

Curriculum Vitae

Dr. Muhammad Shafique



Faculty Position: Associate Professor (BPS-20)
Centre of Excellence in Molecular Biology, University of the Punjab Lahore Pakistan.

Field of Interest: Molecular Biology, Forensic Genetics, forensic case work analysis of all types of criminal cases, populations genetics, STR multiplex development, forensic DNA phenotyping, new emerging technologies for human identification.

Postal Address: Centre of Excellence in Molecular Biology,
University of the Punjab, 87-West Canal Bank Road,
Thokar Niaz Baig, Lahore-53700, Pakistan.

Date of Birth: March 15, 1979

Marital Status: Married

Tel: +92 333 6148635

E-mail: shafique@cemb.edu.pk

E-mail: mshaf86@hotmail.com

Education	<p>PhD (2015) Molecular Biology Development of New STR Multiplex System for the Analysis of Degraded and Non-Degraded Forensic Biological Evidence Simultaneously. CEMB, University of the Punjab Lahore</p> <p>M. Phil. (2004) Molecular Biology Y chromosome STRs analysis. CEMB, University of the Punjab Lahore.</p>
International/ National Trainings	<ol style="list-style-type: none">1. A Training Course on DNA Short Tandem Repeat (STR) Analysis Using ABI 310 Genetic Analyzer from May 15, 2006-Nov. 10, 2006 at Strand Analytical Laboratories, Indianapolis, Indiana, USA.2. '06 Technology Tour sponsored by Promega Corporation June 15, 2006 Chicago, Illinois, USA.3. A workshop on Advanced Topics in Statistics October 9, 2006 sponsored by Promega Corporation at Nashville, Tennessee, USA.4. Medical Transcription training through COMSATS Institute of Information and Technology launched by Government of Pakistan

4. Sajid, A., **Shafique, M.**, Shahzad, M., Shahid, A.A., (2019). Fingerprint patterns and ridge density variations in Pakistani population: A comparative Study. *Anthropologie: International Journal of Human Diversity and Evolution*. 59(1), Pp1- (<https://doi.org/10.26720/anthro.19.11.13.1>). (**IF= 0.34**).
5. Aslam, M.A., Hussain, M., Khan, K. Zahra, F.T., **Shafique, M.**, Javeed, S. (2019). Haplotype diversity of 17 Y-STRs in Sheikh population of Punjab. *Int J Legal Med*. **134**,1325–1326. <https://doi.org/10.1007/s00414-019-02202-1>. (**IF= 2. 222**)
6. Perveen, R., Shahid, A. A., **Shafique, M.**, Shehzad, M., & Akram, M. (2019). Kashmiris phylogenetic depictions through uniparental and biparental genetic markers. *International Journal of Legal Medicine*, **134**, 1311–1312. (<https://doi.org/10.1007/s00414-019-02082-5>). (**IF= 2. 222**)
7. Saleem, S., Shahid, A. A., **Shafique, M.**, Rubab, A., Javed, F., & Husnain, T. (2019). Phylogenetic analysis and haplotype diversity in Christian residents of Lahore, Pakistan, using 17 Y-chromosomal STR loci. *International Journal of Legal Medicine*, **134**, 521–522. (<https://doi.org/10.1007/s00414-019-02030-3>). (**IF= 2. 222**)
8. Shahzad, M., Hussain, M., **Shafique, M.**, Perveen, R., Sheikh, N. (2019). Population genetic data of 30 insertion–deletion markers in Punjabi population of Pakistan. *International Journal of Legal Medicine*, **134**, 511–512. (<https://doi.org/10.1007/s00414-019-02029-w>). (**IF= 2. 222**)
9. Javed, F., Sumbal, S., **Shafique, M.**, Shahid, A. A., Shahzadi, A., Rani, N., Javid, H., Javed, M., Gillani, N., Husnain, T. (2018). Male individualization using 12 rapidly mutating Y-STRs in Araein ethnic group and shared paternal lineage of Pakistani population. *International Journal of Legal Medicine*. 132:1621–1624. (**IF= 2.09**)
10. Perveen, R., Shahid, A. A., **Shafique, M.**, Shahzad, M., & Husnain, T. (2017). Genetic variations of 15 autosomal and 17 Y-STR markers in Sindhi population of Pakistan. *International Journal of Legal Medicine*, 131:1239–1240. (**IF= 2.382**)
11. **Shafique, M.**, Shahzad, M. S., Rahman, Z., Shan, M. A., Perveen, R., Shahzad, M., Hussain, M., Shahid, A.A., & Husnain, T. (2016). Development of new PCR multiplex system by the simultaneous detection of 10 miniSTRs, SE33, Penta E, Penta D, and four Y-STRs. *International Journal of Legal Medicine*, 130(6), 1409-1419. (**IF=2.382**)
12. Shan, M. A., Hussain, M., **Shafique, M.**, Shahzad, M., Perveen, R., & Idrees, M. (2016). Genetic distribution of 15 autosomal STR markers in the Punjabi population of Pakistan. *International Journal of Legal Medicine*, 130(6), 1487-1488. (**IF= 2.382**)
13. **Shafique, M.**, Hussain, M., Shan, M. A., Shahzad, M., Hussain, S., Hussain, N., Ehsan, F., Perveen, R., Iqbal, M. (2015). Genetic Diversity of 15 autosomal STR loci in the population of Southern Punjab Pakistan. *Forensic Science International: Genetics*, 19, e1-e2. (**IF= 4.988**)
14. **Shafique, M.**, Shahzad, M. S., Perveen, U., Parveen, R., Ali, A., Hussain, M., Shahid, A.A., Rehman, Z., & Husnain, T. (2015). Allele frequency

