

# CURRICULUM VITAE

## DR. HUMA RASHEED

*B. Pharm., M. Phil., Ph. D*

### • EDUCATION

Karolinska Institute, Stockholm, Sweden, *Postdoc.*, 2005.

The Aga Khan University, Karachi. *Postdoc.*, 2004.

The Aga Khan University/University of Karachi, Pakistan, *Ph. D.*, Pharmacology, 2003

University of Karachi, Pakistan, *M. Phil.*, Pharmacology, 1998.

University of Karachi, Pakistan, *B. Pharm.*, 1993.

### • PROFESSIONAL EXPERIENCE

<u>Institution</u>	<u>Position/Title</u>	<u>Year</u>
The Wistar Institute, Systems Biology Division, Molecular and Cellular Oncogenesis Program, Philadelphia, PA.	Visiting Scientist	March 12- date
National Cancer Institute- SAIC-Frederick, National Institute of Health, 21701 MD, USA.	Research Scholar	Jan 28-Mar 12, 2008
Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan.	Assistant Professor	April 2007 - date
Department of Pharmacology, Riphah Institute of Pharmaceutical Sciences, Riphah International University, Islamabad, Pakistan.	Assistant Director/ Head Dept. of Pharmacology/ Assistant Professor	April 2006-2007
Department of Pharmacology, Jinnah Medical and Dental College, Karachi-Pakistan	Assistant Professor	Aug 2004- March 2006

Department of Tumor Biochem Center of Molecular Medicine, Karolinska Institute/Hospital 17176 Stockholm, Sweden.	Postdoc fellow/ Junior faculty	Aug 2004- 2005
Department of Biological & Biomedical Sciences, Faculty of Health Sciences The Aga Khan University Karachi 74800, Pakistan. In Collaboration with: Michigan State University, East Lansing MI. USA.	Postdoc fellow	Sep 2004 – July 2005
Department of Biological & Biomedical Sciences, Faculty of Health Sciences, The Aga Khan University Karachi 74800, Pakistan.	Senior Research Officer	May- July 2004
Department of Biological & Biomedical Sciences, Faculty of Health Sciences, The Aga Khan University, Karachi 74800, Pakistan.	Research Officer/ Ph. D. Fellow	2001-2003
Department of Physiology & Parmacology, Faculty of Health Sciences, The Aga Khan University Karachi 74800, Pakistan.	Junior Research officer/ Ph. D. Fellow	1998-2001
Hakimsons Pharmaceuticals Karachi, Pakistan	Trainee Pharmacist (QC Department)	1998
Holy Family Hospital, Karachi, Pakistan.	Hospital Pharmacist	1994

**GRANTS AWARDED:** 3.1 Million from HEC funded project, 2009.

**FELLOWSHIP AWARDED:**

Postdoc fellowship from “*The Wenner-Gren Foundation*” 2004-2005 at Karolinska Institute, Stockholm, Sweden.

- Fellowship from University Grant Commission 1996.

- **AWARDS and ACHEIVEMENTS**

- **“Star Laureate 2005”**

- In: XVth Star Awards 2005 on National level under the auspices of South Asia Publication and awarded.

- (i). A Gold-Plated Trophy*
      - (ii). A Certificate of Excellence*

- **“Best Paper Award” (2005)**

- In: 17<sup>th</sup> Biennial Congress of Cardiology, National Institute of Cardiovascular Diseases, Karachi. 16-18 December, 2005

- **“Young Scientist Award” (2003)**

- In: XIVth Star Awards 2003 on National level under the auspices of South Asia Publications and awarded:

- (i). A Gold-Plated Badge*
      - (ii). A Gold-Plated Trophy*
      - (iii). A Certificate of Excellence*

- **“Star Laureate 2003”**

- In: XIVth Star Awards 2003 on National level under the auspices of South Asia Publications.

- **In: 125 National Distinguish Men and Women Profile (2003)**

- Name included in the list of 125 Distinguish men and women from South Asia Publication as a **Young Scientist**.

- **“Said Ahmed Akberabadi Gold Medal” (2003)**

- In “Science & Technology” from South Asia Publication.

- **Fellow ship from University Grant Commission (1996)**

- University of Karachi.

- **RESEARCH AREAS**

- Pain, Fever & Inflammation
    - Thrombosis & Haemostasis
    - Signal Transduction
    - Molecular Oncology and Cell Biology

- **PROFESSIONAL SOCIETIES AFFILIATION**

Hungarian Society of Experimental and Clinical Pharmacology, 2009.

