DR. MUHAMMAD IMRAN (CURRICULUM VITAE)

★ +9290643183,+923465459904, **Email:** m_imran766@hotmail.com/<u>mmimran@qau.edu.pk</u>. Department of Microbiology, Quaid-I-Azam University Islamabad-45320, PAKISTAN.

PERSONAL

Father's Name:Mehr MuhammadDate of Birth: 26^{th} December, 1980Nationality:Pakistani

CNIC # 37201-1669164-3

ACADEMICS

• Post-doctorate- Microbial Genomics and Proteomics (2015-2016) Food Quality (QALEA), Food, Bioprocesses, Toxicology and Environment (Aliments Bioprocédés Toxicologie Environnements (ABTE) [EA 4651] Universite de Caen- Lower Normandy-France.

o Ph. D- Food and Agro. Biotechnology 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

- M. Phil Life and Health Sciences, 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)
- o B.Sc (Hons) Agriculture in 2004, Food Technology as major subject from University of Arid Agriculture Rawalpindi. Pakistan and scored 76.45 % marks (CGPA 3.62 / 4.0)
- o F. Sc (Pre-Med) in 2000, from F. G Sir Syed College, The Mall Rawalpindi-Pakistan
- o Matric (Science) in 1997, from Govt. High School Bheen, (District Chakwal)-Pakistan

HONORS/AWARDS

- Campus France Post doc. 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 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

- Course coordinator Department of Microbiology (2017)
- New courses developed at Department of microbiology, Quaid-i-Azam University (2012-2015)
- Dairy Microbiology (M.Phil & Ph.D),
- Advances in food microbiology (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),
- **Member** food quality and hygiene committee, Faculty of Biological Sciences Quaid-i-Azam University Islamabad (2015).
- Executive member: Academic Staff Association (ASA), Quaid-i-Azam University (2014-15)
- **Member** M. Phil Admission Committee (2013), M.Sc admission committee (2015,2017), BS admission committee (2018).
- **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,
- Scientific Coordinator, Pakistan French Alumina Network (PFAN), Under French embassy Islamabad (2014-2015).
- **Member board of Directors,** Pakistan French Alumina Network (PFAN), Under French embassy Islamabad (2017-2019).
- **President:** Pakistan French Alumina Network (PFAN), Under French embassy Islamabad (2017-2018).

Research Projects:

- Designing and development of biosensor for Rapid dectecion of aflatoxins contamination in Milk and other Foods (Co-PI). Project No. 9848. Approved. 2018.
- 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. HEC- 2018-2020. (PI.) 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 (PSF-2017-2019). (PI). 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) starting date: August 2011.
- Effect of *Lactobacillus* spp., based inoculant level on microbial diversity and nutritional value of corn silage. (0.055 Million) URF. 2013.

Genomic data submission:

- **Bio Project ID: PRJNA311247** Draft Genome Sequence of *Enterococcus mundtii* QAUEM2808
- Nucleotides Sequences Accession Numbers submitted to NCBI gene bank

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 PUBLICATIONS

Publications in Scientific Journals

- 1. Hafiz Arbab Sakandar, Stan Kubow, Behnam Azadi,Umar Masood 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. doi: 10.3389/fmicb.2018.03312 (IF:4.0)
- 2. <u>Imran, M.,</u> 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)
- **3.** Hafiz Arbab Sakandar, **M. Imran.** Sourdough Bread a Contemporary Cereal Fermented Product: A Review. Journal of Food Processing and Preservtion. JFPP-10-18-1211.R1(Accepted: 2018). (IF:1.51).
- **4.** Abu bakar Muhammad, **M. Imran.** Purification, Characterization and Thermodynamic Assessment of an Alkaline Protease by *Geotrichum candidum* of Dairy Origin. Iranian Journal of Biotechnology. IJB-1709-2042 (**Accepted: 2018).** (IF:0.338)
- **5.** 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.
- **6.** Imrana Amir, amina zuberi, **M. Imran,** Sana Ullah. **2018.** Evaluation of yeast and bacterial based probiotics for early rearing of *Labeo rohita* (Hamilton, 1822). Aquiculture Research. 49 (12): 3856-3863. (IF:1.475). DOI: 10.1111/are.13852.
- 7. Saima Khalid, Noshal Hussain, **M. Imran. 2018**. Detection of Aflatoxigenicity of *Aspergillus flavus* Based on Potential Gene Marker from Food and Feed Samples. Journal of food safety. 38(3). e12448 (IF:1.275).DOI: 10.1111/jfs.12448.
- **8.** Arbab, H. M., Khadija Usman, **M. Imran**. **2018**. Isolation and Characterization of Gluten Degrading *Enterococcus munditii* and *Wickerhanomyces anomalusm* Potential Probiotic Strains from Indigenously Fermented Sourdough. LWT-Food Science and Technology. 91:271-277. (IF: 3.129). (https://doi.org/10.1016/j.lwt.2018.01.023).
- 9. Ifra Ghori, Misbah Tabassum, Tanveer Ahmad, Amina Zuberi and **Muhammad Imran. 2018**. Geotrichum candidum Enhanced the Enterococcus faecium Impact in Improving Physiology, and Health of Labeo rohita (Hamilton, 1822) by Modulating Gut Microbiome under mimic aquaculture conditions. Turkish Journal of Fisheries and Aquatic Sciences 18:1255-1267. (IF:0.482) DOI: 10.4194/1303-2712-v18_11_02.
 - http://www.trjfas.org/uploads/pdf 1269.pdf.
- 10. Shakira Ghazanfar, Maria Qubtia, Iftikhar Ahmed, Fariha Hasan, Muhammad Iqbal Anjum and Muhammad Imran. 2018. Effect of indigenously isolated *Saccharomyces cerevisiae* probiotics on milk production, nutrient digestibility, blood chemistry and fecal microbiota in lactating dairy cows. Journal of Animal and Plant Sciences 28 (2)

