## Rumeza Hanif

#### Associate Professor

Atta-Ur-Rahman School of Applied Biosciences

Email: rumeza.hanif@asab.nust.edu.pk

PhD in Cancer Biology/Biochemistry

Awarded Bronze medal in BSc (Hons) for standing 3rd at NWFP AUP, Pakistan

Contact: 0518741614

LinkedIn:



2007 - 2012

## **About**

Dr. Rumeza Hanif is working as Associate Professor in the Atta-Ur-Rahman School of Applied Biosciences. Dr. Rumeza Hanif has a PhD in Cancer Biology/Biochemistry. Dr. Rumeza Hanif has published 24 research articles & conference papers having a citation count of 373, carried out 4 projects and filed 0 intellectual property.

#### Qualifications

University College London, University of London , United Kingdom	
MSc in Agricultural Chemistry	2005 - 2007
The University of Agriculture, Peshawar , Pakistan	
B.Sc (Hon) in Agricultural Chemistry)	2003 - 2005
The University of Agriculture, Peshawar , Pakistan	
Experience	
Associate Professor	2025- Present
Atta-Ur-Rahman School of Applied Biosciences	
Associate Professor	2025 - 2020
School of Mechanical & Manufacturing Engineering	
Associate Professor	2022 - 2022
Atta-Ur-Rahman School of Applied Biosciences	
Associate Professor	2020 - 2019
Atta-Ur-Rahman School of Applied Biosciences	
Associate Professor	2019 - 2025
Atta-Ur-Rahman School of Applied Biosciences	
Assistant Professor	2013 - 2020
Atta-Ur-Rahman School of Applied Biosciences	
Assistant Professor	2012 - 2013
Atta-Ur-Rahman School of Applied Biosciences	
Assitant Prof	2013 - 2022
ASAB, NUST , NUST, Sec: H-12: ISB	
Awards	
Rumeza Hanif	2018
"Gold nanoparticles as a targeted drug delivery vehicle in breast cancer therapy" NRPU-HEC, (PKR 3.2 M) as PI	
Rumeza Hanif	2013
"Spectrum of beta-thalassemia in Province Punjab and KPK: identification of novel mutations" HEC, (PKR 0.5M) as PI	
Silver medal	2007
Awarded Silver medal in MSc (Hons) for standing 2nd at NWFP AUP, Pakistan	
Bronze medal	2004

# **Research Projects**

National Projects	
Spectrum of Beta-thalassemia in Province of Punjab and KPK: Identification of Novel Mutations Funding Agency: HEC Amount: PKR 500,000.00 Status: Completed	2013
Gold nanocages for detection of circulating tumor cells in breast cancer Funding Agency: National Institute of Health (NIH), PAK Amount: PKR 1,770,000.00 Status: Completed	2022
Gold nanoparticles as a targeted drug delivery vehicle in breast cancer therapy Funding Agency: HEC Amount: PKR 3,240,827.00 Status: Completed	2018
Gold Nanoparticles as a Targeted Drug Delivery Vehicle in Breast Cancer Therapy Funding Agency: HEC Amount: PKR 5,760,000.00 Status: Completed International Projects	2018
Research Articles	
PMA-coated gold nanoparticles functionalized with diamine-PEG conjugated with betulinic acid for in vitro mitochondrial-targeted anticancer and ROS detection study against MDA-MB-231 cell lines  Yasir Iqbal Saima Asghar Rumeza Hanif Faheem Amin  Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume:721, Article Number: 137170  Impact Factor: 5.4   Quartile: 1   Citations: 2  DOI: https://doi.org/10.1016/j.colsurfa.2025.137170	202!
Targeted Delivery of Letrozole-loaded Mg-doped Cobalt Ferrite Nanoparticles for Breast Cancer  Treatment  Huma Ijaz Urwah Raseed Naeem Kiani Hina Saeed Rumeza Hanif Sidra Anwar Nauman Javed Muhammad Shoaib Butt  Journal of Drug Delivery Science and Technology, Volume 101, Part B, Article Number 106245  Impact Factor: 4.500   Quartile: 1   Citations: 5  DOI: 10.1016/j.jddst.2024.106245	2024
Fabrication and Biocompatibility of Neem/Chitosan Coated Silk Sutures for Infection Control and Wound Healing  Urwah Raseed Naeem Kiani Muhammad Shoaib Butt Hina Saeed Rumeza Hanif Sidra Anwar  Journal of King Saud University-Science, Volume 36, Issue 10, Article Number 103435  Impact Factor: 3.700   Quartile: 1   Citations: 8  DOI: https://doi.org/10.1016/j.jksus.2024.103435	2024
Glioblastoma Multiforme: Probing Solutions to Systemic Toxicity towards High-Dose Chemotherapy and Inflammatory Influence in Resistance against Temozolomide  Sadia Nasir Sadia Nazir Rumeza Hanif Aneela Javed  Pharmaceutics, Volume 15, Issue 2, Article Number 687  Impact Factor: 6.525   Quartile: 1   Citations: 12  DOI: https://doi.org/10.3390/pharmaceutics15020687	2023
Cytotoxicity study of gold nanoparticles synthesis using Aloe vera, honey and Gymnema sylvestre leaf extract  **Rumeza Hanif Faheem Amin Sidra Anwar Bisma Rauf Maham Khan Maha Niazi Shizza Malik**  **ACS Omega*, Volume 8, No. 7, Pages 6325–6336*  Impact Factor: 4.132   Quartile: 2   Citations: 28  **DOI: https://doi.org/10.1021/acsomega.2c06491*	2023
Structural and functional characterization of disease-associated NOTCH4: a potential modulator of  PI3K/AKT-mediated insulin signaling pathway  Dr. Rumeza Hanif Muhammad Khalid Anwar Umbreen Ahmed Zaira Rehman Ammad Fahim Syed Babar Jamal Muhammad Faheem	2022

