

## LAHORE COLLEGE FOR WOMEN UNIVERSITY

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Completed Projects	Ongoing /Newly launched project	Total

## • Completed Research Projects

<b>Sr.</b> #	Title of Project	Department	PI	Co-PI	Year of the	Nature of	Amount	Funding
					Project	the Project		Agency
1)	Taxonomic naming of trees at Lahore Zoo	Botany	Dr. Farah Khan		1 Year		0.2million PKR	Lahore Zoo
2)	Development of Sustainable and Collaborative Research Networks	Environmental sciences	Prof. Dr Tahira Aziz Mughal		1 Year		0.7 Million	HEC-BC (INSPIRE)
3)	Response of fish expose to metal contaminated sediments of River Ravi	Zoology	Dr. Ghazala Jabeen	Dr. Sabiha Fazal	1 year		0.5 Million	HEC
4)	Degradation of Biflex (Bifenthrin) And Fipronil (Phenyl Pyrazole) Against Subterranean Termites (Isoptera: Rhinotermitidae) Under Laboratory Conditions	Zoology	Dr. Farkhanda Manzoor		3 years		0.63 Million	FMC corp
5)	Introduction of Innovation in pond raceway system technology to improve aqua culture production in sustainable and economical way in Pakistan	Zoology	Dr. Shafaq Fatima	_	2019-21	TDF-HEC	13.993 M	HEC
6)	Cymbopogen Citrus as a Metal Neutrilizer	Environmental Science	Dr. Saba Khursheed		2017-18		0.405 M	HEC
7)	Strengthening and development of Environmental Science Department at Lahore College for Women University, Lahore.	Zoology	Prof. Dr. Kausar J. Cheema		2002		£21,000	DFID, UK
8)	Isolation of Antihypertensive compounds from	Chemistry	Prof. Dr. Ismat		2005		Rs 4.175	HEC

	polar extracts of Bark and Needles of		Naeem			Million	
	Pinuswallichiana and Pinusroxburghii						
9)	Studies On Fluoride And Arsenic Contamination Of Drinking Water In And Around Lahore Pakistan-A Growing Threat To Human Health.	Zoology	Prof. Dr. Kausar J. Cheema		2006	£57,500	DelPhE, UK
10)	Strengthening and development of Environmental training and Research Centre at Lahore College for Women University, Lahore.	Zoology	Prof. Dr. Kausar J. Cheema		2006	£30,000.	HEC-BC (JHLP-II)
11)	Repellency and Toxicity of Different Essential Oils Against Termites	Zoology	Dr. Farkhanda Manzoor		2006	2.0M	HEC
12)	Development of Bio-Sorption Process for removing Chromium from Leather Industries Effluent		Prof. Dr. Bushra Mateen	Dr. Arifa Tahir	2007	4.5 Million	HEC
13)	Development of Turmeric Production Technology for Enhancement of yield, Curcumin and Oleoresin Content Using Tissue Culture technology	Biotechnology	Dr. Shagufta Naz		2007	3.5 Million	HEC
14)	Isolation of anti-MRSA lead compounds from Guttiferae.	Chemistry	Prof. Dr. Ismat Naeem		2007	£30,000	HEC-BC
15)	Biosynthesis of Interacellular Penicillin Acylase for Hydrolysis of Penicillin G to 6 Aminopenicillanic Acid	Environmental Science	Dr. Arifa Tahir		2008	0.5M	HEC
16)	Survey and Control Strategies of Termites in Pakistan	Zoology	Dr. Farkhanda Manzoor	Prof. Dr Kausar J. Cheema	2008	1.0M	FMC
17)	LCWU-EPD, Pollution Control Project; Kasur	City & Regional Planning	Dr. Atiq-ur- Rahman		2009	1.0 Million	EPD
18)	Strengthening and Upgradation of Molecular Taxonomy Lab in Dept. of Botany, LCWU	Botany	Dr. Zubaida Yousaf		2009	1.0M	HEC
<b>19</b> )	Molecular diagnostics of subterranean Termites of Pakistan" with NIBGE, Faisalabad	Zoology	Dr. Farkhanda Manzoor		2009	1.7 Million	HEC
20)	Functional Status of Vitamin D and its Relation to Bone Health in Local Population	Zoology	Dr. Saima Sharif		2010	0.5M	HEC

