**DR. MUHAMMAD IMRAN  *(CURRICULUM VITAE)***

# Professor &Provost (Boy’s Hostels)

***Department of Microbiology, Quaid-I-Azam University Islamabad-45320, PAKISTAN.***

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**PERSONAL**

**Father’s Name:** Mehr Muhammad

**Date of Birth**: 26th December, 1980

**Nationality**: Pakistani

**CNIC #** 37201-1669164-3

**ACADEMICS**

* **Visiting Scientist** (2019-2020)**, Human Microbiome,** Department of Biological Engineering, Center for Microbiome Informatics and Therapeutic, **Massachusetts Institute of Technology** **(MIT)** **Cambrigde, USA**

[**https://web.mit.edu/almlab/Imran.html**](https://web.mit.edu/almlab/Imran.html)

* **Post-Doctorate:** **Microbial Genomics and Proteomics** (2015-2016) Food Quality (QALEA), Food, Bioprocesses, Toxicology and Environment (Aliments Bioprocédés Toxicologie Environnements (ABTE) [EA 4651] **University of the Caen- Lower Normandy-France**
* **Ph. D: Food and Agro. Biotechnology April, 2011 (Grade: Very Honorable)**
  + Unité des Microorganismes d'intérêt Laitier et Alimentaire (Unit of Microorganisms of Dairy and Food Interests) **University of Caen, Lower Normandy, France**
  + ***Thesis Title:*** *Comprehensive Study of Model Microbial Communities Exhibiting Antilisterial Activity in a Cheese Microcosm*
* **MS (M.Phil): Life and Health Sciences. 2007.** Fundamental and Applied Biology - Cell Biology (Specialization: Microbiology), 2007.University of Caen, Lower Normandy, France (10 European Credit Hours)
* **M.Sc (Hons)** **Food Technology**, **2006.** University of Arid Agriculture Rawalpindi, Pakistan. **85.2% marks** with (**CGPA 3.97 / 4.0**)
* **B.Sc (Hons) Agriculture** in2004, **Food Technology** as major subject from University of Arid Agriculture Rawalpindi. Pakistan and scored **76.45 % marks** (**CGPA 3.62 / 4.0)**
* **F.Sc (Pre-Med)** in2000, from F. G Sir Syed College, The Mall Rawalpindi-Pakistan
* **Matric (Science)** in1997, from Govt. High School Bheen, (District Chakwal)-Pakistan

**HONORS/AWARDS**

* **Fulbright Visiting Scholar Award (2019-2020),** Fulbright Foundation USA. Human Gut Microbiome, Professor ERIC Alm Labortory**.** <https://www.cies.org/grantee/muhammad-imran-0>
* **Campus France Post-Doctrate Fellowship** (2015-2016)
* **“Innovation Award”** by Pakistan Science Foundation (PSF)at Innovation to Invention Summit 2013. <http://www.qau.edu.pk/qau-won-two-innovation-awards/>
* **Overseas Fellowship** for the MS. Leading to PhD Programme (Phase-1) awarded by Higher Education Commission, Pakistan (2006-2011).
* **Merit Base Vice chancellor scholarship** awarded in M.Sc (Hons) Food Technology University of arid agriculture Rawalpindi.

**PROFESSIONAL EXPERIENCE AND SOCIAL WORK**

* + - * **Professor (Tenured)** December-2022 to date
* **Associate Professor (Tenured),** 2018-2022
* **Assistant Professor**, 2011 to 2018. Department of Microbiology, Quaid-i-Azam University.
* Establishment of research laboratory: **Labortory for Microbial Food Safety and Nutrition** at Quaid-i-Azam University.
* **New Courses Developed** at Department of microbiology, Quaid-i-Azam University (2012-2015)
* Dairy Microbiology (M.Phil & Ph.D)
* Advances in Food MMicrobiology (M.Phil & Ph.D)
* Research Techniques in Microbiology (M.Phil & Ph.D)
* Statistics in Microbiology (M.Phil & Ph.D)
* Nutritional Microbiology (M.Phil & Ph.D)
* Human Microbiome (BS)
* **Course Taught**
* Nutritional Microbiology (M.Phil & Ph.D)
* Bioprocessing (M.Phil & Ph.D)
* Dairy Microbiology (M.Phil & Ph.D)
* Food Microbiology (M.Sc.&BS)
* Introductory Microbiology (BS)
* Fundamentals of Microbiology (BS)
* Microbial Metabolism (BS)
* Industrial Microbiology (BS)
* LAB-I, LAB-III, LAB-IV (Basic and Advance Practical course of BS-Microbiolgy)
* **Resource Person:** Awareness Raising Activity on Hygiene and Cleanliness for Food Safety for Dhaba Staff (Food Huts), 11th July2024 at National Skills University Islamabad Pakistan organised by **Safe our Society** **(SOS) Foundation**, Islamabad Pakistan.
* **Focal Person** for MOU between MIT-USA and Quaid-i-Azam Univeristy Pakistan.
* **Focal Person** for MOU between Universitas Dipnegoro, Semarang Indonasia. and Quaid-i-Azam Univeristy Pakistan.
* Member of **Natioanl Standards Committee** of **Agriculture and Food products**, Pakistan Standards & Quality Control Authority **PSQCA**,(Standards Development Centre)
* **Member of National Food and Agriculture techanical committees:**
* Milk and Dairy Products
* Spices and Condiments
* Meat Poultry and Fish and their Products
* Food Additives
* Oil Seed and their Allied Products
* Cereals, Pulses and their Products.
* **Participation as Expert**: International Standard Organisation (ISO): Pakistan's participation in the international standardization process from ISO TC 34/SC9 (Microbiology): **(ISO NP 20070) - Biotechnology — Biobanking — Requirements for sample containers for storing biological materials in biobanks. (2023)**
* **Participation as Expert:** Call for laboratories pre-enrichment study **ISO 11290-1**: Sub-group on methodology and criteria to compare and select (pre-)enrichment broths” Draft document on the methodology to compare and evaluate 6 broths for the (pre-) enrichment of *Listeria monocytogenes* and Listeria spp.: “SENSITIVITY” STUDY by ISO (2023)
* **Member Technical Evaluation Committee (TEC),** Directorate General of Science and Technology Governemnet of Khyber Pakhtunkhwa.
* Member University **Academic Council**, Board of Faculty (Biology) and Board of study (Microbiology), Quaid-i-Azam University Islamabad Pakistan.
* **Course Coordinator** (2017), **Students Advisor** (2019), **BS-Coordinator** (2022) Department of Microbiology, Quaid-i-Azam University Islamabad Pakistan.
* **President (2017,2018) Coordinator (2019) Board of Directors (2017-2019) scientific coordinator (2016):** Pakistan French Alumni Network (PFAN), France Alumni International (2017-2018).
* **Member:** Food quality and hygiene committee, Faculty of Biological Sciences Quaid-i-Azam University Islamabad (2015).
* **Member Curriculum** **Development Committee,** (M. Sc Food Quality and Safety) Institute of Food science and technology, University of Agriculture Faisalabad (2013).
* **External Examiner/ Member Board of Study:** Food and nutrition. Allama Iqbal open University Islamabad Pakistan and FC college Charter university Lahore, Arid Agriculture university, NUST Islamabad. Agriculture University Faisalabad.
* **Member Editorial Board**: Journal of Agricultural Science and Food Technology,
* **Reviewer**: Frontier in Microibology, Fish and Fisheries, Food control, Food Biotechnology, Journal of food safety, Brazilian journal of microbiological research, Asian journal of agriculture, Pearl Journal of Food Science and technology, Peak journal of food science and technology, Peak journal of health,
* **Executive Member**: Academic Staff Association **(ASA)**, Quaid-i-Azam University (2014-15, 2024)
* **Member:** M. Phil Admission Committee (2013), M.Sc: Admission Committee (2015,2017), BS admission committee (2018).

