

## SECTION & FOCUS GROUP DESCRIPTIONS

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SECTION	DESCRIPTION
<b>Analysis and Pharmaceutical Quality (APQ)</b>	analytical techniques, regulatory and compendial issues, and assurance of quality
<b>Biotechnology (BIOTEC)</b>	research, development, and commercialization of new biotechnology-based pharmaceuticals
<b>Clinical Pharmacology and Translational Research (CPTR)</b>	therapeutics and clinical assessment of drugs and biological: experimental design, conduct and analysis of clinical trials; regulatory aspects of clinical trials and drug registration; risk assessment, therapeutic extrapolation from animals to humans; pharmacoepidemiology; drug interactions; and in appropriate populations, therapeutic efficacy/safety and response to alternative dosage forms
<b>Drug Discovery and Development Interface (DDDI)</b>	focuses on issues at the critical interface between drug discovery and drug development; discovering, optimizing, and effectively transitioning preclinical candidates into the clinical development phase
<b>Formulation Design and Development (FDD)</b>	share experimental results, consider new formulation and dosage form technologies, and discuss issues and concerns regarding the design and development of formulations/drug products for all dosage forms
<b>Manufacturing Science and Engineering (MSE)</b>	application and advancement of science and technology to the process development and manufacture of pharmaceutical and pharmaceutically-related products including medical devices and active pharmaceutical ingredients
<b>Pharmacokinetics, Pharmacodynamics and Drug Metabolism (PPDM)</b>	biopharmaceutics, pharmacokinetics, pharmacodynamics, drug metabolism and transport of pharmaceutical products and therapies
<b>Physical Pharmacy and Biopharmaceutics (PPB)</b>	physicochemical and biological factors that impact the design and delivery of small molecules and biologics and focuses on preformulation, biopharmaceutics, drug absorption, nanotechnology, and drug delivery systems design and performance including targeted drug delivery
<b>Regulatory Sciences (RS)</b>	regulatory compliance, GMP, clinical and pre-clinical practices; the legal aspects of pharmaceutical development; and protection of intellectual property

FOCUS GROUP	DESCRIPTION
<b>Animal Pharmaceuticals and Technology</b>	scientists in the animal health industry or involved in the veterinary pharmaceuticals field, and those who use animal models in the development of human drug products
<b>Chemical and Biological API Manufacturing Technology</b>	small molecule and large biologic issues related to the manufacture of active pharmaceutical ingredients (API)
<b>Bioanalytical</b>	chromatographic assays applied to quantitative and qualitative investigations of small and large molecules in biological matrices that support drug discovery and development
<b>Bioequivalence</b>	scientific issues relating to the demonstration of bioequivalence and biosimilarity that allow for sound regulatory policy decisions; PK, statistical designs, and metrics for equivalence of different dosage forms
<b>Biomarkers in Translational Medicine</b>	how to translate in vitro and laboratory findings into clinical applications and to facilitate drug development (qualifying and fitness of use)
<b>Biosimilars</b>	biosimilars as a broad topic (bioanalysis, manufacturing, regulatory, trials design, etc.), allowing decisions to be made not just within a sub-specialty group, but to provide feedback/perspectives from all areas involved in the biosimilar pipeline
<b>Chemistry, Manufacturing, and Controls (CMC)</b>	technical and regulatory CMC topics associated with the development of pharmaceuticals
<b>CMC Statistics</b>	utilization of appropriate statistical methodology
<b>Contract Research Organization (CRO)</b>	issues of interest to CROs, partners, and customers including the industry-sponsored, pre-clinical CMC (Chemistry, Manufacturing and Controls), as well as clinical research programs globally
<b>Dermatopharmaceutics</b>	study of skin and associated structures, skin permeation technologies, topical and transdermal product development as well as members involved in cosmeceuticals, regulatory and marketing of these pharmaceutical products
<b>Discovery Modeling and Simulation</b>	cross-disciplinary view on how modeling is applied in the drug discovery and preclinical space including medicinal chemistry, pharmaceuticals, drug metabolism and PK, and toxicology
<b>Drug Candidate Selection</b>	integrated and cross-disciplinary view on assessing developability for compound selection and development, much in line with how it is actually assessed in the pharmaceutical industry
<b>Drug Metabolism</b>	all aspects of the biotransformation of chemicals and therapeutic agents as well as the conditions that influence metabolism and those that are affected by biotransformation processes
<b>Drug Transport</b>	state-of-the-art techniques to study drug transport and to enhance knowledge about the mechanisms of action of drug transporters
<b>Excipients</b>	understanding of excipients and their use in pharmaceutical formulations including understanding of excipient quality, functionality, drug-excipient interactions and regulatory considerations
<b>Generic Pharmaceuticals</b>	development and manufacture of generic pharmaceuticals
<b>Inhalation and Nasal Technology</b>	art and science of pharmaceutical inhalation aerosol and nasal drug delivery systems
<b>In Vitro Release and Dissolution Testing</b>	development of useful and standardized methods to meet the challenges of new dosage forms and to improve or encourage innovation of new methodologies, provide a more in depth understanding of the IVIVC
<b>Ligand Binding Assay Bioanalytical</b>	technologies and issues pertaining to the bioanalysis of analytes by nonchromatographic assays, including binding assays, immunoassays, activity- and cell-based assays

