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| * **Microbial Control**
	+ - * **Microbial infection & pathogenicity**
			* *In vitro* study of new compounds against bacteria, yeasts and molds
			* Evaluation of new compounds against bacterial biofilm
			* *In silico* & *in vitro* study of new compounds against bacterial quorum-sensing network
			* Using bacteriophages/phage derivatives against resistant bacteria
			* **Microbial control of pharmaceuticals**
			* Microbial enumeration tests of non-sterile products
			* Tests for specified microorganisms of non-sterile products
			* Antimicrobial effectiveness testing
			* Measurement of antimicrobial activity (determination of MIC & MBC, and antibiotics assay)
			* Designing and evaluating of disinfectants
			* Designing and evaluating of mouthwashes
			* **Fermentation**
			* Fermentation of probiotics
			* Optimization & production of active metabolites
* **Pharmaceutical Control**
	+ - * **Modification of pharmaceuticals and dosage forms**
			* Formulation, shelf-life and kinetic calculations of dosage forms
			* Interaction of drugs and macromolecules (complexes) and study of their characteristics and kinetics to improve drug properties
			* Use of modern drug delivery systems (nanoparticles) in semi-solid dosage forms in order to improve their properties and stability
			* Preparation of metal nanoparticles and metal oxides and their use in formulations for pharmaceutical, stability and kinetics studies
			* Bioequivalence studies of generic products
* **Validation**
	+ - * **Method validation**
			* Validation of analytical methods of pharmaceuticals
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