Professor Çimen Karasu

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EDUCATION:

- Ph.D., Department of Pharmacology, Faculty of Pharmacy, Ankara University, 1992.
- M.Sc., Department of Pharmacology, Faculty of Pharmacy, Ankara University, 1987.

EMPLOYMENTS & POSITIONS HELD:

2002-present	Full Time Professor in Department of Medical Pharmacology, Faculty of
	Medicine, Gazi University, Ankara, Turkey.
2000-2002	Senior Lecturer and Associated Professor in Department of Pharmacology,
	Faculty of Pharmacy, Ankara University, Ankara, Turkey
1995-2000	Lecturer and Associate Professor in Department of Pharmacology, Faculty of
	Pharmacy, Ankara University, Ankara, Turkey
1993-1994	Visiting Scientist and Post Doctoral Fellowship in University of London,
	"Queen Mary & Westfield Collage, Faculty of Basic Medical Sciences,
	Department of Medical Pharmacology" and "The William Harvey Research
	Institute" London, England.
1992-1993	Research and Teaching Assistant in Department of Pharmacology, Faculty of
	Pharmacy, Ankara University, Ankara, Turkey
1984-1991	Research Assistant, Department of Pharmacology, Faculty of Pharmacy,
	Ankara University, Ankara, Turkey

OTHER FACULTY POSITIONS:

2002-2004

2004-present	Constitutive Head of Cellular Stress Response and Signal Transduction
	Research Laboratory, Gazi University, Ankara.
2003-present	Constitutive Head of Department of Medical Informatics, Faculty of Medicine,
	Gazi University, Ankara.

Constitutive Director of Laboratory Animals Facilities and Medical Research Canter, Gazi University, Ankara.

1995-2001 Head of Multidisciplinary Student Laboratories Faculty of Pharmacy, Ankara University, Ankara.

PROFESSIONAL ACTIVITIES:

(a) Societies & Associations

2010-present Executive Committee Member. "The World Federation & World Virtual Institute of Preventive & Regenerative Medicine" (PYRAMED-REGMED).

2009-present The Deputy Secretary General. "The European Society for Preventive, Regenerative & Anti-Aging Medicine" (ESAAM).

2008-present Advisory Board. "The World Anti-Aging Academy of Medicine" (WAAAM). 2005-present Constitutive President. "The Anti-Aging and Aesthetic Medicine Society – Turkey".

2000-2006 Executive Committee Member. Turkish Pharmacological Society, Turkey.

(b) Research Leadership

1995-present Leader. "Antioxidants in Diabetes-Induced Complications (ADIC) Study Group" (PUB-MED).

(c) Consultant Appointments

2000-present	Reviewer. The Scientific and Technological Research Council of Turkey.
2000-2006	Board. Turkish Pharmacopoeia Commission, Ministry of Health, Turkey.
2002-2004	Head. International Affairs Commission of Gazi University Faculty of
	Medicine, Turkey.
2002-2004	Board. Ethic Committee for Laboratory Animals, Gazi University, Ankara.
1999-2002	Board. Main Commission of Drug Licensing and Legislation, Ministry of
	Health, Turkey.
1998-1999	Board. Commission on Drug Prospectus Evaluation and Approval, Ministry of
	Health, Turkey.

(d) Editorial Services

2010-present Editorial Board of Neuroendocrinology Letters. ISSN 0172–780X Published by the Society of Integrated Sciences.

2010-present Editorial Board of Rejuvenation Research. ISSN: 1549-1684. Published by the Mary Ann Liebert, Inc.

2000-present Editorial Board of Türkiye Klinikleri Journal of Medical Sciences ISSN: 1300-0292. Published by the Türkiye Klinikleri.

