

LINK

Linking Excellence in Biomedical knowledge and Computational Intelligence Research for personalized management of CVD within PHC

A twinning example – The LINK project

P. Carvalho, J. Henriques, R. Paiva, C. Teixeira, T. Rocha, S. Paredes, M. G. Ruano, A. Bianchi, Vicente Traver-Salcedo, Alvaro Martinez-Romero

UNIVERSITY OF COIMBRA, UNIVERSITY OF ALGARVE, POLITECNICO MILANO, UNIVERSITAT POLITECNICA VALENCIA



Link

 Linking Excellence in Biomedical knowledge and Computational Intelligence Research for personalized management of CVD within PHC

□ Grant Agreement No: 692023

- □ Start Date: 1st January 2016
- End Date: 31st December 2018

□ Total Budget: 1,010,590.00€



The Consortium



Objective 1: To define a research agenda

- Establishment of a research forum for intelligent algorithms for PHC in CVD management.
 - Industry: Philips, IntelliCare, VTT, Medtronic, TSB
 - Academic: California University, Georgia Tech, Uni. Zagreb,
 - Professional Societies & Professionals: IFMBE, IEEE-EMBS, European Cardiology Society, Portuguese Cardiology Society, HL7 Foudation, ISfTeH, several hospitals
 - Decision Makers: Portuguese Health Ministry, Croatian Health Ministry
 - Patients: European Patient Forum, Patients like me
- Contact with fundamental stakeholders in the field to help identifying key gaps and barriers
- Definition of a research agenda for intelligent algorithms for PHC in CVD management.



- Objective 2: To deepen the link between research institutions in a sustainable way
 - Identification, planning and implementation of common research tracks.
 - Successful definition of concepts and project proposals for H2020 framework.
 - Definition and implementation of a structured common data repository and a pool of common resources.



- Objective 3: To enhance S&T excellence in intelligent algorithms for PHC for CVD management.
 - Develop research track

Exchange and internship program of researchers

- Co-advisement of PhD students and post-docs
- Successful definition of PhD thesis and post-doc themes as well as competitive grant applications

Increase of common journal and conference publications

Objective 4: To increase international impact and recognition

- Definition of curricula and training materials for advanced training programs for intelligent algorithms for PHC in CVD management
 - Contribute to IEEE and IFMBE
 - Participation on the Health Informatics Book Series by the Health Informatics WG of OFMBE
- Organization of major international conferences and workshops in the field
 - IEEE-BHI 2016 Special Session
 - PAHCE 2016 Special Session & Round Table
 - CBEB 2016 Workshop
 - IEEE-EMBC 2016 Special Session
 - Medicon 2019
- Co-organization of summer schools
 - IEEE Biomedical Signal Processing
- Organization of special issues of Journals

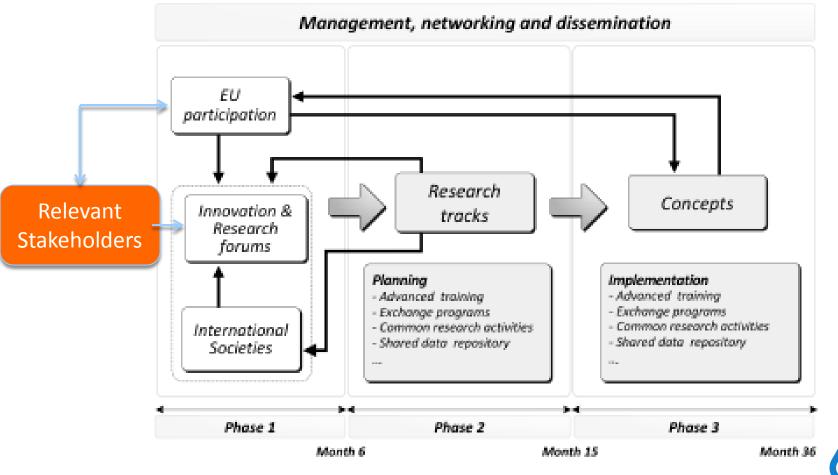


Objective 5: To enhance Innovation and Inclusion

- Establishment of an innovation forum in order to identify gaps, industrial needs and best practices to foster innovation culture in PHC
- Define of a roadmap for EU research widening and participation



The Approach

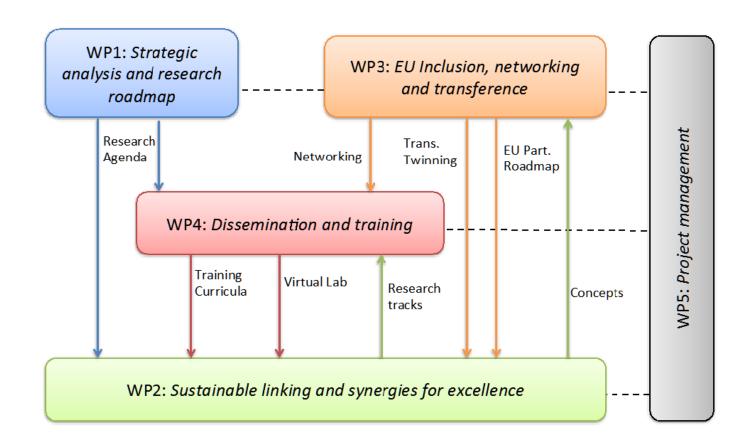






		CVD applications			
RT		Sleep	CAD	HF	Diabetes
Research Tracks Health outcomes	Diagnoses & Stratification				
	Personalized predictions				
	Integrated care & Process mining				
		CapSleep	HeartCycle, Epilepsiae	MyHeart	CroDiabNet, EBM L IN K
		Data sets			

WP organization





Conclusions

□ LINK:

 Define a network to research and develop solutions for key barriers in PHC for CVD management (focused on ICT/intelligent algorithms)

Explore Synergies

- Identify current status and common relevant key barriers
- Define research agenda
- Continuum of Cooperation
 - Research tracks
 - Common projects
 - PhD student exchange
 - Concepts and projects

...