**PATENTS AND COMMERICIAL PROJECTS**

* Patent title: Process for the manufacture of an Ebile Dietary Prouct and the product Patent Application No. IS 558/2024 and filing date is August 12, 2024
* Development of microbial based feed supplement and evaluation of its efficiency on growth, production and health of dairy cattle (2017-2019)- 3 Million by Shafi Resco Chemicals PVT (SRC) Lahore-Pakistan.

**COMPETATIVE RESEARCH GRANTS AWARDED**

* Piloting and Commercialization of the Probiotic Production for Food and Feed Application*.* ***Pakistan Science Foundation,*** Project No. PSF/CRP/C-QAU/T-helx-70. (Project Amount: 14.579Million)-2023-2025.
* “*Conserving and Understanding our microbial heritage”*. This Collaboration is part of The Global Microbiome Conservancy, **Massachusetts Institute of Technology (MIT)** USA**. (**Principal Investigator representing Pakistan in global microbiome consortia:

<http://microbiomeconservancy.org/about/consortium/>**, (Project Amount: 100,000 $)**

* Designing and development of biosensor for Rapid detection of aflatoxins contamination in Milk and other Foods Higher Education Commission (**HEC)** Pakistan (**Co-*Principal Investigator***). Project No. 9848. Approved. **2018. (2.74Millions)**
* Pangenome analysis of indigenously isolated lactic acid bacteria to identify the genetic basis of technological and bioactive properties to develop probiotic supplements and starter cultures for dairy industry. Higher Education Comission (**HEC)** Pakistan- **2018-2020**. (***Principal Investigator***) Project No. 6167.(2.99 Million)
* Development of microbial based feed supplement and evaluation of its efficiency on growth, production and health of dairy cattle (**2017-2019**), (***Principal Investigator***). Project No. PSF/ILP/C-QU/Biotech (078), (5.0 Million), Pakistan Science Foundation (PSF) and 3 Million by SRC (Shafi Resco Chemicals PVT).
* Microbiological safety assessment of milk and Dahi*.* Higher education commission (HEC) (Rs. 0.5 Million) **2011**.

**POPULAR ARTICLES**

# Leave “Parachute Science” Behind When Jumping Into Global Microbiome Research, center for microbiome informatics and therapeutics, Massachusetts Institute of Technology (MIT) [*https://microbiome.mit.edu/microbiome-news/leave-parachute-science-behind-when-jumping-into-global-microbiome-research/*](https://microbiome.mit.edu/microbiome-news/leave-parachute-science-behind-when-jumping-into-global-microbiome-research/)

* **Childhood Nutrition:** The root causes and remedies. Daily Morning Mail.

[*https://morning.pk/story/45955*](https://morning.pk/story/45955)

* **Interview:** A Microscopic city in your Gut (Medium) August 01, 2021.

<https://medium.com/@nthnkim0412/a-microscopic-city-in-your-guts-990519e67623>

* **Interview:** How your Microbiome can Improve your Health; **BBC World Interview**

<https://www.bbc.com/future/article/20211115-how-your-microbiome-can-improve-your-health>

**RESEARCH PUBLICATIONS:**

***Publications in Scientific Journals:*** **(56 Impact Factor Journal Publications, H Index: 16, Citations Scopus: Google scholars : )**

1. Nawaz, F., Barkaat, M., Khan, M.N,  Hafsa Kanwal, Misbah Tabassum, Naseem Rauf, Tahir S. S. Malik , **M.Imran.** **2025**. Impact of microbial composition on nutritional and organoleptic quality of an Indigenous fermented milk product (Dahi). J Food Sci Technol.

[https://doi.org/10.1007/s13197-025-06342-8](Nawaz,%20F.,%20Barkaat,%20M.,%20Khan,%20M.N.%20et%20al.%20Impact%20of%20microbial%20composition%20on%20nutritional%20and%20organoleptic%20quality%20of%20an%20Indigenous%20fermented%20milk%20product%20(Dahi).%20J%20Food%20Sci%20Technol%20(2025).%20https:/doi.org/10.1007/s13197-025-06342-8)

1. Gohar, M., Shaheen, N., Goyal, S. M., **Imran**, **M.,** et al. **2025**. Probiotic potential of yeast, mold, and intermediate morphotypes of *Geotrichum candidum* in modulating gut microbiota and body physiology in mice. Probiotics and Antimicrobial Proteins, 17(2), 1-11. doi: 10.1007/s12602-025-10497-3. <https://link.springer.com/article/10.1007/s12602-025-10497-3>
2. Muhammad Nadeem Khan, Saeeda Bashir, Afifa Afzal, Naghmana Andleeb, Lukasz Krych, Dennis Sandris Nielsen, **Muhammad Imran** **2025**. Probiotic characteristics and survival of a multi-strain lactic acid bacteria consortium in simulated gut model. Folia Microbiologica <https://doi.org/10.1007/s12223-025-01244-w>.
3. Khan M.N., Z. Xie, S.M.B. Bukhari, D. S. Neilsien, **M.Imran,** **2024**. Dairy Based Multi-Strains Probiotic Community Successfully Mitigate Obesity Related Gut Microbiota Dysbiosis in vitro (CoMiniGut). Journal of Medical Microbiology. 73:001936.

