Multi-Disciplinary Multi-Disciplinary Diagnostic Labs Chemo/Radiation Imaging I

Contacts

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ICT for eHealth & Well-being



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OBJECTIVE: to design and develop HW/SW systems to diagnose, follow-up and monitor individuals' health status, according to a patient -centric approach.



ELIGIBLE END-USERS:

- clinical stakeholders, supported during their daily routine;
- patients and healthy people, aided for selfcare and well-being, in their normal-life settings.

Remote monitoring of chronic patients

In the last years, a new care model is gaining momentum being a viable and effective paradigm for the long-term follow-up of chronic patients: innovative technologies are employed to remotely monitor patients' pathophysiological parameters so as to early de-



tect possible exacerbation events. The final aim is reducing the number of hospitalization and

improving patients' quality of life. In this field, SI-Lab has gained expertise in the development of systems for the analysis and interpretation of biomedical data acquired remotely and for decisional support of clinical stakeholders.

Multimodal biomedical data analysis

Biomedical data acquired with different mo-

dalities are becoming a necessary ingredient of

diagnosis and prognosis processes. A historic activity of SI-Lab in this field is the development of SW applications for the *feature*-



based characterization of 3D-4D images and signals and the integration of multimedia data, with the eventual aim of identifying novel diagnostic and prognostic markers.

Responsive multisensory environments for rehabilitation and reeducation

SILab is developing responsive multisensory



environments to support rehabilitation and reeducation for elderly patients suffering of neurodegenerative disorders or of mobility impairments

and for children affected by Pervasive Developmental Disorders.

Self-assessment and self-monitoring of cardio-metabolic risk

In the field of wellbeing, SI-Lab is working on the setup of a multisensory mirror, the *Wize Mirror*, which will allow normal people to self-assess and self-monitor the risk for cardio-metabolic



for cardio-metabolic diseas-

