

Curriculum Vitae

PERSONAL INFORMATION

Hira Mushtaq

📍 Centre of Biotechnology and Microbiology, University of Peshawar, Pakistan

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Sex: Female | **Date of birth:** 12/08/1987 | **Nationality:** Pakistani

WORK EXPERIENCE

15/2010 to date **Lecturer (Microbiology)**
Centre of Biotechnology and Microbiology, University of Peshawar, Pakistan

- Research (individual and collaborative) , teaching and mentoring of students
- Academic and administrative tasks

01/2009 to 14/2010 **Microbiologist**
Rehman Medical Institute, Peshawar, Pakistan.

- Patient's Sample processing and investigation and declaration of reports
- Statistical analysis of data for increase in disease incidence to be reported to authorities

EDUCATION AND TRAINING

11/2013- to 11/2019 **PhD (Microbiology)**

03/2018- 06-2018 **Short course**
Seoul National University , South Korea,
Department of Natural sciences

- Air microbiology, Animal diseases, Agriculture biosciences

03/2010- 12/2012 **M.Phil Microbiology**
Centre of Biotechnology and Microbiology, University of Peshawar. Pakistan

- Advance cell biology, Protein Chemistry , Environmental Biotechnology, Parasitology

...2005 to 2009 **BS Microbiology (hons)**
Centre of Biotechnology and Microbiology, University of Peshawar, Peshawar, Pakistan

- Microbiology, Immunology, Molecular biology, Microbial Diversity, Virology ...

2003 to 2005 **Intermediate (FSc)**

Jinnah College for Women, University of Peshawar, Pakistan

▪ Biology, Chemistry, Physics

2003 Matriculation

Peshawar Model School , Peshawar, KPK, Pakistan

LABORATORY SKILLS

Microbial Cultivation and Identification (biochemical + genomic)

DNA and RNA Isolation, PCR Molecular Cloning,

Gel Electrophoresis, Microscopy and spectrophotometry

PROJECTS

- Project Title:** Isolation and Characterization of colicin producing probiotic bacteria to be used against *E.coli* O157:H7
- Project Description:** Antibiotics cannot be used for treatment of hemolytic uremic syndrome; other chemotherapeutic agents can be used to prevent its occurrence. Under the highlight of usefulness of probiotics (colicins) on animals for control of enterohemorrhagic *E.coli*, specific colicins against *E.coli* O157:H7 in humans can be used to prevent complications and severity of hemolytic uremic syndrome.
- Project Title:** Determining efficacy of therapeutic mouth rinses on oral micro biota (Particularly on dental caries causing alpha- Streptococcus species)
- Project Description:** Dental plaque and dental caries causing microorganisms (bacteria) isolated from saliva. Difference in CFU number before and after use of five commercially available therapeutic mouth rinses showed efficacy. activity of therapeutic mouth rinses evaluated.
- Project Title:** Isolation and characterization of phosphate solubilizing bacteria from rhizosphere soil of *Triticum aestivum* (wheat) (short project)
- Project Description:** Samples from different districts of KPK processed for the difference in microflora content of soil found in *Triticum aestivum* crop land. Comparison was made for the efficient biochemical activities of these microbes and highly effective species were identified.

Publications

Hira Mushtaq, Jehan Bakht, Soniya Amir, Ibrar Khan, Bashir Ahmad. Molecular characterization of colicin producing *E.coli* against *E.coli* O157:H7 and O26:H11. *International Journal of Biosciences*. 15(3), 379-391, **2019**.

H Mushtaq, J Bakht, N Bacha Screening of the novel colicinogenic gram-negative rods against pathogenic *Escherichia coli* O157:H7
Indian Journal of Medical Microbiology, (2015) 33(Supplement 1): S6 7-72

Aftab Ahmad, Fareeha Akhtar, Muhammad Ilyas Khan, Hameed Ur Rehman, Syeda alia Gerdazi, Uzma Ghani, Muhammad Hanzalah Khan, Uzma Ayaz, Hira Mushtaq, nausheen Abdul Malik, Nasir Mahmood, Matiullah, Wahid shah, Malik Nawaz Shuja. Comparative antibiotic resistance profile of *Acinetobacter* spp isolated from fish, chicken and beef meat.
International journal of biosciences, 2019;4 (4), 305-316

References

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