



Muhammad Zubair Ghouri

Date of birth: 27/06/1993 | **Nationality:** Pakistani | **Phone number:**

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Address: Center for Advanced Studies in Agriculture and Food Security, University of Agriculture, Faisalabad, Assistant Suprintendant, Kisan Hall, University of Agriculture, Faisalabad, Punjab, Pakistan, 38000, Faisalabad, Pakistan (Work)

ABOUT ME

"Embarking on the Frontier of Agricultural Innovation: Mr. Ghouri, the Visionary Research Associate at the Center for Advanced Studies in Agriculture and Food Security, is Pioneering Genetic Excellence in Plants. From Precision Genome Editing to DNA Barcoding, Pathogen Identification, and the Exciting Realm of Bioinformatics, his Research Unleashes the Power of Science for a Greener Future at the University of Agriculture, Faisalabad."

WORK EXPERIENCE

16/12/2021 – CURRENT Faisalabad, Pakistan

RESEARCH ASSOCIATE PROJECT MANAGER PROFESSOR DR. SULTAN HABIBULLAH KHAN

1. Researcher working of CRISPR/Cas9 mediated genome editing to improve cotton architecture and fiber production.
2. Cotton Transformation.
3. Meristem/Pollen Tube mediated transformation of CRISPR/Cas9 constructs into elite cotton lines

Business or Sector Agriculture, forestry and fishing

15/08/2018 – 16/08/2021 Faisalabad, Pakistan

RESEARCH ASSISTANT PI DR. AFTAB AHMAD

1. Research Assistant working on Development of RNAi based next generation biopesticides to control cotton bollworms.
2. Designing of RNAi constructs and cloning in insect feeding vector
3. Insect feeding bioassay with dsRNA as a foliar spray

01/01/2019 – 30/05/2019 Faisalabad, Pakistan

TEACHING ASSISTANT PROF. DR. SULTAN HABIBULLAH KHAN

1. Teaching Assistant to assist the Professor manage Post Graduate Courses (Biotech-508 & Biotech-709)
2. Assist the Professor in conducting practical classes
3. Assist in Mid and Final exams conduction.

EDUCATION AND TRAINING

06/09/2015 – 11/05/2018 Faisalabad, Pakistan

MASTER OF PHILOSOPHY BIOTECHNOLOGY University of Agriculture

Website <https://web.uaf.edu.pk/>

06/09/2011 – 20/12/2015 Faisalabad, Pakistan

BSC (HONS) AGRICULTURE (MAJOR SUBJECT: AGRI-BIOTECHNOLOGY) University of Agriculture

Website <https://web.uaf.edu.pk/>

● LANGUAGE SKILLS

Mother tongue(s): **URDU**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	A2	A2	A2	A2	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Microsoft Office | Microsoft Word | Social Media | Google Drive | Microsoft Powerpoint | Microsoft Excel | Google Docs | Outlook

● ADDITIONAL INFORMATION

PUBLICATIONS

[Analysis of SARS-CoV-2 RNA-dependent RNA polymerase as a potential therapeutic drug target using a computational approach](#)

– 2020

Aftab, S. O., Ghouri, M. Z., Masood, M. U., Haider, Z., Khan, Z., Ahmad, A., & Munawar, N. (2020). Analysis of SARS-CoV-2 RNA-dependent RNA polymerase as a potential therapeutic drug target using a computational approach. *Journal of translational medicine*, 18(1), 1-15.

[An outlook on global regulatory landscape for genome-edited crops](#) – 2021

Ahmad, A., Munawar, N., Khan, Z., Qusmani, A. T., Khan, S. H., Jamil, A., ... & Qari, S. H. (2021). An outlook on global regulatory landscape for genome-edited crops. *International journal of molecular sciences*, 22(21), 11753.

[Identification of edible fish species of Pakistan through DNA barcoding](#) – 2020

Ghouri, M. Z., Ismail, M., Javed, M. A., Khan, S. H., Munawar, N., Umar, A. B., ... & Ahmad, A. (2020). Identification of edible fish species of Pakistan through DNA barcoding. *Frontiers in Marine Science*, 7, 554183.

[Regulation of CRISPR edited food and feed: legislation and future](#) – 2023

Ghouri, M. Z., Munawar, N., Aftab, S. O., & Ahmad, A. (2023). Regulation of CRISPR edited food and feed: legislation and future. In *GMOs and Political Stance* (pp. 261-287). Academic Press.

[Regulatory, ethical, and social aspects of CRISPR crops](#) – 2021

Ahmad, A., Ghouri, M. Z., Munawar, N., Ismail, M., Ashraf, S., & Aftab, S. O. (2021). Regulatory, ethical, and social aspects of CRISPR crops. *CRISPR Crops: The Future of Food Security*, 261-287.

[Strigolactones for sustainable plant growth and production under adverse environmental conditions](#)

– 2021

Raza, A., Javed, R., Zahid, Z., Sharif, R., Hafeez, M. B., Ghouri, M. Z., ... & Siddiqui, M. H. (2021). Strigolactones for sustainable plant growth and production under adverse environmental conditions. *Plant Performance Under Environmental Stress: Hormones, Biostimulants and Sustainable Plant Growth Management*, 129-166.

