CURRICULUM VITAE

I. BIOGRAPHICAL DATA

NAME: Hızır Kurtel

ADDRESS: Department of Physiology,

Marmara University School of Medicine

Basibuyuk Yolu Sok. No:9/1

Maltepe-İstanbul

PRESENT RANK: Professor of Physiology,

Marmara University, School of Medicine

TELEPHONE: 0216-6254545 ext. 8104

Mobile: +90 5337706535

E-MAIL: kurtelh@hotmail.com

hkurtel@marmara.edu.tr

II. ACADEMIC QUALIFICATIONS AND AWARDS

Medical Doctor, Dokuz Eylül University School of Medicine. Izmir, Turkey 1987.

Residency in Physiology, (PhD equivalent program for MDs) Department of Physiology, Marmara University School of Medicine, Istanbul, Turkey 1992. *Thesis Title: Ischemia-reperfusion induced mucosal injury: role of neutrophils*

Postdoctoral Fellow, Department of Physiology and Biophysics, Louisiana State University Medical Center, Shreveport LA, USA. Supervisor: Dr. D.N. Granger, January 1990-March1992

Visiting Professor, (3 months) Department of Physiology and Biophysics, Louisiana State University School of Medicine, Shreveport, LA, USA. Intravital microscopic studies on oxidized chylomicron-induced leukocyte-endothelial cell interactions, June-September 1993.

Docent in Physiology, (a formal qualification awarded to academics in the European University System after several years of teaching and research experience and further formal examinations and thesis presentation, equivalent to Associate Professor), awarded by the Turkish Universities Commission, 1996.



Visiting Professor, (for a period of 2 weeks) Hospital Clinic Barcelona, Department of Gastroenterology, Barcelona, Spain. Study on the in vivo application and usage of ultrasonic Doppler flowmeter and hydrogen gas clearance technique, June-1996

Professor of Physiology, Department of Physiology, Marmara University School of Medicine, Istanbul, Turkey 2001.

Visiting Professor, (1 year full appointment) Department of Molecular and Cellular Physiology, Louisiana State University School of Medicine, Shreveport LA, USA, June 2008-June 2009.

III. ADMINISTRATIVE DUTIES AND OTHER SCHOLARLY ACTIVITIES

Associate Director, Animal House, Marmara University School of Medicine 1992-2001

Chairman, Cardiovascular System Subject Committee,. Marmara University School of Medicine 1993-1994

Assistant Coordinator of Phase II Marmara University School of Medicine, 1994-1995

Chairman, Neuroendocrine and Reproductive Systems Subject Committee, Marmara University School of Medicine (Year 2), 1997-2001.

Member of the Board of Directors Marmara University Health Sciences Institution 2001-2007

Head of Multidisiplinary Student Laboratory and Member of Coordinators Committee, Marmara University School of Medicine, 2001-2007.

Outpatient Clinical Director, Sports Physiology, Marmara University School of Medicine Pendik Hospital, 2005-present.

Graduate Program Director (MSc) Sports Physiology, Marmara University Health Sciences Institution.2006-2008.

Chairman, Cardiovascular System and Related Disorders Subject Committee (Year 3), Marmara University School of Medicine 2006-2008.

Member of the Postgraduate Education Committee, Marmara University School of Medicine. 2007-2014.

Member of Accreditation Board, Marmara University School of Medicine, 2012.

IV. OTHER HONORS/AWARDS

Sandoz Pharmacology Award, (Turkey) 1991

Secretary, Free Radicals and Antioxidants Society (İstanbul), 1995-1999

Principle Investigator-Fogarty International Research Collaboration Award (NIH FIRCA) 1996-1999.

Science Encouragement Award, 1997, The Scientific and Technical Research Council of Turkey (TUBİTAK).

Congress Secretary, 27th National Physiology Congress of the Turkish Physiological Society, 2001.

Founder Professor, Department of Sports Physiology, Marmara University School of Medicine 2005.

Certificate of Appreciation. For the Service in Marmara University School of Medicine, 2008.

Symposium President 4th Exercise Physiology Symposium May 17-18 2013 Istanbul, 2013.