21)	In vitro conservation of some medicinally	Biotechnology	Prof. Dr.		2010		2.7 Million	HEC
,	important endangered, threatened and near to		Shagufta Naz					_
	extinct species of different ecological zones of							
	Pakistan							
22)	Molecular characterization of Fasciola isolates	Biotechnology	Dr. Asma	Dr. Faiza	2011		0.5 Million	HEC
	from Punjab, Pakistan		Waheed	Saleem				
23)	Strengthening and Up-gradation of Microbial	Biotechnology	Dr. Mehwish		2011		0.98	HEC
	Biotechnology Lab in Department of		Iqtedar				Million	
	Biotechnology & Microbiology at Lahore college		-					
	for women University							
24)	Effect of induced mutation for varietal	Biotechnology	Dr. Neelma	Dr.	2011	IPFP	0.5 Million	HEC
	improvement and their molecular characterization		Munir	Shagufta				
	in local cultivars of grapes			Naz				
25)	Molecular Mechanisms Involved in The Interaction	Zoology	Prof. Dr.		2011		5.7M	HEC
	of Obesity, Type 2 Diabetes Mellitus and		Tasneem Farasat					
	Hypertension							
26)	The Baseline Surveys of Butterflies in Punjab,	Zoology	Dr. Farkhanda		2011		3.0 Million	WWF
	Pakistan		Manzoor					
27)	Isolation of Natural Compounds from	Botany	Dr. Khajista	Prof. Dr.	2011		0.5M	HEC
	Meliaazedarach & Azadirachtaindica as antifungal		Jabeen	Shagufta				
	agents against early blight of potato			Naz				
28)	Systematic and Pharmacognistic studies of selected	Botany	Dr. Shabnum	Dr. Farah	2011		0.5M	HEC
	medicinal plants of Pakistan		Shaheen	Khan				
29)	Development of Collaborative Postgraduate	Zoology	Prof. Dr. Kausar	-	2012		£35,000.	British
	Program on Climate Change and Sustainable		J. Cheema					Council-
	Development							INSPIRE
30)	Optimization of cultural conditions for the	Biotechnology	Dr. Roheena	Dr.	2012		0.5 Million	HEC
	production of alpha amylase from different fungal		Abdullah	Mehwish				
	isolates			Iqtedar				
31)	Properties of heavy hybrid mesons	Physics	Dr. Nosheen	Dr. Bilal	2012	IPFP	0.2M	HEC
			Akbar	Masud, Ms.				
				Yasmin Ali				
32)	Genetic Analysis of Recessive Glucoma in	Biotechnology	Dr. Rasheeda	Dr. Faiza	2013		0.5 Million	HEC
	Pakistan		Bashir	Saleem				
33)	Studying the effect on expression of a recombinant	Biotechnology	Dr. Farheen	-	2013		0.5 Million	HEC