	<p>distribution of 10 MiniSTRs in the Pashtun population of Pakistan. <i>International journal of legal medicine</i>, 129(3), 467-468.(IF= 2.862)</p> <p>15. Shafique, M., Shahzad, M. S., Shan, M. A., Ali, A., Rahman, Z., & Husnain, T. (2015). Genetic polymorphism of ten MiniSTR loci in the population of Punjab Pakistan for forensic application. <i>International journal of legal medicine</i>, 129(5), 937–942. (IF= 2.862)</p> <p>16. Perveen, R., Rahman, Z., Shahzad, M. S., Israr, M., Shafique, M., Shan, M. A., Zar, M.S., Iqbal, M., & Husnain, T. (2014). Y-STR haplotype diversity in Punjabi population of Pakistan. <i>Forensic Science International: Genetics</i>, 9, e20-e21. (IF=4.604)</p> <p>17. Ilyas M., Shahzad M.S., Israr M., Jafri S.S., Shafeeq M., Zar M.S., Ali A1, Rahman Z. and Husnain T. (2012). Genetic population studies on 17 Y-STR loci in Pashtun population of Swat Valley, Pakistan. <i>IALM conference proceedings</i>.</p> <p>18. Malik, F., Kayani, M. A., Ansar, M., Ullah, O., Shafeeq, M., Chohan, S. et al. (2008). Development of 19-plex Y STR System and Polymorphism Studies in Pakistani Population. <i>Academic Journal of Xian</i>, 20(4), 267-273.</p>
<p>Publications National</p>	<p>1. Shahzadi, A., Shafique, M., Shahid, A.A. (2021). Haplotype diversity of 17 Y chromosomal STRs in Jat population of Pakistan. <i>Pakistan journal of Zoology</i>. Pakistan J. Zool., pp 1-2, 2021. DOI: https://dx.doi.org/10.17582/journal.pjz/20210805110806. (IF=0.831).</p> <p>2. Piracha, B. J., Shafique, M., Shahid, A. A., Sajid, A., Javed, F., Shahzadi, A., Shahzad, M., (2020). Forensic Genetic Analysis of 11 Rapidly Mutating Y-STRs (RM-YSTRs) in Sindhi Population of Pakistan. <i>LGUJLS</i>, 4(02), 96-122.</p> <p>3. Atia Bukhari, Naveed Ahmed, Fizza Khan, Muhammad Shafique, Asif Suleman Sahi (2020). Assessment of genetic diversity and genetic characterization of Nili Ravi buffalo breed utilizing microsatellite markers. <i>Adv. Life Sci.</i> 7(4): 277-280.</p> <p>4. Sumbal, Javed, F., Rani, N., Javaid, H., Ali, Q., Shafique, M., Jillani, S.M.N., Sahibzada, K.I. (2017). An insilco approach to analyze epidemiological association between all asian strains of crimean-congo hemorrhagic fever virus accentuating pakistani strains through biostatistical approach to design vaccine. <i>Sci.Int.(Lahore)</i>,29(1),195-202. (IF=1.365)</p> <p>5. Shahzad, M., Shafique, M., Hussain, M., Shan, M. A., Perveen, R., Rehman, Z., & Idrees, M. (2016). Successful DNA Profiling for Identification of burnt Families from their bones using AmpFℓSTR Identifiler$\text{\textcircled{R}}$ Plus Kit. <i>Advancements in Life Sciences</i>, 3(2), 59-62.</p> <p>6. Shan, M. A., Tahira, F., Shafique, M., Hussain, M., Perveen, R., Shahzad, M., Ehsan, F., Shahzad, M. S., Rehman, Z., Ali, Q., and Iqbal, M. (2015) Estimation of different Biochemical Intensities in Drinking water from Eastern Region of Lahore City. <i>Adv.Life.Sci.</i> 2(3).pp:131-134.</p> <p>7. Daud, S., Shahzad, S., Shafique, M., Bhinder, M.A., Niaz, M., Naeem, A., ur Rehman, Z. and Husnain, T. (2014). Optimization and Validation of PCR protocol for three Hypervariable Regions (HVI, HVII and HVIII) in Human Mitochondrial DNA. <i>Advancements in Life Sciences</i>, 1(3), 165-170.</p>