Founder Faculty Marmara University Student Sailing Club 2013-

V. EDUCATIONAL ACTIVITIES

i. Human Physiology Lectures in Different Institutions

Allied Health School, Marmara University, Radiology, Laboratory and Anesthesia Technicians, 1988-1995.

Allied Health School, Louisiana State University, Shreveport, 1991-1992.

School of Medicine, Marmara University, Istanbul, 1992-present (Teaching in English).

Health Sciences Institution, MSc and PhD in Physiology, Marmara University 1992-present.

School of Pharmacy, Marmara University, Istanbul 1993-1994.

School of Biology, Marmara University, Istanbul, 1995-2000.

School of Medicine, Yeditepe University, Istanbul, 1997-2007.(Teaching in English)

School of Dentistry, Yeditepe University, Istanbul 1997-2006 (Teaching in English)

School of Biology, Boğaziçi University, Istanbul 1997-1998

School of Medicine, Maltepe University, Istanbul, 1998-2001. (Teaching in English)

Health Sciences Institution, MSc in Sports Physiology, Marmara University 2006-present

ii. Titles of physiology lectures given to medical students (in English, year 1 to 5):

Transport of substances; Cell to cell adhesion; The microcirculation and tissue fluid exchange; Neuromuscular transmission; Synapses and neuronal integration; Spinal reflexes; Physiology of hearing; The basal nuclei and their motor functions; Principles of hemodynamics; Regulation of blood pressure; Coronary circulation; Cardiac muscle; Circulation to specific organs; Hypertension (Interactive Study Module); Blood and its functions; The blood groups and transfusion; Regulation of respiration; Functional structures of the digestive system; Eating, salivation, mastication and deglutition; Digestion, absorption and secretion in small intestine; Functions of large intestine; Functions of liver and gallbladder; Exocrine function of pancreas, Introduction to endocrine physiology; Female reproductive system; Fertilization and implantation; Male reproductive system; Control of blood glucose; Adrenocortical hormones; Fat and Fitness (Interactive Study Module), Exercise prescription in hypertension, Exercise for healthy life style; Skeletal muscle as an endocrine organ.

Experiential physiology student labs (using *Biopac Student Lab* instruments and software: EMGI, EMG II, ECGI, ECGII, ECG&Pulse, Heart Sounds, Systemic Blood Pressure, Aerobic Exercise Physiology, Biofeedback, Reaction Time I, Respiratory Cycle I, Pulmonary Function I, Pulmonary Function II, VO2 and RER, Heart rate Variability Anaysis).

iii. Titles of Courses given to MSc students in sports physiology (in Turkish)

Exercise and endocrine system; Exercise and cardiovascular system; Principles of exercise prescription; Exercise prescription in special cases; Energy for physical activity.

iv. Solely Supervised PhD Students:

Vildan Gurbüz: (1998) "Role of nitric oxide in indomethacin-induced gastric mucosal dysfunction in the rat". Successfully completed her PhD

Mustafa Deniz: (2006) "Mediators of glucagon-like peptide 2-induced blood flow in the rat small intestine". Successfully completed his PhD

Salah Ghondour: (2005) "Effects of acute and chronic stress on intestinal hemodynamics". Successfully completed his PhD.

Ozgur Kasimay: (2007) "Exercised induced bronchospasm in elite athletes: role of endogenous nitric oxide and endothelins" Successfully completed her PhD

Nuray Geçer Alaca: (2015) "Effects of Different Exercise Training Programs on Streptozotosin-Nicotinamide-Induced Type-2 Diabetic Rats: Continuous Versus Short Bouts and Weekend Warrior Exercises". Successfully completed her PhD.

Zarife Nigar Özdemir: (2017) "Impaired vascular function induced by ageing: Role of irisin, exercise and perivascular adipose tissue (PVAT)" Successfully completed her PhD.

Mehmet Koç: (2017) "Role of Apelin in chronic renal failure-induced endothelial dysfunction and cardiac failure" PhD student.

Pınar Kuru Bektaşoğlu (2019) "Role of plasminogen activator inhibitor-1 (PAI-1) inhibition on traumatic brain injury in rats. PhD student.

v. Attendance to specific courses:

Educational skill development and methods for trainers (1 week full time course), June 2000

Methods for student assessment and evaluation (2 days full time course), September 2000.