- **PUBLICATIONS**

**M.Phil Thesis**

**Rasheed, H.** Pharmacological assessment of newly synthesized piperidinium derivatives for analgesic activity. *M. Phil Thesis*, Faculty of Pharmacy, University of Karachi, Pakistan. 1998.

**Ph.D Thesis**

**Rasheed, H.** Studies of cyclooxygenase-1 (COX-1) and cyclooxygenase-2 (COX-2) inhibitors for analgesic, anti-inflammatory and antiplatelet activities. *Ph.D Thesis*, Faculty of Pharmacy, Department of Pharmacology, University of Karachi, Pakistan/ Department of Biological & Biomedical Sciences, The Aga Khan University, Karachi, Karachi-Pakistan. 2003.

- **Research Papers**

1. Khan, R.A., **Rasheed, H.**, Saify. Z.S and Rehman, A.B. Analgesic Activity of piperidine derivatives *Pakistan Journal of Pharmaceutical Sciences*. 10: 17-20, 1997.
2. Khan RA. **Rasheed H**, Saify ZS, Rehman AB, Arif M. Pharmacological assessment of newly synthesized Piperidine derivatives for their Analgesic activity. Proceedings of Second International Conference of Pharmaceutical Science 2 to 5 Jan (1997) 79-83.
3. Khan, R.A., **Rasheed, H.**, Saify. Z.S and Rehman, A.B. Screening of newly synthesized piperidine derivatives for analgesic activity. *Hamdard Medicus*. Vol XL, 3: 10-13., 1997.
4. Khan, R.A., **Rasheed, H.**, Saify. Z.S and Rehman, A.B. A new type of piperidine derivative for analgesic activity. *Hamdard Medicus*. Vol. XLI, 1: 55 –57, 1998.
5. Khan, R.A., **Rasheed, H.**, Saify. Z.S and Rehman, A.B. Analgesic activity of newly synthesized piperidinium derivatives in mice. *Hamdard Medicus*. Vol XLI, 4:53-55, 1998.
6. Shah, B.H., Siddiqui, A., Qureshi, K.A., Khan, M., Rafi, S., Ujan, V.A., Yaqub, Y., **Rasheed, H** and Saeed, S.A. Co-activation of Gi and Gq proteins exerts synergistic effect on human platelet aggregation through activation of phospholipase C and Ca<sup>2+</sup> signaling pathways. *Experimental and Molecular Medicine*. 31: 42-46, 1999.

7. Shah, B.H., Lashari, I., Rana, S., Saeed, O., **Rasheed H** and Saeed, S.A. Synergistic interaction of adrenaline and histamine in human platelet aggregation is mediated through activation of phospholipase, MAP kinase and cyclooxygenase pathways. *Pharmacological Research*. 42: 479-483, 2000.
8. Saeed S.A., **Rasheed H**., Hoodbhoy Z.A., Pasha S.R., Mapara Z., Kumar H and Shah B.H. Involvement of cyclooxygenase, phospholipase C and MAP kinase in human platelet aggregation mediated by the synergistic interaction of adrenaline and PAF. *Inflammopharmacology*. 9: 147-155, 2001.
9. S.A. Saeed, J.D. Connor, **H. Rasheed**, A.H. Gilani, S. Lodhi, S. S. Ali, S. Rashid, E. Khan and B.H. Shah. Wortmannin inhibits platelet aggregation produced by interaction of  $\gamma$ -aminobutyric acid and calcium ionophore, A23187. *Research Communication in Molecular Pathology and Pharmacology*. 109: 87-94, 2001.
10. Saeed, S.A., **Rasheed, H.**, Gilani, A.H., Hashmi, A. and Bukhtiar H Shah. An investigation of cyclooxygenase and signaling inhibitors on 5-hydroxytryptamine and adrenaline induced platelet activation. *Proceeding in Western Pharmacological Society*. 44: 159-162, 2001.
11. Connor, J.D., **Rasheed, H.**, Gilani, A.H., Cheema, M., Rizvi, Z. and Saeed, S.A. Second messengers in platelet aggregation evoked by serotonin and A23187, a calcium ionophore. *Life Sciences*. 63: 2759-2764, 2001.
12. Shah, B. H., **Rasheed, H.**, Rahman, I. H., Shariff, A.H., Khan, F.L., Rahman, H.B., Hanif, S and Saeed, S.A. Molecular mechanism involved in human platelet aggregation by synergistic interaction of platelet activation factor and 5-hydroxytryptamine. *Experimental and Molecular Medicine*. 33: 226-233, 2001.
13. Ghayur, M.N., Gilani, A.H., Saeed, S.A., **Rasheed, H.**, Ismail M and Iqbal, Z. Studies on antispasmodic, antidiarrhoeal and antiplatelet activities of *Paeonia emodi*, an indigenous plant of Pakistan. *Asia Pacific Journal of Pharmacology*. 15: S 56, 2001.
14. Saeed, S.A., Gilani, A.H., **Rasheed, H.**, Bhatti, F.N., Atiq, M., Qureshi, A., Jafery, R and Connor, J.D. Plasma from rheumatoid patients taking low dose methotrexate amplifies platelet aggregation. *Research Communication in Molecular Pathology and Pharmacology*. 111: 69-76, 2002.
15. Saeed, S.A and **Rasheed, H.** Calcium-dependent synergistic interaction of platelet activating factor and epinephrine in human platelet aggregation. *Acta. Pharmacologica Sinica*.. 24: 31-36, 2003.
16. Saeed S.A., **Rasheed H**., Kumar S., Ali T.M., Butt M.U., Dhangana R., Jafri A., Zehra, S and Gilani A.H. Involvement of cyclooxygenase, phospholipase C and MAP

