IEEE CBMS 2017 - Special track Submission
Empowering Patients with Cancer through Connected Health

The expected size of this Special Track is 5 scientific papers in one session, with an addition poster track.

<u>Call for papers</u>
Patients diagnosed with cancer usually are required to change their lifestyles to adjust to treatments and also during the rehabilitation and recovery phase of the disease. Health information technologies, such as informational web sites, smartphone apps and wearable devices, has made possible empowering patients to be effective advocates for their own health through adequate information and understanding about their health conditions to manage their health. Nevertheless, how to integrate connected health for the empowerment of patients with cancer is not trivial.

This track is part of the effort in the European Projects **CATCH** (www.catchitn.eu) and iManageCancer (http://imanagecancer.eu/).Within CATCH we focus on "technology advancements such as gamification based on biofeedback, and neuromuscular electrical stimulation, can help to increase the quality of cancer rehabilitation. However, we need to understand specific challenges and patient journeys associated with cancer care and how we can help patients to leverage psychological tools to better engage in their own care. We then need to optimize technological tools to meet patients' rehabilitation needs, and finally, to understand how to bring resultant solutions to market where they can have maximal impact on quality of care. ". On the other hand **iManageCancer** aims to provide a cancer specific self-management platform designed according to the needs of patient groups while focusing, in parallel, on the wellbeing of the cancer patient with special emphasis on avoidance, early detection and management of adverse events of cancer therapy but also, importantly, on psycho-emotional evaluation and self-motivated goals.

This special track invites original research on innovative concepts, methods, tools and services that address challenges at the empowering of patients with cancer to make informed decisions through technology. These may include technological issues around data registration, standards, taxonomies and security, as well as other disciplinary considerations such as the ownership and coordination of records, information, educational tools, gamification, physical activity promotion and the social and economic impacts new models in the service users, service providers, service organizations and informal care networks. Incentive structures to help introduce these changes will also be considered. Topics of interest include, but are not limited to:
- Patient technologies for managing specific conditions
- Mobile self-management for patients with cancer
- The use of social media by cancer patients
- Technologies supporting doctor-patient communication
- Mobile technologies and social media
- Biofeedback and rehabilitation technologies
- Gamification
- Physical Activity promotion using connected health
- Privacy and security of digital personal health information
- Multidisciplinary models and implementation research

<u>**Track Chairs:**</u>
Prof. Brian Caulfield, Insight Center, University Colleague Dublin, Ireland
PhD Luis Fernandez Luque: eHealth Researcher, Qatar Computing Research Institute, HBKU, Doha Qatar; Co-founder and eHealth Advisor, Salumedia, Seville, Spain.

PhD Matilde Mora Fernández: Assistant Professor, Sports and Exercise Science, University of Seville, Spain.

PhD Octavio Rivera: Assistant Professor and Postdoctoral Researcher at University of Seville, Spain

Dipl.-Inform. Stephan Kiefer: Group Manager, Health Information Systems, Fraunhofer-Institut Biomedizinische Technik (IBMT), Germany

PhD Haridimos Kondylakis: Collaborating Researcher at Institute of Computer Science, FORTH, Greece

Committee members:
- Begoña García-Zapirain, Associate Professor, Universided de Deusto, Bilbao, Spain
- Guido Giunti: Human-Computer Interaction PhD Student at University of Oulu, Finland; Medical Advisor at Salumedia, Seville, Spain
- Francisco M Monteiro-Guerra: Connected Health PhD Student at University College of Dublin, Ireland; Gamification Researcher at Salumedia, Seville, Spain
- Santiago Hors-Fraile: PhD Candidate, University of Seville, Spain; Business Advisor, Salumedia, Seville, Spain.
- Gabriel Signorelli: Connected Health PhD Student at University College of Dublin, Ireland; Sports & Exercise Science Researcher at Oncoavanze, Seville, Spain.
- Lefteris Koumakis, Collaborating Researcher at Institute of Computer Science, FORTH, Greece