Advanced CPR Course, Turkish Society of Cardiology, 2005.

Educational skill development and methods for trainers (1 week full time course), June 2012.

vi. Interactive study modules

Hypertention Study Module

Fat and Fitness Module

VI. RESEARCH SUPPORT (as principal investigator)

Cold-restraint stress induced gastric mucosal dysfunction : (1994) Role of nitric oxide. The Scientific and Technical Research Council of Turkey (TÜBİTAK), \$2400.

Indomethacin-induced gastric mucosal dysfunction: (1995) Role of nitric oxide. Marmara University School of Medicine Foundation, \$ 2500.

Cold-restraint stress induced gastric mucosal dysfunction: Role of nitric oxide. (1995) The Scientific and Technical Research Council of Turkey (TÜBİTAK), \$1700.

Endothelin-1 induced intestinal injury: Role of neutrophils, reactive oxygen metabolites and blood flow. (1996) Marmara University Research Grant, \$4000.

Cold-restraint stress induced gastric mucosal injury: Role of PAF and LTB4. (1996) Marmara University Research Grant, \$ 750.

Cold-restraint stress induced gastric mucosal injury: Role of nitric oxide donors. (1996) Marmara University Research Grant, \$ 1000.

Endothelin and ischemia-reperfusion injury. (1996-1999) National Institutes of Health, USA (NIH-FIRCA), \$ 60,000.

Healthy reproduction of research animals for investigators II. (1997) Marmara University Research Grant, \$ 1000.

Role of GLP-1, autonomic nervous system and CCK receptors on ileal brake mechanism. (1999) Marmara University Research Grant, \$ 3500.

Role of ET-A and ET-B receptors on endothelin-1 induced mucosal dysfunction in the rat small intestine. (1999) Marmara University Research Grant, \$ 2000.

Effetcs of acute and chronic stress on intestinal hemodynamics. (2002) The Scientific and Technical Research Council of Turkey (TÜBİTAK), \$ 10.000

Role of endothelin peptides in experimental colitis. (2003) Marmara University Research Grant, \$ 10.000.

Role of glucagone like peptide-2 on intestinal ischemia reperfusion injury. (2004) Eczacibasi Group Scientific Research and Award Fund., \$ 5000.

Establishement of Sports Physiology Laboratory. (2005) Marmara University Research Grant, \$ 30.000.

Exercised induced bronchospasm in elite athletes: role of endogenous nitric oxide and endothelins. (2005) Turkish Government Planning Commission, \$ 50,000.

Effects of chronic regular exercise on plasma nitric oxide and endothelin-1 levels in individuals with impaired glucose tolerance, (2005) The Scientific and Technical Research Council of Turkey (TÜBİTAK), \$ 10.000.

Skeletal muscle gene ACTN3 and physical performance: genotype-phenotype relation, (2007) Marmara University Research Grant, \$15.000.

Effects of different exercise modalities on muscle tissue and cardiovascular system in diabetic rats: weekend warriors versus daily swimmers. (2014) Marmara University Research Grant, \$ 15.000.

Impaired vascular function induced by ageing: Role of irisin and perivascular adipose tissue (2016), Marmara University Research Grant, \$ 15.000.

Role of Apelin in chronic renal failure-induced endothelial dysfunction and cardiac failure (2017) Marmara University Research Grant, \$15.000.

VII. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Istanbul Medical Association Turkish Physiological Societies Federation Federation of European Physiological Societies Free Radicals and Antioxidants Society (İstanbul)