kinase pathways in human platelet aggregation mediated by the synergistic interaction of platelet activating factor and arachidonic acid. *Pakistan Journal of Biological Sciences*. 6: 918-924, 2003.

17. Saeed, S.A., Nawaz, H., Aftab, O., Khawar, T., Zaigham, MA., Hansraj, **Rasheed, H.** and Memon, S. J. New prospects in the in the control of arachidonic acid metabolism in the fetus and the neonate. *Journal of Medical Sciences*. 3: 192-208, 2003.
18. Saeed, S.A., **Rasheed, H** and Gilani, A.H. Synergism interaction between arachidonic acid by 5-hydroxytryptamine in human platelet aggregation involves multiple signaling pathways. *Acta Pharmacologica Sinica*.24: 958-964, 2003.
19. Butt, I.F., Saeed, S.A., **Rasheed, H.** and Aslam, M. Role of phosphatidylinositol 3-kinase in epinephrine and calcium ionophore, A23187 induced platelet aggregation. *Armed Forces Journal Pakistan*. 54: 92-98, 2004.
20. Saeed, S.A., **Rasheed, H.**, Ali, T. M., Qazi, Y., Kabraji, S., Paul, S., Khan, R., Hussain, F. A. and Ahmed, S. Mechanism of inhibitory action of cyclo-oxygenase-2 inhibitors in human platelets. *Journal of Biological Sciences*. 4: 515-520, 2004.
21. **Rasheed, H.**, Tirmizi, AH., Salahuddin, F., Rizvi, N. B., Arshad, F., Farooq, S. Z and Saeed, S. A. Calcium signaling in human platelet aggregation mediated by platelet activating factor and calcium ionophore, A23187. *Journal of Biological Sciences*. 4: 117-121, 2004.
22. Saeed, S.A., **Rasheed, H.**, Fecto, F. A. W., Achakzai, M. I., Ali, R., Connor, J. D. and Gilani, A. H. Signaling mechanisms mediated by g-protein coupled receptors on human platelets. *Acta Pharmacologica Sinica*. 25: 887-892. 2004.
23. **Rasheed, H** and Saeed, S.A. Involvement of thromboxane A<sub>2</sub> and tyrosine kinase in the synergistic interaction of platelet activating factor and calcium ionophore, A23187 in human platelet aggregation. *Experimental and Molecular Medicine*. .114: 376-380, 2004.
24. Zemke D, **Rasheed H**, Majid A. Minocycline inhibits agonist-induced aggregation of human platelets. *Neurology*: 64: A179-A179. 2005.
25. Ghayur, MN, Gilani, AH, **Rasheed H**, Khan A, Iqbal Z., Ismail M., Saeed, SA., Janssen, LJ. Cardiovascular and airway relaxant activities of peony root extract. *Can. J. Physiol. Pharmacol.* 86, 792-803, 2008.