<https://doi.org/10.1099/jmm.0.001936>

1. Khan, F.A., A.Ali, D.W., C.Huang, H.Zulfiqar, M.Ali, B.Ahmed, M.R.Yousaf, E.M.Putri, W.Negara, **M.Imran**, N. Shinta Pandupuspitasari, **2024.** Editing microbes to mitigate enteric methane emissions in livestock. *World J. Microbiol Biotechnol* 40, 300. <https://doi.org/10.1007/s11274-024-04103-x>
2. Yasir, M., [A Nawaz](https://pubmed.ncbi.nlm.nih.gov/?term=Nawaz+A&cauthor_id=35544793), S Ghazanfar, [M K Okla](https://pubmed.ncbi.nlm.nih.gov/?term=Okla+MK&cauthor_id=35544793), [A Chaudhary](https://pubmed.ncbi.nlm.nih.gov/?term=Chaudhary+A&cauthor_id=35544793), [Wahidah H Al](https://pubmed.ncbi.nlm.nih.gov/?term=Al+WH&cauthor_id=35544793), [M N Ajmal](https://pubmed.ncbi.nlm.nih.gov/?term=Ajmal+MN&cauthor_id=35544793), [H AbdElgawad](https://pubmed.ncbi.nlm.nih.gov/?term=AbdElgawad+H&cauthor_id=35544793), Z Ahmad, [F Abbas](https://pubmed.ncbi.nlm.nih.gov/?term=Abbas+F&cauthor_id=35544793), [A Wadood](https://pubmed.ncbi.nlm.nih.gov/?term=Wadood+A&cauthor_id=35544793), [Z Manzoor](https://pubmed.ncbi.nlm.nih.gov/?term=Manzoor+Z&cauthor_id=35544793), [N Akhtar](https://pubmed.ncbi.nlm.nih.gov/?term=Akhtar+N&cauthor_id=35544793), [M Din](https://pubmed.ncbi.nlm.nih.gov/?term=Din+M&cauthor_id=35544793), [Y Hameed](https://pubmed.ncbi.nlm.nih.gov/?term=Hameed+Y&cauthor_id=35544793), **[M Imran](https://pubmed.ncbi.nlm.nih.gov/?term=Imran+M&cauthor_id=35544793). 2024**. Anti-bacterial activity of essential oils against multidrug-resistant foodborne pathogens isolated from raw milk. Braz J Biol. 84:e259449. doi: 10.1590/1519-6984.259449. (0.472 IF)

<https://pubmed.ncbi.nlm.nih.gov/35544793/>

1. Mahnoor Akbar , Naeem Ali, **Muhammad Imran**, Arshad Hussain, S.W.Hassan, Urooj Haroon , Asif Kamal, Farhana , H., Javed Chaudhary,  Muhammad Farooq Hussain Munis, **2024**. Spherical Fe2O3 nanoparticles inhibit the production of aflatoxins (B1 and B2) and regulate total soluble solids and titratable acidity of peach fruit. International Journal of Food Microbiology. 410-110508.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85178362617&origin=resultslist>

1. Imrana Amir, Amina Zuberi , Muhammad Kamran , **Muhammad Imran,** Muhammad Ahmad **2024**. Comparative efficiency of Geotrichum candidum microcapsules prepared with alginate alone and in combination with other polymers: In vivo evaluation. Food Hydrocolloids 147- 109348.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85173038350&origin=resultslist>

1. Maryam Idrees, Naima Atiq, Rabaab Zahra, **Muhammad Imran,**Shakira Ghazanfar. **2023**. Draft genome sequence of *Lactiplantibacillus plantarum* subsp. plantarum strain HF43, a human gut-associatedpotential probiotic. Microbial Resource Announcement. https://doi.org/10.1128/MRA.00945-22**.**
2. Smayia Sharif, Nafeesa Qudsia Hanif, Shakira Ghazanfar, Muhammad Imran, Mohammed A. E. Naie, Mahmoud Alagawany **2023**. Dominance of bacillus sp. alter microbiological and nutritional quality and improve aerobic stability of the corn silage. Rendiconti Lincei. Scienze Fisiche e Naturali. 34(1):3.
3. Nadeem M.K, Saeeda Bashir, **M. Imran.** **2023**. Probiotic characterization of Bacillus species strains isolated from an artisanal fermented milk product Dahi. Folia Microbiologica. <https://doi.org/10.1007/s12223-023-01048-w>.
4. Hafiz Arbab Sakandar , Yongfu Chen, Chuantao Peng, Xia Chen, **Muhammad Imran**, and Heping Zhang. **2023**. Impact of Fermentation on Antinutritional Factors and Protein Degradation of Legume Seeds: A Review, Food Reviews International, 39(3), 1227-1249.

<https://www.tandfonline.com/doi/full/10.1080/87559129.2021.1931300>

1. Shahid Zaman,Madeeha Gohar, Hafsa Kanwal, Afia Chaudhary, **Muhammad Imran 2022.** Impact of Probiotic *Geotrichum candidum* QAUGC01 on Health, Productivity, and Gut Microbial Diversity of Dairy Cattle. Current Microbiology 79(12).

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85141293307&origin=resultslist>

1. Khan, M.N, and M. **Imran. 2022.** Draft Genome Sequences of Seven *Limosilactobacillus fermentum* Indigenously Isolated Probiotic Strains from the Artisanal Fermented Milk Product Dahi. Microbiology Resource Announcement. 11(11)-1-3.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85142804227&origin=resultslist>

1. Ifra, G., Misbah T. T. Ahmed, Amina Z. **M. Imran.** **2022**. Gut microbiome modulation mediated by probiotics: Positive impact on growth and health status of *Labeo rohita*. Frontiers in Physiology.13, 949559. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85138812028&origin=resultslist>
2. Khan, M.N., S.I. Khan, M.I. Rana, Arshad, A. Yousaf, M. **M. Imran 2022**. Intermittent Fasting Positively Modulates Human Gut Microbial Diversity and Ameliorates Blood Lipid Profile. Frontiers in Microbiology. 13, 922727.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85138010164&origin=resultslist>

1. Idrees, M., M. Imran, Naima, A. Rabaab. Z. et al. **2022**. Probiotics, their action modality and the use of multi-omics in metamorphosis of commensal microbiota into target-based probiotics. Front. Nutrition. DOI 10.3389/fnut.2022.959941.
2. Maleeha Urooj, Mehreen Shoukat, **M. Imran,** Rani Faryal **2022.** Emergence of hypermucoviscous colistin-resistant high-risk convergent *Klebsiella pneumoniae* ST-2096 clone from Pakistan.  17(1). <https://www.scopus.com/record/display.uri?eid=2-s2.0-85136341802&origin=resultslist>
3. Nadeem H, Talat M., Muhammad L, Naeem S., Waqas A, Abdul Q., Kashif Sarfraz A. **M. Imran**. **2022**. Rheometry nutrition and gluten microstructure trends in wheat cultivars. Food Science and Technology. Ciência e Tecnologia de Alimentos ([10.1590/fst.60920](http://dx.doi.org/10.1590/fst.60920)). 41(1-6).
4. Zumara Younus, Sagar M. Goyal, Vikash Singh, Aamer Ikram, **M. Imran.** **2021**. Genomic Based Characterization of Enterococcus Spp-An Emerging Pathogen Isolated from Human Gut. Molecular Biology Reports (MOLE)48(6), pp.5371-5376. (2.136 IF) <https://link.springer.com/article/10.1007/s11033-021-06540-5>
5. Bibi Khadija, **M. Imran**, [Rani Faryal](https://www.sciencedirect.com/science/article/abs/pii/S1156523320302420?via%3Dihub#!). **2021**. Keystone salivary mycobiome in postpartum period in health and disease conditions. Journal of Medical Mycology 13:1. (2.391 IF).

