

SAEED ULLAH KHATTAK

PhD Microbiology

Assistant Professor

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PERSONAL INFORMATION:

Name	Saeed Ullah Khattak
Father Name	Ghaffar Ali Khan
N.I.C	17201-2948720-7
D.O.B	20 th January; 1981
Domicile	Nowshera (Khyber Pakhtunkwa).
Present address	Centre of Biotechnology and Microbiology, University of Peshawar, Pakistan.
Permanent address	Muhalla Zafar Khel, Village and P.O. Dak Ismail Khel, District Nowshera, Tehsil Pabbi, Khyber Pakhtunkwa, Pakistan.
Languages	English, Urdu, Pashto

EDUCATION:

- **PhD Microbiology (Fungal Natural Products). 2015. (CGPA 3.8).**

Institution: University of Peshawar, Peshawar, Pakistan.

Thesis title: "Exploitation of Soil and Rhizosphere Inhabiting Fungal Species for Biologically Active Secondary Metabolites".

PhD Supervisor: Professor Dr. Ghosia Lutfullah.

PhD co supervisor: Dr. Zafar Iqbal.

- **M. Phil. Microbiology (Antimicrobial drug resistance). 2007. (CGPA 4).**

Institution: Quaid - e - Azam University, Islamabad, Pakistan.

Thesis title: "Studies on the resistance of Pseudomonas aeruginosa against various antibiotics".

M.Phil. Supervisor: Dr. Fariha Hassan.

- **Msc. (Biological sciences/ Plant sciences). 2005. (CGPA 4).**

Institution: Quaid - e - Azam University, Islamabad, Pakistan.

TEACHING AND RESEARCH/ JOB EXPERIENCE:

- Assistant Professor Centre of Biotechnology and Microbiology University of Peshawar (from 7/1/15 onwards) (Current Position).
- Lecturer University of Agriculture Peshawar (from 1/9/ 2012 till 6/1/15)
- Lecturer Centre of Biotechnology and Microbiology University of Peshawar, Pakistan (from 23rd October 2007 till 1st March 2012).
- Product manager life science research group chemical house (Bio-Rad) (from March 2007 till November 2007).

RESEARCH STUDENTS SUPERVISION:

- ✓ Supervised more than 40 BS research students.
- ✓ Supervised 15 M. Phil. Research students.
- ✓ Supervised one PhD student.

Currently supervising:

- ⊕ 7 M.Phil. and 3 PhD students.

Research collaborations:

- School of Pharmacy, Lanzhou University China in Natural products research (2018).
- Department of Chemistry University of Bristol, Bristol, UK.

FELLOWSHIP AWAD/ HONORS:

- Charles Wallace fellowship, UK (2016).

RESEARCH GRANTS:

- Awarded research grant of Rs.1.85M under grant no. HEC/ NRPU- 4856 as co-principal investigator.

RESEARCH AREA OF EXPERTISE:

- Fugal and bacterial culturing and identification
- Bioassay screening
- Extraction, purification and structure elucidation of fungal secondary metabolites
- Structural elucidation using NMR, LC-MS, and chromatographic techniques
- Molecular docking and in silico modeling
- Real-time PCR and electrophoresis techniques
- Bacterial antibiotics resistance, MIC, MBC and gene amplification using PCR.
- Bacterial pathogenesis

Teaching Portfolio:

- Extremophiles and Microbial diversity
- Mycology
- Microbial genetics
- Microbial Taxonomy
- Industrial microbiology
- Fundamentals of microbiology
- Techniques in Microbiology
- Molecular genetics of yeast
- Molecular biology
- Recombinant DNA technology
- Bacteriology and virology
- Microbial Cell biology
- Immunology
- Mechanisms of microbial pathogenesis
- Diversity of green plants

List of Publications in peer reviewed journals:

