Dr. HR Ahmad
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Publications:

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2017

1. **Ahmad HR**, Hashmi S, Mahmood MH. A new model for a PhD elective course. *Pak J Med Sci.* 2017; 33(3):

2. **Ahmad HR**, Khan NA. Dialectics of Imagination and Experimentation. *Pak J Med Sci.* 2017; 33(1): 248. doi: 10.12669/pjms.331.12591.

3. Satwat H, **Ahmad HR,** Sharif H, Bokhari S. Diastolic dysfunction in coronary artery disease. *J Coll Physicians Surg Pak,* 2017; 27(3): 192.

4. Baig AM, **Ahmad HR**. Evidence of a M1-Muscarinic GPCR homolog in unicellular eukaryotes: featuring Acanthamoeba spp bioinformatics 3D-modelling and experimentations. *J Recept Signal Transduct Res.* 2017; 37(3): 267-275.

5. Baig AM, Rana Z, Mannan MM, Tariq SS, **Ahmad HR**. Antibiotic Effects of Loperamide: Homology of human targets of Loperamide with targets in *Acanthamoeba* spp., *Recent Pat Antiinfect Drug Discov.* 2017. doi: 10.2174/1574891X12666170425170544.

6. Baig AM, Khan NA, Effendi V, Rana Z, **Ahmad HR**, Abbas F**.** Differential receptor dependencies: expression and significance of muscarinic M1 receptors in the biology of prostate cancer. *Anticancer Drugs* 2017; 28(1): 75-87.

2016

7. **Ahmad HR**, Arain FM, Khan NA. A new model of MPhil in Physiological Sciences. *Pak J Med Sci.* 2016; 32(5): 1296-301.

8. Ahmad HR. How to write a doctoral thesis. *Pak J Med Sci.* 2016; 32(2): 270-3.

9. Baig AM, Rana Z, Mannan MM, Effendi V, **Ahmad HR**. Forte of bioinformatics computational tools in identification of targets of digitalis in Acanthamoeba. *EC Microbiology* 2016; 4(6): 831-844.

10. Sofia A, Ahmad HR, Sami S. Correlation of Serum and Pericardial fluid NT-pro-BNP. *BJMMR* 2016; 14(5): 1-5:24325

2013

11. Sofia A, Sami SA, Basir MN, Hameed K, Fujita M, **Ahmad HR**. Pericardial fluid and serum biomarkers equally predict ventricular dysfunction. *Asian Cardiovasc Thorac Ann.* 2013; 21(2): 160-5.

2012

12. Sofia A, Ahmad HR. Ventricular Peptides and Cardiac Function. *Pak J Med Sci*. 2012; 28(3): 552-5.

13. Afsar NA, Ufer M, Haenisch S, Remmler C, Mateen A, Usman A, Ahmed KZ, **Ahmad HR,** Cascorbi I. Relationship of drug metabolizing enzyme genotype to plasma levels as well as myelotoxicity of cyclophosphamide in breast cancer patients. *Eur J Clin Pharmacol.* 2012; 68(4): 389-95.

14. Fatima S, Ahmad SI, **Ahmad HR**. The intercept and slope of breathlessness/chest pain-heart rate relationship in patients with coronary artery disease using exercise tolerance test. *J Pak Med Assoc.* 2012; 62(4): 382-5.

15. Subhan MM, Ali SA, Bokhari SS, Khan MN, **Ahmad HR.** Underweight and overweight men have greater exercise-induced dyspnoea than normal weight men. *Ups J Med Sci.* 2012; 117(4): 383-9.

2011

16. Fatima S, Ahmad SI, **Ahmad HR.** The relationship between exertional chest pain/dyspnoea--heart rate in patients with coronary artery disease using Exercise Tolerance Test. *J Pak Med Assoc.* 2011; 61(9):845-50.

2010

17. Afsar NA, Haenisch S, Mateen A, Usman A, Ufer M, Ahmed KZ, **Ahmad HR,** Cascorbi I. Genotype frequencies of selected drug metabolizing enzymes and ABC drug transporters among breast cancer patients on FAC chemotherapy. *Basic Clin Pharmacol Toxicol.* 2010; 107(1):570-6.

2009

18. Jaleel A, Aqil S, Jaleel F, **Ahmad HR**, Zuberi A, Alam E. Adiponectin and infarction size in subjects with and without cerebrovascular disease. *Neurosciences (Riyadh)* 2009; 14(3):245-8.

2006

19. Bukhari S, Ali A, Subhan F, Ahmad N, **Ahmad HR**. How do intercept and gain of the dyspnea-heart rate relationship respond to exercise in cardiac patients? *Pak J Med Sci.* 2006; 22:28-32.