[https://pubmed.ncbi.nlm.nih.gov/33321299/](https://pubmed.ncbi.nlm.nih.gov/33321299/%20%20%20)

1. Hafiz Arbab Sakandar, Weining Huangl, Stan Kubow, Faizan Ahmed Sadiq, **M. Imran**. **2020**. Comparison of bacterial communities in gliadin-degraded sourdough (Khamir) sample and non-degraded sample J. Food Sci. Technol 57(1):375–380. (IF: 2.701). <https://doi.org/10.1007/s13197-019-04030-y>.
2. Sami Ullah, Qing-Jun Shao, Imdad Ullah, Amina Zuberi, Muhammad Nasir Khan Khattak, Farman Ullah Dawar, **Muhammad Imran**,Amin Ullah, Aqsa Bashir Shah. **2020**. Dietary administration of Commercially available probiotic enhanced growth, digestion and immune response of Rohu (*Labeo rohita*) reared in earthen pond. The Israeli Journal of Aquaculture Bamidgeh 72:10 (IF: 0.24).
3. Habib K., T. Ahmad, A. Riaz, G. Ali, I. Arif, **M. Imran,** S. Parveen, A. Maqbool, S. Ghazanfar. **2020**. Molecular Identification of Lactic acid bacteria Isolated from Lactating Cattle Lower Gut as a Potential Probiotic Species. Indian Journal of Animal Research 54 (B-1175): 1-8. (IF:0.444)

<https://arccjournals.com/journal/indian-journal-of-animal-research/B-1175>

1. Hafiz Arbab Sakandar, Stan Kubow, Behnam Azadi, Rani Faryal, Barkat Ali, Shakira Ghazanfar, U.M. Quraishi and **M. Imran** **2019**. Wheat Fermentation with *Enterococcus mundtii* QAUSD01 and *Wickerhamomyces anomalus* QAUWA03 Consortia Induces Concurrent Gliadin and Phytic Acid Degradation and Inhibits Gliadin Toxicity in Caco-2 Monolayers. Frontiers in Microbiology. (IF:4.0)

<https://www.frontiersin.org/articles/10.3389/fmicb.2018.03312/full>

1. Farah. N. M. N. Khan, A. Javed, I. Ahmed, N.Ali, M.I.Ali, S.M. Bakhtiar, **M. Imran**. **2019**. Genomic and Functional Characterization of *Enterococcus mundtii* QAUEM2808, Isolated From Artisanal Fermented Milk Product Dahi. Frontiers in Microbiology. 10:434. (IF:4.0)

<https://www.frontiersin.org/articles/10.3389/fmicb.2019.00434/full>

1. [Arif, A.](https://www.scopus.com/authid/detail.uri?authorId=57207914979), [Hasan, F.](https://www.scopus.com/authid/detail.uri?authorId=7005439391), [Khan, Q.A.](https://www.scopus.com/authid/detail.uri?authorId=55216737400), ... [Khan, A.](https://www.scopus.com/authid/detail.uri?authorId=57190418319), **[Imran, M.](https://www.scopus.com/authid/detail.uri?authorId=57198098035) 2019.** [Affect of seasonal variation on bacterial sepsisand antibiotic sensitivity profile in neonates](https://www.scopus.com/record/display.uri?eid=2-s2.0-85077565039&origin=resultslist). *Pakistan Paediatric Journal*, 2019, 43(4), pp. 247–254.

<https://www.scopus.com/record/display.uri?eid=2-s2.0-85077565039&origin=resultslist>

1. **Imran, M.,** Desmasures, N., Coton, M., Coton, E., Le Flèche-Matéos, A., Irlinger, F., Delbès, C., Stahl, V., Montel, M.-C.,Vernoux, J.-P., **2019**. Safety assessment of Gram-negative bacteria associated with traditional French cheeses. Food Microbiology. 79.1-10. ISSN 0740-0020. (IF:4.09)

<https://www.sciencedirect.com/science/article/abs/pii/S0740002018302624>

1. Hafiz Arbab Sakandar, Raza, Hussain, Stan Kubow, Faizan Ahmed Sadiq, Weining Huang, **M. Imran. 2019**. Sourdough Bread a Contemporary Cereal Fermented Product: Invited Review. Journal of Food Processing and Preservtion. 43 (3).1-15.(IF:1.51).

<https://onlinelibrary.wiley.com/doi/10.1111/jfpp.13883>.

1. Abu bakar Muhammad, B. S.A. Imran, J.P-Vernoux, M.I. Ali, R. Faryal, N. Desmasures, **M. Imran**. **2019**. Purification, Characterization and Thermodynamic Assessment of an Alkaline Protease by *Geotrichum candidum* of Dairy Origin. Iranian Journal of Biotechnology. IJB-17(2): 1709-2042 (IF:0.338)

<http://www.ijbiotech.com/article_85179_0.html>

1. Imrana Amir, Amina Zuberi, M. Kamran, **M. Imran,** Mahmmod ul Hassan Murtaza. **2019**. Evaluation of commercial application of dietary encapsulated probiotic (Geotrichum candidum QAUGC01): Effect on growth and. immunological indices of rohu (Labeo rohita, Hamilton 1822) in semi-intensive culture system. Fish and shell fish immunology. 95: 464-472. (3.37)

<https://www.sciencedirect.com/science/article/abs/pii/S105046481931054X>

1. Hafiz Arbab Sakandar, Sarfraz Ahmad, Rashida Perveen, Hafiz Khuram Wasim Aslam, Azam Shakeel, Faizan Ahmed Sadiq, **Muhammad Imran. 2018.** Camel Milk and its Allied Health Claims: A review, Progres in Nutrition. 20S:15-29. (IF*:*0.312*)*. DOI: 10.23751/pn.v20i1-S.5318.

<http://www.mattioli1885journals.com/index.php/progressinnutrition/article/view/5318Sabaha>

1. Hafiz Arbab Sakandar, Nuzhat Huma, Faizan Ahmed Sadiq, Qaiser Farid Khan, **Muhammad Imran,** Abdur Rehman, Rashida Perveen, Ayesha Sameen. **2018**. Effects of Artificial Sweeteners on the Quality Parameters of Yogurt During Storage. Progres in Nutrition. 20 (2-S): 57-63. DOI: 10.23751/pn.v20i2-S.5667. (IF*:*0.312*)*.