1. **Saeed Ullah Khattak***. (2025). Weedicidal Potential of Crude Metabolites from Endophytic *Alternaria* and *Gibberella* Species for the Biocontrol of *Parthenium hysterophorus*. Abasyn Journal of life sciences. AJ Life Sci. 2025, 8(1):1-15.
2. **Saeed Ullah Khattak***. (2024). Comparative Assessment of Antibacterial, Antifungal and Cytotoxic Potential of *Aspergillus fumigatus* and *Penicillium chrysogenum* Extracts. Abasyn Journal of life sciences. AJ Life Sci. 2024, 7 (2): 35-53.
3. Zulqarnain, Zafar Iqbal, Jawad Anwar, Mudassar Iqbal, Nazish Manzoor, Nasir Ahmad, **Saeed Ullah Khattak**, Syed Sartaj Alam and Kazunori Sakamoto. (2024) Bioactivity of a dihydroxy flavone produced by *Penicillium EU0013* against the wilt pathogen of tomato. Journal of Natural product research. <https://doi.org/10.1080/14786419.2024.2413037>.
4. Aqsa Riaz , Irshad Ur Rehman, Jamshaid Ahmad, Amin Ullah, **Saeed Ullah Khattak**, Dalal Sulaiman Alshaya, Eman Fayad, Refaat A. Eid, and Muhammad Alaa Eldeen. (2024). Variability in SARS-CoV-2 Spike Protein Sequences: Impact on Receptor Binding and Immunotherapeutic Strategies. Journal of Computational Biophysics and Chemistry. <https://doi.org/10.1142/S273741652450042X>.

5. **Saeed Ullah Khattak***, Mansoor Ahmad, Jamshaid Ahmad, Saima Ikram, Sajjad Ahmad, Fahad M Alshabrm, Eid A. Alatawi. (2024). Purification of Potential Antimicrobial Metabolites from Endophytic *Fusarium oxysporum* Isolated from *Myrtus communis*. Applied Biochemistry and Biotechnology. **10.1007/s12010-024-05016-z.**
6. **Saeed Ullah Khattak**, Zafar Iqbal, Jamshaid Ahmad, Yanbin Shi and Irshad Ur Rehman. (**2024**). Purification of Andibenin and Chromanone like Compound from Rhizospheric *Aspergillus flavus* and Soil-Borne *Penicillium notatum* with Cytotoxic and Antibacterial properties. *Mycologia*.**116** (3) p.355-369. <https://doi.org/10.1080/00275514.2024.2324620>.
7. Zia UrRehman, Yan Qiang, Long Wang, Yiwei Shi, QianqianYang, **Saeed Ullah Khattak**, Rukhma Aftab & Juanjuan Zhao .Effective Lung Nodule Detection using Deep CNN with Dual Attention Mechanisms. (2024). *Scientific reports*. **14**:3934. <https://doi.org/10.1038/s41598-024-51833-x>.
8. Sajjad Ahmad, Taghreed N. Almanaa, Saifullah Khan, Salma Mohammed Aljahdali, Yasir waheed, Mohammad Abdullah Aljasir, Wafa Abdullah I. Al-Megrin, Aamir Aziz, Muhammad Ateeq, Fazli Amin, **Saeed Ullah Khattak** & Samira Sanami. Identification of potential drug molecules against fibroblast growth factor receptor 3 (FGFR3) by multi-stage computational-biophysics correlate (2023). *Journal of Biomolecular Structure and Dynamics*. <https://doi.org/10.1080/07391102.2023.2291541>
9. Guifang Zhang, Haijiao Wang, **Saeed Ullah Khattak**, Huijuan Lv, Lifang Wang, Xuefeng Li, Xiuxia Sun, Yanbin Shi. (2023). Effect of Rhubarb Free Anthraquinones on Obesity in Rats and Its Potential Mechanism. *International Journal of Applied Pharmaceutics*. Vol 15, Issue 6, 2023, 142-152.
10. **Saeed Ullah Khattak***, Zafar Iqbal, Ghosia Lutfullah, Sajjad Ahmad Metab Alharbi, Muhammad Irfan. (**2023**). Purification and Structure Elucidation of *Penicillium chrysogenum* Derived Antifungal Compound with Potential Anti-Candida property: In Silico and In Vitro Evidence. *Journal of Biomolecular structure and dynamics*. DOI: 10.1080/07391102.2023.2273435.
11. Aladhadh, S.; Almatroodi, S.A.; Habib, S.; Alabdulatif, A.; **Khattak, S.U.**; Islam, M. (**2023**) An Efficient Lightweight Hybrid Model with Attention Mechanism for Enhancer Sequence Recognition. *Biomolecules*, **13**, 70. <https://doi.org/10.3390/biom13010070>.