- **11.** Khalid, Saima; Baccile, Joshua; Spraker, Joseph; Tannous, Joanna; <u>Muhammad Imran</u>, Schroeder, Frank; Keller, Nancy **2018**. NRPS-derived Isoquinolines and Lipopetides Mediate Antagonism between Plant Pathogenic Fungi and Bacteria. *ACS Chem. Biol.* 13 (1). (IF:4.592).
- **12.** Muhammad Ibrar, Amina. Zuberi,, Imrana Amir, <u>Muhammad Imran</u>, Zohaib Noor **2017** Effect of Probiotic *Geotrichum candidum* on Early Rearing of *Labeo rohita* (Hamilton, 1822). Turkish Journal of Fisheries and Aquatic Sciences *17*: *1263-1270*. **(IF :0.482)**
- 13. Abubakar Muhammad, S.A.I Bokhari, Naeem Ali, Hamid Mukhtar, Ali Nawaz and <u>M. Imran</u>. 2017. Purification and characterization of extracellular lipase by *Geotrichum candidum* of dairy origin. *Pak. J. Bot.*, 49(2): 757-761. (IF:0.94)
- **14.** Rabia Liaquat, A. Jamal, I. Tauseef, Z. Qureshi, U. Farooq, **Muhammad Imran**, M. I. Ali. 2017. Characterizing Bacterial Consortia from an Anaerobic Digester Treating Organic Waste for Biogas Production. Polish Journal of Environmental Studies 26 (2) (**IF :1.120**)
- **15.** Yasmin, N., R. Javed, S. Hameed, S. Ahmed, M. Imran 2017. Inactivation of Food borne Pathogens on Food packaging and in Cow Milk by Exposure of Nd: YAG Laser Canadian Journal of Physics 95(7): 662-669, (IF:0.724)
- **16.** Farah, N, Mehdi, A, Soomro, S.I, Soomro, N. I., Tareb, R, Desmasures N. Vernoux JP, Bakhtiar SM, M. Imran. **2016**. Draft Genome Sequence of *Enterococcus mundtii* QAUEM2808, Isolated from Dahi, a Fermented Milk Product. Genome Announcements 4(5)
- 17. Bushra Jamil, Rashda Abbasi, Shahid Abbasi, <u>Muhammad Imran</u>, Siffat, U. Khan, Ayesha Ihsan, Sundus Javed, Habib Bokhari and Muhammad Imran 2016. Encapsulation of cardamom essential oil in chitosan nano-composites: In-vitro efficacy on antibiotic resistant bacterial pathogens and cytotoxicity studies. Frontiers in Microbiology 7; 1580. doi: 10.3389/fmicb.2016.01580. (IF: 4.019) (O1-Microbiology)
- **18.** Madeeha Ilyas Rana, Aamer Ikram, <u>Muhammad Imran</u>. 2016. A preliminary insight of correlation between fecal microbial diversity and blood lipid profile. International Journal of Food Science and Nutrition 29:1-7 (IF: 1.76). (Q3-Food Science and technology/Q4-Nutrition and Dietetics)
- 19. Hajra Hanif · Awais Anjum · Naeem Ali · Asif Jamal · <u>Muhammad Imran</u>, Bashir Ahmad Muhammad Ishtiaq Ali. 2015. Isolation and Antibiogram of Clostridium tetani from Clinically Diagnosed Tetanus Patients. The American journal of tropical medicine and hygiene 93:752-756. (IF 2.564) (O1-tropical medicine/ O2-Public, environmental and occupational health)
- **20.** Sakandar HA, Imran M, Huma N, Ahmad S, Aslam HKW (2014) Effects of Polymerized Whey Proteins Isolates on the Quality of Stirred Yoghurt made from Camel Milk. J Food Process Technol 5:350. doi: 10.4172/2157-7110.1000350.
- **21.** Ibrahim, T, A. Bano, H. J. Chaudhary, M. Imran, Z. Mehmood, S. W. Hassan, N. Muhammad, S. A. H. Naqvi, M. F. H. Munis. 2014. Evaluation of Different Inoculation Methods for the Induction of Spot Blotch Caused by *Helminthosporium sativum* in Wheat. Philippine Journal of Crop Science (PJCS) 39 (3):1-11 (IF: 0.211) (*Q4-Agronomy*)
- **22.** Muhammad, A.B.; Zaffar Mehmood; Munis, M. F. H.; Chaudhary, H. J.; T. Masud; Mahmood, T.; Haider, M. I.; <u>Muhammad Imran</u> 2014. Comparative biodiesel production potential of food waste oils as renewable energy source. Asian Journal of Chemistry 26 (2) -527-530. (**IF 0.14**) (*O4-Chemistry, Multidisciplinary*)
 - http://www.cabdirect.org/abstracts/20143089549.html;jsessionid=40A153667A5AE1567F96637EF5C5F4EC
- **23.** <u>Imran M</u>, Bre J. M, Guéguen M., Vernoux J-P, Desmasures N. **2013.** Reduced growth of *Listeria monocytogenes* in two model cheese microcosms is not associated with individual microbial strains. **Food microbiology** 33, 30-39 (**IF:4.09**), (*Q1-Food Science and technology, Q1-Biotechnology and applied microbiology, Q2-Microbiology)*