<https://kopernio.com/viewer?doi=10.23751/pn.v20i2-S.5667&route=6>

1. Hafiz Arbab Sakandar, **M. Afzaal, Tahir Zahoor, Faizan Ahmed Sadiq, Farhan Ahmad, Muhammad Imran, Adeela Yasmin, Qaiser Farid Khan.** **2018**. Effect of encapsulation on the viability of probiotics in youghurt. Progres in Nutrition. 20 (2-S):44-52. (IF*:*0.312*)*.

<http://www.mattioli1885journals.com/index.php/progressinnutrition/article/view/5331>

1. Imrana Amir, amina zuberi, **M. Imran,** Sana Ullah. **2018.** Evaluation of yeast and bacterial based probiotics for early rearing of *Labeo rohita* (Hamilton, 1822). Aquculture Research. 49 (12): 3856-3863. (IF:1.475). DOI: 10.1111/are.13852.
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**Genomic Data Accession Numbers Submitted to NCBI Gene Bank**

* [PRJNA495109](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA495109) : Impact of Probiotic *Geotrichum candidum* QAUGC01 on Health, Productivity, and Gut Microbial Diversity of Dairy Cattle(TaxID: 1735564).
* [PRJNA523005](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA523005) : *Geotrichum candidum* strain:QAUGC01 Genome sequencing and assembly: (TaxID: 1173061)
* [PRJNA477600](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA477600) : Human gut microbiome of Pakistani population Metagenome
* [PRJNA668861](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA668861) : Gut Microbial Diversity of Irritable Bowel Syndrome (IBS) Patients from Pakistan.
* [PRJNA744373](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA744373) : Lactic acid bacteria isolated from the artisanal fermented milk product Dahi (22 Draft Genomes)
* [PRJNA836395](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA836395) : Human Gut Microbiome of Irritable Bowel Syndrome Patients from Pakistan (TaxID: 408170)
* [PRJNA342578](http://www.ncbi.nlm.nih.gov/bioproject/PRJNA342578) : Metagenomic analysis of fungal diversity from Raw Milk Fermented product Dahi
* [PRJNA495448](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA495448) : Fish Gut Metagenome (TaxID: 1602388)
* [PRJNA311247](http://www.ncbi.nlm.nih.gov/bioproject/PRJNA311247): *Enterococcus mundtii* Genome sequencing (TaxID: 53346)
* [PRJNA321557](http://www.ncbi.nlm.nih.gov/bioproject/PRJNA321557) : Metagenomic analysis of bacterial diversity from Raw Milk Fermented product Dahi Metagenome
* [PRJNA380451](http://www.ncbi.nlm.nih.gov/bioproject/PRJNA380451) : Marinomonas Genome sequencing and assembly (TaxID: 1972585)

**Nucleotides Sequences**

NCBI: accession Numbers: ***G. candidum***: KT280407, ***Aspergillus flavus***: No. KP036603, KP036602, ***Pichia kudriavzevii*:** KT987926, KT987927and **Lactic acid bacteria**: KP256006, KP256007, KP256008 KP256009, KP256010, KT021871, KT021872, KT021870, KT021869, KT021873, KT021874, KT021875, KP256018, KP273582, KP256013, KP256014, KP256015, KP256011, KP256012, KP256016, KP256017, KP256021, KP256019, KP826774,). KP036602, KP036603, KP826777, KT033699, KT033700, KT033701, KT033702, KP826775, KP826776.

**RESEARCH SUPERVISION**

**Ph. D Supervision:** (07 completed and 05 under supervision)

|  |  |  |
| --- | --- | --- |
| **Student Name** | **Year** | **PhD-Thesis Titles** |
| Dr. Muhammad Nadeem Khan | 2023 | Study on Microbial Communities Modulation to Mitigate Obesity Related Gut Microbiota Dysbiosis |
| Dr. Zumara Younas | 2022 | Implication of Gut Microbiome in Pathophysiology of Irritable Bowel Syndrome (IBS) |
| Dr. Shahid Zaman | 2021 | Development of Microbial Based Probiotic Feed Supplement and Evaluation of its Impact on Growth, Production and Health of Dairy Cattle. |
| Dr. Ifra Ghori | 2019 | Evaluation of dietary probiotic mixtures for the improvement of physiology and health of *Labeo rohita* through modulation of the gut microbiome under mimic aquaculture conditions |
| Dr.Hafiz Arbab Sakandar | 2019 | Synchronous Degradation of Gliadin and Phytic acid by Potential Probiotic Microbiota of Indigenously Fermented Sourdough and Its Application in Wheat Dough Fermentation |
| Dr.Saima Khalid | 2018 | Study of Aflatoxigenicity and Biocontrol of aflatoxigenic *Aspergillus flavus* and Impact of Imizoquins on its Physiology |
| Dr. Farah Nawaz | 2017 | Genomic and Culture based Microbiological Characterization of Fermented Milk Product Dahi and its Impact on Product Quality, Nutrition and Safety |