2004-present Editorial Board of Gazi University Medical Journal, Turkey. 2000-present Editorial Board of Turkish Pharmacological Society Bulletin

(e) Invited Speaker at Recent International Conferences/Workshops:

- The 2nd annual ECOPRAM (European Congress on Preventative Regenerative and Aging Medicine). 18-20 March 2010 at the Milan Convention Centre, Italy. Title of the Keynote Lecture: "Oxidative stress related changes in proteins during aging and agerelated diseases"
- 5th World Congress on Preventive and Regenerative Medicine, 5-7 October 2010 at Convention Centre in Hannover, Germany. Title of the Keynote Lecture: "Advanced Lipoxidation and Glycoxidation in Aging: Therapeutic Prospects for the Inhibitors"
- The Dubai Congress on Anti-Aging & Aesthetic Medicine 2010. 25-27 October 2010, Dubai United Arab Emirates. Title of Keynote Lecture: "How to Lower Glycoxidative

- Stress and Reverse Aging"
- International Congress on Swiss Academy of Antiaging Medicine; SICAAAM II. 27-29 November 2009 Geneva, Switzerland. Title of the Keynote Lecture: "Diabetes as amodel of oxidative aging: Potential remedies using anti-oxidants"
- 2nd International Geriatric Physical Therapy Congress. 11-13 November 2009 at the Hacettepe University, Cultural Cener, Ankara, Turkey. Title of the Keynote Lecture: "Antiaging experiences from Turkey"

(f) Main Projects and International Cooperation

- 2011-present Project coordinator. The effects of "(±)-8-methoxy-1,3,4,4a,5,9b-hexahydro-pyrido[4,3-b]indole-2-carboxylic acid ethyl ester" on viability, reactive radical production, insulin releasing and cytokine-mediated cell death in INS-1 cells. Supported by Gazi University Research Foundation No:01/2011–09.
- 2011-present Project coordinator. Development of Functional Nutrient, Dietary Supplement and OTC drug (pharmaceutical Formulations) from Olive leaf extracts. Supported by KOSGEB No:2011-0850.
- 2010-present Project coordinator. The effects of SM1EC1 on glycoxidative stress markers and vascular reactivity on aging rats with or without diabetes. Supported by Gazi University Research Foundation No:01/2010-126.
- 2010-present Project Leader and the coordinator of Turkish side. The role of oxidative stress in apoptosis and dysfunction of pancreatic beta cells: The potential protective effect of novel pyridoindole antioxidants. Supported by the Scientific and Technological Research Council of Turkey (TUBITAK) and Slovak Academy of Sciences, SBAG-SLOVAK-4 No:108S239.
- 2007-2010 Project coordinator. The effects of dietary restriction, exercise, orlistate and sibutramin on oxidative stress and antioxidation markers in obese patients. Supported by Gazi University Research Foundation No:01/2007-02.
- 2006-2010 Project Leader and the coordinator. Research on effects of Olea europaea leaf extracts on protein-lipid oxidation, apoptosis signal transduction pathways and glucose stimulated insulin release in INS-1E pancreas beta cell line", Supported by the European Science Foundation, COST Action B-35 (Lipid Peroxidation Associated Disease). Scientific and Technological Research Council of Turkey (TUBITAK) No:106S025.
- 2004-2010 Project Leader and the coordinator. The vascular effects (in vivo and in vitro) of pyridoindole antioxidants on animal model of diabetes mellitus. Supported by Gazi University Research Foundation No:01/2004-42.
- 2003-2009 Project Leader and the coordinator. Assessment of cardiovascular and Renovascular effects of antioxidant stobadine. Supported by Gazi University Research Foundation No:01/2003-50.
- 2003-2007 Project Leader and the coordinator of Turkish side. Antioxidants and aldose reductase blockade in prevention of late diabetic complications: study on new pyridoindole derivatives. Supported by the Scientific and Technological Research Council of Turkey (TUBITAK) and Slovak Academy of Sciences, SBAG-SLOVAK-2 No:103S180.
- 2001-2005 Project Leader and coordinator. Antioxidants and aldose reductase blockade in prevention of late diabetic complications: study on new pyridoindole derivatives", Supported by Turkish Scientific and Research Council (TUBITAK), No:SBAG-2397 (100S232), Ankara University Research

Foundation No:2001-08-03-31 and Gazi University Research Foundation No:01-2003/50.