Applied Nanoscience, Pages 1-18

Impact Factor: 0 | Citations: 1

DOI: https://doi.org/10.1007/s13204-021-02281-w

Therapeutic effect of Thymoquinone on behavioural response to UCMS and neuroinflammation in

2022

hippocampus and amygdala in BALB/c mice model

Sadia Nazir Rai Khalid Farooq Sadia Nasir Rumeza Hanif Aneela Javed

Psychopharmacology, Volume 239, Pages 47-58 Impact Factor: 4.530 | Quartile: 2 | Citations: 14

DOI: 10.1007/s00213-021-06038-9

Integrated analysis of microarray and RNA-Seq data for the identification of Hub genes and networks

2021

involved in the pancreatic cancer

Rumeza Hanif Rehan Zafar Paracha Mehak Rafiq Zamir Hussain Maryum Nisar Igra Arshad Sidra Adil Sabaoon Zeb

Frontiers in Genetics, Volume 12, Article Number 663787

Impact Factor:  $4.599 \mid$  Quartile:  $2 \mid$  Citations: 18

DOI: doi.org/10.3389/fgene.2021.663787

Interferon- $\lambda$  rs12979860 genotype association with liver fibrosis in chronic hepatitis C (CHC) patients in the Pakistani population

2021

Rumeza Hanif Bisma Rauff Ali Amar Shafiq Ahmad Chudhary Saqib Mahmood Ghias Un Nabi Tayyab

Archives of Virology, Volume 166, Pages 1047-1056 Impact Factor: 2.574 | Quartile: 3 | Citations: 2

DOI: 10.1007/s00705-020-04901-2

In-silico modeling and analysis of the therapeutic potential of miRNA-7 on EGFR associated signaling

2020

network involved in breast cancer

Shiza Malik Samra Khalid Haider Ali Maham Khan Faryal Mehwish Aneela Javed Fazal Akbar Rumeza Hanif Muhammad Suleman

Gene Reports, Volume 21, Article Number 100938

Impact Factor: 0 | Citations: 2

DOI: https://doi.org/10.1016/j.genrep.2020.100938

Overcoming tamoxifen resistance in oestrogen receptor-positive breast cancer using the novel

2020

thiosemicarbazone anti-cancer agent, DpC

Sundus Naila Maqbool Rumeza Hanif Syer C. Lim Kyung Chan Park Des R. Richardson Patric J. Jansson Zaklina Kovacevic

British Journal of Pharmacology, Volume 177, Issue 10, Pages 2365-2380

Impact Factor: 8.740 | Quartile: 1 | Citations: 26

DOI: https://doi.org/10.1111/bph.14985

Comparative safety analysis of bactericidal nano-colloids: Assessment of potential functional toxicity and radical scavenging action

2019

Muhammad Uzair Hashmi Nauman Khalid Tehseen Alam Rumeza Hanif Hussnain A. Janjua Colloids and Surfaces B: Biointerfaces, Volume 184

Impact Factor: 4.389 | Quartile: 1 | Citations: 8

DOI: 10.1016/j.colsurfb.2019.110508

Formulation of active packaging system using Artemisia scoparia for enhancing shelf life of fresh fruits

2019

Javaria Hanif Nauman Khalid Rao Sanaullah Khan Muhammad Faraz Bhatti Mohammad Qasim Hayat Muhammad Ismail Saadia Andleeb Qaiser Mansoor

Faria Khan Fahim Ameen Rumeza Hanif Muhammad Uzair Hashmi Hussnain Ahmed Janjua

Impact Factor: 5.880 | Quartile: 1 | Citations: 20
DOI: https://doi.org/10.1016/j.msec.2019.02.101

Materials Science and Engineering C, Volume 100, Pages 82-93

Bridging the gap by discerning SNPs in linkage disequilibrium and their role in breast cancer

2018

Sundus Naila Maqbool Sadia Haleema Nazir Rumeza Hanif Aneela Javed Mehak Rafiq

Gene, Volume 679, Pages 44-56 Impact Factor: 2.638 | Quartile: 2 DOI: 10.1016/j.gene.2018.06.102.