http://www.ncbi.nlm.nih.gov/pubmed/23122498

24. Talat M, T. Masud, <u>M. Imran</u>, Iftikhar Ahmed, N. Khalid. **2013.** Selection and characterisation of probiotic culture of *Streptococcus thermophilus* from dahi. **International Journal of Food Science and Nutrition** ;64(4):494-501 (**IF: 1.52**). (Q3-Food Science and technology/Q4-Nutrition and Dietetics)

http://www.ncbi.nlm.nih.gov/pubmed/23216305

25. <u>Imran, M.</u>, Vernoux, J-P., Ledauphin, J., Bernay, B. & Desmasures N. (2012). Study of hurdle effect of model microbial communities exhibiting antilisterial activity in a cheese microcosm. Renc. Rech. Ruminants (19) 245-247.

http://www.journees3r.fr/spip.php?article3424

- **26.** Javed A., T. Masud, Q. ul Ain, <u>M. Imran</u>, S. Maqsood. **2011**. Enterocins of *Enterococcus faecium*, emerging natural food preservatives. A review. **Annals of Microbiology**, 61 (4), 699-708, (**IF:** 1.549)- (*Q4- Biotechnology & Applied Microbiology/ Q4 Microbiology*). http://www.springerlink.com/content/k4322047h230163v/
- 27. Sandra Larpin, <u>Muhammad Imran</u>, Catherine Bonaïti, Nagamani Bora, Roberto Gelsomino, Stefanie Goerges, Françoise Irlinger, Michael Goodfellow, Alan C. Ward, Marc Vancanneyt, Jean Swings, Siegfried Scherer, Micheline Guéguen and Nathalie Desmasures. (2011) Surface microbial consortia from Livarot, a French smear ripened cheese. Canadian journal of microbiology. 57, 651-660 (IF: 1.243). (Q4- Biotechnology & Applied Microbiology) Q4 Microbiology)