- 1998-2001 Project Leader and coordinator. The role of some antioxidant compounds on the treatment of cardiovascular observed in experimental diabetes. Supported by Ankara University Research Foundation No:98-03-005.
- 1993-1994 Principal Researcher. Effects of antioxidant treatment on the nerve dysfunction in STZ-diabetic rats; comparison with essential fatty acids. Supported by grants from the William Harvey Research Institute, Ono Pharmaceuticals and Scotia Pharmaceuticals.
- 1993-1994 Researcher. Effects of aminoguanidine treatment on sciatic nerve Doppler flux and in vitro prostacycline release in experimental diabetes". Supported by grants from the William Harvey Research Institute and Ono Pharmaceuticals.
- Researcher. The effects of essential fatty acids and anti-oxidants on sciatic nerve dysfunction in streptozotocin-diabetic rats" Supported by grants from the William Harvey Research Institute and Ono Pharmaceuticals.
- 1988-1990 Principal researcher. The role of endothelial cells on the vascular reactivity in alloxan diabetic rats", Supported by Ankara University Research Foundation No:88-03-003.

(g) Awards and acknowledgements

- Grant for visiting scientist from University of London, Queen Mary & Westfield Collage, 1993
- Postdoctoral Fellowship William Harvey Research Institute 1993-1994.
- Ono Pharmaceuticals Grant for Research, 1993.
- Awards from The Scientific and Technological Research Council of Turkey (TUBITAK) for international publications (1998 -2010).
- Award from the presidency of Ankara University for The Best Scientist in the University (1999).
- Award from Ankara University for encouragement of international publications (1986-2002).
- Award from Gazi University for encouragement of international publications (2002-2011)
- Awards for Science, Technology and Novelty Projects Lieder from Scientific and Technological Research Council of Turkey (TUBITAK), 2006.

(I) Publications in International Journals

PUB-MED:	60
WEB of SCI®:	87
Short Communications and Abstracts in International Journals	> 70
Citations in SCI, WEB of Science®:	780

EXPERTISE & RESEARCH INTEREST:

Since the early 1990's, within the title "The Antioxidants in Diabetes-induced Complications (ADIC) Study Group" and the leadership of Prof. Karasu, the laboratory was focused on the characterization of metabolic reactions and cellular alterations mediated by reactive oxygen species and other reactive radicals. Oxidative stress-induced deteriorations in lipid and protein structure and functions, cellular stress responses to oxidants and

antioxidative compounds are in the centre of her research interest. During years, Prof. Karasu was occupied by the evaluations of the mechanisms of alterations in tissue and organ functions in animal models of accelerated aging and advanced oxidation end productsmediated diseases such as diabetes, obesity, cardiovascular and neurodegenerative complications. She determined preventive and/or restorative effects of various natural and synthetic substances and drugs, including antioxidants, trace elements, essential fatty acids, lipid and blood glucose lowering drugs or insulin sensitizer compounds on oxidative stressmediated and age-related metabolic abnormalities and diseases. Within the topics linked with endocrinepharmacology, the interaction mechanisms of pancreatic and adipose tissue hormones, incretins and neuropeptides in the regulation of energy metabolism have been clarified in her laboratory. She has also patents by pyridoindole antioxidants under collaboration of Slovak Academy of Sciences. Recently, Prof. Karasu interested in research on how cell death signal transduction pathways are affected by cellular stressors and oxidative-aging processes and which mechanisms are involved in the maintenance of cell survival via cellular redox homeostasis by natural micronutrients. Senesence, longevity and Anti-Aging philosophy are the priority of her academic life

