



# pHealth 2017

14th International Conference on  
Wearable, micro & Nano Technologies  
for Personalized Health  
14-16 May 2017, Eindhoven, The Netherlands

## Call for Papers pHealth 2017

[www.phealth2017.eu](http://www.phealth2017.eu)

pHealth 2017 is the 14th event in a series of international conferences on personalized health, to cater to patient needs and to facilitate patient engagement. Starting in 2003 with personal health management systems as technology focused International Conference on Wearable Micro and Nano Technologies for Personalized Health, pHealth has evolved to a truly interdisciplinary meeting of international experts by combining medicine, technologies, biomedical engineering, legal, ethical, social, and organizational aspects and impacts, with basic research for enabling future care paradigms. Thereby, pHealth increasingly combines medical services with public health and epidemiological monitoring, prevention, social and elderly care, as well as nutrition, wellness and fitness to establish participatory, predictive, personalized, preventive, and effective care settings. Smart mobile systems, health apps, sensors native or attached to mobile phones available to eHealth and telemedicine are emerging as enablers for ubiquitous pervasive health and the main components for the next wave of health services delivering integrated care, so still presenting advances in wearable or implantable micro, nano and biotechnologies for healthcare and wellness. Social media and gamification further highlight the potential of pHealth, both as a business domain and as a community safety-net.

OECD (Organisation for Economic Co-operation and Development) has defined four basic areas to be managed in the new care model: address the big data challenges; foster meaningful innovation; understand and address the potential new risks; and support concerted effort to un-silo communities for a future of sustainable healthcare and wellness in aging communities. pHealth 2017 will emphasize the interrelated aspects framing ubiquitous pervasive health: personalized health and virtual care, precision medicine, mobile technologies, micro-nano-bio smart systems for personalized health; big bio-data management and analytics; but also new potential risks for security and privacy as well as safety chances and challenges. The intended outcome is intelligent and connected health devices and services leading to integrated care. The multilateral benefits of pHealth technologies for all stakeholder communities give enormous potential, not only for medical quality improvement and industrial competitiveness, but also for managing health care costs and last but not least: better patient experiences.

We would like to welcome you for pHealth 2017 to the city of Eindhoven, an important location of science and industry as well as research and development (Brainport) in The Netherlands. Please join us to share your expectations, experiences and results, and to open up for the future!

Following a long-term tradition, pHealth 2017 is supported by the Working Groups "Electronic Health Records", "Personal Portable Devices" and "Security, Safety and Ethics" of the European Federation for Medical Informatics (EFMI), but also by the Working Group "Security in Health Information Systems" of the International Medical Informatics Association (IMIA). Another supporter is HL7 International represented by HL7 The Netherlands.



## Conference Contributions

The conference is composed of Conference Keynotes, Session Keynotes, Full Paper Presentations, and Poster Presentations. The conference will be opened by a few Conference Keynotes held by globally leading experts. Invited Session Keynotes will introduce into the session topics and the Full Papers and Posters presented there. The first day, May 14th will be an innovation forum for pHealth and mHealth projects including those funded by the European Commission.

## Awards

The scientific program committee will bestow the pHealth 2017 Best Paper Award to be proclaimed at the end of the conference. Additionally and beyond the regular paper submission process, students from around the world are cordially invited to join the Best Student's Poster Contest by submitting poster proposals directly to the conference organizers, so passing the online-registry system for submissions.

## Topics

The conference organizers call for innovative paper submissions describing knowledge beyond the state of the art in the area pHealth as outlined above. Specific topics of interest include:

### Wearable and implantable devices and systems

- Sensors, actuators and patient diagnostic systems
- Biosignal processing and analysis
- Bioelectrical and bio-impedance sensing techniques
- Wireless body area network communication and computing
- Multi-sensor data fusion
- Sensor pattern recognition
- Therapeutic systems
- Smart textiles

### Solutions for personalized care and food safety (nutrition)

- Personalized diagnostics
- Addressing food safety with smart systems
- Personalized therapy and rehabilitation
- Biomedicine and pHealth
- Biomechanics, Bioelectronics, Biophotonics and pHealth
- Personalized decision support systems
- Artificial organs