PubMed link: http://www.ncbi.nlm.nih.gov/pubmed/21815832?dopt=AbstractPlus

- 28. <u>Imran M</u>, Desmasures N, Vernoux J-P. (2010) From undefined read smear cheese consortia to model communities having similar antilisterial activity on a micro-cheese (agar) matrix. Food Microbiology 27 1095-1103 (IF: 4.6). (*Q1- Food Science and technology, Q1-Biotechnology and applied microbiology, Q2-Microbiology*) http://www.ncbi.nlm.nih.gov/pubmed/20832690
- **29.** Zaheer Ahmed, Yanping Wang, Qiaoling Cheng and M. Imran (2010) *Lactobacillus acidophilus* bacteriocin, from production to their application: An overview. African Journal of Biotechnology. 9(20) 2843-2850 (IF: 0.573). (*Q4-Biotechnology and applied microbiology*) http://www.academicjournals.org/AJB/abstracts/abs2010/17May/Ahmed%20et%20al.htm
- **30.** Maqsood' S., F. Hasan, T. Masud, <u>M. Imran</u>. 2008. Preliminary characterisation of Bacteriocin produced by *Lactobacillus acidophilus* TS1 isolated from traditional Dahi. Annals of Microbiology, 58 (4) 1-6 (**IF: 1.407**) (*Q4- Biotechnology & Applied Microbiology/ Q4 Microbiology*).

http://www.springerlink.com/content/8r8p3700nh161615/

Book chapter and Conference Publications

- 1. Muhammad Hussein Alu'datt, M.Imran, Neveen Mustafa and Wafa Ayadi. 2018 Fermented Food-Derived Bioactive Compounds with Anticarcinogenic Properties: Fermented Royal Jelly As a Novel Source for Compounds with Health Benefits in In book: Anticancer plants: Properties and Application Publisher: Springer Nature Singapore Pte Ltd.
- 2. Shakira Ghazanfar, Nauman Khalid, Iftikhar Ahmed and <u>Muhammad Imran</u>. 2017. Probiotic Yeast: Mode of Action and its Effects on Ruminant Nutrition. *in* "Yeast Industrial Applications", ISBN 978-953-51-5782-3. In Tech Open, London, UK.

- 3. Mazhar Rafique..... M. Imran, Hassan Javed. 2015. Bacterial biofilm formation and its role against agricultural pathogens. In book: The Battle Against Microbial Pathogens: Basic Science, Technological Advances and Educational Programs., Chapter: Bacterial biofilm formation and its role against agricultural pathogens, Publisher: Formatex Research Center, Spain.
- 4. Desmasures, N., <u>Imran, M.</u>, Cretenet, M., **2015**. Structure—Function Relationships of Microbial Communities, in: Bora, N., Dodd, C., Desmasures, N. (Eds.), Diversity, Dynamics and Functional Role of Actinomycetes on European Smear Ripened Cheeses. Springer International Publishing, pp. 167-184.

http://link.springer.com/chapter/10.1007%2F978-3-319-10464-5 7

5. <u>Imran, M.</u>, Desmasures, N., **2015**. Safety and Quality Aspects of Smear Ripened Cheeses, in: Bora, N., Dodd, C., Desmasures, N. (Eds.), Diversity, Dynamics and Functional Role of Actinomycetes on European Smear Ripened Cheeses. Springer International Publishing, pp. 199-215.

http://link.springer.com/chapter/10.1007/978-3-319-10464-5 9

6. <u>Imran M.</u>, Desmasures N., Vernoux J-P. "Fermented food ecosystems having complex microbial communities and functional properties" *in book titled*: Fermentation: Effects on Food Properties, *In series*: Chemical & Functional Properties of Food Components. **April 10, 2012**, CRC Press - 399 Pages.

http://www.crcpress.com/product/isbn/9781439853344;jsessionid=hmzpaqm3LGw65h4Gr5iVwQ**

Research supervision

M.Phil. Completed: 36 MPhil under supervision: 07

Ph.D. under supervision: 06, Co-supervision: 01

Ph. D Supervision

Student Name	Year	Thesis Titles		
Farah Nawaz	2017	Genomic and Culture based Microbiological Characterization of Fermented Milk		
		Product Dahi and its Impact on Product Quality, Nutrition and Safety		
Saima Khalid	2018	Study of Aflatoxigenicity and Biocontrol of aflatoxigenic Aspergillus flavus and Impact of Imizoquins on its Physiology		

M.Phil Supervision

S/No.	Student Name	Year	Thesis Titles
1.	Aqib Javed	2018	Evaluation of safety and blood lipid homeostasis potential of indigenous probiotics in mice model.
2.	Shehwar Malik	2018	Impact of morphotypes and culturing conditions on extracellular enzymatic activity of <i>Geotrichum candidum</i> .
3.	Muhammad Junaid Alam	2018	Isolation and characterization of anti-Aspergillus compound produced by <i>Geotrichum candidum</i> QAUGC01
4.	Samia Ali	2018	Study of the impact of <i>Geotrichum candidum</i> on improvement in physiochemical and sensory attributes of ripened soft cheese
5.	Almira Ikram	2018	Determination of Antimicrobial Activity of Dahi Against Selected Foodborne Pathogens
6.	Maimoona Sarwar	2018	Detection of Aflatoxins Contamination in Indigenous Fermented Milk Product Dahi.

