

## MyHeart

### Mission:

*Fighting Cardio-Vascular Diseases  
by Preventive Lifestyle & Early Diagnosis*

### Integrated Project

2.3.1.11 e-health  
IST-2002-507816

### Project Manager:

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Start: 31.12.03

Duration 45 Months

Budget: 33 M€

EC contrib. 16 M€

Swiss contrib. 3 M€

### Key words:

Biomedical clothes  
Prevention, health,  
cardio-vascular diseases



### Project Summary:

Cardio-vascular diseases (CVD) are the leading cause of death in the west. In Europe over 20% of all citizens suffer from a chronic CVD and 45% of all deaths are due to CVD. Europe spends annually hundreds billion Euros on CVD. With the upcoming aging population, it is a challenge for Europe to deliver its citizens healthcare at affordable costs.

It is commonly accepted, that a healthy and preventive lifestyle as well as early diagnosis could systematically fight the origin of CVD and save millions of live-years. The MyHeart mission is to empower citizen to fight cardio-vascular diseases by preventive lifestyle and early diagnosis.

The starting point is to gain knowledge on a citizen's actual health status. To gain this info continuous monitoring of vital signs is mandatory. The approach is therefore to integrate system solutions into functional clothes with integrated textile sensors. The combination of functional clothes and integrated electronics and process them on-body, we define as intelligent biomedical clothes. The processing consists of making diagnoses, detecting trends and react on it. Together with feedback devices, able to interact with the user as well as with professional services, the MyHeart system is formed.

This system is suitable for supporting citizens to fight major CVD risk factors and help to avoid heart attack, other acute events by personalized guidelines and giving feedback. It provides the necessary motivation the new life styles. MyHeart will demonstrate technical solutions. The outcome will open up a new mass market for the European industry and it will help prevent the development of CVD, meanwhile reduce the overall EU healthcare costs.

### Cooperation opportunities:

- Multicentric field trial in any European country and the US
- Specific sensor solutions for textile integration
- Medical economic study of impact for different EU member states

**Website:** [www.extra.research.philips.com/euprojects/myheart](http://www.extra.research.philips.com/euprojects/myheart)

## Partners:

| Number | Participant name  | Country |
|--------|---|---------|
| 1      | Philips Research Labs. - Aachen   | D       |
| 2      | Philips Design - London   | UK      |
| 3      | Philips Design - Eindhoven  | NL      |
|        |   |         |
| 5      | PITS NV - PDSL  | B       |
| 6      | Medtronic   | E       |
| 7      | Nokia   | Fin     |
| 8      | Fundacion Vodafone  | E       |
| 9      | Nylstar   | I       |
| 10     | Manifatture Filati Riunite (Lineapiu Group)   | I       |
| 11     | Milior  | I       |
| 12     | Smartex   | I       |
| 13     | Dr.Hein GmbH  | D       |
| 14     | Mind Media B.V.   | NL      |
| 15     | Medgate   | CH      |
| 16     | CSEM  | CH      |
| 17     | CEA-LETI  | F       |
| 18     | ETH Zurich  | CH      |
| 19     | University of Pisa  | I       |
| 20     | Universidad Politecnica de Madrid   | E       |
| 21     | Instituto de Aplicaciones de las Tecnologías de la Información y de las Comunicaciones Avanzadas - Asociación | E       |
| 22     | Consorzio di Bioingegneria e Infomatica Medica  | I       |
| 23     | Politechnic University di Milano  | I       |
| 24     | University of Padova  | I       |
| 25     | University of Firenze   | I       |
| 26     | Mayo Clinic Rochester   | USA     |
| 27     | University Clinic Aachen – dept Psychology & dept Cardiology  | D       |
|        |   |         |
| 29     | Hospital Clinico (San Carlos) de Madrid (HCM)   | E       |
| 30     | Fondazione Centro San Raffaele  | I       |
| 31     | University Pavia IRCCS/FSM  | I       |
| 32     | Technical University of Valencia – Sports Center (UPV-SC)   | E       |
| 33     | University of Coimbra (ACG-CISUC)   | P       |
| 34     | Hospital da Unisersidade de Coimbra (CU-HUC)  | P       |
| 35     | Philips Research Labs - Eindhoven   | NL      |