VIII. PUBLICATIONS (h-index:18)

In Peer Reviewed Journals

- 1- Kurtel H., B.Ç. Yeğen, A. Dedeoğlu, N.B. Ulusoy, and Ş. Oktay. Muscarinic receptor subtypes of guinea pig gallbladder smooth muscle. Arch. in Pharmacodyn. Ther.308:38-46, 1990.
- 2- Kurtel H., K. Fujimoto, B. J. Zimmerman, D. N. Granger and P. Tso. Ischemia-reperfusion-induced mucosal dysfunction; role of neutrophils. Am J. Physiol. 261 (Gastrointest. Liver Physiol. 24):G490-G496, 1991.
- 3- Kurtel H., P. Tso, and D. N. Granger. Granulocyte accumulation in postischemic intestine: role of leukocyte adhesion glycoprotein CD11/CD18. Am J. Physiol. 262(Gastrointest Liver Physiol 25):G878-G882, 1992.
- 4- Kurtel H., D.N. Granger, P. Tso, M.B. Grisham. Vulnerability of intestinal interstitial fluid to oxidant stress, Am. J. Physiol.(Gastrointest. Liver Physiol. 26):G573-G578, 1992
- 5- Coşkun T., A. Sevinç, İ. Tevetoğlu, İ. Alican, H. Kurtel, B.Ç. Yeğen. Delayed gastric emptying in conscious male rats following chronic estrogen and progesterone treatment. Research in Experimental Medicine, 195: 49-54, 1995.
- 6- Coşkun T., İ. Alican, B.Ç. Yeğen, T. Şan, Ş. Çetinel, H. Kurtel. Cyclosporin A reduces the severity of cold-restraint-induced gastric lesions:Role of leukocytes, Digestion 56:214-219, 1995.

- 7- Alican İ., T. Coşkun, A. Çorak, B.Ç. Yeğen, Ş. Oktay, H. Kurtel. Role of neutrophils in indomethacin-induced gastric mucosal lesions in rats. Inflammation Research, 44: 164-168, 1995
- 8- Kurtel H., M.B. Grisham, P. Tso, T.Y. Aw, D.C. Anderson, M. Miyasaka, D.N. Granger. Mechanisms of oxidized chylomicron-induced leukocyte-endothelial cell adhesion. Am J Physiol. 268 (Heart and Circ Physiol.):H2175-H2182, 1995.
- 9- Yeğen B.Ç., V. Gürbüz, T. Coşkun, A. Bozkurt, H. Kurtel, I. Alican, G.J. Dockray. Inhibitory effects of gastrin releasing peptide on gastric emptying in rats. Regulatory Peptides. 61, 175-180, 1996.
- 10- Coşkun T., İ. Alican, V. Gürbüz, A. Çorak, Ş. Çetinel, H. Kurtel, B.Ç. Yeğen. Influence of gallopamil on the gastric effects of stress. Pharmacology, 52:199-206, 1996.
- 11- Coşkun T., B.Ç. Yeğen, İ. Alican, Ö. Peker, H. Kurtel. Cold-restraint-stress induced gastric mucosal dysfunction: role of nitric oxide. Digest.Dis.Sci., 41:956-963, 1996.
- 12- Güllüoğlu B.M., A.Ö. Aktan, C. Yeğen, H. Kurtel, R. Yalin. Endothelin release is augmented with captopril in rat ischemia-reperfusion injury of the liver. Research in Experimental Medicine, 196: 227-233, 1996.
- 13- Gürbüz V., A. Çorak, B.Ç. Yeğen, H. Kurtel, İ. Alican. Oxidative organ damage in a rat model of thermal injury: the effect of cyclosporin A. Burns, 23:37-42, 1997.
- 14- Coskun, T., A. Bozkurt, I. Alican, U Özkutlu, H. Kurtel, B.Ç. Yeğen. Pathways mediating CRF-induced inhibition of gastric emptying in rats. Regulatory Peptides, 69; 113-120, 1997.
- 15- Çorak A., T. Çoşkun, İ. Alican, H. Kurtel, B.Ç. Yeğen. The effect of nitric oxide synthase blockage and indomethacin on gastric emptying and gastric contractility. Pharmacology ,54:298-304, 1997.
- 16- Alican İ., C. Yeğen, A. Olcay, H.Kurtel, B.Ç. Yeğen. Ischemia-reperfusion induced delay in intestinal transit: role of endothelins. Digestion, 59: 343-348, 1998.
- 17- Bozkurt, A., M. Yüksel, G. Haklar, H. Kurtel, B.Ç. Yeğen, İ. Alican. Adenosine protects against indomethacin-induced gastric damage in rats. Digest. Dis Sci. 43(6), 504-509, 1998.
- 18- Gürbüz, V., İ., Alican, B.Ç. Yeğen, A. Bozkurt, B. Karakoyun, G. Haklar, M. Yüksel, H. Kurtel. Role of nitric oxide in indomethacin- induced gastric mucosal dysfunction in the rat. Exp. Physiol. 84(2), 319-332, 1999.

