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SEMEOTICONS
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SEMEiotic Oriented Technology for Individual's
CardiOmetabolic risk self-assessmeNt and Self-monitoring



Info: <http://www.semeoticons.eu/>

Graphics & images: Ilgeko

The “Wize Mirror”
Face Reading to Help People stay Healthy

The central idea in the FP7 Project SEMEOTICONS, which stands for SEMEiotic Oriented Technology for Individual's CardioMetabolic risk self-assessment and Self-monitoring, is to exploit the face as a major indicator of individual's well-being by tracing traits of physical and expressive status.

In accordance to a semeiotics viewpoint, face signs will be mapped to measures and computational descriptors, automatically assessed.

SEMEOTICONS will design and construct an innovative multi-sensory system integrated into a hardware platform having the exterior aspect of a mirror: the so-called Wise Mirror. This will easily fit into users' home or other sites of their daily life (e.g. fitness and nutritional centers, pharmacies, schools and so on).

Consortium:

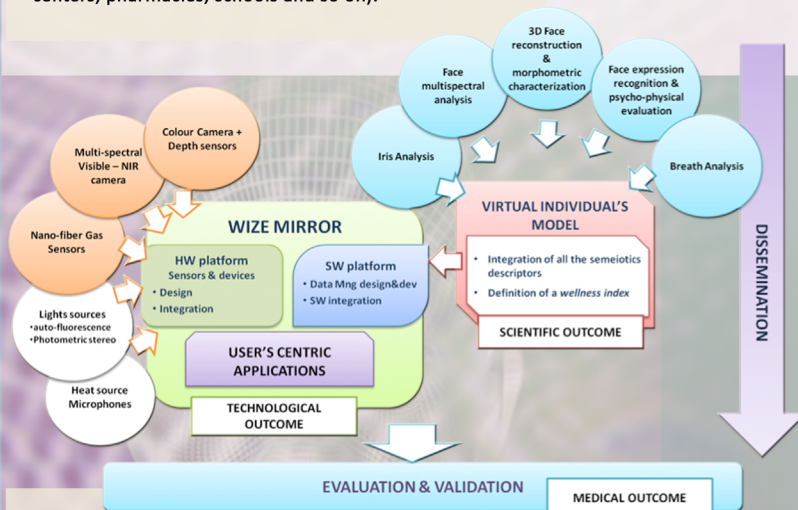


SEMEOTICONS Consortium brings together a unique variety of professional and research competence and experience. The participation of six research organizations (CNR, FORTH, LIU, UCLAN, NTNU, CNRH), two industrial Partners (INTECS and FORTHNET), and two SMEs (DRACO and COSMED) guarantees a perfect balance of innovation and technology-driven research that is required to realize the SEMEOTICONS vision.

Daily self-monitoring of individuals' wellness

The Wise Mirror will collect data mainly in the form of videos and images. These will be processed by advanced dedicated methods to extract biometric, morphometric, colorimetric, and compositional descriptors derived from individual's face. The "wellness index", derived from the integration of such descriptors into a Virtual Individual's Model, will trace and monitor the daily evolution of individual's status.

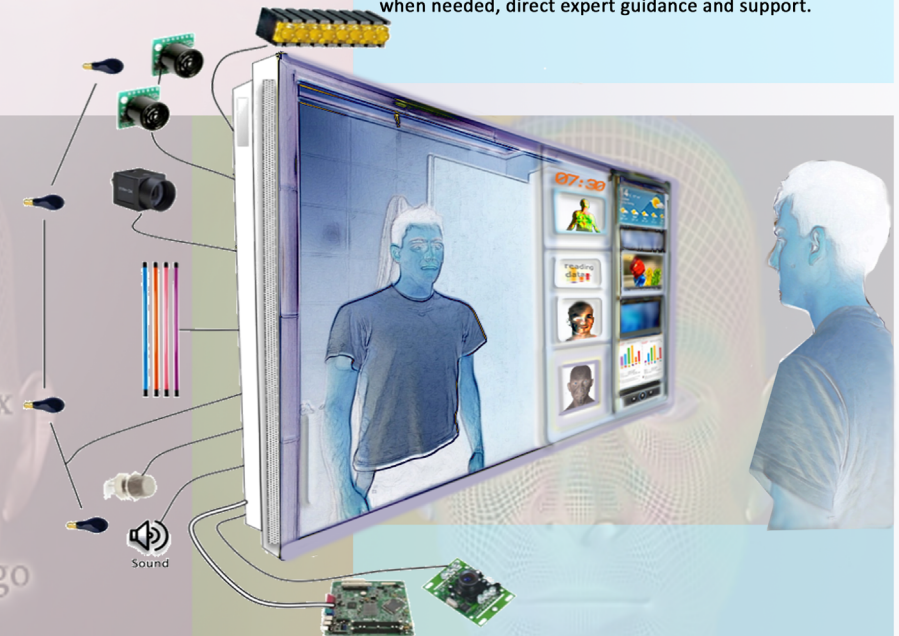
Suggestions and coaching messages will be provided to foster the maintenance of a correct lifestyle or reduce noxious habits. Users will be enabled to share data in their diary with health professionals so as to receive, when needed, direct expert guidance and support.



Wise Mirror validation

Medical experts will validate the system with respect to the reproducibility of measurements, the efficacy in detecting changes in well-being and cardio-metabolic status as well as the acceptability by the end-users.

The exploitation of the Wise Mirror is expected promote new aggregations between health and well-being actors including industry, fitness, and schools. Furthermore, significant effects towards the development of new prevention strategies of cardio-metabolic diseases are expected, with positive impacts on the reduction of avoidable disease burden and health expenditures.



SEMEOTICONS consortium includes ten partners from 7 countries: France, Greece, Italy, Norway, Spain, Sweden and United Kingdom.

Six research institutions, both ICT and medical, and four industries are involved in the project that will be coordinated by the Italian National Council of Researches (CNR).

Three medical centers located in Pisa, Milan, and Lyon will support research and industrial partners and will host the Wise Mirror testing.

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