20. **Ahmad HR**. History and variants of problem based learning: implications for the postgraduate studies. Proc CME on PG Physiol Edn @ JIPMER. 2006. Pondicherry.pp 36-41

2003

21. Bokhari S, Subhan MMF, Ali A, Khan MN, **Ahmad HR**. Dynamics of vagal withdrawal in heart rate control in exercise. *J Pak Med Assoc.* 2003; 53: 375-8.

2001

22. **Ahmad HR,** Subhan MMF, Bokhari SSI, Ali SA, Khan MN. Intercept shift in the breathlessness/ventilation relationship in response to progressive increase in workload. *Adv Exp Med Biol.* 2001; 499: 383-8.

1999

23. Siffert W, Forster P, Jockel KH, Mvere DA, Brinkmann B, Naber C, Crookes R, Heyns A DUP, Epplen JT, Fridey J, Freedman BI, Muller N, Stolke D, Sharma AM, Moutaery KAL, Wilde HG, Buerbaum B, Enrlich T, **Ahmad HR,** Horsthemke B, Toit EDDU, Tiilikainen A, JGE, Wang Y, Yang D, Husing J, Rosskopf D. Worldwide Ethnic Distribution of the G Protein β3 Subunit 825T Allele and Its Association with Obesity in Caucasian, Chinese, and Black African Individuals. *J Am Soc Nephrol.* 1999; 10: 1921-30.

1998

24. Moore BJ, King GG, Yachkova YD, **Ahmad HR**, Pare PD. Mechanism of Methacholine Dose-Response Plateaus in Normal Subjects. *Am J Respir Crit Care Med.* 1998; 158: 666-9.

1996

25. Khan MA, **Ahmad HR.** Non-invasive estimation of thoracic compliance in patients with pulmonary diseases. *Pak J Med Sci.* 1996; 13: 41-6.

26. **Ahmad HR,** Khan MA, Memon M, Khan MN. Interaction of β_2-agonist and volume history in asthmatics and patients with COPD. *Pak J Med Sci.* 1996; 12: 243-6.

27. Lammers W, **Ahmad HR,** Arafat K. Spatial and temporal variation pacemaking and conduction in the isolated renal pelvis. *Am J Physiol.* 1996; 39(3): 1-8.

28. **Ahmad HR**, Rayani HH, Vellani CW, Khan MA, Zaidi SR. Bronchodilator response in pulmonary diseases under two different states of respiratory mechanics. *Respiration* 1996; 63: 286-91.

29. **Ahmad HR**, Akhtar S, Khan KS, Romana H, Khan A, Qureshi AA. Hughes P. Dynamic and steady state response of heart rate to orthostatic stress in normotensive and hypertensive pregnant women. *Eur J Obs Gynaecol* 1996; 66: 1-37.

1995

30. **Ahmad HR**, Khan MA, Memon M, Khan MN. Volume history response of airway resistance. In: Modelling and control of ventilation. (Eds.) Steve Semple, Lewis Adams, Abe Guz and Brain Whipp. Pleunum Press, New York pp. 111-115, 1995.

1994

31. Gilani AH, Janbaz KH, Zaman M, Lateef A, Ruhi S, **Ahmad HR**. Hypotensive and spasmolytic activities of crude of cyperus scariosus. *Arch Pharmacal Res.* 1994; 17: 145-9.

32. Gilani AH, Janzab KH, Zaman M, Lateef A, Suria A, **Ahmad HR**. Possible presence of calcium channel blocker(s) in Rubia cordifolia. *J Pak Med Assoc.* 1994; 44: 82-5.

1993

33. **Ahmad HR**, Omar HM. New indices of pulmonary mechanics derived from force expiratory volume/time curve in normal subjects and patients with pulmonary disease. *Med Sci Res* 1993; 21(18): 685-7.

34. **Ahmad HR**, Prabhakar NR, Cherniack NS. Reaction of hypoxic and hypercapnic excitation of the carotid and aortic body to carbonic anhydrase inhibitor. *Med Sci Res* 1993; 21(3):91-3.

1992

35. **Ahmad HR**, Vellani CW, Sheikh MA. Non-invasive estimation of cardiac output by the CO_2 breath-holding method: A new approach to the Fick Principle. *Pak J Card.* 1992; 2:118-123.

1985

36. **Ahmad HR**, Ulmer WT. Sweat electrolytes and lung function in patients with chronic obstructive lung disease. *Atemwegs-und Lungenkrankheiten. Dustriverla.* 1985; 366-8.