<b>Lipid-Based Drug Delivery Systems</b>	use of lipid-based systems in drug discovery and product development to effectively overcome physical and biological barriers related to poor aqueous solubility and stability, membrane permeability, drug efflux and bioavailability
<b>Microdialysis</b>	sampling technique that permits collection of molecules in the interstitial fluid of various organs with minimal tissue damage; current applications and future potentials in quantitative drug research and development
<b>Modified Release</b>	mechanistic understanding, formulation design & development, process development & scale-up, as well as the related regulatory aspects of modified release dosage forms
<b>Nanotechnology</b>	control of matter on a scale smaller than 1 micrometer, normally between 1-100 nanometers, as well as the fabrication of drug and gene delivery devices and diagnostics on this same length scale
<b>Non-Clinical Dose Formulation and Analysis</b>	technical and regulatory topics associated with nonclinical dose formulation analysis; dosing of poorly soluble, poorly permeable drug substances, and analytical challenges
<b>Nutraceutical and Natural Products</b>	drug discovery and development of nutraceuticals, dietary supplements, and natural products
<b>Ocular Drug Delivery and Disposition</b>	novel drug delivery system design for ocular applications; emerging trends in ocular pharmacokinetics such as the use of microdialysis technique for aqueous and vitreous humor kinetics; and cellular and molecular basis of ocular drug delivery (e.g., cell culture models, epithelial electrophysiology, drug efflux pumps, and cytochrome P450 isoenzymes)
<b>Oral Absorption</b>	human oral absorption (e.g., species differences in permeability, gastrointestinal tract regional differences in permeability, intestinal metabolism, in vitro/in vivo correlations, compound library for oral absorption research)
<b>Patient-Centric Drug Development, Product Design, and Manufacturing</b>	based on existing or new formulation and drug delivery technologies, along with efficient, highly flexible, and innovative manufacturing technologies and platforms that allow the provision of personalized therapeutics like individual dose strength, fixed dose combinations, and appropriate packaging solutions, etc., but also efficient adherence monitoring systems
<b>Pharmaceutical Impurities</b>	technical and regulatory topics associated with impurities for both small molecule and biologic medicines.
<b>Pharmaceuticals in Global Health</b>	application of pharmaceutical sciences to the solution of global health issues
<b>Pharmaco-imaging</b>	amalgamation of imaging and pharmacology that provides additional information that could not otherwise be obtained using traditional techniques and allows for a more precise, faster and direct translation of data from a preclinical to clinical context
<b>Pharmacogenomics (PGx)</b>	genetic causes of individual variations in drug response; pharmacogenomics more broadly involves genome-wide analysis of the genetic determinants of drug efficacy and toxicity
<b>Pharmacometrics</b>	quantitative concepts of pharmacometrics in the discovery, development, regulatory approval, and market utilization of therapeutic agents
<b>Preformulation</b>	characterization of physical and chemical properties of both small and large-molecule drug substances or drug products, and is performed at both the early-stage and mid-stage development in pharmaceutical development and manufacturing
<b>Process Analytical Technology</b>	system for designing, analyzing, and controlling manufacturing processes through timely measurements (i.e., during processing) of critical quality and performance attributes of raw and in-process materials, to ensure final product quality
<b>Process Development</b>	design, development, analysis, and optimization of technical processes

<b>Process Modeling and Simulation</b>	application of physics based (such as Discrete Element Models, Computational Fluid Dynamics, Finite Element Analyses), engineering and mathematical modeling (statistical models such as LVM) techniques to better understand, control, develop and improve pharmaceutical manufacturing processes (both API and DP)
<b>Protein Aggregation and Biological Consequences</b>	qualitative and quantitative aspects of aggregation of therapeutic protein products, to discuss and develop techniques to study aggregation and factors that cause aggregation and to discuss potential impact of aggregation including immunogenicity and for example kinetics, (bio) activity
<b>QbD and Product Performance</b>	Quality by Design (QbD) paradigm and biopharmaceutics, and its potential impact on enhancing drug product quality
<b>Stability</b>	issues with stability testing and interpretation of new regulatory guidances relating to stability testing of API and finished products
<b>Sterile Products</b>	science and technology of parenteral products including sterile products that cover a range of therapeutic entities from small molecules to large biologics
<b>Systems Pharmacology</b>	drug action at the molecular, cellular, tissue, organ, organism, and population levels
<b>Targeted Drug Delivery and Prodrug</b>	site-specifically deliver or activate the therapeutic compounds in the site of action
<b>Therapeutic Product Immunogenicity</b>	interpretation, presentation and clinical application of immunogenicity, and pursue validation of the risk factors and underlying cause-effect relationships affecting the immunogenicity of therapeutic products