## Abstracts

1. Khan, R.A., **Rasheed, H.**, Saify. Z.S and Rehman, A.B. Pharmacological assessment of newly synthesized piperidinium derivatives for their analgesic activity. In: **2<sup>nd</sup> Internal Conference of Pharmaceutical Society pp.43.** 1997.
2. Saeed, S.A., **Rasheed, H.**, Khawaja, A., Siddiqui, A., Hussain, L.M., Khurram, I.M and Shah, B.H . Effects of cyclooxygenase inhibitors on human platelet aggregation and calcium signaling. **5<sup>th</sup> Annual National Symposium**, The Aga Khan University, September 20-21, Karachi. Abs. 51. p. 59, 1999.
3. Saeed, S.A., **Rasheed, H.**, Rana, S., Saeed, O., Lashari, I and Shah, B.H. Synergistic interaction of histamine and adrenaline in platelet aggregation involves activation of phospholipase C and MAP kinase pathways. **Proceedings of the British Pharmacological Society, Joint Meeting with the German Society for experimental and clinical Pharmacology and Toxicology**14<sup>th</sup> –16<sup>th</sup> July, University of Nottingham, U.K. 57P. 1999.
4. Butt, I.F., **Rasheed, H.**, Aslam, M., Waqar, S.N. and Saeed, S.A. Mechanism involved in adrenaline and calcium ionophore, A23187 induced platelet aggregation. **7<sup>th</sup> Biennial Conference of Pakistan Physiological Society.** Department of Physiology, University of Karachi. 3-5 April. p. 11, 2000.
5. Saeed, S.A., **Rasheed, H.**, Sharrif, A.H., Khan, F.A., Rahman, H.B., Rahman, I.H., Hanif, S and Shah, B.H. Activation of Gi and Gq protein exerts synergistic effect on platelet aggregation through phospholipase C and Ca<sup>2+</sup> signaling pathways. **7<sup>th</sup> Biennial Conference of Pakistan Physiological Society.** University of Karachi. 3-5 April. p. 12, 2000.
6. Ghayur, M.N., **Rasheed, H.**, Aziz, N., Saeed, S.A and Gilani, A.H. Bronchodilator, spasmolytic and antiplatelet activities of crude extract of Polygonum viviperum. **AKU Symposium of Cardiovascular and pulmonary diseases**, September 22- 24, Karachi, p. 90, 2000.
7. Saeed S.A., Cheema, M., Rizvi, Z.H. and **Rasheed, H.** Amplification of serotonin and calcium ionophore-A23187 induced human platelet aggregation is mediated through multiple signaling pathways. **AKU Symposium of Cardiovascular and pulmonary diseases**, September 22<sup>nd</sup>. Abs.50. p. 68, 2000.
8. Saeed, S.A., **Rasheed, H.**, Hoodbhoy, Z.A., Pasha, S.R., Mapara, Z., Kumar, H. and Shah, B.H. Interaction of PAF and adrenaline in human platelets is mediated through multiple signaling pathways. **18<sup>th</sup> International Congress of Biochemistry and Molecular Biology.** p. 59, 2000.
9. Saeed, S.A., **Rasheed, H.** and Anwar, S.H. New aspects of cyclooxygenase and signaling inhibitors in PAF and adrenaline mediated platelet aggregation. In:

*International Conference on Inflammopharmacology and VII Side Effects of anti-inflammatory Drugs Symposium*, Sheffield, UK. P. 45-46, 2000.

10. S.A. Saeed, A.H. Gilani, **H. Rasheed**, S.S. Ali, E. Khan, S. Lodhi, S. Rashid and B.H. Shah. Wortmannin inhibits GABA and calcium ionophore induced platelet aggregation. *Pharmacology Vancouver. (Joint Meeting of the Australasian, British, Canadian and Western Pharmacology Societies)*, p.91. 2001.
11. **Rasheed, H.**, Azam, A., Karim, U., Arif, H., Nasir, N., Anwar, M., Aslam, N and Saeed S.A. COX- Inhibitors: Effects on 5- hydroxytryptamine and platelet activating factor induced platelet aggregation. In; *AKU Symposium focus current challenges in oncology*. The Aga Khan University, Karachi. Abs. 36, p 61, 2001.
12. **H. Rasheed**, M. Bana, M. M. Shahpurwala and S. A. Saeed. Analgesic and anti-platelet effects of cyclooxygenase inhibitors. In: *25<sup>th</sup> Annual Conference, King Edward Medical College, Lahore* Dec 27-29, p. 14. 2001.
13. S.A. Saeed, **H. Rasheed**, S. Pasha, I. Dosani and A.H. Gilani. Study of cyclooxygenase inhibitors on 5-HT and adrenaline induced platelet activation. *Pharmacology Vancouver*. p. 82, 2001.
14. Ghayur, M.N., Gilani, A.H., Saeed, S.A., **Rasheed, H.**, Ismail M and Iqbal, Z. Studies on antispasmodic, antidiarrhoeal and antiplatelet activities of *Paeonia emodi*, an indigenous plant of Pakistan. *16<sup>th</sup> Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*, 25-26 June, Kuala Lumpur Malaysia, p.0C 29, 2001.
15. Saeed, S.A., **Rasheed, H.**, Shariff, A.H., Khan, F.L., Rahman, H.B., Hanif, S and Shah, B.H. Interaction of PAF and 5-hydroxytryptamine in human platelet aggregation. In; *Inflammation Research. (5<sup>th</sup> World Congress on inflammation)* September 22-26, *Edinburgh International Conference Centre Scotland*. S 195. p 028, 2001.
16. Pasha, S., Dosani, S., Saeed, S. A., **H. Rasheed** and Gilani, A. H. Study of epinephrine and 5-HT mediated platelet aggregation and their inhibition by cyclooxygenase inhibitors. *Symposium on Contemporary Medicine & Information Technology*, Jinnah postgraduate Medical Center Karachi, February 13-15, 2001.
17. Saeed, S.A., **Rasheed, H.**, Fecto, F.A.W., Achakzai, M.I., Ali, R., Azhar, E., Hasnain, I.T., Khalid, H., Javed. A. Synergistic interaction of adrenaline and arachidonic acid in human platelets is mediated through multiple signaling pathways. *Pharmacologist*. 44 (2). p. 110.44, 2002.
18. **Rasheed, H.**, Kizilbaksh, S., Shafi, S.I., Bana, M., Shahpurwala, M. Puri, M and Saeed, S.A. Signaling pathways involves in platelet aggregation by the synergistic