- 12.** Naila Azam, Asad Ullah and **Saeed Ullah Khattak. (2022)** Butyrolactone Production by Endophytic *Aspergillus terreus* from *Ocimum basilicum L.* and Screening of its Antimicrobial Potential. Journal of Xi'an Shiyou University, Natural Science Edition, 18 (12), p.989-995.
- 13.** **Saeed Ullah Khattak***, Ghosia Lutfullah, Zafar Iqbal, Jamshaid Ahmad, Irshad Ur Rehman, Yanbin Shi and Saima Ikram. (2022). *Aspergillus flavus* originated pure compound as a potential antibacterial. BMC Microbiology. DOI : 10.1186/s12866-021-02371-3.
- 14.** Aamir Aziz, Bashir Ahmad, Muhammad Ateeq, Naila Gulfam, Sudhair Abbas Bangash, Hamad Ullah, Sadia Sardar, Farah Shireen, **Saeed Ullah Khattak**, Junaid Ahmad, Shubana Hayat, Muhammad Asghar. (2022). Isolation and Identification of MDR *Salmonella Typhi* from Different Food Products in District Peshawar, KPK, Pakistan. Tobacco Regulatory Science. 2022; 8(1): 555-572.
- 15.** Muhammad Akmal, **Saeed Ullah Khattak**, Naila Azam and Muhammad Shuaib. (2021). Antifungal potential of endophytic *Cladosporium sphaerospermum L.* isolated from *Citrus medica L.* Bioscience Research, 18(1): 805-812.
- 16.** Naila Azam, Asad Ullah and **Saeed Ullah Khattak. (2021)**. Isolation of endophytic *Aspergillus terrus L.* from a high valued medicinal plant *Ocimum basilicum L.* Wulfenia Journal. Vol 28, (1) 23-37.
- 17.** Fawad ahmad, saima ikram, jamshaid ahmad*, irshad ur rehman, **Saeed ullah khattak**, sadia butt & maryam mushtaq. **(2021)**. Molecular Docking Unveils Prospective Inhibitors for the SARS-COV-2 Main Protease. Sains Malaysiana 50 (5): 1473-1484.
- 18.** Waseem Ullah, Khan Muhammad, Ijaz Ul Haq, Amin Ullah, **Saeed Ullah Khattak & Muhammad Sajjad.** (2021). Splicing sites prediction of human genome using machine learning techniques. Multimedia Tools and Applications. <https://doi.org/10.1007/s11042-021-10619-3>.
- 19.** Jing'e Niu, Zheng Xu, Xuefeng Li, Zhaohui Wang, Jincheng Li, Zhigang Yang, **Saeed Ullah Khattak**, Yingqian Liu, Yanbin Shi. **(2020)**. Development and evaluation of rhubarb free anthraquinones loaded self-nanoemulsifying tablets. Journal of Drug Delivery Science and Technology. Volume 57. DOI: <https://doi.org/10.1016/j.jddst.2020.101737>.