	protein by changing the nucleotides at the promoter & start of the gene.		Aslam					
34)	Strengthening and up gradation of Molecular Genetics Lab facilities in the Department of Botany of LCWU	Botany	Prof. Dr. Farah Khan		2013		0.64 million PKR	HEC
35)	Forcing of apicormic spouts for colonal propagation of Shesham	Botany	Dr. Adeela Haroon	Dr. Khajista Jabeen	2013		0.5 Million	HEC
36)	Genetic and Molecular characterization of corneal dystrophies prevalent in Pakistan	Biotechnology	Dr. Shagufta Naz	Dr. Tasneem Farasat, Dr. Rehan Saddiq	2013		2.99 Million	HEC
37)	Construction, Characterization and evaluation of potential applications of novel coordination polymers derived from carboxylate ligands	Chemistry	Dr. Shehzad Sharif	Dr. Bushra Khan	2014		0.5 Million	HEC
38)	Application of molecular methods for the development of a pathogen-free certification program for grapevine in Pakistan	Biotechnology	Prof. Dr. Shagufta Naz		2015		42.9 Million	HEC- USAID
39)	Production of all-female population in silver carp (Hypophthalmichthys molitrix) by 17α- methyltestosterone immersion and dietary treatment	Zoology	Dr. Shafaq Fatima	Prof. Dr Farkhanda Manzoor	2015	NRPU	1.9M	HEC
40)	High throughput citrus Diagnosis and screening of pathogens of canker, greening scab and viruses from nurseries and orchards of Sargodh	Biotechnology	Prof. Dr. Shagufta Naz	-	2015		05 Million	PARB
41)	Studies on the in vivo effect of methionine aminopeptidase on the structure of human interferon alpha 2 b	Chemistry	Dr. Amina Arif	Prof. Dr Bushra Khan	2015		0.5M	HEC
42)	Natural/ Synthetic Pesticides Induced Hepatic Toxicity and Variation in Iron Metabolism Regulatory Genes in Rattus Norvegicus	Zoology	Dr. Afshan Syed Abbas	Prof. Dr. Farkhanda Manzoor	2015		0.5 Million	HEC
43)	Women Teacher Preneurship: Development and dissemination of entrepreneurship modules for teachers Education programs in Punjab under the theme "Economy: Issues and prospects"	Education	Prof. Dr. Uzma Qureshi		2015		1.5 Million	HEC

44)	Production of all-female population in common sole (S. solea) by $17\alpha$ -methyltestosterone immersion treatment	Zoology	Dr. Shafaq Fatima	Prof. Dr. Farkhanda Manzoor	2015		0.5 Million	HEC
45)	Biosynthesis of cellulase for use in various industrial and environmental processes	Environmental Sciences	Dr. Saima Aftab	Prof. Dr. Arifa Tahir	2015		0.5 Million	HEC
46)	Collection identification and extraction of oil from various high oil yielding algal specie Molecular characterization and analysis of algal oil as a feedstock for biofuel production	Biotechnology	Dr. Neelma Munir	Prof. Dr. Shagufta Naz	2015	NRPU	10.1 Million	HEC
47)	Concerned bioinformatics and proteomic approaches to define the role of post translation modifications in signaling proteins of the insulin pathway	Biotechnology	Dr. Afshan Kaleem	Dr. Daniel C Hoessli, Dr Ikram- ul-Haq	2015	NRPU	2.8 Million	HEC
48)	MobiGrab- An Android based Mobile Monitoring Application	Computer Science	Dr. Mohsin Nazir	-	2016		Rs. 79,690/-	HEC
<b>49</b> )	Get on the Road (GOTR)	Computer Science	Dr. Marium Rehman	-	2016		Rs. 24,700/-	HEC
50)	Life Savior: Integrated Emergency Response System	Computer Science	Dr. Maria Anjum	-	2016		Rs. 68,107/-	HEC
51)	Cloning and Expression of Antimicrobial Genes of Apis Cerana for the Production of Antimicrobial Compound	Zoology	Dr. Irfana Iqbal	Prof. Dr. Farkhanda Manzoor	2016		Rs. 412,250/-	HEC
52)	Trilingual Punjabi Qissa Jati Dictionary Urdu, English, Punjabi" under the Theme "Literature and Language Linguistics	Punjabi	Dr. Mujahida Butt	-	2017		4.0 million	HEC
53)	Study of Natural Prevalence of HCV Variants Showing Resistance to Direct Acting Antivirals (DAAs) in Treatment naïve HCV Patients in Pakistan	Biotechnology	Dr. Madiha Akram	Prof. Dr. Shagufta Naz	2017	SRGP	0.4 million	HEC
54)	Analytical Method Development for the Synthesis of Silver and Gold Nano-particles from Different Species of Malus domestica skin extracts and their bioactivity Test	Chemistry	Dr. Nusrat Shaheen	Dr. Bushra Khan	2018	SRGP	0.94 M	HEC
55)	Phenotypic and genotypic exploration of worldwide carrot ( <i>Daucus carota L.</i> ) germplasm to enhance its value added application in Pakistan	Botany	Dr. Zubaida Yousaf		2018		5.6 million	PARB