[Rna Editing with Crispr/Cas13](#) – 2022

Ashraf, S., Ghouri, M. Z., Javed, M. A., Zafar, H., Ali, H., Qari, S. H., & Ahmad, A. (2022). Rna Editing with Crispr/Cas13. *The CRISPR/Cas Tool Kit for Genome Editing*, 219-254.

Understanding floral biology for CRISPR-based modification of color and fragrance in horticultural plants

– 2022

Khan, Z., Razzaq, A., Sattar, T., Ahmed, A., Habibullah Khan, S., & Zubair Ghouri, M. (2022). Understanding floral biology for CRISPR-based modification of color and fragrance in horticultural plants. *F1000Research*, 11, 854.

Applications of CRISPR/cas system in plants – 2022

Khan, S. H., Tariq, H., Farooq, I., Tasleem, H., Ghouri, M. Z., Mubarik, M. S., & Khan, Z. (2022). Applications of CRISPR/cas system in plants. *The CRISPR/cas tool kit for genome editing*, 285-309.

Genome editing in cotton: challenges and opportunities

Khan, Z., Khan, S. H., Ahmed, A., Iqbal, M. U., Mubarik, M. S., Ghouri, M. Z., ... & Azhar, M. T. (2023). Genome editing in cotton: challenges and opportunities. *Journal of Cotton Research*, 6(1), 1-21.

First-generation transgenic cotton crops – 2021

Ahmad, A., Ghouri, M. Z., Jamil, A., Khan, S. H., Ahmad, N., & Rahman, M. U. (2021). First-generation transgenic cotton crops. In *Cotton Precision Breeding* (pp. 229-255). Cham: Springer International Publishing.

Breeding Cotton for Insect/Pests Resistance – 2022

Cheema, H. M. N., Khan, A. A., Khan, M. A., Pervez, M. A., Ghouri, M. Z., Ahmad, A., & Khan, S. H. (2022). Breeding Cotton for Insect/Pests Resistance. In *Cotton Breeding and Biotechnology* (pp. 199-232). CRC Press.

Applications of CRISPR/Cas Beyond Simple Traits in Crops – 2021

Khan, S. H., Ghouri, M. Z., Aslam, S., Mubarik, M. S., Khan, Z., Ahmad, M. Q., & Sajjad, M. (2021). Applications of CRISPR/Cas Beyond Simple Traits in Crops. *CRISPR Crops: The Future of Food Security*, 231-260.

Reengineering of the CRISPR/Cas System – 2022

Khan, Z., Sattar, T., Siddique, M., Ali, Z., Khan, A. A., Aftab, S. O., ... & Ahmad, F. (2022). Reengineering of the CRISPR/Cas System. *The CRISPR/Cas Tool Kit for Genome Editing*, 149-186.

CRISPR/Cas-based techniques in plants – 2021

Khan, Z., Binyameen, B., Waheed, U., Mubarik, M. S., Ghouri, M. Z., Sattar, T., & Razzaq, A. (2021). CRISPR/Cas-based techniques in plants. *CRISPR Crops: The Future of Food Security*, 37-61.

RECOMMENDATIONS

Dr. Aftab Ahmad Advisor

Associate Professor at Department of Biochemistry, University of Agriculture, Faisalabad, Punjab, Pakistan.

Email aftab.ahmad@uaf.edu.pk | **Phone** (+92) 3065577159

Dr. Zulqurnain Khan Advisor

Assistant Professor in Institute of Plant Breeding and Biotechnology (IPBB), Muhammad Nawaz Sharif University of Agriculture, Multan, Punjab, Pakistan.

Email zulqurnain.khan@mnsuam.edu.pk | **Phone** (+92) 3025880755

Dr. Nayla Advisor

Assistant Professor, Department of Biochemistry, United States of Arab Emirates, University, UAE.

Email naylamunawar@gmail.com

CONFERENCES AND SEMINARS

21/02/2022 – 25/02/2022 – CAS-AFS

1st National Hands-on Training on CRISPR/Cas Mediated Genome Editing Worked as Resource Person in Scientific Activities

23/05/2022 – 27/05/2022 – CAS-AFS

2nd National Hands-on Training on CRISPR/Cas mediated Genome Editing Worked as Resource Person in Scientific Activities

22/07/2019 – 22/07/2019 – CAS-AFS

Bacteriophages: An Old Tool in a New Fashion Against Multidrug Resistant Bacteria Participant

19/09/2017 – 20/09/2017 – CAS-AFS

Seminar and Training Workshop on CRISPR/Cas based Genome Editing CAS-AFS

05/09/2016 – 07/09/2016 – USPCAS-AFS, University of Agriculture, Faisalabad

Biotechnology for Crop Improvement; GM crops production, Challenges, and opportunities
Participant

29/05/2016 – 29/05/2016 – University of Health Sciences, Lahore, Punjab, Pakistan

International Symposium on “Molecular Forensics: Emerging Trends Participant

30/11/2023 – 01/12/2023 – CAS-AFS

1st National Workshop on CRSIPR Applications in Biological Systems Resource Person in Scientific
Acitivities