Exploring NS3/4A, NS5A and NS5B proteins to design conserved subunit multi-epitope vaccine against

2018

**HCV** utilizing immunoinformatics approaches

Aqsa Ikram Tahreem Zaheer Faryal Mehwish Awan Ayesha Obaid Anam Naz Rumeza Hanif Rehan Zafar Paracha Abdul Khaliq Naveed Hussnain Ahmed

Scientific Reports , Volume 8, Article Number 16107

Impact Factor: 4.011 | Quartile: 1 | Citations: 75

DOI: 10.1038/s41598-018-34254-5 Pharmacophore modeling for identification of anti-IGF-1R drugs and in-vitro validation of fulvestrant as 2018 a potential inhibitor Samra Khalid Rumeza Hanif Ishrat Jabeen Qaisar Mansoor Muhammad Ismail PlosOne . NULL Impact Factor: 2.766 | Quartile: 2 | Citations: 9 **DOI:** 10.1371/journal.pone.0196312 Association of rs1801157 single nucleotide polymorphism of CXCL12 gene in breast cancer in Pakistan 2017 and in-silico expression analysis of CXCL12-CXCR4 associated biological regulatory network Samra Khalid Rumeza Hanif PeerJ, Vol.5, Article Number e3822 Impact Factor: 2.118 | Quartile: 2 | Citations: 7 DOI: doi:10.7717/peerj.3822 2017 Comparative studies of three novel freshwater microalgae strains for synthesis of silver nanoparticles: insights of characterization, antibacterial, cytotoxicity and antiviral activities Muneeba Khalid Nauman Khalid Iftikhar Ahmed Rumeza Hanif Muhammad Ismail Hussnain Ahmed Janjua Journal of Applied Phycology, Volume 29, Pages1851-1863 Impact Factor: 2.401 | Quartile: 1 | Citations: 56 DOI: doi:10.1007/s10811-017-1071-0 2017 Identification of drug resistance and immune-driven variations in hepatitis C virus (HCV) NS3/4A, NS5A and NS5B regions reveals a new approach toward personalized medicine Aqsa Ikram Ayesha Obaid Faryal Mehwish Awan Rumeza Hanif Anam Naz Rehan Zafar Paracha Amjad Ali Hussnain Ahmed Janjua Antiviral Research, Volume: 137, Pages: 112-124, Published: JAN 2017 Impact Factor: 4.307 | Quartile: 1 | Citations: 7 DOI: 10.1016/j.antiviral.2016.10.013 2016 Formal modeling and analysis of ER-α Associated Biological Regulatory Network in Breast Cancer

Samra Khalid Rumeza Hanif Samar H.K. Tareen Amnah Siddiqa Zurah Bibi Jamil Ahmad

*PeerJ*, Volume 2016, Issue 10, Article number e2542 **Impact Factor:** 2.177 | **Quartile:** 2 | **Citations:** 5

DOI: doi:10.7717/peerj.2542

#### Fetal iron levels are regulated by maternal and fetal Hfe genotype and dietary iron

2012

Rumeza Hanif Sara Balesaria Mohamed F. Salama Kishor Raja Henry K. Bayele Harry McArdle Surjit K.S. Srai

Haematologica , Volume 97, Issue 5, Pages 661-669
Impact Factor: 5.935 | Quartile: 1 | Citations: 32

DOI: 10.3324/haematol.2011.055046

#### Erythropoietin regulates intestinal iron absorption in a rat model of chronic renal failure

2010

Rumeza Hanif Surjit K. Srai Bomee Chung Joanne Marks Katayoun Pourvali Nita Solanky Chiara Rapisarda Timothy B. Chaston Robert J. Unwin Edward S. Debnam Paul A. Sharp

Kidney International, Volume 78, Issue 7, Pages 660-667

Impact Factor: 6.105 | Quartile: 1 | Citations: 36

DOI: 10.1038/ki.2010.217

# Role of vegetables as nutritional food: Role in human health

2006

Rumeza Hanif Zafar Iqbal Mudassar Iqbal Shaheena Hanif Masooma Rasheed ARPN Journal of Agricultural and Biological Science, Volume 1, No.1, Pages 18-22

Impact Factor: 0

DOI: https://journals.indexcopernicus.com/search/details?id=32551

#### **Book Chapters**

# A new insight into genome editing: CRIPR-Cas system in bacteria from evolution to application

2024

Sidra Anwar Alvina Gul Rumeza Hanif

In: Book on Targeted Genome Engineering via CRISPR/Cas9 in Plants, 1st Edition, Chapter 2, Pages 21-34

Citations: N/A

DOI: doi.org/10.1016/B978-0-443-26614-0.00014-X.