ORIGINAL RESEARCH ARTICLES IN INTERNATIONAL PEER-REVIEWED SCIENTIFIC JOURNALS

- 1. Cumaoglu A, Ari N, Kartal M, Karasu C. Polyphenolic extracts from Olea europea L. protect against cytokine-induced β-cell damage through maintenance of redox homeostasis. **REJUVENATION RESEARCH** DOI: 10.1089/rej.2010.1111.
- 2. Cumaoğlu A, Rackova L, Stefek M, Kartal M, Maechler P, Karasu C. Effects of olive leaf polyphenols against H₂O₂ toxicity in insulin secreting β-cells. ACTA BIOCHIMICA POLONICA 58(1): 45-50, 2011.
- **3.** Ceylan-Isik AF, Ari N, Stefek M, Sotnikova R, Ozansoy G, Horakova L, **Karasu C**. Effects of a Long-Term Treatment with an Antioxidant Pyridoindole on Vascular Responsiveness in Diabetes-Induced Aging Rats. **CURRENT AGING SCIENCE** 4(2): 150-157, 2011.
- **4.** Cumaoğlu A, Ozansoy G, Irat AM, Arıcıoğlu A, **Karasu** C, Arı N. Effect of long term, non cholesterol lowering dose of fluvastatin treatment on oxidative stress in brain and peripheral tissues of streptozotocin-diabetic rats. **EUROPEAN JOURNAL of PHARMACOLOGY** 654(1): 80-85, 2011.
- **5.** Duvan CI, Cumaoglu A, Turhan NO, **Karasu C**, Kafali H. Oxidant/antioxidant status in premenstrual syndrome. **ARCHIVE GYNAECOLOGY OBSTETRIC** 283(2): 299-304, 2011.
- **6. Karasu C.** Glycoxidative stress and cardiovascular complications in experimentally-induced diabetes: effects of antioxidant treatment. **OPEN CARDIOVASCULAR MEDICINE JOURNAL** 26(4): 240-256, 2010.
- 7. Cumaoglu A, Stefek M, Bauer V, Ari N, Aricioglu A, Karasu C. Glycoxidative and nitrosative stress in kidney of experimental diabetic rats: effects of the prydoindole antioxidant stobadine. NEUROENDOCRINOLOGY LETTERS 31(3): 313-318, 2010.