7.	Ghazal Ali	2018	Evaluation of Gut Microbiota of Drug Addicts and Depression Patients
8.	Muhammad Usman Khan	2017	Incidence of Shiga toxin producing <i>Escherichia coli</i> in Fermented Milk product Dahi
9.	Ifrah Kiren	2017	Study of the Impact of <i>Geotrichum candidum</i> on lipid composition of fermented milk
10.	Marva Imtiaz	2017	Evaluation of Folate (Vitamin B9) Biosynthesis by <i>Enterococcus mundtii</i> QAUEM2808
11.	Mashal Fatima	2017	Evaluation of probiotic potential of bacterial isolates from human gastrointestinal tract
12.	Mr. Muhammad Nadeem Khan	2017	Impact of energy restriction (Ramadan fasting) on human male physiology and gut microbiome
13.	Ms. Saroosh Shar Siddiqui	2017	Evaluation of Geotrichum candidum proteome and its impact on nutrition and quality of fermented milk
14.	Mr.Shoaib Rafique	2017	Assessment of the natural antagonistic potential of Dahi against common foodborne pathogens
15.	Ms.Sidra Irshad	2017	Study of the impact of energy restriction (Ramadan fasting) on human female physiology and gut microbiome
16.	Ms. Afia Chaudhary	2016	Study of the Impact of <i>Geotrichum candidum</i> QAUGC01 Feeding on Dairy Cattle Gut Microbiology.
17.	Ms. Sumyia Jamil	2016	Folate (Vitamin B9) Biosynthesis by Lactic Acid Bacteria in Dairy Ecosystem
18.	Ms. Misbah Tabassam	2016	Impact of Potential Probiotic Microbiota on Physiology and Gut Microbiology of Labeo rohita
19.	Ms. Khadija usman	2016	Isolation and Characterization of Gluten Degrading Microbiota from Sourdough
20.	Ms. Rabia Javed	2016	Evaluation of Nd: YAG laser for photo inactivation of selected food borne Pathogens
21.	Ms. Madeeha Ilyas Rana	2016	An in vitro study of the cholesterol lowering potential of microbial isolates from human gut
22.	Ms. Amna Mehndi	2016	Study of histidine and tyrosine decarboxylation activity of selective lactic acid bacteria
23.	Ms. Asma Mahmood	2016	Screening and characterization of anti-Aspergillus flavus activity of Geothricum candidum QAUGC01 co-cultured with selective microbial isolates.
24.	Ms. Maria Barkaat	2015	Study of the impact of microbial diversity on nutritional and organoleptic quality of indigenous fermented milk product (Dahi)
25.	Ms. Arooba Sarwar	2015	Preliminary screening of selective microbial strains isolated from rumen gut and fermented food for probiotic potential
26.	Mr. Tanveer Ahmad	2015	Evaluation of the impact of potential probiotic microorganisms on gut microbiology, growth parameters and health of rohu (Labeo rohita)
27.	Ms. Maria Saeed	2015	Screening and optimization of anti-Aspergillus flavus activity of Geotrichum candidum and lactic acid bacteria
28.	Ms. Sadia Mehmood	2015	Identification and technological characterization of lactic acid bacteria for potential application in milk fermentation
29.	Ms. Sanam Islam	2015	Risk assessment of pathogens in vegetables irrigated with sewage water, tap water and wetland treated water
30.	Ms. Asad ul Naz	2014	Screening and characterization of indigenous microbial strains for probiotic potential.