- 19- Güllüoğlu, B.M., H. Kurtel, M.G. Güllüoğlu, C. Yeğen, A.Ö. Aktan, F. Dizdaroğlu, R. Yalın, B.Ç. Yeğen. The role of endothelins in trinitrobenzene sulfonic acid-induced colitis in rats. Digestion, 60: 484-492, 1999.
- 20- Güllüoğlu, B.M., H. Kurtel, M.G. Güllüoğlu, A.Ö. Aktan, C. Yeğen, F. Dizdaroğlu, R. Yalın, B.Ç. Yeğen. Bombesin ameliorates the colonic damage in experimental colitis. Digest. Dis. Sci., 44:1531-1538, 1999.
- 21- Bozkurt, A., B.K. Oktar, H. Kurtel, İ. Alican, T. Coskun, B.Ç. Yeğen. Capsaicinsensitive vagal fibers and 5-HT3-, gastrin releasing peptide, and cholecystokinin A receptors are involved in distension-induced inhibition of gastric emptying in the rat. Regulatory Peptides, 83; 81-86, 1999.
- 22- Oktar, B.K., T. Coşkun, A. Bozkurt, B. Ç. Yeğen, M. Yüksel, G. Haklar, S. Bilsel, F. B. Aksungar, Ş. Çetinel, D.N. Granger and H. Kurtel. Endothelin-1 induced PMN infiltration and mucosal dysfunction in the rat small intestine. Am J. Physiol. (Gastrointest. Liver Physiol. 42): 483-491, 2000.
- 23- Oktar, B.K., M.A. Gülpınar, A. Bozkurt, S. Ghandour, Ş. Çetinel, H. Moini, B.Ç. Yeğen, S. Bilsel, D.N. Granger, H. Kurtel. Endothelin receptor blockers reduce ischemia-reperfusion induced intestinal mucosal injury in the rat: role of blood flow. Am J. Physiol. Gastrointest. Liver Physiol. 282: g647-g655, 2002.
- 24- İşman CA, Gülpınar MA, Kurtel H, Alican İ, Yeğen BÇ. Hypertension module: an interactive learning tool in physiology. Adv Physiol Educ 27(2):53-61, 2003
- 25- Ghandour S, Çetinel Ş, H. Kurtel. Endothelin-3 induced mesenteric vasoconstriction and PMN infiltration in the rat small intestine: role of endothelin receptors. Regulatory Peptides 119:125-131, 2004.
- 26- Deniz M, Çetinel Ş, H. Kurtel. Blood flow alterations in the TNBS-induced colitis: role of endothelin receptors. Inflammation Research. 53:1-8, 2004.
- 27-Deniz M, Bozkurt A, Kurtel H. Mediators of glucagon-like peptide 2-inducedblood flow: responses in different vascular sites. RegulPept. 2007 Jul5;142(1-2):7-15. PubMed PMID: 17346812.
- 28- Kasımay O, Ergen N, Bilsel S, Kaçar O, Deyneli O, Gogas D, Akalın S, Yeğen BÇ,Kurtel H. Diet-supported aerobic exercise reduces blood endothelin-1 and nitricoxide levels in individuals with impaired glucose tolerance. J ClinLipidol. 2010Sep-Oct;4(5):427-34. doi: 10.1016/j.jacl.2010.08.001. PubMed PMID: 21122687
- 29- Kasimay Ö, Yildirim A, Ünal M, Kaçar Ö, Bilsel S, Kurtel H. The involvement ofnitric oxide and endothelin-1 in exercise-induced bronchospasm in young soccerplayers.Clin J