	<ol style="list-style-type: none"> 8. S. Yassir Abbas, Saqib Shahzad, Abdul Qayyum Rao, M. Hashim Raza, F. Arshad, M. Shafique, Ziaur Rahman, A. Ali Shahid, Zahoor Ahmed and S. Riazuddin (2003). Development of STR Multiplex System (D5S818, D7S820 and D18S51) for Forensic Casework. <i>Pak. J. Zoology</i>. Vol. 23:167-174.(IF=0.404) 9. Salam, A., Ali, M., Shafique, M., Azeem, A. and Khan, B.A (2002). Studies on biodiversity in relation to seasonal variations in mixed water of River Ravi and Chenab at Bakarpur, Kabirwala, Punjab, Pakistan. <i>Biologia</i>. 48(1&2).PP123-130. 10. Ali, M., Salam, A., Azeem, A., Shafique, M. and Khan, B.A. (2000). Studies on the effect of seasonal variations on physical and chemical characteristics of mixed water from River Ravi and Chenab at union site in Pakistan. <i>J.Res.Sci</i>.11 (1).11-17.
<p>Abstracts</p>	<ol style="list-style-type: none"> 1. Muhammad Shafique, Yasir Aziz, Muhammad Shahzad, Ahmad Ali Shahid. (2021). Genetic Variation of 22 Autosomal STR Loci in Balochistan Population of Pakistan. 4th international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 23-24, p159. 2. Muhammad Afzal, Muhammad Shafique, Ahmad Ali Shahid. (2021). Genetic Characterization of 22 Autosomal STRs in Gilgit Baltistan Population of Pakistan.. 4th international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 23-24, p142. 3. Muhammad Shafique, Namra Sajid, Muhammad Shahzad, Ahmad Ali Shahid. (2021). Genetic Diversity of 22 Autosomal STR Loci in Khyber Pakhtunkhwa Population of Pakistan. 4th international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 23-24, p141. 4. Iqra Ilyas, Muhammad Shafique, Shahzad Akhtar, Ata ul Haq Shahzad, Yasir Aziz, Ahmed Ali Shahid. (2021). Detection of Trace Explosives Through Raman Spectroscopy and Touch DNA Profiling from Latent Fingerprints. 4th international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 23-24, p55. 5. Abida Shehzadi, Muhammad Shafique, Faqeeha Javed and Ahmad Ali Shahid. (2021). Developmental Validation of New 21-Plex PCR Assay for Forensic Applications. 4th international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 23-24, p42. 6. Ahmad Ali Shahid, Saliha Bashir, Muhammad Shafique. (2021). Phenotypic variations based on pigmented traits and iris features in Pakistani population. Presented to Scientific Conference “Science, Technology and Development of Innovative Technologies”, dedicated to the 30th anniversary of independence of Turkmenistan. Dated June 12-13. P-476. 7. Muhammad Shafique, Abida Shehzadi, Ahmad Ali Shahid. (2021). Development of 21-plex for the simultaneous detection of autosomal, Y AND X-chromosomal STRS. Presented to Scientific Conference “Science, Technology and Development of Innovative Technologies”, dedicated to the 30th anniversary of independence of Turkmenistan. Dated June 12-13. P-474. 8. Sajid, A. Shafique, M. Shahid, A.A. and Hasnain, T. (2019). Prediction of fingerprint patterns through DNA analysis in Pakistani population. Proceeding of International conference on Recent Innovations in Molecular Sciences held at University of the Punjab Lahore Pakistan 6-8 November, 2019. P-184.