31.	Ma Nashal		
	Mr. Noshal Hussain	2014	Study of incidence and Aflatoxigenic potential of Aspergillus <i>flavus</i> in cattle feed, water and milk samples
32.	Mr. Khurram Khalid	2014	Study of dengue virus incidence among all age groups by using immuno-assay and RT-PCR
33.	Ms. Saima Riaz	2014	Effect of co-inoculation of lactic acid bacteria and <i>Geotrichum candidum</i> on safety and quality improvement of fermented milk
34.	Mr. Abu Bakar	2014	Production, purification and characterization of protease and lipase by Geotrichum candidum for food industry
35.	Ms. Maria Qubtia	2014	Microbiological characterization of dairy cattle fecal material as potential source of probiotics
36.	Mr. Muhammad Rafiq Khan	2013	Study of antimicrobial activity of <i>Enterococcus faecium</i> isolated from indigenous fermented milk.
37.	Ms. Momeena Abbassi	2013	Effect of co-inoculation of <i>Geotrichum candidum</i> and <i>Pediococcus acidilactici</i> with commercial starters on yoghurt quality.
38.	Mr. Muhammad Yasir Khan	2013	Evaluation of antimicrobial activity of selected herbal oils from Quetta valley against food borne pathogens.
39.	Mr. Majid Majeed	2013	Biodecolorization of Reactive S3R Orange azo dye by a cadmium resistant bacterial strain isolated from textile effluents
40.	Ms. Smayia Sharif	2013	Impact of commercial inoculant on microbiological and nutritional quality of corn silage
41.	Ms. Saima Khalid	2013	Evaluation of microbial potential to biocontrol aflatoxigenic Aspergillus flavus.
42.	Ms. Samra Asghar	2013	Incidence of foodborne pathogens in indigenous fermented milk
43.	Manzoor Khan	2013	Effect of preliminary characterized bacteria and yeasts strains on physiology and gut microbiology of grass carp.
44.	Mr. Shabbir Ahmad Khan	2012	Microbiological Evaluation of Indigenous Fermented Milk Product (Dahi) Using Conventional and Modern Techniques
45.	Mr. Waqas Ahmad Khan	2012	Microbiological Study of Raw and Pasteurized Milk by Culture Dependent and Independent Approaches
46.	Ms. Tahreem Naz	2012	Microbiological surveillance and antibiotic susceptibility pattern of bacterial contamination in different wards of hospital.
47.	Ms. Ambreen	2012	Bacteremia of neonates in Peshawar hospitals.

Conferences Abstracts (Oral and poster presentations)

- 1. **Imran. M.** Significance of Popular Scientific Communication in Bridging the Gap Between Science and Society: 4th Invention to Innovation Summit 22-23 November, 2018. CECOS, University, Peshawar.
- 2. 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.
- 3. Saima Khalid, Maria Saeed, Asma Mahmood and **Muhammad 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.

- 4. 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
- 5. **Imran, M**. Application of Metaproteomic to Study the Microbial Functionalities in Natural Ecosystem. Proteomics International conference of emerging trends in Plant Proteomics, 2-4th October, 2017. Quaid-i-Azam University Islamabad Pakistan.
- 6. **Imran. M**. Antibiotics vs Probiotics: Mechanism of Action. Probiotic research to Production. 'Iran-Pakistan First International Training Workshop. 27-29th March 2017. Forman Christian College (A Chartered University), Lahore Pakistan.
- 7. **Imran**. M. Role of Probiotics in Nutritional Security. 7-8th March 2017. International Conference Food and Nutrition Security. GC University Faisalabad, Faisalabad
- 8. **Imran. M**. Bulk production technology of indigenous Lactic-starters for dairy industry. *in Session*: Biotechnology; Process & Application for Industry" 2nd Invention to Innovation Summit 16 November, 2016. University of technology Peshawar.
- 9. Nadeem M., Farah N, **M. Imran**, S. M. Bakhtiar. 2016. Exploring the safety and probiotic potential of *Enterococcus mundtii* QAUEM2808. 4th International Conference on Biological and Computer Sciences December 17, 2016. Capital university of Science and technology Islamabad.
- 10. Saroosh Sahar Siddiqi, Shahid Zaman, M. Imran. 2016. Evaluation of Geothricum candidumQAUGC01 proteome to explore its technological properties. 4th International Conference On Biological and Computer Sciences December 17, 2016. Capital university of Science and technology Islamabad.
- 11. 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.
- 12. Shakira Ghazanfar, M. I. Anjum, F. Hassan, I. Ahmed, M. Qbtiya, M. Afzal and M. Imran. 2015. Dietary Supplementation of *Saccharomyces Cerevisiae* on Production and Health Status in Lactating Dairy Cattle. *In* "3rd International workshop on Dairy Science Park, pp 65, November 16-18, 2015, Peshaware-Pakistan
- 13. Siddiqui SS, Zeb S, <u>Imran M</u>, Bakhtiar SM, In sight to genome shedding in Streptococcus thermophilus in response to environmental conditions. 3rd International Conference on emerging Trends in Bioinformatics and Biosciences (ICETBB) CUST, Islamabad. October 2015.
- 14. Khan M. N, <u>Imran m</u>, Bakhtiar SM. Re-annotation of Lactococcus lactis genome. 3rd International Conference on emerging Trends in Bioinformatics and Biosciences (ICETBB) CUST, Islamabad. October 2015
- 15. Farhan Ahmad · Hafiz Arbab Sakandar · Khansa Haque · S. Umair Jamil · Asif Jamal · M. Ishtiaq Ali · M. Imran · Naeem Ali. 2015. Onion (*Allium Cepa*) as functional food to Ameliorate Cancer. 1st International Nastaran Cancer Symposium-, At Mashhad, Iran,
- 16. Asad Ullah Naz, M. Rafique, Farah N, <u>M. Imran.</u> 2015. Evaluation Antagonistic and Probiotic Potential of Dairy Origin *Enterococcus Faecium*. International Human Nutrition Conference and Expo. Lahore.
- 17. Farhan Ahmad · Naeem Ali · Asif Jamal · Hafiz Arbab Sakandar · Khansa Haque · <u>M. Imran</u>. Biocolors an alternative to synthetic colors: a novel tool in food industry 10th Biennial International conference of Pakistan Society for Microbiology. Exploring Microbes for future Endeavors. March 25-28, 2015. Department of Microbiology and Molecular Genetics, University of Punjab, Lahore.
- 18. 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.
- 19. Noor ul Huda, Amina Zuberi, Baber Khan, M. Imran, Saeeda Raza. Strain base comparative effects of Dietary Probiotic *Geotrichum candidum* on digestive enzymes and body composition of *Ctenopharyngodon idella* and *Tor putitora*. 5th International Fisheries symposium, 24-25 February 2015, Pearl Continental Hotel, Lahore Pakistan.

