FACILITIES

- Fully equipped laboratories for cellular or molecular biology (chemical fume hoods, laminar flow cabinets, centrifuges, electrophoresis apparatus for DNA and proteins, proteins and DNA blotting systems), DNA sequencer, real time PCR equipments, Luminex apparatus, cold room, ELISPOT
- Security level P2 Laboratory
- Full equipments for fluorescence confocal microscopy (including live-cell-imaging) and flow cytometry
- Magnetically-shielded room
- Fully equipped Laboratory for genotyping service

The Institute of Translational Pharmacology (IFT) of the CNR, is headquartered in the Research Area of Rome Tor Vergata (ARTO) and branches out in Rome, St. Camillus Hospital, in L’Aquila and in Cagliari/Pula. IFT was constituted in 2010 and currently includes 17 members of the technologist, management and administrative staff, 55 researchers, 21 research associates and 33 non-permanent staff members in place. IFT also participates in the training of students of degree courses and PhD courses.
MISSION

The mission of the IFT is to accelerate the translation of basic research discoveries in biology and medicine into novel therapeutics and diagnostics tools. To this purpose, activities of the IFT focus on preclinical and translational investigation aimed to the understanding of the complex mechanisms of disease and targeted therapy action, with a particular attention to cancer, neurological disorders, infectious and inflammatory diseases, and to their transfer into clinical practice.

EXPERTISE

Specific expertise offered by laboratories of IFT includes: drug design, discovery and delivery; pharmacogenomics; study of therapeutics, including biologically active compounds and biotechnological tools, for cancer, neurological disorders, infectious and inflammatory diseases and regenerative medicine; study of innovative biomarkers for the diagnosis, prevention and treatment of the diseases; genotyping studies and service for transplantation and degenerative diseases; regulatory aspects of therapeutics. All these scientific themes represent the core of the so-called "Translational Pharmacology" that is considered one of the most exciting frontiers in biomedical research and, therefore, naturally highly attractive to young researchers.

RESEARCH ACTIVITIES AND TECHNOLOGY TRANSFER

Specific research lines of IFT include:
- Neurogenetics and molecular basis of neurodegeneration: identification of new therapeutic targets
- Identification of molecular targets and preclinical models for cancer therapy and immunotherapy
- Identification of molecular targets for differentiation, proliferation and inflammation disorders
- Design and evaluation of new, interdisciplinary therapeutic strategies
- Immunogenetics and immunopharmacology in neurological, immunological and neoplastic disorders
- Drug design and delivery, and pre-clinical evaluation of new chemical entities.

IFT offers itself as a territorial strategic resource for the development of advanced biomedical research and particularly for the development of the pharmaceuticals sector on the regional and national territory. This propensity is documented by a high number of active patents in which researchers of IFT act as inventors. In particular, 44 international patents in different countries were active in the 2011-2014 period. Most of them refer to new drug candidates, but some refer to innovative methods for differentiation/maturation of progenitor cells, to new uses of already approved drugs or to the use of new biologically active therapeutics. Activities of technology transfer has been also achieved by participation of IFT to spin-off companies.