ROMA

CARDIOVASCULAR ENGINEERING
Via San Martino della Battaglia 44, 00185 Roma

- analytical, predictive and educational applications of modeling to circulatory and respiratory pathophysiology in adult and pediatric subjects, to study the effects of mechanical and pharmacological assistance, even during physical exercise.

EPIDEMIOLOGY AND RESEARCH ON HEALTH SERVICES
Via dei Taurini 19, 00185 Roma

- human biomonitoring investigations; co-ordination of the Interdepartmental CNR Environment and Health Project, and of the working group on communication and perception of environmental and health risk.

LECCE

c/o CAMPUS UNIVERSITARIO ECOTEKNE, ed. A7, via Provinciale Lecce-Monteroni, 73100 Lecce

- 4 Research Macro-Areas: Cardiovascular biomarkers, Technological solutions for Health, Nano-imaging and nutrigenomics
- promotion of Scientific and Technological Research in Southern Italy, together with other research institutes, Public Agencies (local authorities, Regions, etc.) and the industrial and entrepreneurial sector.

REGGIO CALABRIA

c/o Ospedali Riuniti – Azienda Ospedaliera “Bianchi-Melacrino-Morelli”, Via Vallone Petrara, 89124 Reggio Calabria

- epidemiology of cardiovascular risks connected to the kidney diseases and the arterial hypertension, study of the cardiovascular reflexes and of the sleep disorders in patients with chronic renal disease and in patients with transplanted kidney, molecular genetics of the renal disease and of the arterial hypertension, role of the adipose tissue in the systemic inflammation in patients with chronic renal disease, arterial hypertension, bio-statistics of the risk, nutrition and hypertension, clinical epidemiology, pathophysiology of the progressive renal diseases; full member of the European Training Centers network, center of excellence in Europe for the training of researchers and clinicians in the area of renal disease and for the treatment of arterial hypertension.
THE INSTITUTE

Founded in Pisa in 1968 for the study of the pathophysiology of the cardiovascular system and the related organs, IFC has pioneered the ‘translation’ process of physiological observations and measurements at the molecular and cellular level, towards knowledge, new therapies, guidelines, for the benefit of the clinical practice and the community health.

Throughout the study of the differences between the mechanisms which produce consequences on the population health at progressively lower levels of observation, IFC, widening its experience to a holistic point of view, sets the “personalized care” as a goal, to guarantee social health and optimal life quality.

The staff, as many as more than 500 employees, is a multidisciplinary team with different training and scientific culture: medicine, biology, physics, chemistry, engineering, computer science, psychology, statistical science, etc.

Although the Institute’s activities cover areas such as Clinical pathophysiology and risk factors for health, Bio-tech science and modeling, Epidemiology and health promotion. Preclinical biology and mechanisms of disease, IFC keeps a strong involvement in the development of multidisciplinary projects, coworking with the most important world institutions, getting high levels of excellence, as coordinator as well as partner in many international projects and in synergic collaborations with industries, always keeping attention to all the involved stakeholders, from patients to health workers.

THE RESEARCH

PISTA

PATHOPHYSIOLOGY AND HEALTH RISK FACTORS

Integration of the most relevant, potentially useful in the medical field, scientific results, evaluating their applicability, feasibility and clinical significance on patients.

BIOTECHNOSCIENCE AND “MODELING”

Development of innovative technologies and methodologies applied to the medical sciences for a model of “4P” (predictive, preventive, personalized and participatory) Medicine.

EPIDEMIOLOGY AND HEALTH PROMOTION

Study of diseases related to environmental and/or social factors, and of the complex relationships between causes and effects, using observational studies of population and experimental studies in the clinical field, through the application of advanced statistical methods.

PRECLINICAL BIOLOGY AND DISEASE MECHANISMS

Reply to scientific needs to translate rapid progresses in genomics and other omics, in a broader sense, technologies, to ensure a better comprehension of the molecular mechanisms of diseases, with particular attention to the implications in the clinical arena.

MASSA

c/o Stabilimento Ospedaliero di Massa, Ospedale del Cuore, via Aurelia Sud, 54100 Massa

- polymeric biomaterials and biomedical devices for the cardiovascular area, studies of congenital heart diseases and of leuco-platelet pathophysiology
- epidemiology and biostatistics oriented to the statistical analysis of health surveys on current information flows, clinical and observational studies.

MILAN

Piazza Ospedale Maggiore 3, 20162 Milano

- laboratories for the determination of homocysteine, cysteine, glutathione in plasma, urinary cystine, B1 and B2 vitamins in blood, A, E, C vitamins, beta-carotene, B6 in serum, markers of inflammation or associated with the extracellular matrix or monocytes activation, determination of microRNA in plasma and tissue, clinical data collection and non-invasive cardiovascular evaluation of subjects enrolled in research protocols, MASH-groups to improve quality of life and appropriateness of diagnostic and therapeutic interventions.

SIENA

Strada del Petriccio e Belriguardo 35, 53100 Siena

- pre-clinical research focused on the development of innovative therapies for personalized medicine in the field of oncology, within Tuscany Life Sciences (TLS), at the Technological Pole of “Torre Fiorentina”.