- 20. **Organise** session « **Biotechnologies for Industrial Needs** » in 3rd innovation to invention summit 2014. Punjab University Lahore 19-20 March, 2014.
- 21. http://www.irp.edu.pk/wp-content/uploads/2014/03/detailed-program-summit-14.pdf
- 22. Saima Khalid and **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**).
- 23. Hafiz Arbab Sikandar, Muhammad Imran, Hafiz Khuram Waseem Aslam, Muhammad Asim, Azam Shakeel and Muhammad Shoaib Biodegradable Coating of Minimally Processed Melon: A New Tool For Food Preservation. National Conference on "Innovative Technologies and Sustainable Development in Agriculture" August 19-22, 2014 Agricultural University Teachers Association (AUTA) The University of Agriculture Peshawar-Pakistan at Bara Gali—Pakistan.
- 24. Noor ul Huda—M. Imran and Amina Zubari, 2014 comparative effect of three strains of dietary probiotics *Geotrichum candidum* on growth performance and immunity of *Ctenopharyngodon idella* and *Tor Putitora*, 34th Pakistan congress of Zoology, 25-27 Feb 2014. Bahauddin Zakariya University Multan-Pakistan.
- 25. Huda S. Kifayyat Ullah, S. Ahmed, Manzoor Khan, M. Imran and Amina Zubari. 2014. Effect of different strains of dietary probiotics on digestive enzymes on Juvenil Grass carp (*Ctenopharyngodon idella*). 34th Pakistan congress of Zoology, 25-27 Feb 2014. Bahauddin Zakariya University Multan-Pakistan.
- 26. Momina Abbasi, Abu bakar Muhammad, Saima Riaz, Farah Nawaz and M. Imran. 2013. Impact of mix culture of Geotrichum candidum and lactic acid bacteria on yoghurt keeping quality. International Conference on Emerging Issues in Nutrition & Food safety, 21-23 Oct. 2013, University of Agriculture Faisalabad -Pakistan
- 27. Abu bakar Muhammad and M. Imran. 2013. *Geotrichum candidum* as a potential proteolytic microbe for food industry. International Conference on Emerging Issues in Nutrition & Food safety, 21-23 Oct. 2013, University of Agriculture Faisalabad –Pakistan.
- 28. Smayia Sharif, Nafeesa Qudsia Hanif, Shakira Ghazanfar, M. Imran, 2013. Effect of inoculant concentration on safety and nutritional quality of corn silage. International Conference, Application of Molecular Biology in Medicine and Agriculture, August 20-22, 2013. National Centre for Physics, Quaid-i-Azam University, Islamabad
- 29. <u>Imran, M.,</u> K. Saima, S. Ahmed, N. Desmasures, Impact of Microbial Diversity and Interactions on the Safety of Fermented Foods. 6th Annual World Congress of Industrial Biotechnology (IBIO-2013) Nanjing China 25-27 April 2013 (Oral Presentation).
- 30. <u>Imran M.</u> Starter Culture An Import Substitute for Dairy and Health Sector. <u>Invention to Innovation Summit 2013</u>, organized by Institute of Research Promotion (IPR) in collaboration with PSF and PCST. 9-10 April, 2013. University of the Punjab Lahore Pakistan.
- 31. Abu Bakar M, Ikram-Ul-Haq, U. Hameed, S. Ahmed, M. I., Ali and <u>M. Imran.</u> Evaluation of *cladophora* sp. Oil for the production of biodiesel as renewable energy source. 33rd Pakistan Congress of Zoology. 2-4 April 2013. Islamabad (*Oral presentation*).
- 32. <u>Imran, M.,</u> S. Ahmed, J-P Vernoux, and N. Desmasures. Evaluation of antagonistic interaction in a cheese Microcosm by using metaproteomic and metabolomics approaches. *2nd International conference future perspectives of food processing industry in Pakistan*. December 11-12, 2012. Department of food Science, Govt. college university Faisalabad, Pakistan (Key note speaker).
- 33. Abu Bakar Muhammad, Ifra Ghori, Farah Nawaz, M. Imran. Future Challenges for Pakistani Food Industry Regarding Microbial safety. 2nd International conference future perspectives of food processing industry in Pakistan. December 11-12, 2012. Department of food Science, Govt. college university Faisalabad, Pakistan (Poster presentation, 3rd Price).
- 34. Waqas, A., S. Ahmed, M. Imran High incidence and antibiotic resistance of pathogenic bacteria in raw milk. 1st National Symposium on "New Horizons of Microbiology" Steps of Microbes on the Ladder of Life, November 7-8, 2012. Federal Urdu University of Arts Science and Technology, Karachi, Pakistan (Oral presentation).
- 35. <u>Imran M.</u>, Desmasures N., Ahmad S., Hameed A. Vernoux J-P. Characterization of antilisterial activity of model microbial community in a cheese microcosm. <u>International conference on emerging issues in food safety</u>. 14-16th November, 2011. National institute of Food Science and technology, Faisalabad-Pakistan (Invited presentation).

