

SEE-DRUG's uniqueness is based on the combination of the two features: first, it implements a strong collaborative institutional network of high-quality expertise, and second, improves and extends the national research activities beyond the state-of-the-art in the field of Structural and Chemical Biology. The latter is accomplished by tightly linking Structural Biology to multi-faceted biological characterization of the chosen drug target and thus it produces highly novel mechanistic and functional insights regarding both known as well as novel therapeutic targets.

The SEE-DRUG project addresses the rapid developments in Chemical and Molecular Systems Biology throughout Europe and ambitions to couple these fields for added synergy. In doing so, the SEE-DRUG proposal will certainly strengthen the Greek and South Eastern EU research capacity by providing a unique to the region infrastructure to tackle cutting-edge research problems that are acknowledged top priorities S&T fields in the EU. As a consequence, the project will have the following primary impacts:

- SEE-DRUG will enable UPAT to perform both atomic-level characterizations of protein targets as well as functional screening/optimization of molecules that interact with them (and modulating their activity), thus combining and coupling powerful NMR-based Structural Biology to an array of Pharmacological assays.
- The benefit of obtaining the core instrument, 700 MHz NMR, will be multiple: by exploiting its capability to process small sample amounts, it will enable and accelerate high quality research activities within the SEE-DRUG group and will enable new collaborations with regional and transnational partners.
- SEE-DRUG will significantly improve UPAT's visibility by strengthening its research and technological capacity. It will also boost regional S&T scientific potential, enhance the quality level and number of skilled, expert scientists in the area and will create a unique pole in the region.
- SEE-DRUG will promote national and trans-national access to UPAT infrastructure and will stimulate co-operative and networking activities of UPAT with other laboratories, research centres and academia, in Greece, Eastern and SouthEastern EU countries.

Impact

Written by Administrator

Wednesday, 21 December 2011 14:49 -

SEE-DRUG is also expected to contribute significantly in the social-economic growth of the Achaia region and the wider area of Western Greece, through the building of scientific network with EU Centers of Excellence, with countries in the Balkan peninsula and with national/regional industries