**M.Phil Supervision (75 completed, 07 Under supervision)**

|  |  |  |  |
| --- | --- | --- | --- |
| **S/No.** | **Student Name** | **Year** | **Thesis Titles** |
|  | Tahira Nawaz | 2024 | Optimization of the Fermentation Process for Vinegar Production from Grape Juice Using Central Composite Design |
|  | Maryam Sana | 2024 | Preparation, Physicochemical and Organoleptic  Characterization of Flaxseed-based Vegan Cheese by  Using Indigenous Starter Cultures |
|  | Sabahat Iqbal | 2024 | Evaluation of the Impact of Dietary Patterns and Gut Microbiota-Linked Depression on the Progression of Polycystic Ovary Syndrome (PCOS) |
|  | Syed Zain Kazmi | 2024 | Study of the Effects of Garlic, Onion, and Ginger Extracts on the Proliferation of Probiotic Lactic Acid Bacteria |
|  | Robana Hanif | 2024 | Evaluation of the Impact of Skin care Products and Dietary Habits on Skin Health and Microbiota |
|  | Nimra Ghalib | 2024 | Assessment of the Impact of *Enterococcus faecium* on Physiochemistry and Nutrition of Fermented Milk |
|  | Nimra Irshad | 2023 | Evaluating the Impact of Microbial Interactions on Antimicrobial Activity of Selected Lactic Acid Bacteria |
|  | Seemab Musharaf Faiz | 2023 | Evaluation of Physiochemistry and Nutritional Profile of Surface Ripened Cheese Produced by using Indigenously Isolated Cultures |
|  | Afzal Ishaq | 2023 | Optimization and Validation of NIR-based Detection and Quantification Strategy for Aflatoxins in Foods |
|  | Ihtisham Ul Haq | 2023 | Study of Ciprofloxacin degradation by Human gut Microbiota of Depression Patients |
|  | Aqsa Aftab | 2023 | Study of the Impact of Cannabis Preparations on Food and Gut Related Microbiota |
|  | Alviya Zainab Kazmi | 2023 | Study of Probiotics Viability and Attributes Stability in Powdered Milk Prepared by Lyophilization |
|  | Hafsa Kanwal | 2022 | Study of the Impact of dietary Pattern on levels of aflatoxin B1 in Human Serum |
|  | Noreen Shafait | 2022 | Study of the Interaction between selected strains of Lactic acid bacteria with Yeast to improve consistency and sensorial properties of fermented milk |
|  | Namal Javaid | 2022 | Evaluation of the Impact of Microbial Metabolites and Neurotransmitters on Gut-microbiota-brain Axis of Depressed Patients |
|  | Tayyaba Zaheer Kayani | 2022 | Investigating the Influence of Serotonin and Fecal Short Chain Fatty Acids on the Gut-microbiota-brain Axis in Healthy Subjects |
|  | Rimsha Areej | 2022 | Investigating the Correlation Between Serum Aflatoxin B1 Levels and Liver Damage in Hepatitis (HBV &amp; HCV) Patients |
|  | Nida Shaheen | 2021 | Comparative Assessment of Probiotic potential of *Geotrichum candidum* Morphotypes in Mice Model |
|  | Abdul Wahab | 2021 | Standardization and Optimization of infra-red based Detection of Aflatoxin in HCV and HBSag Patients Serum |
|  | Rida Habib | 2021 | Evaluation of the Correlation between Gut-Microbiota-Brain Axis and Dietary Pattern by using Electroencephalography (EEG) |
|  | Javeria | 2021 | Optimization and Standardization of FTIR based Aflatoxin Detection Strategy for Food Matrix |
|  | Naghmana Andleeb | 2021 | Evaluation and Mimicking the Microbial Communities of Indigenously Fermented Dahi for Bioactive Properties |
|  | Orida Zaman Abbasi | 2021 | Preliminary study of human gut microbial association with depression |
|  | Qalab Abbas | 2019 | Comparative Assessment of the Impact of Commericial and Indigenous Yeast on Physiology and Productivity Dairy Cattle |
|  | Afifa Afzal | 2019 | Isolatioan and Characterisation of Potential Probiotic Lactic Acid Bacteria for Milk Fermenation |
|  | Syeda Momna Batool | 2019 | Evaluation of Short Chain Fatty Acid (s) Production ability of *Geotrichum candidum* *in silico* and during cheese ripening |
|  | Syeda Bashir | 2019 | Isolation and Characterization of Lactic Acid Bacteria to Develop Probiotic Model Microbial Communities |
|  | Saiqa Noureen Sahotra | 2019 | Optimization of Media and Culturing Conditions for Economical Production of *G. candidum* QAUGC01 |
|  | Filza Zarar | 2019 | Implication of Gut Microbiome in Modulation of Short Chain Fatty Acid in Irritable Bowel Syndrome (IBS) Patients |
|  | Aqib Javed | 2018 | Evaluation of safety and blood lipid homeostasis potential of indigenous probiotics in mice model. |
|  | Shehwar Malik | 2018 | Impact of morphotypes and culturing conditions on extracellular enzymatic activity of *Geotrichum candidum*. |
|  | Muhammad Junaid Alam | 2018 | Isolation and characterization of anti-Aspergillus  compound produced by Geotrichum candidum QAUGC01 |
|  | Samia Ali | 2018 | Study of the impact of *Geotrichum candidum* on improvement in physiochemical and sensory attributes of ripened soft cheese |
|  | Almira Ikram | 2018 | Determination of Antimicrobial Activity of Dahi Against Selected Foodborne Pathogens |
|  | Maimoona Sarwar | 2018 | Detection of Aflatoxins Contamination in Indigenous Fermented Milk Product Dahi. |
|  | Ghazal Ali | 2018 | Evaluation of Gut Microbiota of Drug Addicts and Depression Patients |
|  | Muhammad Usman Khan | 2017 | Incidence of Shiga toxin producing Escherichia coli in Fermented Milk product Dahi |
|  | Ifrah Kiren | 2017 | Study of the Impact of Geotrichum candidum on lipid composition of fermented milk |
|  | Marva Imtiaz | 2017 | Evaluation of Folate (Vitamin B9) Biosynthesis by Enterococcus mundtii QAUEM2808 |
|  | Mashal Fatima | 2017 | Evaluation of probiotic potential of bacterial isolates from human gastrointestinal tract |
|  | Mr. Muhammad Nadeem Khan | 2017 | Impact of energy restriction (Ramadan fasting) on human male physiology and gut microbiome |
|  | Ms. Saroosh Shar Siddiqui | 2017 | Evaluation of *Geotrichum candidum* proteome and its impact on nutrition and quality of fermented milk |
|  | Mr.Shoaib Rafique | 2017 | Assessment of the natural antagonistic potential of Dahi against common foodborne pathogens |
|  | Ms.Sidra Irshad | 2017 | Study of the impact of energy restriction (Ramadan fasting) on human female physiology and gut microbiome |
|  | Ms. Afia Chaudhary | 2016 | Study of the Impact of *Geotrichum candidum* QAUGC01 Feeding on Dairy Cattle Gut Microbiology. |
|  | Ms. Sumyia Jamil | 2016 | Folate (Vitamin B9) Biosynthesis by Lactic Acid Bacteria in Dairy Ecosystem |
|  | Ms. Misbah Tabassam | 2016 | Impact of Potential Probiotic Microbiota on Physiology and Gut Microbiology of Labeo rohita |
|  | Ms. Khadija usman | 2016 | Isolation and Characterization of Gluten Degrading Microbiota from Sourdough |
|  | Ms. Rabia Javed | 2016 | Evaluation of Nd: YAG laser for photo inactivation of selected food borne Pathogens |
|  | Ms. Madeeha Ilyas Rana | 2016 | An in vitro study of the cholesterol lowering potential of microbial isolates from human gut |
|  | Ms. Amna Mehndi | 2016 | Study of histidine and tyrosine decarboxylation activity of selective lactic acid bacteria |
|  | Ms. Asma Mahmood | 2016 | Screening and characterization of anti-Aspergillus flavus activity of *Geothricum candidum* QAUGC01 co-cultured with selective microbial isolates. |
|  | Ms. Maria Barkaat | 2015 | Study of the impact of microbial diversity on nutritional and organoleptic quality of indigenous fermented milk product (Dahi) |
|  | Ms. Arooba Sarwar | 2015 | Preliminary screening of selective microbial strains isolated from rumen gut and fermented food for probiotic potential |
|  | Mr. Tanveer Ahmad | 2015 | Evaluation of the impact of potential probiotic microorganisms on gut microbiology, growth parameters and health of rohu (*Labeo rohita*) |
|  | Ms. Maria Saeed | 2015 | Screening and optimization of anti-Aspergillus flavus activity of *Geotrichum candidum* and lactic acid bacteria |
|  | Ms. Sadia Mehmood | 2015 | Identification and technological characterization of lactic acid bacteria for potential application in milk fermentation |
|  | Ms. Sanam Islam | 2015 | Risk assessment of pathogens in vegetables irrigated with sewage water, tap water and wetland treated water |
|  | Ms. Asad ul Naz | 2014 | Screening and characterization of indigenous microbial strains for probiotic potential. |
|  | Mr. Noshal Hussain | 2014 | Study of incidence and Aflatoxigenic potential of Aspergillus flavus in cattle feed, water and milk samples |
|  | Mr. Khurram Khalid | 2014 | Study of dengue virus incidence among all age groups by using immuno-assay and RT-PCR |
|  | Ms. Saima Riaz | 2014 | Effect of co-inoculation of lactic acid bacteria and *Geotrichum candidum* on safety and quality improvement of fermented milk |
|  | Mr. Abu Bakar | 2014 | Production, purification and characterization of protease and lipase by *Geotrichum candidum* for food industry |
|  | Ms. Maria Qubtia | 2014 | Microbiological characterization of dairy cattle fecal material as potential source of probiotics |
|  | Mr. Muhammad Rafiq Khan | 2013 | Study of antimicrobial activity of *Enterococcus faecium* isolated from indigenous fermented milk. |
|  | Ms. Momeena Abbassi | 2013 | Effect of co-inoculation of *Geotrichum candidum* and *Pediococcus acidilactici* with commercial starters on yoghurt quality. |
|  | Mr. Muhammad Yasir Khan | 2013 | Evaluation of antimicrobial activity of selected herbal oils from Quetta valley against food borne pathogens. |
|  | Mr. Majid Majeed | 2013 | Biodecolorization of Reactive S3R Orange azo dye by a cadmium resistant bacterial strain isolated from textile effluents |
|  | Ms. Smayia Sharif | 2013 | Impact of commercial inoculant on microbiological and nutritional quality of corn silage |
|  | Ms. Saima Khalid | 2013 | Evaluation of microbial potential to biocontrol aflatoxigenic *Aspergillus flavus*. |
|  | Ms. Samra Asghar | 2013 | Incidence of foodborne pathogens in indigenous fermented milk |
|  | Manzoor Khan | 2013 | Effect of preliminary characterized bacteria and yeasts strains on physiology and gut microbiology of grass carp. |
|  | Mr. Shabbir Ahmad Khan | 2012 | Microbiological Evaluation of Indigenous Fermented Milk Product (Dahi) Using Conventional and Modern Techniques |
|  | Mr. Waqas Ahmad Khan | 2012 | Microbiological Study of Raw and Pasteurized Milk by Culture Dependent and Independent Approaches |
|  | Ms. Tahreem Naz | 2012 | Microbiological surveillance and antibiotic susceptibility pattern of bacterial contamination in different wards of hospital. |