- 36. <u>Imran M.</u>, 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)
- 37. <u>Imran M</u>, 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)
- 38. <u>Imran M</u>, Desmasures N, Vernoux J-P. 2009. Reconstitution of simple "smear like" microbial consortia active against Listeria monocytogenes in cheese agar 4th IDF (International Dairy Federation) Dairy Science and Technology Week 20-24 April 2009. Rennes-France (Poster presentation)
- 39. 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)
- 40. <u>Imran M</u>, 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)
- 41. 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)
- 42. <u>Imran M</u>, 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
- **43.** Wang Y, Feng Wu, Z. Ahmed, Li Chao M. Imran. 2007. Isolation, Identification and selection of high EPS producing strain of Lactic acid bacteria from Kefir. 3rd international symposium on Lactic Acid Bacteria and Health, 15-16 Oct, 2007 Shanghai China (Poster presentation)
- 44. Ahmed, Z. Wang Y, A. H Soomro, <u>M. Imran</u>. 2007. Detection and partial characterization of a Novel Board Inhibitory Spectrum bacteriocin Produce by *L. acidophilus* ID3 isolated from Pakistani Dairy product, Dahi. 3rd International symposium on Lactic Acid Bacteria and Health, 15-16 Oct, 2007 Shanghai China

COURSES AND TRAINING PROGRAMMES ATTENDED

- 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 at Quaid-i-Azam University Islamabad-Pakistan.
- Training workshop on communication skills 19-21 September 2012 by HEC at Quaid-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: Internship at *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.

Expertise in Techniques

- MALDI- TOF/TOF (Mass spectrometry, Mascot analysis)
- Real time PCR (RT-PCR/Q PCR/classic PCR)
- 2D Gel Electrophoresis classic and 2 DIGE, SDS PAGE and Agarose Gel Electrophoresis
- **Microscopy** (simple, epiflouresence, Electron microscopy)
- HPLC (High Pressure Liquid Chromatography), GC (Gas Chromatography/GC-MS/MS)

MEMBERSHIP

- 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.

CO-CURRICULAR ACTIVITIES

Tourism, Cricket played as team captain during schooling, Tennis, Foot ball, Hiking, Participated in debates and performed as compare.

Motivation

To enhance my knowledge in the field of food biotechnology/molecular microbiology and nutrition so that I could be in better position to serve the humanity regard this most crucial aspect of life.