

Department of Biotechnology
Jamia Millia Islamia

RESEARCH PROJECTS

S.NO	PI	Project	Funding Agency	Amount (INR)	Year
1.	Prof. Mohammad Zahid Ashraf	1. Investigating the role of Hypoxia Inducible Factors-1a (HIF-1 α) and NLRP3 Inflammasome axis in Pre-Eclampsia during Pregnancy.	National Bioscience Award-Grant, Department of Biotechnology,	15 Lakh	2019-2022
		2. Effect of Hypoxia on tissue factor mediated coagulation pathway and their function in hypoxia induced thromboembolism.	SPARC- MHRD (International collaboration with National University of Singapore)	57 Lakh	2018-2020
		3. Determination of antithrombotic potential of traditionally used Unani formulations.	AYUSH, Govt of India,	58 Lakh	2018-2021
		4. Role of Poly(ADP-ribose) Polymerase-1 (PARP1) in Hypoxia-induced Thrombosis.	Shastri Institutional Indo-Canadian Collaborative Research	10 Lakh	2018-2021

		5. Vitamin D level at HA is Attributable to Higher Incidence of Thrombosis at High Altitude and the Role of NLRP3 inflammasome.	Department of Biotechnology	60 Lakh	2019-2022
		6. Search for novel anti-platelet and anti-thrombin peptides from Indian viper venom (<i>Daboia russelii</i>): Purification, characterization and evaluation of its antithrombotic potential	Department of Biotechnology (North East Region programme)	20 Lakh	2018-2021
		7. The LONG NONCODING RNA (lncrna) Landscape of hypoxia induced thrombosis.	Science and Engineering research board	55 Lakh	2019-2022
		8. Characterizing Milk Colostrum of Ladakhi Cows and Yak for Identification of Biomolecules with Therapeutic Potential	Department of Science & Technology (ASACODER program) Multicentric project: NDDRI Karnal, IISc, Bangalore; DRDO , Leh and JMI	40 Lakh	2020-2023
2.	Prof. Mohammad Husain	1. Investigation of anti HIV potential of some herbal plants <i>Adhatoda vasica</i> , <i>Boerhaavia diffusa</i> , <i>Cephalandra indica</i> and <i>Nardostachys jatamansi</i> from Indian subcontinent	CCRUM, Ministry of AYUSH	7,40,000/-	2017

3	Prof. Mohammad Mahfuzul Haque	1. Studies on endothelial nitric oxide synthase (eNOS) phosphorylation and its consequences on uncoupled NO synthesis, Tetrahydrobiopterin (BH4) recycling and superoxide generation	SERB-DST	53,55,400	2019
		2. Effect of Hypoxia on tissue factor mediated coagulation pathway and their function in hypoxia induced thromboembolism.	SPARC-MHRD	57 lakhs	2019
		3. Effects and Molecular Mechanisms of Cardioprotective Unani drug Khamira Abresham on Nitric Oxide (NO) production, uncoupling and reactive oxygen species (ROS) generation in Atherosclerosis	CCRUM	51 lakhs	2024-27
		4. Investigating the effects of tyrosine phosphorylations in iNOS in Lung cancer	ICMR	60 lakhs	2025-28
		5. Development and evaluation of lipid nanocarrier for endothelial Nitric Oxide Synthase (eNOS) delivery and its consequences on uncoupled NO synthesis and superoxide generation.	ICMR	50 lakhs	2022-25
4	Dr. Meetu Gupta	1. Nutrient and metabolite profiling of rice and wheat growing in arsenic contaminated areas of Ballia district UP	SERB-DST	34,54,000	2018-2021
		2. Identification of novel marker to boost iron and vital nutrients in As-stressed rice genotype using multi-nutrient seed priming strategy.		38 lakhs	2024-2027

