

DEVARAJ VC, Ph.D.

Post-doctoral research scholar

Chapman university, School of Pharmacy

Email: devraj.vc@gmail.com

Phone: +1-9496492880

Career objective: Seeking to be a part of an organization / institution that gives an opportunity to apply the knowledge and skills that has been gained, to develop in new challenging and enriching environment that will add immense value to my career and organization.

Career summary: Pharmacological professional with track record of success in pre-clinical research, recognized for my skills in pharmacokinetic studies in rodents & non-rodents, bioanalytical method development & validation. Had been a part of early integrated drug discovery programs contributing in ADME screening and LC-MS/MS method development and validation of NCE's as per FDA guidelines.

Education:

1. Ph.D. in Pharmaceutical Sciences (2016)

Jawaharlal Nehru Technological University Hyderabad, India.

2. M-Pharm (Pharmacology) (2006)

Rajiv Gandhi University of Health Sciences Karnataka, India.

3. B-Pharmacy (2004)

Rajiv Gandhi University of Health Sciences Karnataka, India.

Highlights of Research Experience / Job Profile:

- Development and optimization of drug metabolism studies and the characterization of cytochrome P-450 enzyme activities in subcellular fractions of various tissues like liver, kidney, and brain of rats using specific probes by LC-MS/MS system.
- *In-vitro* enzyme kinetic assays and Immunoassays (Western blotting).
- Acute-on-chronic liver (ACLF) disease model development in rats, and to test the prodrug approach on the same to manage the conditions.
- Worked within interdisciplinary research teams to apply various LC-MS/MS technologies to support ADMET (absorption, distribution, metabolism, excretion, toxicity) and PK (pharmacokinetics) studies and assays in support of drug discovery programs.

- Characterize the metabolic stability, metabolite identification, inhibition/induction kinetics, and protein binding of small molecules in *in-vitro* systems like hepatocytes, hepatic microsomes, S9 fractions, and plasma samples using LC-MS/MS analysis.
- Pre-clinical pharmacokinetic studies (bioavailability, dose proportionality, quantitative tissue distribution, and ocular kinetics) in rodents and non-rodents.
- Pharmacokinetic data calculation as per GLP/Non GLP and report preparation to support IND filing.
- Exceptional interpersonal, training, and scientific skills, where in the previous organization responsible for handling the entire DMPK work (as per GLP standards).
- Qualitative and quantitative analysis of various biomarkers (ceramides, n-methyl nicotinamide, endocannabinoids, etc.) in cell-based systems and in the complex *in-vivo* biological matrices of the various therapeutic targets related to metabolic disorders.
- Management and maintenance of the inventory of the laboratory requirements like ordering chemicals, reagents, and general lab supplies.
- Supervision and training of graduate students for assay development, optimization, and standardisation.
- Imparting training to beginners on small laboratory animal surgeries, PK study design, sampling technique, and analytical method development of small molecules.
- Protocols and SOP writing.
- Deft in addressing operational issues, resolving performance bottlenecks, and achieving desired objectives of the studies.

Professional experience:

- ***Post-doctoral research fellow / Lab Manager (June-2018 to till date)***
[*Biomedical and Pharmaceutical sciences dept., Chapman university, Irvine, CA, USA*](#)
- ***Senior Research Scientist-A (April-2010 to June-2018)***
[*Drug metabolism & pharmacokinetic dept., Jubilant Biosys Ltd., Bangalore, India*](#)
- ***Research Scientist (Sep 2009 to April-2010)***
[*Drug metabolism & pharmacokinetic dept., Syngene international Ltd., Bangalore, India*](#)
- ***Research Associate (Jan 2006 to Aug 2008)***
[*DMPK dept., Aurigene discovery technologies Pvt. Ltd., Bangalore, India*](#)

Technical expertise:

Animal handling Techniques:

Surgical / non-surgical skills

- ❖ Vascular catheterization (JVC, FVC, carotid / femoral artery, portal vein) in rodents/ non rodents.
- ❖ Bile duct / lymphatic duct / urinary bladder / duodenal catheterization in rodents.
- ❖ Animal handling (Mice, Rat, Rabbit, Guinea pig) PO, IP, IM, SC, IVT and IV dosing
- ❖ Subconjunctival and intravitreal injections in rats / rabbits
- ❖ Blood sampling via retro orbital plexus / cardiac puncture / tail vein / in rodents /non rodents.
- ❖ CSF collection in rodents.
- ❖ Ocular pharmacokinetics in rodents / non-rodents.
- ❖ Isolation of Rat and Mice Primary Hepatocytes.
- ❖ Deft with various animal screening techniques like anti-ulcer activity, anti-inflammatory, analgesic activity, anti-diabetic activity etc

Analytical Techniques:

Mass Spectrometry:

Sciex API 6500, 55000, 4000, 4000 Q-Trap, 3000, 2000, 3200, Thermo ultra-Quantum ESI and Bruker EVOQ, APPI, and APCI quadrupole/ion trap mass spectrometers.

HPLC and UPLC:

Shimadzu, Agilent 1100, Bruker's, and Waters ACQUITY LC systems

Well-versed in handling, troubleshooting, and operating the advanced technology of Agilent; **Rapid fire mass spectrometry technology** for high through put screening of *in-vitro* assays (cell-based assays, invitro ADME assays like metabolic stability, CYP inhibition studies, CaCo2 screening, Protein binding assays and CYP induction studies) qualitative analysis.

Pharmacokinetics, Enzyme Kinetics, Drug Metabolism, and Statistics Software:

Phoenix WinNonlin-7.1, Graphpad Prism-5, Light-sight, Analyst-6.1.4, Sigma Plot, SPSS (Statistical Product and Service Solutions).

Professional Memberships:

- ❖ Member of American Association of Pharmaceutical Scientists (AAPS)
- ❖ Member of Society of Neuroscience (SfN)
- ❖ Member of Indian Pharmaceutical association
- ❖ Member of Association of Pharmaceutical Teachers of India (APTI)

References: References can be provided on request.