56)	Development and Evaluation of Pharmacist Intervention Model (PIM) and its Impact on Clinical Outcomes among Pre-Dialysis Chronic Kidney Disease (CKD) Patients	Pharmacy	Yusra Habib Khan	Dr. Humaira Majeed Khan	2018	SRGP- HEC	0.4399 M	HEC
57)	Enhancement of the Activity of Two synergistic Bacillus Thuringiensis Proteins Against Cotton Bollworms Earias Vitella Earias Insulana and Spodoptera Litura	Zoology	Dr. Fakhar un Nisa	Prof. Dr. Farkhanda Manzoor	2015		5.96 million	HEC
58)	Study of the Innate Immune System and Expression Profiles of Immune-Responsive Genes in Major Carps, Labeo rohita, Catla Catla and Cirrhinus Mrigalatahira Challenged with Microbial Infections	Zoology	Dr. Zakia Kanwal		2015	NRPU	7.49 million	HEC
59)	Expression Augmentation of Recombinant Human Therapeutic Peptides in Bacillus Expression System	Biotechnology	Dr. Faiza Saleem	-	2016		5.888 million	HEC
60)	Comparison of Curcuminoids and essential oil isolated from in vivo and in vitro grown plants of curcuma longa L. (turmeric) through modern extraction method	Biotechnology	Dr. Saiqa Ilyas	Dr. Neelma Munir	2018	SRGP- HEC	0.475 M	HEC
61)	Extraction and isolation of bioactive compounds from Foeniculum vulgare by microwave assisted extraction	Botany	Dr. Samera Javad		2015	NRPU	3.7 million	HEC
62)	Influence of Ripening temperature on low fat buffalo milk cottage cheese quality	Home Economics	Dr Rashida Parven	Prof. Dr Shagufta Naz	2015	SRGP	0.5 million	HEC
63)	Genetic Analysis of Disease-Causing Genes for Glucoma in Pakistani Population	Biotechnology	Dr. Rasheeda Bashir	Prof. Dr. Shagufta Naz	2016	NRPU	1.846 million	HEC
64)	Automated Recognition System using deep neural networks	Electrical Engineering	Dr. Aqsa Shabbir	Prof. Dr Intesar Ahmed	2017	SRGP	0.3 million	HEC
65)	Ectomycorrhizal Community Structure of Himalayan Moist Temperate Forests of Pakistan And Screening of Compatible Strains for Myco-Forestry	Botany	Dr. Sobia Ilyas		2018	NRPU	3.93M	HEC
66)	Ethno Pharamcological Exploration of Medicinal	Environmental	Prof. Dr. Tahira	Prof. Dr	2018	NRPU	3.89M	HEC