37. Caspary L, Hoffman J, **Ahmad HR**, Luebbers DW. Analysis of *in vitro* cardiac surface PO_2 histogram. *Adv Exp Med Biol.* 1985; 191: 263-270.

1984

38. Hoffmann J, Heinrich U, **Ahmad HR**, Luebbers DW. Analysis of tissue reflection spectra obtained from brain or heart, using the two flux theory for non-constant light scattering. *Adv Exp Med Biol.* 1984; 180: 555-63.

1982

39. Mueckenhoff K, Luttmann A, Loeschcke HH, **Ahmad HR.** Investigation of the ional exchange in the brain: Measurement and modelling. In: Central neurone environment and the control systems of the breathing and circulation. (Eds) Schlaefke ME, Koepchen HP and See WR, Springer-verlag Berlin Heidelberg and New York, pp. 29-41-22, 1982.

40. **Ahmad HR.** Loeschcke HH. Evidence for a carrier mediated exchange of bicarbonate against chloride at the interphases of the central nervous system. In: Central neurone environment and the control systems of breathing and circulation. (Eds.) Schlaefke ME,

Koepchen HP and See WR, Springer-Verlag Berlin, Heidelberg and New York, pp. 13-22, 1982.

41. **Ahmad HR**, Loeschcke HH. Fast bicarbonate-chloride exchange between plasma and brain extracellular fluid at maintained PCO2. *Eur J Physiol.* 1982; 295:300-305.

42. Ahmad HR, Loeschcke HH. Fast bicarbonate-chloride exchange between brain cells and brain extracellular fluid in respiratory acidosis. *Eur J Physiol.*1982; 395; 293-9.

43. **Ahmad HR**, Loeschcke HH. Transient and steady state response of pulmonary ventilation to pH in the brain extracellular fluid. *Eur J Physiol.* 1982; 395; 285-92.

1981

44. Mueckenhoff K, **Ahmad HR**, Luttmann A. The kinetics of the potassium concentration in brain extracellular fluid during respiratory and metabolic disturbances. In: Progress in Enzymes and Ion-selective Electrodes. (Eds.) Luebbers DW, Acker H, Buck RP, Eisenman G, Kessler M, and Simon W, Springer-Verlag, Berlin-Heidelberg, New York, pp. 116-121, 1981.

45. Loeschcke HH, **Ahmad HR.** Contribution to respiratory drive by peripheral and central chemosensory structures. In: Arterial Chemoreceptors. (Eds.) Belmonte C, Paloot JJ, Acker H and Fidone S, Leicester University press, pp. 513-520, 1981.

46. Luttmann A, **Ahmad HR,** Mueckenhoff K, Plaas-Link A. Influence of weak acids and bases on the pH and PCO_2 kinetics in the blood. In: Gas Exchange Function of Normal and Diseased Lungs. (Eds.) Piiper J and Scheid P Karger-Verlag, Basel, 1981.

47. Ahmad HR, Luttmann A, Loeschcke HH. Application of a CO_2-electrode as a micro tonometer for the study of pH kinetics in the blood. In: Gas Exchange Function of Normal and Diseased Lungs. (Eds.) Piiper J. and Scheid P., Karger-Verlag, Basel, pp. 187-1992. 1981.

1980

48. Loeschcke HH, **Ahmad HR**. Transient and steady state of chloride-bicarbonate of brain extracellular fluid. In: Biophysics and Physiology of CO_2, Regensburg. Springer-Verlag, Berlin-Heidelberg, New York, pp.439-448, 1980.

49. Loeschcke HH, **Ahmad HR.** Anion exchange between blood extracellular fluid of the brain cells and its consequences for the respiratory control of acid-base balance. *Respiration and Circulation, Igaku Shoin, Tokyo* 1980; 28:29-330.

1978

50. **Ahmad HR,** Loeschcke HH, Woidtke, HH. Three compartments model for the bicarbonate exchange of the brain extracellular fluid with blood and cells. In: The Regulation of Respiration during Sleep and Anaesthesia. (Eds.) Fitzgerald RS, Gautier H and Lahiri S, Plenum Press, New York, pp. 195-209, 1978.

1976

51. **Ahmad HR,** Berndt J, Loeschcke HH. Bicarbonate exchange between blood, brain extracellular fluid and brain cells at maintained PCO_2. In: Acid-base Homeostasis of the Brain Extracellular Fluid and the Respiratory Control System. (Eds.) Loeschcke HH, Thieme-Verlag, Stuttgart pp. 19-27, 1976.