interaction of collagen and nor adrenaline. In: *7<sup>th</sup> Eurasia Conference on Chemical Sciences*. p. 159. 2002.

19. Saeed, S.A., **Rasheed, H.**, Farnaz, S and Gilani, A.H. The effect of cinnamon oil and cinnamaldehyde on platelet aggregation and PAF induced death in rabbits. In: *7th Eurasia Conference on Chemical Sciences*. p. 205, 2002.
20. Saeed, S.A., **Rasheed, H.**, Kumar, S., Ali, T. M., Butt, M.U., Saud, M.F., Dhangana, R., Jafri, A., Zehra, S and Gilani, A.H. New aspects of cyclooxygenase and signaling inhibitors in arachidonic acid (AA) and platelet activating factor (PAF) mediated platelet aggregation. *Biochemical Society Transactions*. *677<sup>th</sup> Meeting Cardiff University, Wales*. Volume 30, parts 6 p. 61, 2002.
21. **Rasheed, H.**, Ahmed, A., Ali, T., Ayub, S., Jabeen, K., Khan, M. T., Khan, S and Saeed, S. A. Mechanisms involved in the synergistic interaction of 5-hydroxytryptamine and arachidonic acid in human platelet aggregation. *National Health Sciences Research Symposium: Early Childhood Care and Development*. The Aga Khan University, Karachi. Abs 19. p 34, 2002.
22. **Rasheed, H.**, Tirmizi, A. H., Rizvi, N. B., Arshad, M., Sallahuddin, F. F., Farooqui, Z. S and Saeed, S. A. Signaling mechanisms involved in the synergistic interaction of platelet activating factor and calcium ionophore, A23187 in human platelet aggregation. 26<sup>th</sup> Annual Conference of Pakistan association of pathologists, 5<sup>th</sup> Annual Conference of Pakistan Society of Hematology, Rawalpindi – Pakistan. Abs 37. p 36. 2002.
23. Saeed, S.A., **Rasheed, H.**, Ali, T.M., Ali, R., Zaidi, A.H and Gilani, A.H. Disparate effects of nimesulide and aspirin on calcium ionophore, A23187 induced platelet aggregation. *6th World Congress on inflammation* Vancouver, Canada *Inflammation Research Supplement* 2. 2-6 August. Abs 6.5. S 93, 2003.
24. Shahpurwala, M., **Rasheed, H.**, Shafi, S. I., Bana, M., Kizilbaksh, S., Puri, M and Saeed, S.A. Signaling mechanisms involved in Human platelet aggregation mediated by the synergistic interaction of collagen and norepinephrine. *14<sup>th</sup> European Students Conference* Berlin, Germany. November 4-8, Abs. act392o. p. 265, 2003.
25. Khalid, H., **Rasheed, H.**, Javed, A and Saeed, S. A. The effect of cyclooxygenase inhibitors in the synergistic interaction of adrenaline and arachidonic acid in human platelet aggregation. *14<sup>th</sup> European Students Conference* Berlin, Germany. November 4-8, Abs. act313o. p. 269, 2003.
26. Fecto, F., **Rasheed, H.** and Saeed, S. A. Pharmacological characterization of cyclooxygenase (COX) inhibitors on nociception in a chemical assay in mice. *14<sup>th</sup> European Students Conference* Berlin, Germany. November 4-8, Abs. act645p. p. 413. 2003.