	plants and its pharmacological aspects of Dera Ghazi khan	Science	Mughal	Zubaida Yousaf				
67)	Antidote Potential of Indigenous plant Oils Against Orally Induced Acrylamide Intoxication in Animal Model (albino Mice)	Environmental Sciences	Dr. Nadia Ghani		2018	NRPU	1.4 M	HEC
68)	Expression and Characterization of Azoreductase from the Novel Staphylococcus KU898286 immobilized onto the solid surface	Environmental Sciences	Dr. Numrah Nisar		2018	NRPU	1.85 M	HEC
<b>69</b> )	Antimicrobial Properties of nanoparticles (NPs) against beta lactamases Producing Bacteria and their cytotoxic Potential in prokaryotic and Eukaryotic mammalian Systems	Zoology	Dr. Farzana Rashid	-	2018	NRPU	12.30 M	HEC
70)	Characterization of Industrial Effluents Using Whole Effluent Toxicity Testing (WET) and Evaluation of Cyto-Genotoxicity Biomakers in The Fish Due to Industrial effluents	Zoology	Dr. Ghazala Jabeen		2018	NRPU	5.70M	HEC
71)	Comparative Expression Studies of Recombinant Chymosin in Baccilus Subtilis and Pichia Pastoris in Cheese Production	Biotechnology	Dr. Faiza Saleem		2019	Pak-Turk Mobility Grant	1.02 Million	HEC
72)	75 years of Scouting/Guiding Activities in Pakistan: Celebrating the shared British Heritage of Active Citizenship (SCOGPABH)	History	Dr. Sumaira Noreen	Coventry University UK & School of Miniature Painting, UK	2021	British Council	2 million	British Council
73)	STEM Education in Pakistan	ORIC	Dr. Aqsa Shabbir	UK Cambridge University, University of Glasgow, Middlesex University of London, University	2021		5 million	British Council

74)	Phytochemical, analytical and pharmacological	Pharmacognosy	Dr M Tanveer	of Westminster & Liverpool Hope University, Pakistan Virtual University of Pakistan, University of Peshawar, BZU Multan & Khawarizmi Science Society Dr Naureen	2023	Industry	0.3M	Tahseen
, ,	studies of polyherbal products containing glycyrrhiza	Tharmacognosy	Khan	Shehzadi	2025	Project	0.3141	Industries

## • Ongoing Research Projects

Sr.	Title of Project	Department	PI	Co-PI/	Year of	Nature of the	Amount	Funding
#				Collaborators	the Project	Project		Agency
1)	Ochratoxigenic Fungi Management By Pytochemicals Of Common Weeds	Botany	Dr Khajista Jabeen		2020	NRPU	4.81 M	HEC
2)	Comparative Studies of George Namah & Shahnameh Firdowsi	Persian	Prof. Dr. Faleeha Kazmi		2020	NRPU	1.6 M	HEC
3)	Urdu Literary Research: Use of Digital Resources, Methodology and Terminology	Urdu	Dr. Azmat Rubab		Nov, 2020	NRPU	4.545 M	HEC
4)	Combating deforestation using wireless sensor networks	Electrical Engineering	Dr. Aqsa Shabbir		2021	ICRG - innovation and collaborative research grant	12 M	
5)	Emerging Treatment Modality for Rheumatoid Arthritis from Designing Topical Nano sponge gel to in vivo efficacy studies	Pharmacy	Prof. Dr. Humaira M. Khan		2021	NRPU	4,110,000	HEC
6)	Formulation optimization and in vivo evaluation of phytoconstituents based nasal spray to alleviate migraine	Pharmacy	Dr. Humaira Majeed Khan		2021	NRPU	11.07 M	HEC
7)	To investigate the various instabilities as energy source in quantum and classical plasm	Physics	Dr. Rozina Chaudry		2021	PSF	PKR. 1,005,720	
8)	Combating deforestation using wireless sensor networks	Electrical Engineering	Dr. Aqsa Shabbir		2021	ICRG - innovation and collaborative research grant	12 M	
9)	Emerging Treatment Modality for Rheumatoid Arthritis from Designing Topical Nano sponge gel to in vivo efficacy studies	Pharmacy	Prof. Dr. Humaira M. Khan		2021	NRPU	4,110,000	HEC
10)	Effect of mattresses on sleep quality, back pain and mood in Pakistani adults	Applied Psychology	Dr. Nudra Malik	Prof. Dr. Amina Muazzam & Dr. Aqsa Shabbir	December 2022	Industry Project	1 M	Master Sleep Research Foundation