- **8.** Rackova L, Snirc V, Jung T, Stefek M, **Karasu** C, Grune T. Metabolism-induced oxidative stress is a mediator of glucose toxicity in HT22 neuronal cells. **FREE RADICAL RESEARCH** 43(9): 876-886, 2009.
- **9.** Güler G, Türközer Z, Ozgur E, Tomruk A, Seyhan N, **Karasu C.** Protein oxidation under extremely low frequency electric field in guinea pigs. Effect of N-acetyl-L-cysteine treatment. **GENERAL PHYSIOLOGY & BIOPHYSICS** 28(1):47-55, 2009.
- **10.** Skalska S, Kyselova Z, Gajdosikova A, **Karasu C,** Stefek M, Stolc S. Protective effect of stobadine on nerve conduction velocity in streptozotocin-diabetic rats: augmentation by vitamin E. **GENERAL PHYSIOLOGY AND BIOPHYSICS** 27(2): 106-114, 2008.
- **11.** Demirci H, Yurtcu E, Ergun MA, Yazici AC, **Karasu C**, Yetkin I. Calpain 10 SNP-44 gene polymorphism affects susceptibility to type 2 diabetes mellitus and diabetic-related conditions. **GENETIC TESTING** 12(2): 305-309, 2008.
- **12.** Cumaoglu A, Cevik C, Rackova L, Ari N, **Karasu C.** Effects of antioxidant stobadine on protein carbonylation, advanced oxidation protein products and reductive capacity of liver in streptozotocin-diabetic rats: role of oxidative/nitrosative stress. **BIOFACTORS** 30(3): 171-178, 2007.
- **13.** Uluoglu C, Cimen B, Ozbey G, **Karasu** C, Durakoglugil DB, Gunes A, Turkozkan N, Zengil H. The effect of experimental diabetes on the circadian pattern of adenosine deaminase and myeloperoxidase activities in rat liver. **GENERAL PHYSIOLOGY AND BIOPHYSICS** 27 (1): 25-31, 2008.
- **14.** Stefek M, Snirc V, Djoubissie PO, Majekova M, Demopoulos V, Rackova L, Bezakova Z, **Karasu** C, Carbone V, El-Kabbani O. Carboxymethylated pyridoindole antioxidants as aldose reductase inhibitors: Synthesis, activity, partitioning, and molecular modeling. **BIOORGANIC MEDICINAL CHEMISTRY** 16(9): 4908-4920, 2008.
- **15.** Uluoglu C, Durakoglugil DB, **Karasu** C, Ozbey G, Gunes A, Zengil H. The effect of experimental diabetes on the twenty-four-hour pattern of the vasodilator responses to acetylcholine and isoprenaline in the rat aorta. **CHRONOBIOLOGY INTERNATIONAL** 24(6): 1081-1094, 2007.
- **16.** Ceylan-Isik A, Hünkar T, Aşan E, Kaymaz F, Ari N, Söylemezoğlu T, Renda N, Soncul H, Bali M, **Karasu** C. (Antioxidants in Diabetes-Induced Complications) *The ADIC Study Group*. Cod liver oil supplementation improves cardiovascular and metabolic abnormalities in streptozotocin diabetic rats. **JOURNAL OF PHARMACY AND PHARMACOLOGY** 59(12): 1629-1641, 2007.
- **17.** Sahilli M, Irat AM, Işik AC, **Karasu** C, Ozansoy G, Ari N. A lack of synergistic interaction between insulin and pioglitazone on reactivity of rat aorta from chronically high dose insulin-treated diabetic rats. **GENERAL PHYSIOLOGY AND BIOPHYSICS** 26(1): 48-55, 2007.
- **18.** Yülek F, Or M, Ozoğul C, Isik AC, Ari N, Stefek M, Bauer V, **Karasu C**. Effects of stobadine and vitamin E in diabetes-induced retinal abnormalities: involvement of oxidative stress. **ARCHIVE OF MEDICAL RESEARCH** 38(5): 503-511, 2007.

