



**AL MAGNIFICO RETTORE
DELL'UNIVERSITA' DEGLI STUDI DI MILANO
COD. ID: 6478**

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di _____ Dipartimento di Bioscienze dell'Università degli Studi di Milano

Responsabile scientifico:

Prof. Conti Lucio _____

[Rana Khalid Iqbal]

CURRICULUM VITAE

INFORMAZIONI PERSONALI

Cognome	Iqbal
Nome	Rana Khalid

OCCUPAZIONE ATTUALE

Incarico	Struttura

ISTRUZIONE E FORMAZIONE

Titolo	Corso di studi	Università	anno titolo	conseguimento
Laurea Magistrale o equivalente	M.Phil	Bahauddin Zakariya University, Multan	2011	
Specializzazione				
Dottorato Di Ricerca	Ph.D	University of Strasbourg, France	2017	
Master	M.Sc	Bahauddin Zakariya University, Multan	2008	
Diploma Di Specializzazione Medica				
Diploma Di Specializzazione Europea				



Altro	B.Sc	Bahauddin Zakariya University, Multan	2006`
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ISCRIZIONE AD ORDINI PROFESSIONALI

Data iscrizione	Ordine	Città
17-Jan-2022- 16-April-2023	Postdoctoral Researcher	Department of Biology, University of Padova, Italy.
28-Aug-2017 to 05- Jan	Assistant Professor	Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan
18-Oct-2012 to 31-Jan-2013	Lecturer	Institute of Molecular Biology and Biotechnology, Bahauddin Zakariya University, Multan

LINGUE STRANIERE CONOSCIUTE

lingue	livello di conoscenza
English	Written, Spoken

PREMI, RICONOSCIMENTI E BORSE DI STUDIO

anno	Descrizione premio
2012	Won Ph.D Scholarship under the faculty development program
2022	Won Postdoc fellowship
2018	H.E.C approved supervisor for Doctoral students

ATTIVITÀ DI FORMAZIONE O DI RICERCA

<p>descrizione dell'attività</p> <ul style="list-style-type: none">• Strong background in molecular biology and plant science.• Experience with confocal microscopy and approaches for genetic manipulation, tissue culture, and organelle genetics in plants as well as managing a lab.• Isolation and estimation of genomic DNA/RNA, cDNA synthesis, PCR amplification, Restriction digestion, carried out agarose and quantitative real-time PCR of expression analysis.• Experienced in sample preparation for transcriptome analysis by N.G.S• Knowledge of computational and statistical analysis of biological systems by using software's viz. SPSS-17, and GraphPad Prism 5, BLAST, programing using Python and



R, Primer design using NCBI and other web based bioinformatics tools.

- Experienced in Genome-wide association studies (GWAS) analysis.
- Data analysis, manuscript preparation.
- Isolation and estimation of proteins, PAGE-SDS & Native.
- Student supervision at Master and Doctoral level.

Main research direction:

Plant Mitochondrial Genetics.

Cop Stress physiology and Molecular Biology,

Plant Cell signal Transduction

ATTIVITÀ PROGETTUALE

Anno	Progetto

TITOLARITÀ DI BREVETTI

Brevetto

CONGRESSI, CONVEGNI E SEMINARI

Data	Titolo	Sede

PUBBLICAZIONI

Libri
[titolo, città, editore, anno...]



[titolo, città, editore, anno...]

[titolo, città, editore, anno...]

Articoli su riviste

PUBLICATIONS: (*for first author or corresponding author)