27. **Rasheed, H.**, Simjee, R.U. and Saeed, S.A. Extracts of glycyrrhiza glabra inhibit human platelet aggregation and arachidonic acid metabolism. *9<sup>th</sup> international symposium on natural product chemistry*. Jan 10-13, Abs, p.273. 2004.
28. Saify, Z. S., **Rasheed, H.**, Simjee, Naim, S., and Khan, K. M. Structural modification in piperidine derivatives with reference to antinociceptive effects in mice. *9<sup>th</sup> international symposium on natural product chemistry*. Jan 10-13, Abs, p.291, 2004.
29. Butt, I. F., Saeed, S. A., Aslam, M and **Rasheed, H.** Potentiation of epinephrine by calcium ionophore in human platelets. *9<sup>th</sup> Biennial International Conference of the Pakistan Physiological society*. April 2-3, p 75, 2004.
30. **Rasheed, H** and Saeed, S. A. The risk of thrombo-embolic disorders increases by the synergy of epinephrine with various platelet activators through the activation of COX-1 & COX-2 pathways. *17<sup>th</sup> Biennial Congress of Cardiology, National Institute of Cardiovascular Diseases, Karachi*. Dec 16-18, Abs, p. 40. 2005.
31. **Rasheed, H** and Saeed, S. A. G-protein coupled receptors in the synergism of epinephrine and arachidonic acid mediated platelet aggregation. *10<sup>th</sup> International symposium on natural product chemistry. HEJ, University of Karachi*. Jan 6-9, 2006 p 265.
32. **Rasheed, H.**, Saeed, S.A, Dhanani, M. A and Connor, JD. Inhibition of COX-2 mediated prostaglandins reduce the risk of inflammation. *43<sup>rd</sup> Annual Symposium, Jinnah Postgraduate Medical Center, Karachi*. March 7-9, p. 78. 2006.
33. **Rasheed, H.**, Saeed, S. A and Saeed, S. A. Analgesic and Anti-inflammatory effect of Resveratrol. *7<sup>th</sup> International and 70<sup>th</sup> National Chemistry Conference. Gomal University, DI Khan, Pakistan*.
34. **Rasheed, H.** Natural Products: Implications in Cancer Chemotherapy. *1<sup>st</sup> Universiti Teknologi Mara, Malaysia (UITM) - International Center for Chemical and Biological Sciences Workshop, Karachi*. p.24. 2007.
35. **Rasheed H.**, Mustaq N, Miana GA, Choudhary MI, Saify ZS. Investigation of piperidine derivatives on in-vitro model of pain and platelet aggregation. p72. 2008.
36. **Rasheed H.**, Nikonova EV, Chang C, Billioun, Kossenkov, AV, Nichols CE, Showe MK and Showe LC. Expression of ATP- Binding Cassette (ABC) transporters and other candidate genes in depsipeptide resistant cells of cutaneous-T cell lymphoma. *2<sup>nd</sup> International Symposium cum Training Course on Molecular Medicine and Drug Research. P23, Jan 12-15, 2009, Karachi- Pakistan*.

37. **Rasheed H, Bylund L, Weber G.** Molecular cloning and oncogene expression in human pancreatic carcinoma cell line. Hematology Conference, National Institute Blood Diseases, p. 8. Oct 15-18, 2009.

• **PRESENTATIONS in SEMINARS**

“Analgesic activity of newly synthesized piperidine derivatives.” Faculty Research Seminar, Department of Physiology and Pharmacology, The Aga Khan University, Karachi- Pakistan, June 22, 1998.

“Effects of cyclooxygenase inhibitors on human platelet aggregation”. Ph.D. Research Seminar, Jumma Research Building, The Aga Khan University, Karachi- Pakistan, August 7, 1999.

“Interaction of epinephrine and PAF in human platelet aggregation is mediated through multiple signaling pathways”. Faculty Research Seminar, Department of Physiology and Pharmacology, The Aga Khan University, Karachi- Pakistan, July 10, 2000.

“Effect of 5-hydroxytryptamine and calcium ionophore, A23187 induced human platelet aggregation.” Faculty Research Seminar, The Aga Khan University Karachi, September 2001.