- 20.** Fawad Ahmad, Saima Ikram, Jamshaid Ahmad*, Waseem Ullah, Fahad Hassan, **Saeed Ullah Khattak** and Irshad Ur Rehman. **(2020).** GASPIDs versus Non-GASPIDs - Differentiation Based on Machine Learning Approach. *Current Bioinformatics*. 15: 1. <https://doi.org/10.2174/1574893615999200425225729>.
- 21.** **Saeed Ullah Khattak***, Hamza ur Rehman, Anmol Khurshid and Bushra Ijaz. (2020). Antibacterial and antifungal potential of endophytic fungi isolated from different tissues of selected medicinal plants. *Pure Appl. Biol.*, 9(1): 989-998.
- 22.** Ikram S, Ahmad F, Rehman IU, Ahmad J, Shah FH, **Khattak SU**, Hafeez AB, Maryam A, Gohar M. (2018). Epidemiological analysis of hepatitis C in Pakistan and other Countries: a current update. *JOURNAL OF VIRAL HEPATITIS* 2018 Jun 1 (Vol. 25, pp. 204-204). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY.
- 23.** Zulqarnain, Zafar Iqbal, Russell Cox, **Saeed Ullah Khattak**, Jawad Anwar, Nasir Ahmad, Khalid Khan, Mudassar Iqbal, and Nazish Manzoor. **(2018).** Antifungal activity of the compounds isolated from *Aspergillus niger* and their molecular docking studies with tomatinase. *Journal of Natural product Research* 34:18, 2642-2646. <https://doi.org/10.1080/14786419.2018.1548447>.
- 24.** **Saeed Ullah Khattak**, Ghosia Lutfullah, Zafar Iqbal, Irshad Ur Rehman, Jamshaid Ahmad & Abid Ali Khan. **(2017).** Herbicidal activity of pure compound isolated from rhizosphere inhabiting *Aspergillus flavus*, *Natural Product Research*, DOI:10.1080/14786419.2017.1326038.
- 25.** Ghosia Lutfullah, Sumbal Taj, Kashif Bashir and **Saeed Ullah Khattak. 2017.** Structural, functional and evolutionary study of in silico three dimensional model of Pneumolysin. *Journal of Chemical Society of Pakistan*. Volume 29 (2) p. 285-295.
- 26.** **Saeed Ullah Khattak**, Nafees Bacha, Ghosia Lutfullah, Jehan Bakhat, Sajid Ali and Abid Ali Khan. **(2015).** Study of the genetic traits associated with antibiotic resistance in *staphylococcus aureus* isolated from skin wards Khyber Pakhtunkhwa, Pakistan. *Asian Pacific Journal of Tropical Diseases* 5(5): p 930-935.
- 27.** Ghosia Lutfullah, Hina Tila, **Saeed Ullah Khattak**, Arshad Hussain, Johar Ali and Abid Ali Khan. **2015.** Antioxidant properties of agro-industrial waste and their use as natural preservative for sunflower oil. *J. Appl. Environ. Biol. Sci.* 5 (11). P 10-16.
- 28.** Ghosia Lutfullah , Atta Ur-Rehman Anjum , Iftikhar Ali, Mumtaz Ahmad, **Saeed Ullah Khattak** and Abid Ali Khan. **(2016).** Variation in glucosinolate of seed and leaves

- through induction of sulfur in cotyledon and hypocotyls regenerates of mustard (*Brassica Juncea L.*). *J. Appl. Environ. Biol. Sci.*, 6(2). p. 89-93.
- 29.** Ghosia Lutfullah, Muhammad Kamran, Abid Ali Khan, Irshad Ur Reshman, Jamshaid Ahmad and **Saeed Ullah Khattak**. (2017). Bioassay of *Nyctanthes arbor tritis* extracts against bacterial and fungal pathogens. *Pak. J. Weed Sci Res.* Volume 23, issue no. 2.
- 30.** Haroon, M., M. Saeed, I. Ahmad, R. Khan, S. Bibi, **Saeed Ullah Khattak** and Hidayatullah. (2014). Weed density and strawberry yield as affected by herbicides and mulching techniques. *Pak. J. Weed Sci Res.* 20(1): 67-75.
- 31.** Jamil Khan, Bakhtiar Muhammad, Muhammad Aurangzaib Khan, Zahid Hussain, **Saeed Ullah Khattak***, Faheem Ullah, Ghosia Lutfullah, Roshan Ali. (2014). Effect of forest fire on the chemical composition of the soil of Margalla hills of Pakistan. *Pak. J. Weed Sci. Res.* 20(2): 213-223.
- 32.** **Saeed Ullah Khattak***, Z. Iqbal, G. Lutfullah, N. Bacha, A.A. Khan, M. Saeed and M. Ali. (2014). Phytotoxic activities of *Aspergillus* and *Penicillium* species isolated from rhizosphere and soil. *Pak. J. Weed Sci. Res.* 20(3): 293-303.

Administrative Experience:

- Coordinator BS Microbiology and Biotechnology at Centre of Biotechnology and Microbiology University of Peshawar (2008- 2012).
- Examination incharge Centre of Biotechnology and Microbiology University of Peshawar
- Assistant Warden Hostel No. 7 University of Agriculture, Peshawar (2013- 2014).

References:

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