- Sport Med. 2011 May;21(3):237-42. doi:10.1097/JSM.0b013e31821a61c8. PubMed PMID: 21490504.
- 30- Kurtel H, Rodrigues SF, Yilmaz CE, Yildirim A, Granger DN. Impaired vasomotor function induced by the combination of hypertension and hypercholesterolemia. JAm SocHypertens. 2013 Jan-Feb;7(1):14-23. doi: 10.1016/j.jash.2012.11.005.PubMed PMID: 23321401; PubMed Central PMCID: PMC3547651.
- 31- Agopyan A, Tekin D, Unal M, Kurtel H, Turan G, Ersoz A. Acute effects of static stretching on isokinetic thigh strength on modern dancers. J Sports MedPhys Fitness. 2013 Oct;53(5):538-50. PubMed PMID: 23903535.
- 32- Agopyan A, Tekin D, Unal M, Kurtel H, Turan G, Ersoz A. Isokinetic strengthprofiles of thigh muscles of modern dancers in relation to their experiencelevel. Med Probl Perform Art. 2013 Sep;28(3):137-44. PubMed PMID: 24013285.
- 33- Kirac D, KasimayCakir O, Avcilar T, Deyneli O, Kurtel H, Yazici D, Kaspar EC,Celik N, Guney AI. Effects of MC4R, FTO, and NMB gene variants to obesity,physical activity, and eating behavior phenotypes.IUBMB Life. 2016Oct;68(10):806-16. doi: 10.1002/iub.1558. PubMed PMID: 27634552.
- 34- Alaca N, Uslu S, GulecSuyen G, Ince U, Serteser M, Kurtel H.Effects of different aerobic exercise frequencies on streptozotocin-nicotinamide-induced type 2 diabetic rats: continuous versus short bouts and weekend warrior exercises.J Diabetes.2017 Apr 20.doi: 10.1111/1753-0407.12561.PMID: 28425181
- 35- Alaca N, Özbeyli D, Uslu S, Şahin HH, Yiğittürk G, Kurtel H, Öktem G, ÇağlayanYeğen B.Treatment with milk thistle extract (Silybummarianum), ursodeoxycholic acid, or their combination attenuates cholestatic liver injury in rats: Role of the hepatic stem cells.Turk J Gastroenterol. 2017 Nov;28(6):476-484. doi: 10.5152/tjg.2017.16742. Epub 2017 Oct 25.PMID: 2908671
- 36- Uslu S1, Alaca N2, Kilic KD3, Uysal A3, Kurtel H4. The effects of aerobic exercise frequencies on liver fibrosis, α -fetoprotein and cytokeratin 19 in experimental type 2 diabetes-induced rats: an immunohistochemistry study. Biotech Histochem. 2018;93(8):615-622. doi: 10.1080/10520295.2018.1517898. Epub 2018 Sep 27.PMID: 30260236
- 37-Analysis of Postural Stability and Daily Energy Expenditure to Manage Tumor Patients' Functional Expectation. Caliskan E1, Karadag Saygi E2, Gencer ZK2, Kurtel H3, Erol B. Clin Orthop Surg. 2018 Dec;10(4):491-499. doi: 10.4055/cios.2018.10.4.491. Epub 2018 Nov 21.

Book Chapters, Translations and Others:

- 1: Kurtel H., B. J. Zimmerman, P. Kubes, and D. N. Granger. Reactive oxygen metabolites: modulations of reperfusion-induced neutrophil infiltration. Oxidative Damage and Repair: Clinical, Biological and Medical aspects. K.J.A. Davies,(ed), Pergamon Press. 694-699, 1991.
- 2: Zimmerman B.J., H. Arnt, P. Kubes, H. Kurtel, and D.N. Granger. Reperfusion injury in the small intestine. Pathophysiology of Shock, Sepsis, and Organ Failure. G. Schlag, H Redl (Eds.), Springer-Verlag, Berlin, 322-335, 1993.
- 3: Kurtel, H., S. Ghandour. Endothelins and inflammation: the gastrointestinal system. Pathophysiology, 6: 77-89, 1999.
- 4: Book Translation: Medical Physiology ,W.F. Ganong, Chapter 3, Translation Editor : Ayşe Doğan, Barış Kitabevi, 1995.
- 5: Book Translation: PDQ Physiology Uwe Ackerman Translation Editors: İnci Alican, Berrak Yeğen, Hızır Kurtel, Istanbul Medikal Yayincilik, 2006.
- 6: Book Translation: A.C. Textbook of Medical Physiology, Guyton and Hall, Chapters 16 and 17 1996, 2007, 2016.

Numerous, presentations in national and international meetings, articles in national journals, workshops in national meetings.