**Conferences Abstracts (Oral and poster presentations)**

*Participated in more than 60 conferences at national and international conference (below is selected list)*

1. Speaker: One Day Screening Camp for Diabetes organized by Quaidian Association of Microbiology (QAM) in collaboration with The Diabetes Centre (TDC) Network, Pakistan on 29 October 2024 at Quaid-i-Azam University Islamabad Pakistan.
2. Focal person: food Safety training for Quaid-i-Azam University hostels Mess Staff. 25th October, 2024 organized by the Provost office of the Quaid-i-Azam University (QAU) in Collaboration with Save our Society Foundation (SOSF) and Marriott Hotel Islamabad to mark the “World Food Day” at National Library of Pakistan Islamabad Pakistan.
3. Invited Speaker: Wonders of the Gut Microbiome: Past, Present and Future. 30th July, 2024. Webnir by Universitas Dipnegoro, Semarang Indonasia.
4. Guest speaker: Gut Microbiome dynamics in Enhancing Health and Productivity in Livestock and Poultry Farming. World Microbiome Day, 27th June, 2024. PMAS Arid Agriculture University Rawalpindi-Pakistan.
5. Guest Speaker: Optimizing Animal and Agricultural Industries Through Microbial Applications**,** Universitas Dipnegoro, Semarang Indonasia. 16th June 2024. Universitas Dipnegoro, Semarang Indonasia.
6. Guest Speaker: Introduction to Animal Microbiome, 17th June, 2024. Universitas Dipnegoro, Semarang Indonasia.
7. Guest Lecture: Exploring the mcirobial world within; A visiting Professorship Journey into animal Gut Microbiome understanding. 20th June, 2024, Universitas Dipnegoro, Semarang Indonasia.
8. Invited speaker: International Workshop on Bridging the Gap: Enhancing Biosafety and Biosecurity Regimes for a Secure future. December 3 – 4, 2023, COMSTECH Islamabad-Pakistan
9. Invited Speaker: Chem-Bio Threat &Response, Science and Technology organization, National Center of Physics (NCP), 5-6 July,2023. Chem-Bio Defence Directorate CBRC. Pakistan
10. Keynote Speaker: 1st International Conference on Emerging Trends in Functional Foods and Nutraceuticals (ICETFFN 2023) on 14-15 February 2023. University of Management and Technology (UMT), Lahore-Pakistan
11. Invited speaker: webinar biological risks in dealing with Infectious disease pandemic date: April 20, 2020. Young Doctors association. Online.
12. **Chief organizer,** *Building innovative Pakistan*, through science technology and innovation policy, 14th Feb.2019. Quaid-i-Azam University Islamabad Pakistan. <https://qau.edu.pk/building-innovative-pakistan-through-science-technology-innovation-policy/>
13. Sakandar, H. **M. Imran**. Comparison of bacterial communities in complete gliadin-degraded sourdough (khamir) samples and non-degraded samples 2nd International Conference on Microbial Ecology & Eco Systems” July 11-12, 2018. Toronto, Canada.
14. Saima Khalid, Maria Saeed, Asma Mahmood and **M. Imran.** Evaluation of synergistic antagonism of food and gut isolated microbes against *Aspergillus flavus.* Gut Microbiology: No longer the forgotten organ – 11th Rowett-INRA Conference. June 11-14, 2018. Aberdeen, Scotland, UK.
15. Sakandar, H. S. Kubow, Q. Khan, K. Usman , **M. Imran.** Giadin and Phytic Acid Simultaneous Degradation by *Enterococcus mundtii* QAU01 and *Wickerhamomyces anomalus* QAU03 Consortia and Reduction in Toxicity on Caco2 Monolayers ASM MICROBE 2017 1-5 June, NEW ORLEANS, USA
16. **M. Imran.** Participated in discussion session. Framing the health risks on raw milk cheese with norms and regulations? A crossed perspectives analysis 29&30th June 2016, **Agro ParisTech – Paris-France**.

