



Research Plan 2026 – 2030

General specialization: Pharmacy

Specialization	SDG	Research topic	Key words
Microbiology and Immunology	SDG3	Microbial resistance to antibiotics: prevalence, mechanisms, multidrug resistance, and prevention	Microbial resistance
		Discovery of antimicrobial agents produced by natural sources	antimicrobials
		Antimicrobial surveillance of healthcare & associated infections	antimicrobials
		Investigating host pathogen interactions	Host-pathogen
		The molecular techniques for detecting, typing, and characterizing of microorganisms of potential medical biotechnological importance	Molecular techniques Typing Microorganisms
		The use of AI in antimicrobial development	Artificial intelligence
	SDG11	Microbial degradation of toxic compounds	bioremediations
	SDG1	Discovery novel microorganisms from extreme sites (deserts, contaminated area,...)	microorganisms
	SDG1 SDG3	Exploration of natural products found in marine life	Natural products
	SDG1 SDG9 SDG11 SDG12	Use of enzymes as biocatalysts for green production of chemicals	Enzymes
		Use of microorganism for production of chemicals via fermentation techniques	Fermentation
		Production of useful products from microorganisms using the genetic engineering tools	Genetic engineering
		Use of microorganisms and isolated enzymes for biofuel production	Biofuel
		Discovery of new enzymes for industrial applications	Enzymes



Specialization	SDG	Research topic	Key words
	SDG11	Application of bioinformatics tools for protein engineering	Bioinformatics
	SDG3	The microbial quality of food and water in Beni-Suef governorate	Microbial quality of food

**Vice-Dean for
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