



FP7-REGPOT-2011-1

SEE-DRUG (www.seedrug.upatras.gr)

**A CONSORTIUM FOR STRUCTURE-BASED
DRUG TARGET CHARACTERIZATION
UNIVERSITY OF PATRAS (UPAT)**



**JOB OPPORTUNITIES for EXPERIENCED RESEARCHERS & TECHNICAL PERSONNEL
at the University of Patras (UPAT), GREECE.**

Participants: Departments of Pharmacy, Medicine, Chemistry and Biology

DESCRIPTION

Candidates should have a PhD in Biological and Chemical Sciences (e.g. Biochemistry, Structural Biology, Pharmacology), with solid background and at least 4-years of relevant post-Ph.D. expertise in the fields covered by the "SEE-DRUG". The Aim of SEE-DRUG is the discovery and characterization of bioactive drug candidates, using a rational, Structural Biology-based drug-design approach. It combines on-site multidisciplinary expertise in the fields of Chemistry, Biology, Pharmacology and Molecular/Cell Biology. SEE-DRUG relies on the use of a centerpiece 700MHz NMR equipment and on state-of-the-art protein expression and pharmacological evaluation technology, to identify, design and evaluate molecules that target proteins that play a key role in vascular, neural and inflammatory diseases. Successful applicants will have the opportunity to conduct research with access to state-of-the-art research facilities, and they will complement the existing UPAT's research groups and human research capacities of the SEE-DRUG project. They are also expected to transfer knowledge and expertise to the host institution (UPAT), to train younger researchers and to perform lab management and scientific reporting. The positions offer competitive remuneration and very good prospects for professional growth. Starting date is between January and June 2012.

The successful candidates should be highly motivated scientists with the following qualifications:

- Scientific background and significant track record in fields related to the project components,
- Proven ability to tackle complex problems in an independent manner, and team-leadership capabilities,
- Experience on the existing and anticipated equipment (High-field 700MHz NMR Spectrometer, Confocal microscope, Crystallization Robot, Intravital microscope and Myographs)
- Excellent oral and written communication skills, in Greek or English
- Ability to interact closely and productively with scientists from different disciplines (i.e. chemists, spectroscopists, biologists, bioinformaticians)

Specific expertise for the eight available positions includes: **(1)** polypeptide labeling strategies for NMR conformational dynamics studies, spectra analysis & peptide/protein structure determination, **(2)** Expertise in Bio-NMR Spectroscopy applications and significant experience in use of high-field (>600 MHz) NMR instruments and previous work in a NMR Center (a staff member of a Large NMR RIs or equivalent) to set-up new BioNMR applications at UPAT, **(3)** Expertise in biomolecular crystallography and modeling, for the setup of crystallization protocols and capabilities in crystal structure determination and drug design, **(4)** Expertise in molecular biology and biochemistry in order to perform expression, purification experiments and biophysical characterization of proteins, **(5)** Expertise in Confocal and Functional Microscopy for the establishment and development of the Confocal unit and network activities, **(6)** Expertise in *in vitro* assays used in vascular biology and inflammation in order to perform cell-based assays, **(7)** Expertise in *in vivo* and *ex vivo* assays used in vascular biology and inflammation, and significant experience in applications of Intravital Microscopy and Myographs, **(8)** Expertise in data acquisition/integration, database development and curation to build an integrated platform for the collection of the data from all the collaborating groups.

Finally, a qualified technical assistant will also be hired in the framework of "SEE-DRUG" project, in order to ensure the smooth functioning of the core, 700MHz NMR equipment. The qualified person will be responsible for the maintenance and the day-to-day operation of the NMR. This person should have a good understanding of biological systems and proven ability to operate electronic devices and PC's along with strong Unix/Linux skills. He/she will receive additional training to cover, if possible, most equipment-related applications.

The eight researchers will be recruited in the frame of the "SEE-DRUG" project (FP7-CAPACITIES, RESEARCH POTENTIAL, REGPOT-2011-1) for periods that vary from 18 to 36 months, depending on the position. Annual gross salary including social charges will be according to the qualifications.

Qualified candidates are invited to electronically submit their full CV, together with a 1-page statement of interests/expertise, availability and the names and contact information of 2 referees, at the following e-mail address: G.A.Spyroulias@upatras.gr