11)		Computer Science	Dr. Saima Farhan	Dr. Kamran Ali				British Council
	Gender equality and enhancing employability for women in academia and other sectors in Pakistan		(Lead- Partner Pakistan)	(Lead- Partner UK)	07-12-2022		£ 25000	
12)	Investigating Engineering Graduates Employability Using Advanced Machine Learning: Aggregate Trends And Determinants	Electrical Engineering	Dr. AqsaShabbir	Dr. Huma Tauseef& Dr. Ali Hussain Kazim	05-10-2022		3.2M	RAASTAPIDE
13)	Implementation of Integrated STEAM (Science, Technology, Engineering, Arts & Mathematics) Pedagogy for School and Teacher Capacity Building	Elementary Education	Dr. Asma Shahid Kazi	Dr. Suleman Shahid & Fatima Rahman (LUMS)	29.8.2022	NRPU	Rs. 9.8 M	HEC
14)	Depiction of Punjab's Civilization & Culture in Urdu Prose	Urdu	Dr. Rehana Kausar,	Mrs. Zahida Khalid	25 <sup>th</sup> Feb,2022	NRPU	Rs 7.9M	HEC
15)	GDS-LCWU Initiative of Capacity Building & Professional Development of Partners University	Gender & Development Studies	Dr Uzma Ashiq Khan	Dr Shehla Ahmad Rathor Ms Madiha Nadeem	4 August 2022		7,623,900 PKR	The United States Governemnt (USEFP)
16)	Amelioration of the Physiochemical Properties and Bioactivities of Nutraceuticals by Development of Nano-cocrystals	Pharmaceutics	Sumera Latif	Prof. Dr. Nasir Abbas	July 2022	NRPU	3,400,000 PKR	HEC
17)	Formulation optimization and in vivo evaluation of phyto-constituents based nasal spray to alleviate migraine	Pharmacology	Prof. Dr. Humaira Majeed Khan	Dr Ali Sharif	16-06- 2022	NRPU	9.44 M	HEC
18)	Application of Machine Learning to Predict Financial Statement Fraud of Pakistani Firms	Management Sciences	Dr. Adeel Nasir	Dr. Umar Farooq, Dr. Kanwal Iqbal Khan	14/06/2022	NRPU	Rs. 4.3 Million	HEC
19)	Training of local female community for making opportunities in higher education	Botany	Dr. Sumera Javad		April 2022		0.78 Million	American Association of University Women (AAUW) Fellowship & Grants
20)	Use of halophytic nanoparticles as a sustainable approach towards improvement of crop yield and nutritional quality in saline conditions	Biotechnology	Dr. Zain ul Abideen (University of Karachi)	Dr. Neelma Munir (LCWU)	12.04.22	NRPU	3.4 million	HEC

21)	Management of bacterial leaf blight by biological agents	Botany	KhajistaJabeen	Kou Yanjun	2023	Pakistan Science Foundation	3.5 Million	Pakistan Science Foundation
22)	Pak-UK Education Gateway Mobility Partnership for Student	ORIC	Dr. Aqsa Shabbir	Prof. Dr Amina Muazzam	2023	British Council	7.6M	British Council
23)	An Assessment of Sedimentation Trends in TErbela Reservoir Afecting the Dam Storage Capacity, to Ensure Sustainabile Energy in Pakistan	Geography	Dr Nausheen Mazhar		2023	PAK-UK France PERIDOT	3.6M	PERIDOT
24)	A Step Ahead Towards Diversity and Inclusivity: Facilitating Learning of Basic Mathematics and Basic Statistics to Blind Girls at Lahore College for Women University (LCWU), Pakistan	Statistics	Dr Asifa Kamal		2023		1.1 Million	Mathematical Science Sponsorship Fund (MSSF) (Elsevier.com)
25)	Management of bacterial leaf blight by biological agents	Botany	Khajista Jabeen (PI)		2023		3.5 Million	Pakistan Science Foundation