5	Dr. Kapil Dev	<ol style="list-style-type: none"> 1. Evaluating prognostic significance of Her-2/neu oncogene in the development of colorectal cancer' 2. 'Crosstalk on Autophagic and Inhibitory Apoptotic Proteins: As molecules for therapeutic targets in breast cancer cells' 3. Immunohistochemical expression of Her 2 oncogene in colorectal cancer 4. Endemic Fluorosis: Role of oxidative stress as a causative factor for Skeletal Fluorosis' in collaboration with A.I.I.M.S. New Delhi. 	<p>UGC</p> <p>SERB-DST</p> <p>IRA-JMI –UGC</p> <p>Ministry of Environment & Forest</p>	<p>10, 45,000</p> <p>53,82,960</p> <p>1,00,000</p> <p>22,23,360</p>	<p>2015-2018</p> <p>2016-2020</p> <p>2014-2015</p> <p>2009-2012</p>
6	Dr. Sadaf Fatima	<ol style="list-style-type: none"> 1. Nanotechnology Core Grant 2. Unani Medicine 	<p>DBT</p> <p>AYUSH</p>	<p>60 Lakh</p> <p>50 Lakh</p>	<p>2017-2020</p> <p>2018-2021</p>

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8	Dr. Syed Mansoor Ali	<ol style="list-style-type: none"> 1. Integrating effects of Vitamin D and miRNAs in Lung Development and Injury 2. Role of miRNAs in lung development and injury” Ramanujan Fellowship Research Grant 3. “Role of mitophagy in macrophage polarization and sepsis-induced acute lung injury” Core Research Grant 4. The role of miRNAs in metabolism and macrophage polarization in Non-small cell lung cancer (NSCLC) 5. Therapeutic potential of microRNA loaded lipid nanoparticles in neonatal and adult acute lung injury 	<p>DBT</p> <p>DST</p> <p>SERB</p> <p>ICMR</p> <p>ICMR</p>	<p>44 Lakh</p> <p>89 Lakh</p> <p>54 Lakh</p> <p>34 Lakh</p> <p>54 Lakh</p>	
9	Dr. Abdur Rub	<ol style="list-style-type: none"> 1. Identification of cholesterol biosynthetic pathway regulatory miRNAs during Leishmania infection and its role in the treatment of leishmaniasis (<i>as Principle Investigator</i>) 2. Screening of pro-apoptotic potential of medicinal plants on leishmania infected and uninfected macrophages (<i>as Principle Investigator</i>) 3. Effect of cytokines on the expression of cholesterol biosynthetic genes and Leishmania donovani infection in macrophages (<i>as Principle Investigator</i>) 	<p>ICMR-Govt of India</p> <p>Ministry of AYUSH</p> <p>Deptt of Science and Technology, Govt, India</p>	<p>42 Lakh</p> <p>64 Lakh</p> <p>25 Lakh</p>	

	<p>4. Role of small G-proteins in <i>Leishmania donovani</i> infection (<i>as Principle Investigator</i>)</p>	<p>Indian National Science Academy, India</p>	<p>15 Lakh</p>	
	<p>5. Role of G protein coupled receptors (GPCRs) in regulation of macrophage function by <i>Leishmania donovani</i>(<i>as Principle Investigator</i>)</p>	<p>University Grant Commission (UGC), Govt India</p>	<p>6 Lakh</p>	
	<p>6. Role of sphingosine-1-phosphate in <i>Leishmania donovani</i> infection (<i>as Principle Investigator</i>)</p>	<p>ICMR</p>	<p>Approved (~43 Lakh)</p>	
	<p>7. Identification of novel inhibitors against UDP-galactopyranose mutase to combat leishmaniasis. (<i>as Principle Investigator</i>)</p>	<p>DSR-Majmaah University, KSA</p>	<p>12000 SAR</p>	
	<p>8. Targeting polyamine pathway to develop new drug to combat Leishmaniasis (<i>as Co-PI</i>)</p>	<p>Collaborative JMI-DSR, Majmaah University, KSA</p>	<p>12000 SAR</p>	