1. Niazi AK, Delannoy E, **Iqbal RK***, Mileshina D, Val R, Gabryelska M, Wyszko E, Soubigou-Taconnat L, Szymanski M, Barciszewski J, Weber-Lotfi F. Mitochondrial transcriptome control and inter-compartment cross-talk during plant development. *Cells*. 2019 Jun 13;8(6):583
2. Dietrich A, Wallet C, **Iqbal RK**, Gualberto JM, Lotfi F. Organellar non-coding RNAs: emerging regulation mechanisms. *Biochimie*. 2015 Oct 1;117:48-62.
3. Gilani M, Danish S, Ahmed N, Rahi AA, Akrem A, Younis U, Irshad I, **Iqbal RK***. Mitigation of drought stress in spinach using individual and combined applications of salicylic acid and potassium. *Pak. J. Bot.* 2020 Oct 1;52(5):1505-13.
4. Sabir A, Iftikhar A, Ijaz MU, Hussain G, Rasul A, **Iqbal RK**, Sajid F, Anwar H. Retrospective study of frequency of ABO and Rhesus blood group among population of Safdarabad and Faisalabad cities of Pakistan. *BMC Research Notes*. 2021 Dec; 14(1):1-5.
5. Amjad SF, Mansoor N, Din IU, **Iqbal RK**, Jatoi GH, Murtaza G, Yaseen S, Naz M, Danish S, Fahad S, Datta R. Application of zinc fertilizer and mycorrhizal inoculation on physio-biochemical parameters of wheat grown under water-stressed environment. *Sustainability*. 2021 Oct 4;13(19):11007.
6. Iqbal J, Kiran S, Hussain S, **Iqbal RK**, Ghafoor U, Younis U, Zarei T, Naz M, Germi SG, Danish S, Ansari MJ. Acidified biochar confers improvement in quality and yield attributes of sufaid chaunsa mango in saline soil. *Horticulturae*. 2021 Nov;7(11):418.
7. Sardar R, Zulfiqar A, Ahmed S, Shah AA, **Iqbal RK**, Hussain S, Danish S, Ghafoor U, Fahad S, Krucky J, Al Obaid S. Proteomic changes in various plant tissues associated with chromium stress in sunflower. *Saudi Journal of Biological Sciences*. 2022 Apr 1;29(4):2604-12
8. Aziz MN, **Iqbal RK***, Irfan M, Parveen A, Asif M, Ozubek S, Aktas M, Said MB, Iqbal F. First report on molecular epidemiology, seasonality and phylogeny of *Toxoplasma gondii* infecting goats from Khanewal district in Punjab, Pakistan. *Acta Tropica*. 2022 Apr 1;228:106304.
9. Aziz MN, Irfan M, Parveen A, Asif M, Ijaz M, Mumtaz S, Ozubek S, Aktas M, **Iqbal RK***, Iqbal F. Prevalence, epidemiology, seasonality, and phylogeny of *Anaplasma marginale* in blood samples of goats collected from Punjab, Pakistan. *Tropical Animal Health and Production*. 2022 Feb;54(1):74.
10. Iftikhar A, Nausheen R, Mukhtar I, **Iqbal RK**, Raza A, Yasin A, Anwar H. The regenerative potential of honey: A comprehensive literature review. *Journal of Apicultural Research*. 2023 Jan 1;62(1):97-112.
11. Jamil H, Awan A, Akbar A, Babar M, Akhtar S, **Iqbal RK**, Iqbal F. A study of association between presence or absence of GSTT1 and GSTM1 and/or single nucleotide polymorphism in FABP2 and GSTP1 with incidence of diabetes type 2: A case-control study. *JPMA. The Journal of the Pakistan Medical Association*. 2022 Apr 1; 72(4):714-20.
12. Taalay I, **Iqbal RK***, Asif M, Ahmad A, Amjad M, Anwar FN, Aktas M, Said MB, Iqbal F. Molecular survey of *Toxoplasma gondii* in cattle and buffaloes and phylogenetic position of