	<ol style="list-style-type: none"> 9. Javed, F., Sumbal, S., Shafique, M., Shahid, A. A., Shahzadi, A., Rani, N., Javid, H., Javed, M., Gillani, N., Husnain, T. (2019). Male individualization using 12 rapidly mutating Y-STRs in Araein ethnic group and shared paternal lineage of Pakistani population. Proceeding of International conference on Recent Innovations in Molecular Sciences held at University of the Punjab Lahore Pakistan 6-8 November, 2019. P-175. 10. Shafique, M. Rubab, A. Saleem, S. Shahid, A.A. and Hasnain, T. (2019). Genetic Characterization of 15 Autosomal and 17 Y-STRs in Christian Population of Pakistan. Proceeding of International conference on Recent Innovations in Molecular Sciences held at University of the Punjab Lahore Pakistan 6-8 November, 2019. P-111. 11. Noshaba Rani, Muhammad Shafique, Ahmad Ali Shahid, Fageeha Javed, Sumbal and Tayyab Husnain (2018). Forensic evaluation of 10 CODIS miniSTR loci in Arain Population of Pakistan. <i>Advancements in Life Sciences</i>. (Proceedings of international symposium on advances in Molecular Biology of Plants and Health Sciences, December, 19-21, p12). 12. Sumbal, Muhammad Shafique, Fageeha Javed, Ahmad Ali Shahid and Tayyab Husnain (2017). Individualization of shared paternal lineages by using Twelve Rapidly Mutating Y-STRs. <i>Advancements in Life Sciences</i>. (Proceedings of international symposium on advances in Molecular Biology of Plants and Health Sciences, November, 21-23, p54). 13. Khadija Tahira, Fageeha Javed, Madeeha Javed, Sidra Saleem, Muhammad Shafique and Shah Jahan (2017). Molecular detection of TEM and CTX-M genes in β-lactamase producing Gramnegative rods isolated from clinical specimens of Pakistani population. <i>Advancements in Life Sciences</i>. (Proceedings of international symposium on advances in Molecular Biology of Plants and Health Sciences, November, 21-23, p24). 14. Rukhsana Perveen, Ahmad Ali Shahid, Muhammad Shafique, Muhammad Idrees, Tayyab Husnain. (2016). Genetic Signatures of Y chromosome STRs in Sindhi Population of Pakistan. YHRD-Haploid Markers 2016 update on DNA variation Berlin, May 20-21, p-A24. 15. M. Shafique, M. S. Shahzad, Z. Rahman, A.A. Shahid and T. Husnain (2015) Development of a MiniSTR system for the analysis of highly degraded DNA. <i>Advancements in Life Sciences</i>. (Proceedings of international symposium on advances in Molecular Biology of Plants and Health Sciences, December 29-31, p22). 16. H.A. Riaz, A.A. Shahid, M. Shafique, S.M.N. Jillani and T. Husnain (2015) Genetic association analysis of the MAOA-uVNTR and 5HTTLPR, candidate genes for aggression in maltreated individuals. <i>Advancements in Life Sciences</i>. (Proceedings of international symposium on advances in Molecular Biology of Plants and Health Sciences, December 29-31, p55).
Patents	<ul style="list-style-type: none"> • A patent application No. 172/2015 filed dated 24th March, 2016 entitled “Development a Process of PCR Multiplex System for the Simultaneous Detection of Conventional STRs, MiniSTRs and Y-STRs. • A patent application No. 725/2020 filed dated 27/10/2020 entitled “Development of new 21-plex STR process for the simultaneous detection of autosomal, Y and X-chromosomal markers.
Books	<ul style="list-style-type: none"> • Muhammad Shafique, (2021). Forensic STR analysis of compromised DNA. LAP LAMBERT Academic Publishing. ISBN 978-620-3-92313-1.