“Molecular mechanisms involved in the synergistic interaction of 5-hydroxytryptamine and platelet activating factor in human platelet aggregation.” Faculty Research Seminar, The Aga Khan University Karachi, April 4, 2002.

“Nimesulide and indomethacin induce apoptosis in head and neck cancer cells”. Journal Club, Center of Molecular Medicine, Karolinska Institute, Stockholm, Sweden. Dec 8, 2005.

“Bcl-XL small interfering RNA suppresses the proliferation of 5-fluoracil-resistant human colon cancer cells. Journal Club, Center of Molecular Medicine, Karolinska Institute, Stockholm, Sweden. April 6, 2005.

“Inhibitors of mitochondrial gene transcription suppress neurotensin secretion in the human carcinoid cell line BON”. Journal Club, Center of Molecular Medicine, Karolinska Institute, Stockholm, Sweden. June 15, 2005.

“Upregulation of Men-1 gene in pancreatic and cervical carcinoma cell lines. The Wistar Institute. Philadelphia, Pennsylvania. March 28, 2008.

“The effect of Histone Deacetylase inhibitor SAHA, on Depsipeptide resistant human T-Cell lymphoma Cell line. The Wistar Institute. Philadelphia, Pennsylvania. December 15, 2008.

- **INVITED LECTURES / TALKS**

- ***“Drugs used in Musculo-skeletal disorders”***. B.Sc Generic and Diploma programme, *School of Nursing*, The Aga Khan University-Karachi, 1998-2001.
- ***“Drugs used in Musculo-skeletal disorders.”*** B.Sc Diploma programme, *School of Nursing*, The Aga Khan University-Karachi, 1998-2001.
- ***“Management of ENT & Eye diseases”***. B.Sc Diploma and Generic programme, *School of Nursing*, The Aga Khan University-Karachi, 1999-2001.
- ***“Good ingredients of poster presentation”***. Effective presentation skill workshop” Department of Biological and Biomedical Sciences, The Aga Khan University, Karachi. October 6, 2002.
- ***“Signal Transduction in Platelets”***. Riphah Institute of Pharmaceutical Sciences, Riphah International University, Islamabad. March, 02, 2006.
- ***“Identification of multiple endocrine neoplasia type-1 related genes”***. 1<sup>st</sup> International Workshop-cum-Training course on Molecular Medicine and Drug Research. Dr. Punjwani Center for Molecular Medicine & Drug Research, University of Kasrachi, Comstech and Higher Education Commission, Pakistan. January 16-30, 2007.
- ***“Molecular cloning of tumor suppressor genes: Advancement of cancer therapy”***. 1<sup>st</sup> International Workshop-cum-Training course on Molecular Medicine and Drug Research. Dr. Punjwani Center for Molecular Medicine & Drug Research, University of Kasrachi, Comstech and Higher Education Commission, Pakistan. January 16-30, 2007.

- **WORKSHOPS ATTENDED**

1. Molecular Biology Workshop. DNA extraction and PCR. May 28-1, 2001. Organized by Department of Biological & Biomedical Sciences, The Aga Khan University Karachi-Pakistan.
2. Molecular Biology Workshop on current Challenges in Oncology. September 18-22, 2001. Organized by The Aga Khan University, Karachi- Pakistan.
3. Manuscript writing. March 2002. Organized by Jumma Research Centre, The Aga Khan University, Karachi- Pakistan.

4. Effective Presentation Skill. Oct 6, 2002. Organized by Department of Biological and Biomedical Sciences, The Aga Khan University, Karachi-Pakistan.
5. Manuscript Writing. June 18, 2002. Organized by the Department of Biological Biomedical Sciences, The Aga Khan University, Karachi- Pakistan.
6. 1<sup>st</sup> International Workshop-cum-Training course on Molecular Medicine and Drug Research. Dr. Punjwani Center for Molecular Medicine & Drug Research, University of Kasrachi, Comstech and Higher Education Commision, Paklistan. January 16-30, 2007.
7. 1<sup>st</sup> Universiti Teknologi Mara, Malaysia (UITM) – International Center for Chemical and Biological Sciences, Workshop. 20-26 May, 2007. Organized by International International Center for Chemical and Biological Sciences (ICCSB) University of Karachi, Karachi-75270, Pakistan.
8. HEC-British Council Workshop on Nutraceutical Foods. Jointly organized by International Center for Chemical and Biological Sciences, University of Karachi and British council Karachi, January 21<sup>st</sup>, 2009.