- Pakistani isolates based on ITS-1 gene. *Comparative Immunology, Microbiology and Infectious Diseases*. 2022 May 1;84:101782.
13. Khan RW, Awan FS, **Iqbal RK***. Evaluation and identification of salt tolerant wheat through in vitro salinity induction in seeds. *Pak. J. Bot.* 2022 Dec 1;54(6):1987-93.
 14. Saeed A, Rafiq Z, Imran M, Saeed Q, Saeed MQ, Ali Z, **Iqbal RK**, Hussain S, Khaliq B, Mehmood S, Akrem A. In-silico Studies Calculated a New Chitin Oligomer Binding Site Inside Vicilin: A Potent Antifungal and Insecticidal Agent. Dose-Response. 2022 Jun 11;20(2):15593258221108280.
 15. Khan RW, Khan RS, Awan FS, Akrem A, Iftikhar A, Anwar FN, Alzahrani HA, Alsamadany H, **Iqbal RK***. Genome-wide association studies of seedling quantitative trait loci against salt tolerance in wheat. *Frontiers in Genetics*. 2022;13.
 16. Ali Y, Iqbal S, Aatif HM, Naveed K, Khan AA, Ijaz M, Magsi MM, Ahmad S, Syed AU, Magsi MA, **Iqbal RK**. Predicting Stripe Rust Severity in Wheat Using Meteorological Data with Environmental Response Modeling. *Journal of King Saud University-Science*. 2023 May 1;35(4):102591.
 17. Syed A, Elgorban AM, Bahkali AH, Eswaramoorthy R, **Iqbal RK**, Danish S. Metal-tolerant and siderophore producing *Pseudomonas fluorescens* and *Trichoderma* spp. improved the growth, biochemical features and yield attributes of chickpea by lowering Cd uptake. *Scientific Reports*. 2023 Mar 18;13(1):4471.
 18. Kainat N, Saeed A, Ali A, Khaliq B, Mehmood S, Saeed MQ, **Iqbal RK**, Khalid S, Akrem A. In silico modeling and docking of salicylic acid revealing the sod like activity of an antimicrobial seed vicilin of *Capsicum annuum* L. Var. Grossum. *Pak. J. Bot.*;55:5.
 19. Zerlasht M, Javaria S, Murtaza MA, **Iqbal RK**, Quddoos MY, Azhar S, Syed A, Elgorban AM. Antimicrobial Potential and Phyto-Physio-Chemical Characterization of Brans from Wheat, Oat, and Rice. *Journal of King Saud University-Science*. 2023 May 16:102709.
 20. Iqbal M, Raja NI, Khan SA, Ali a, Hanif A, Hussain M, Anwar T, Qureshi H, Saeed M, Rauf A, Alharbi SA, **Iqbal RK**. Evaluation of green synthesized silver nanoparticles against bacterial pathogenic strains of plants. *Pak. J. Bot.*;55: 5.
 21. Naeem, M., Hira I, M. N., Marrium, F., Khubaib, H. M., Gul, S., Rais, A., **Iqbal RK***, & Alahmadi, T.A. (2023). New insights for exploring the bioactive nature and biomedical activities of *Allium cepa*. *Pak. J. Bot.*, 55(6), 2203-2209
 22. Kumar, S, Rana, S. S, Sharma, N., **Iqbal RK**, Qureshi, H., Anwar, & Eswaramoorthy, R. (2023). Weed phyto-sociology and diversity in relation to conservation agriculture and weed management strategies under Northwestern Indian Himalayas. *Journal of King Saud University-Science*. August 2023, p102728
 23. Iftikhar, A., Nausheen, R., Khurshid, M., **Iqbal RK.**, Muzaffar, H., Malik, A., & Anwar, H. Pancreatic Regenerative Potential of Manuka Honey Evidenced Through Pancreatic Histology and Levels of Transcription Factors in Diabetic Rat Model. Available at SSRN 4489294
 24. Aslam, J., Shahzad, M. I., Ali, H. M., Ramzan, M., Mustafa, M. Z., **Iqbal RK***, & Danish, S. (2023). Antioxidant and anti-inflammatory potentials of aerial and floral parts of *Neurada procumbens* extracts: In vitro and in vivo studies. *Journal of King Saud University-Science*, 35(7), 102822.
 25. Irfan, M., Chang, S. C., **Iqbal, RK***, Tanveer, M., Asif, M., Khan, A., & Chen, C. C. (2023). Seasonality, epidemiology and phylogeny of *Theileria ovis* with a note on hematological and biochemical changes in asymptomatic infected goats from Pakistan. *PloS one*, 18(8), e0290620.
 26. Qian, L., Dawar, K., Ullah, I., Irfan, M., Zhang, Z., Mian, I. A., & Alarfaj, A. A., **Iqbal, RK** (2023). Zinc foliar application mitigates cadmium-induced growth inhibition and enhances wheat growth, chlorophyll contents, and yield. *ACS Omega*.



27. MINHAS, A., SAEED, M. S., EHSAN, A., MURTAZA, G., AKRAM, M., MEHRAN, **Iqbal RK*** (2024). Response of integrated use of humic acid and chemical fertilizer on growth and yield of rice crop (*Oryza sativa* L.) in calcareous soil. *Pak. J. Bot*, 56, 3.

Gene bank submission

1. <https://www.ncbi.nlm.nih.gov/nuccore/MW374090.1>
 - *Toxoplasma gondii* isolate 05 internal transcribed spacer 1, partial sequence
2. <https://www.ncbi.nlm.nih.gov/nuccore/MW374089.1>
 - *Toxoplasma gondii* isolate 01 internal transcribed spacer 1, partial sequence
3. <https://www.ncbi.nlm.nih.gov/nuccore/OL461228.1>
 - *Toxoplasma gondii* isolate goat01 internal transcribed spacer 1, partial sequence
4. <https://www.ncbi.nlm.nih.gov/nuccore/OL461229.1>
 - *Toxoplasma gondii* isolate goat 05 internal transcribed spacer 1, partial sequence
5. <https://www.ncbi.nlm.nih.gov/nuccore/MW759702.1>
 - *Anaplasma marginale* clone 03 major surface protein 5-like (msp5) gene, partial seque
6. <https://www.ncbi.nlm.nih.gov/nuccore/MW759703.1>
 - *Anaplasma marginale* clone 67 major surface protein 5-like (msp5) gene, partial sequences
7. <https://www.ncbi.nlm.nih.gov/nuccore/MW759704.1>
 - *Anaplasma marginale* clone 67 major surface protein 5-like (msp5) gene, partial sequenc
8. <https://www.ncbi.nlm.nih.gov/nuccore/MW759701.1>
 - *Anaplasma marginale* clone 101 major surface protein 5-like (msp5) gene, partial sequence.

Atti di convegni
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[titolo, struttura, città, anno]
[titolo, struttura, città, anno]

ALTRE INFORMAZIONI

- 3 Doctoral students are preparing their thesis under my supervision one of them is already



submitted his thesis for evaluation report.

- 13 Master students completed their thesis under my supervision and currently 2 are working on their projects.

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all'art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che i **curricula SARANNO RESI PUBBLICI sul sito di Ateneo** e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

Si prega pertanto di **NON FIRMARE** il presente modello.

Luogo e data: 4-March-2024, Multan-Pakistan