**International
Conferences/
Seminars/
Workshops**

1. Participation in virtual event IonWorld 2021 organized by Labroots on October 14, 2021.
2. A paper presented on iris features and participated online in international conference on Science, Technology and development of innovative technologies held by Academy of Sciences of Turkmenistan on June 12-13, 2021.
3. A paper presented on STR multiplex development and participated online in international conference on Science, Technology and development of innovative technologies held by Academy of Sciences of Turkmenistan on June 12-13, 2021.
4. A one day international symposium on development of CKC technology in collaboration with ALEENAH SEED COMPANY Khartoum Sudan held at Centre of Excellence in Molecular Biology, University of the Punjab Lahore on December 15, 2020.
5. A webinar 'Microbiome and biology strain analysis of dairy starter cultures confirmation' on October 8, 2020.
6. A webinar 'Detection techniques and epidemiology studies for SARS-CoV-2 infection' on October 8, 2020.
7. A webinar 'Proquest Ebook central advanced training' on September 23, 2020.
8. A webinar 'Journal hosting in scopus confirmation' on August 25, 2020.
9. A webinar 'Making labs effective with remote learning' on July 28, 2020.
10. A webinar on 'How to write a great research paper, and get it accepted by good journal' organized by Elsevier in collaboration with HEC on May 20, 2020.
11. A seminar on **Genomic applications of PCR, qPCR and NGS** held at PC hotel Lahore on December 12, 2019.
12. International symposium on '**STEM CELL AND REGENERATIVE MEDICINE**' held at Centre of Excellence in Molecular Biology, University of the Punjab Lahore on November 15, 2019.
13. Oral Presentation in International conference on **Recent Innovations in Molecular Sciences** held at University of the Punjab Lahore Pakistan 6-8 November, 2019.
14. Web of Science Conference held on 11 March, 2019 at Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
15. A 3rd international symposium on advances in Molecular Biology of Plants and Health Sciences, during 19-21 December, 2018 held at Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
16. A 2nd international symposium on advances in Molecular Biology of Plants and Health Sciences, November, 21-23 2017 held at Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
17. A workshop on PAK-CHINA Young Scientists Exchange Program held on April 21, 2017 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
18. A seminar on advances in QX200 droplet digital PCR technology "Advances in PCR Technology" by Dr. Amro Kabbara (saudi) on 5th April 2017 at Centre for Advanced Molecular Biology, University of the Punjab Lahore.
19. A seminar on FPLC with respect to protein purification by Mr. Nicolas Azar (Austrian National) on Friday 3rd June 2016 at Centre for Advanced Molecular Biology, University of the Punjab Lahore.
20. A 1st International Symposium on Advances in Molecular Biology of Plants and Health Sciences held on 29-31 December, 2015 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
21. International Symposium on Molecular Forensic: Emerging Trends organized on May 29, 2014 at University of Health Sciences Lahore, Pakistan.
22. **17th International Symposium on Human Identification held October 9-12, 2006 sponsored by Promega Corporation at Nashville, Tennessee, USA.**
23. **A seminar on Advancing Justice through DNA Technology National Missing Persons Program at Strand Analytical Laboratories, Indianapolis, Indiana, USA August 04, 2006.**

