel Neural Processing	Iyad Obeid* (USA)
Modeling Cardiovascular Hemodynamics for Clinical Applications	Nicolas Chbat*, Kenji Sunagawa (USA)
Neural Engineering Advances in Cortical & Deep Brain Stimulation for Treating Neurological Disorders	David Mogul* (USA)
Next Generation Sensory Replacement Implants	Daniel Merfeld* (USA)
Nonlinear Modeling of Dynamic Biomedical Systems	Vasilis Marmarelis* (USA)



Novel Time Series Analysis Approaches to Heart Rate Variability Complex Dynamics	Zbigniew R. Struzik* (Japan)
Ocular Image Processing and Ocular Disease Diagnosis	Cuntai Guan* (Singapore)
Recent Advances in Extra-Laboratory Clinical Gait Analysis Using Ambient or on Body Sensing Approaches	Brian Caulfield* (Ireland)
Recovering Neural Information from Peripheral Nerves	Dominique Durand* (USA)
Resolving Signal Complexity in Diverse Rehabilitation Applications	Syed Hamid Nawab* (USA)
Restoring or Augmenting Impaired Sensory Function for Posture and Gait	Kathleen H. Sienko*, Patrick Loughlin (USA)
Robot-Aided Surgery	Gregory Fischer* (USA)
Smart Textile and Wearable Systems	Andreas Lymberis* (Belgium)
State-of-the-Art Technologies for AAL, Einclusion, and Phealth – The Road Ahead	Nikolaos Maglaveras* (Greece)
Stimulation Techniques for Neuroprostheses	Jose M. Carmena*, Subramaniam Venkatraman (USA)
Systems Bioengineering in the Cardiac Myocyte	Joseph L Greenstein* (USA)
Towards Understanding Neurons' Language: From Micro-Processing to Macro-Analyzing Brain Recordings	Konstantina Nikita*, Konstantinos P. Michmizos (Greece)
Track 10.3 mHealth	Sergio Guillen* (Spain)
Vestibular Prostheses - Medical, Neuroscientific and Ethical Issues	Klaus-Peter Hoffmann* (Germany)
Wearable Sensors in Healthcare: Real Applications	Alessandro Puiatti*, Eric McAdams (Switzerland)
Wearable systems for Neuro-Rehabilitation – Mobility, Balance and Activity Monitoring	Peter Veltink* (Netherlands)
Wearable Systems for Neuro-Rehabilitation – Reaching and Grasping	Peter Veltink* (Netherlands)
What is Motor Skill and can Technology Enhance it?	Vittorio Sanguineti*, John W. Krakauer (Italy)

## Minisymposia

Mini Symposia Title	Organizer(s)
In Vivo Neurotransmitter Sensing: State of the Art and Applications	W. G. Besio* (USA)
Advanced Technologies for Human Movement Analysis	Claudia Mazzà* (Italy)
Advances in eHealth: From Chronic Conditions to Real-Time Emergency Response	Constantinos Pattichis* (Cyprus)
Advances in Neural Signal Recording, Processing, and Neurostimulation	Ali Shoeb* (USA)
Benefits and Pitfalls of University - Industry Collaborations	Dieter Haemmerich* (USA)
Brain Tissue and Tumor Segmentation	Iftekharuddin Khan* (USA)
Cell-Matrix Interactions within Tumors and Normal Tissue	Nicole Moore* (USA)
Cellular Force Transduction	Jeffrey G Jacot* (USA)
Computational Modeling of Lung Mechanical Function	Jason H T Bates* (USA)
Control in Synthetic Biology	Timothy Lu* (USA)
Control in Synthetic Biology	Bruce Tidor*, Timothy Lu (USA)
Development of a Retinal Prosthesis for the Blind: Technical and Biological Challenges	Joseph F. Rizzo* (USA)
Development of Sleep and Respiratory Analysis Systems using Reference Data Sets from Databases of Physiological Signals; Physionet (US) and Siesta (EU) as Examples	Ron Leder* (Mexico)
Exoskeletons for Functional Training	Sunil Agrawal* (USA)
Futures in Brain-Machine Interfaces	Justin C. Sanchez*, Jose M. Carmena (USA)
Health Informatics: eHealth Solutions for Cardiovascular Risk Screening I. Overview	Carmen CY Poon* (China)

Health Informatics: eHealth Solutions for Cardiovascular Risk Screening II. Vascular Ultrasound	Carmen CY Poon* (China)
Human Models and Machines for Brain Reading and Mind Healing	Danilo De Rossi* (Italy)
Imaging and Computation in Clinical Electrocardiology	Dana Brooks*, Rob MacLeod (USA)
Innovative Technology Assisting Children with Cerebral Palsy	Deborah Gaebler-Spira* (USA)
Miscellaneous Minisym Papers from Invited Sessions	Atam Dhawan* (USA)
Modeling and Analysis of Human Dynamics	Yoshiharu Yamamoto* (Japan)
Modeling Biomedical Systems	Hongyue Dai*, Jeffrey Saltzman, Bruce Tidor (USA)
Modeling the Respiratory Control System During Sleep: Applications to Sleep Disordered Breathing	David Andrew Wellman* (USA)
Molecular, Cellular and Tissue Engineering and Biomaterials	Wan-Ju Li* (USA)
Neural Decoding in Brain-Machine Interfaces	Wasim Q. Malik*, Riccardo Barbieri (USA)
Nonlinear Biomedical Signal Processing: Advances and Challenges in Monitoring	Maria G. Signorini* (Italy)
Novel Clinical Applications for Non-Invasive Electrical Stimulation	Brian Caulfield* (Ireland)
Optogenetics: Novel Tools for Probing and Manipulating Neural Circuits	Karim Oweiss* (USA)
Personal Health Systems and mHealth – Horizons Towards 2015	Ilkka Korhonen*, Niilo Saranummi (Finland)
Psycho Behavioral Monitoring and Cyber Therapy in Mental Disorders	Rita Paradiso* (Italy)
Recent Experiences with Non-Penetrating Micro-Electrodes in the CNS	Mesut Sahin* (USA)
Rehabilitation Robotics	Hermano Igo Krebs* (USA)
Reliable and Trustworthy Physiological Signal Monitoring in Daily-Life	Julien Penders* (Netherlands)
Researchers and Companies Involved in innovation of Biomedical Devices	Maria Teresa Arredondo Waldmeyer, Teodiano Bastos* (Brazil)
Rethinking Health – ICT Enabled Services for People to be Responsible for their Health	Niilo Saranummi*, Teresa Meneu, Sergio Guillen (Finland)
Robot-Assisted Training in Sports: Not Requested or too Challenging?	Peter Wolf* (Switzerland)
Spatiotemporal Control of Cell Fate and Cardiac Differentiation	Michael Davis* (USA)
Stem Cells in Regenerative Medicine	William Murphy*, Todd McDevitt (USA)
Systems Biology Data Modeling	Forest White*, Bruce Tidor (USA)
Systems in Synthetic Biology	Bruce Tidor*, Ron Weiss (USA)
Systems Models in Biology	Jacob K. White*, Bruce Tidor (USA)
Tailoring Biomaterial Properties for Regenerative Medicine	Aaron Goldstein* (USA)
Telemedicine and Interoperability - Improved Care for Wounded Warriors	Sean Kennedy* (USA)
Translational Tissue Engineering	Karen Christman* (USA)
Virtual Reality in Rehabilitation	Robert Kenyon* (USA)
Wireless Miniature Neurostimulation Devices	Victor Pikov* (USA)
Xray Microscope Imaging of Biomolecules	Lee Makowski* (USA)