- **PRESENTATIONS AT CONFERENCES**

1. “Pharmacological assessment of newly synthesized piperidinium derivatives for their analgesic activity.” 2<sup>nd</sup> International Conference of Pharmaceutical Society, Karachi-Pakistan, January 2-5, 1997.
2. “Synergistic interaction of epinephrine and histamine in human platelet aggregation.” Pakistan Society of Physician, 14<sup>th</sup> Annual Symposium, March 6-7, 1999.
3. “Effect of cyclooxygenase inhibitors on human platelet aggregation and calcium signaling.” 5<sup>th</sup> Annual AKU National Symposium of Infectious Diseases, The Aga Khan University, Karachi-Pakistan, September 20-21, 1999.
4. “Synergistic interaction of calcium ionophore, A23187 and 5-hydroxytryptamine in human platelet aggregation is mediated through phospholipases C and calcium signaling pathways”. IInd Annual Hamdard Symposium Health care in IIIrd Millennium. Organized by Hamdard University, Hamdard College of Medicine, Karachi- Pakistan. November 12-14, 1999.
5. “Amplification of serotonin and calcium ionophore A23187 induced platelet aggregation is mediated through multiple signaling pathways.” National

Symposium on Cardiovascular and Pulmonary Diseases, The Aga Khan University, Karachi- Pakistan, September 25-26, 2000.

6. "Analgesic and antiplatelet effects of cyclooxygenase inhibitors." 25<sup>th</sup> Annual Conference, King Edward Medical College, Lahore, Pakistan, December 27-29, 2001.
7. "The effect of cinnamon oil and cinnamonaldehyde on platelet aggregation and PAF induced death in rabbits." 7<sup>th</sup> Eurasia Conference on Chemical Sciences, Karachi-Pakistan, November 10-13, 2001.
8. "Mechanisms involved in the synergistic interaction of 5-hydroxytryptamine and arachidonic acid in human platelet aggregation." National Health Sciences Research Symposium: Early Childhood Care and Development. The Aga Khan University, Karachi-Pakistan. September 23-24, 2002.
9. "Signaling mechanisms involved in the synergistic interaction of platelet activating factor and calcium ionophore A23187 in human platelet aggregation." *5<sup>th</sup> Annual Conference of Pakistan Society of Haematology*, Rawalpindi- Pakistan, December 13-15, 2002.
10. "Extracts of glycyrrhiza glabra inhibit human platelet aggregation and arachidonic acid metabolism". *9<sup>th</sup> International Symposium on Natural Product Chemistry*. HEJ Research Institute of Chemistry, University of Karachi. Jan 10-13, 2003.
11. "Structural modification in piperidine derivatives with reference to antinociceptive effects in mice". *9<sup>th</sup> International Symposium on Natural Product Chemistry*. HEJ Research Institute of Chemistry, University of Karachi. Jan 10-13, 2003.
12. "The risk of thrombo-embolic disorders increases by the synergy of epinephrine with various platelet activators through the activation of COX-1 & COX-2 pathways". *17<sup>th</sup> Biennial Congress of Cardiology*, National Institute of Cardiovascular Diseases, Karachi. Dec 16-18, 2005.
13. "G-protein coupled receptors in the synergism of epinephrine and arachidonic acid mediated platelet aggregation". *10<sup>th</sup> International symposium on natural product chemistry*. HEJ Research Institute of Chemistry, University of Karachi. Jan 6-9, 2006 p 265.
14. Inhibition of COX-2 mediated prostaglandins reduce the risk of inflammation. *43<sup>rd</sup> Annual Symposium of Medical Sciences.*, Jinnah Postgraduate Medical Center, Karachi. March 7-9, p. 78. 2006.

- **COURSES ATENDED**

1. *Advance Human Genome Course*. February 28- May 9, 2003. Organized by Department of Biological and Biomedical Sciences, The Aga Khan University, Karachi-Pakistan.
2. *Trauma Psychology: Addressing the Needs of Traumatized Children*. University of Missouri-Columbia, International Center for Psychosocial Trauma. November 7-8, 2005: held at Jinnah Medical & Dental College, Karachi, Karachi-Pakistan.

- **GUEST SPEAKER**

*“Higher Education is the only Success of Pakistan in 21<sup>st</sup> Century”*. On The Defense Day of Pakistan. September 06, 2005, Embassy of Pakistan, Stockholm, Sweden.

*“How to Design a Research Project” as a Resource Person*. March 20, 2007. In: Orientation workshop for Intel® International Science & Engineer Fair, Islamabad-Pakistan.

- **COLLABORATIONS**

1. The Wistar Institute, Philadelphia, PA. USA.