	<p>24. A seminar on Population and Statistical Methodology used in the Field of Human Identification at Strand Analytical Laboratories, Indianapolis, Indiana, USA June 19, 2006.</p>
<p>National Conferences/ Seminars/ Workshops</p>	<ol style="list-style-type: none"> 1. A webinar ‘HEC ISF (innovator seed fund) Pre-Launch Event-Challenges and Innovation opportunities in the health care and Health Tech sectors’ on September 3, 2021. 2. A webinar ‘virtual Pak Pharma and Health care Expo, attended on August 25-28, 2020. 3. A mini-Symposium on Drug development from medicinal plants held in Lecture hall at CEMB on December 06, 2019. 4. Training on STRATEGIC TIME MANGEMENT was held in Lecture hall at CEMB on October 18, 2019. 5. A scientific symposium on Brain, Neurogenetics and Regenerative Medicine was held at RIAZUDDIN AUDOTIORUIM CEMB jointly organized by CEMB and UHS on October 03, 2019. 6. A seminar from ‘Bio-Pharmaceutical Group’ was held in Lecture hall at CEMB on August 01, 2019. 7. A seminar from ‘Plant biotechnology Group’ was held in Lecture hall at CEMB on July 07, 2019. 8. Participation in 8th invention to innovation summit 2-3 April, 2019 at University of the Punjab, Lahore. 9. A seminar on ‘Stem cells skin’ was held in Lecture hall at CEMB on March 04, 2019. 10. A seminar on ‘Genetic diseases’ was held in Lecture hall at CEMB on January 31, 2019. 11. A seminar on ‘forensic DNA typing research was held in Lecture hall at CEMB on November 15, 2018. 12. A seminar on ‘stem cell research was held in Lecture hall at CEMB on October 04, 2018. 13. A seminar on ‘Genomics’ was held in Lecture hall at CEMB on August 30, 2018. 14. A seminar on ‘Genetic diseases’ was held in Riazuddin auditorium at CEMB on July 12, 2018. 15. A technical session on ‘GMO / Mycotoxin Detection Technologies’ conducted by Belvic Lee Regional Senior Sales Manager from Romer Labs, Regional Office, Singapore at Centre of Excellence in Molecular Biology University of the Punjab, Lahore on 24-04-2018. 16. One day workshop on ‘Drought stress, challenges for agriculture and mitigation strategies’ at Centre of Excellence in Molecular Biology, University of the Punjab, Lahore on March 17, 2018. 17. Participation in 7th invention to innovation summit 7th - 8th March, 2018 at University of the Punjab, Lahore. 18. A National Forensic Science Conference held at Marriott Hotel Islamabad on 15-16 February, 2018 arranged by National Forensic Science Agency Islamabad, attended and abstract orally presented. 19. A lecture seminar on ‘Seven Habits of a Successful Person’ delivered by Prof. Syed Qasim Ali Shah (Vice Principal Government Engineering Academy Punjab Lahore) at Centre of Excellence in Molecular Biology, University of the Punjab, Lahore on January 19, 2018. 20. A lecture on ‘Stress Management and Success in Life’ delivered by Dr. Saima Sandhu CEO, Neuro-Psychological Clinic, New Jersey USA at Centre of Excellence in Molecular Biology, University of the Punjab, Lahore on November 08, 2017. 21. A workshop on NRPU research projects was attended at Al-Razi Hall, Centre for Undergraduate Studies University of the Punjab Lahore organized by ORIC on October 06, 2017 from 10:00am to 11:00am. 22. Participation in 2 days workshop in patent filing held at University of the Punjab Khorana auditorium-chemistry deptt, Lahore on 17-18 May, 2017. 23. Participation in 6th invention to innovation summit 8th - 9th March, 2017 at University of the Punjab, Lahore. 24. An awareness seminar on Lungs and Bronchial Diseases organized by CEMB, University of the Punjab, GULL’S and Pakistan Chest Society held on November 17, 2016 at Centre for Applied Molecular Biology (CAMB).