### Data and Knowledge Management and Methodologies

- Big (Bio)Data and the Quantified Self
- Business Analytics and Visualization
- Virtual Physiological Human and Gamification
- Cloud services development and deployment

### Interoperable ICT and Telemedicine

- Connected health and integrated care
- Building large-scale interoperable electronic health systems
- Remote care and care coordination with pHealth
- Disease specific and emergency patient summaries



- ePrescription and eDispensation
- Personal Health Record systems
- Personalized Health Record Banking, including life time storage, organizing, and retrieval of health data
- Intelligent data processing and predictive algorithms in eHealth and pHealth
- Multi-scale and multi-level decision support systems
- Integration of mobile and home telecare with IHE
- Success stories and failure reports

## mHealth Applications

- Bridging mHealth and pHealth applications
- Behavioral Health services
- Inclusive user interfaces for pHealth
- mHealth beyond care: lifestyle management
- pHealth in Ambient Assisted Living for Active Healthy Aging
- Mobile health and wellness Apps supporting new care paradigms
- Medical Device Directive Compliance - Advantage or drawback

## Security, Privacy, Safety and Ethics in pHealth

- Trust and trustworthiness as enablers for pHealth
- Security, privacy and ethics in pHealth
- Experience with existing labelling systems
- Future needs for regulation, certification and labelling
- Medication and patient safety issues

## Publications

Regular submissions to pHealth 2017 include full papers only. Full Papers are scientific papers, future vision papers or review papers, but also advanced implementation experiences related to methodologies and/or applications. They should provide interrelations to the other ubiquitous pervasive health aspects. The paper structure includes: title, names, and affiliations (city, state, and country) of all authors, abstract (up to 200 words), 4-6 key-words. The body of the text shall include: introduction, methods, results, discussion, conclusions and references. The maximum length of a paper submission is six A4 camera-ready pages, and should strictly follow the formatting rules of the provided IOS Press template. All submitted papers will be subject to a peer-review process by three independent reviewers. Accepted full papers will be included in the pHealth 2017 Proceedings published at IOS Press in the Series "Studies in Health Technology and Informatics". The series is indexed at Elsevier's EMCare, Elsevier's SciVerse Scopus, Google Scholar / Google Books, MEDLINE, PubMed, Thomson Reuters' Book Citation Index, Thomson Reuters' Conference Proceedings Citation Index. The presentations are planned to be available on the conference website.

Submitters of accepted contributions that tend to be better presented as Posters will be invited to revise their paper to a Poster Paper and to prepare and present a Poster. The camera-ready three pages Poster Paper will be included in the IOS Proceedings.

## Paper Submission

All papers formatted in accordance with the [IOS Press template](#) instructions have to be submitted through the conference online system at: [www.phealth2017.eu/submission](http://www.phealth2017.eu/submission). This site will open soon.



As mentioned before, submissions for the Best Student's Poster Contest have to be directly submitted to the Conference Secretariat at [info@phealth2017.eu](mailto:info@phealth2017.eu).

### Important Dates

Paper submission deadline:	January 17th, 2017
Notification of acceptance:	February 6th, 2017
Author registration:	March 27th, 2017
Re-submission of camera-ready papers:	March 21st, 2017
Conference Dates:	May 14th – 16th, 2017

### Conference Venue

The pHealth 2017 Conference will be organized in the premise of University of Eindhoven [www.tue.nl/en/university/about-the-university/accessibility-tue-campus/accessibility-route-and-map-tue-science-park/](http://www.tue.nl/en/university/about-the-university/accessibility-tue-campus/accessibility-route-and-map-tue-science-park/).

### Contact

If there are any questions, please do not hesitate to contact the Conference Secretariat mr Patrick van der Schaaf at [info@phealth2017.eu](mailto:info@phealth2017.eu).

### The conference organizers:

Dr. William Goossen

Oxn behalf of the pHealth 2017 Local Organ-izing Committee