##### Farah Nawaz, Sadia Mehmood, Saima Riaz and M. Imran. 2015. Diversity and technological potential of locally isolated lactic acid bacteria from fermented milk. 10th Biennial International conference of Pakistan Society for Microbiology. Exploring Microbes for future Endeavors. March 25-28,. Department of Microbiology and Molecular Genetics, University of Punjab, Lahore.

1. **Organise** session **« Biotechnologies for Industrial Needs »** in 3rd innovation to invention summit 2014. Punjab University Lahore 19-20 March, 2014.

http://www.irp.edu.pk/wp-content/uploads/2014/03/detailed-program-summit-14.pdf

1. Saima Khalidand **Muhammad Imran**. Comparaison of Molecular and Phenotypic Approaches to Evaluate Aflatoxigenic Potential of *Aspergillus flavus*.5th International Conference on Agriculture, Food Security and Climate Change. Sep. 9-11, **2014** at The University of Poonch Rawalakot (**Oral Presentation**).
2. **Imran M.,** Iabbassen A, Panoff JM, Desmasures N, Vernoux J-P. 2010. Focusing Metaproteomic analysis of simple microbial community in a cheese microcosm. **8th Congress of French Society of Microbiology (SFM) Congress, Marseille, France, 2-4 June 2010 (Poster presentation)**
3. **Imran M**, Desmasures N, Vernoux J-P. 2010. Role of Microbial Growth Dynamics in Antilisterial Activity of Model Microbial Communities Originating from Cheese. **110th General Meeting of American society for Microbiology (ASM), San Diego-California USA. 23-27 May 2010. (Poster presentation)**
4. **Imran M**, Desmasures N, Vernoux J-P. 2009 Comparison of *Listeria* *monocytogenes* enumeration by rRNA hybridization and classical oxford media from micro-cheese agar. **12th Day of Doctorate school of Normandy, Integrative Biology, Health and Environment (EdNBISE) 20th March 2009, Rouen, France (Oral presentation)**
5. **Imran M**, Desmasures N, Vernoux J-P. 2008. A rapid method for selection of microbial communities exhibiting antilisterial activity on micro-cheese agar medium. **First European Food Congress 4th-8th November 2008. Ljubljana-Slovenia (Oral presentation)**
6. Wang Y. Z. Ahmed, **M. Imran.** 2008 Textural and functional improvement of Paneer Cheese using camel milk with Exopolysaccaride producing cultures. **5th IDF (International Dairy Federation) Symposium on Cheese Ripening 9-13 March 2008, Bern Switzerland. (Poster presentation)**
7. **Imran M**, Desmasures N, Vernoux J-P. 2007 selection and characterization of anti-listerial microbial communities originating from cheese **7th National Congress, Voyage au centre de la Microbiologie (voyage in to centre of microbiology) SFM (French society of microbiology) 30-31st and 1st June 2007, Nantes, France.**

**COURSES AND TRAINING PROGRAMMES ATTENDED**

* **QIIME 2 (Quantitative Insights Into Microbial Ecology 2)** a popular open-source bioinformatics platform for analyzing and interpreting microbiome data. December-November,2019-2020. MIT USA.
* **Bloodborne Pathogens: Researchers. Jan. 2020.** EHS00200. **MIT USA**.
* General Biosafety for researchers **Jan. 2020.** EHS00404. **MIT USA**
* General and Lab Specific Chemical Hygiene **Jan. 2020.** EHS00260. **MIT USA**
* Managing Hazardous Waste **Jan. 2020.** EHS00501. **MIT USA**
* Certificate of Professional Development under HEC-Incorporating Technology in Education (ITE). **National Academy of Higher Education, December, 29 2011 to January 13, 2012,** Quaid-i-Azam University Islamabad-Pakistan.
* **Training workshop on microteaching 22-24 May, 2012,** by HEC atQuaid-i-Azam University Islamabad-Pakistan.
* **Training workshop on communication skills 19-21 September 2012** by HEC atQuaid-i-Azam University Islamabad-Pakistan.
* **2D-DIGE** (Two-dimensional difference gel electrophoresis) User meeting, (GE Health care) 20 Nov. 2008 **Institute Cochin**, **Paris France.**
* Advance in imagery and proteomics for comprehension of complexity of biological systems. 12th March 2007 **Rouen, France**.
* Hygiene and Security: Specific and General risk in the Biology and Chemistry Laboratory 18th to 22nd September 2006. University of the **Caen, France**
* Internship at **Pakistan Council for Scientific and Industrial Research (PCSIR)** Islamabad in Food quality analysis. 2003, (2 months).
* **Industrial process trainee:** Internshipat ***Coca Cola International*** (Shahi Beverages) Islamabad in Beverages Processing, Water Purification and related water and beverages Analysis for Quality Control. 2004. (6-weeks)
* Part time work along with study (M.Sc (Hons) and B.Sc (Hons)) at **Food Processing, Training and Research Laboratory** University of Arid Agriculture Rawalpindi, Main responsibilities were food product development and processing especially bakery products, Dairy products and beverages at pilot scale.

**MEMBERSHIPS**

* + **General Secertary** Islamabad chapter, Pakistan Society for Microbiology (PSM)
  + Member of American society of Microbiology (ASM) Washington USA
  + Member of European Federation of Food Science and Technology EFFoST (Membership Number: SM200702140)
  + Member of SFM “French society of microbiology”

**Miscellaneous**

**Arabic** (Reading, Writing)

**English** (Reading, Writing and Speaking).

**French** (Reading, Writing and Speaking).

**Urdu** (Reading, Writing and Speaking).

* Window 98/Xp MS Word, MS Excel, MS PowerPoint, Print, photo shop, Installation, Email and Internet, Scientific soft wares (Samspot, Bionumerics, etc.) and bio-informatics tools on internet
* Medline Formation (Interface Pubmed) Universite de Caen France 2009.
* Certificate in Medical Transcription (Computer based).2001.
* **Brevet d’études Française** Institut de Touraine, Tours-France (2 months, 20 hours/week)
* **Cours de Français (FLE),** 330 hours, Alliance Française d’Islamabad, Pakistan.
* **Special Certificate (240 hours) in French Language** from National University of Modern Languages Islamabad, Pakistan August- December 2005.
* Certificate of the “**International English Testing System**” **(IELTS)** with 6.0 bands in 2004.