25. A lecture on Phen-Gen: combining phenotypes and genotypes to analyze rare disorders delivered by Dr. Asif Javed, Research Scientist at Genome Institute of Singapore held on 02.11.2016 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
26. A Day with Biosafety held on October 25, 2016 at CEMB jointly organized by Gull's Associates, Congress of Molecular Biology and National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
27. A technical seminar on Biosafety held on 25.03.16 by ESCO Ltd at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
28. ICGEB COURSE ON 'BASIC BIOTECHNOLOGY TECHNIQUES' held on March 07-09, 2016 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
29. A cancer awareness seminar held on February 26, 2016 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
30. Hand on training workshop on Next Generation Sequencing Data analysis held on October 14-16, 2015 at National Centre of Excellence in Molecular Biology, University of the Punjab Lahore.
31. 1st National Conference on Integrated Role of Forensic Sciences in Criminal Justice System held on September 25, 2014 at The University of Lahore, Lahore.
32. A seminar on New Technological Tools and Applications in Biological Research held on 27.09.2013 at Centre for Applied Molecular Biology (CAMB).
33. A seminar on Evolution in Molecular Diagnostics held on 30.08.2013 at Centre for Applied Molecular Biology (CAMB).
34. A 10th Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Strand Analytical Laboratories Indiana, USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (March 24-25. 2008).
35. A 9th Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Strand Analytical Laboratories Indiana, USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (November 21-22. 2007).
36. A 8th Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Strand Analytical Laboratories Indiana, USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (July 18-19. 2007).
37. A 7th Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Strand Analytical Laboratories Indiana, USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (December 15-16. 2006).
38. A Fifth Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Strand Analytical Laboratories Indiana, USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (January, 06-07. 2006).
39. A Fourth Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Forensic Laboratory, Indianapolis, Marion County. USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (January 10-11, 2005).
40. A Two Day Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Forensic Laboratory, Indianapolis, Marion County. USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (October, 11-12. 2004).
41. A Three Day Training Workshop on Modern Forensic Techniques for Crime Scene Search and Investigations, jointly organized by Forensic Laboratory, Indianapolis, Marion County. USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (March, 8-10. 2004).
42. Stem cell workshop jointly organized by COMSTECH and Center of Excellence in Molecular Biology, Lahore, Pakistan. (2003).
43. A Training Workshop on Crime Scene and Modern Forensic Techniques in Police Investigations" jointly organized by Forensic Laboratory, Indianapolis, Marion County. USA and Center Of Excellence in Molecular Biology, Lahore, Pakistan. (Jan, 12-17. 2003).

Honors and Awards

- Performance evaluation Award for the year of 2020.
- Incentive Award for the year of 2020 on publications.
- Performance evaluation Award for the year of 2019.
- Incentive Award for the year of 2019 on publications.
- A certificate of Appreciation awarded on successfully organizing 3rd international symposium on Advances in Molecular Biology of Plants and Health Sciences 19-21 December, 2018.
- Incentive Award for the year of 2018 on publications.
- A Performance Evaluation Award for the year of 2018.
- Guest Speaker in National Forensic Science Conference held at Marriott Hotel Islamabad on 15-16 February, 2018 arranged by National Forensic Science Agency Islamabad.
- Incentive Award for the year of 2017 on publications.
- A Performance Evaluation Award for the year of 2017.
- A Technology Award at 5th Invention to Innovation Summit 2016 held on March 02-03, 2016 University of the Punjab Lahore.
- A Performance Evaluation Award for the year of 2016.
- A Performance Evaluation Award for the year of 2015.
- A letter of Appreciation as speaker in International Symposium on Advances in Molecular Biology of Plants and Health Sciences held on 29-31 December, 2015.
- HEC Indigenous PhD scholarship award (2011-2014).
- Court testimonies as a Forensic DNA expert- 05 times.