- **19.** Umit Bağriaçik E, Uslu K, Yurtçu E, Stefek M, **Karasu C**. Stobadine inhibits doxorubicin-induced apoptosis through a caspase-9 dependent pathway in P815 mastocytoma cells. **CELL BIOLOGY INTERNATIONAL** 31(9): 979-984, 2007.
- **20.** Guz G, Demirogullari B, Ulusu NN, Dogu C, Demirtola A, Kavutcu M, Omeroglu S, Stefek M, **Karasu C.** Stobadine protects rat kidney against ischaemia/reperfusion injury. **CLINICAL AND EXPERIMENTAL PHARMACOLOGY AND PHYSIOLOGY** 34(3): 210-216, 2007.
- **21.** Guz G, Oz E, Lortlar N, Ulusu NN, Nurlu N, Demirogullari B, Omeroglu S, Sert S, **Karasu C**. The effect of taurine on renal ischemia/reperfusion injury. **AMINO ACIDS** 32(3): 405-411, 2007.
- 22. Irat AM, Aslamaci S, Karasu C, Ari N. Alteration of vascular reactivity in diabetic human mammary artery and the effects of thiazolidinediones. JOURNAL OF PHARMACY AND PHARMACOLOGY 58(12): 1647-1653, 2006.
- **23.** Ulusu NN, Ozbey G, Tandogan B, Gunes A, Durakoglugil DB, **Karasu C.** Uluoglu C, Zengil H. Circadian variations in the activities of 6-phosphogluconate dehydrogenase and glucose-6-phosphate dehydrogenase in the liver of conrol and streptozotocin-induced diabetic rats. **CHRONOBIOLOGY INTERNATIONAL** 22(4): 667-677, 2005.
- **24.** Kyselova Z, Gajdosik A, Gajdosikova A, Ulicna O, Mihalova D, **Karasu C.** Stefek M. Effect of the pyridoindole antioxidant stobadine on development of experimental diabetic cataract and on lens protein oxidation in rats: comparison with vitamin E and BHT. **MOLECULAR VISION** 11(6): 56-65, 2005.
- **25.** Gunes A, Ceylan A, Sarioglu Y, Stefek M, Bauer V, **Karasu C.** *The Antioxidants in Diabetes-induced Complications (ADIC) Study Group.* Reactive oxygen species mediate abnormal contractile response to sympathetic nerve stimulation and noradrenaline in the vas deferens of chronically diabetic rats: effects of in vivo treatment with antioxidants. **FUNDAMENTAL & CLINICAL PHARMACOLOGY** 19(1): 73-79, 2005.
- **26.** Das Evcimen N, Ulusu NN, **Karasu** C, Dogru B. Adenosine triphosphatase activity of streptozotocin-induced diabetic rat brain microsomes. Effect of vitamin E. **GENERAL PHYSIOLOGY AND BIOPHYSICS** 23(3): 347-355, 2004.
- **27.** Ceylan A, **Karasu** C, Aktan F, Ozansoy G. Simvastatin treatment restores vasoconstriction and the inhibitory effect of LPC on endothelial relaxation via affecting oxidizing metabolism in diabetic rats. **DIABETES NUTRITION & METABOLISM** 17(4): 203-210, 2004.
- **28.** Cimen B, Turkozkan N, Seven I, Unlu A, **Karasu C**. Impaired Na⁺,K⁺-ATPase activity as a mechanism of reactive nitrogen species-induced cytotoxicity in guinea pig liver exposed to lipopolysaccharides. **MOLECULAR AND CELLULAR BIOCHEMISTRY** 259(1-2): 53-57, 2004.
- 29. Akbay E, Ulusu NN, Törüner F, Ayvaz G, Taneri F, Aktürk M, Arslan M, Karasu C.

- Effects of Rosiglitazone treatment on the pentose phosphate pathway and kidney of rats fed a high-fat diet. **CURRENT THERAPEUTIC RESEARCH-CLINICAL AND EXPERIMENTAL** 65(1): 79-89, 2004.
- **30.** Ceylan A, **Karasu** C, Aktan F, Guven C, Can B, Ozansoy G. Effects of simvastatin treatment on oxidant/antioxidant state and ultrastructure of diabetic rat myocardium. **GENERAL PHYSIOLOGY AND BIOPHYSICS** 22(4): 535-547, 2003.
- **31.** Demiryurek AT, **Karasu C**, Stefek M, Stolc S. Effect of stobadine on leukocyte free radical generation in streptozotocin-diabetic rats: Comparison with vitamin E. **PHARMACOLOGY** 70(1): 1-4, 2004.
- **32.** Dogru Pekiner B., Das Evcimen N., Ulusu N.N., Bali M., **Karasu C**. Effects of vitamin E on microsomal Ca²⁺-ATPase activity and calcium levels in streptozotocin-induced diabetic rat kidney. **CELL BIOCHEMISTRY AND FUNCTION** 21(2): 177-182, 2003.
- **33.** Ulusu NN, Sahilli M, Avci A, Canbolat O, Ozansoy G, Ari N, Bali M, Stefek M, Stolc S, Gajdosik A, **Karasu** C. Pentose phosphate pathway, glutathione-dependent enzymes and antioxidant defense during oxidative stress in diabetic rodent brain and peripheral organs: Effects of stobadine and vitamin E. **NEUROCHEMICAL RESEARCH** 28(6): 815-823, 2003.
- **34.** Hunkar T, Aktan F, Ceylan A, **Karasu** C. *Antioxidants in Diabetes-Induced Complications (ADIC) Study Group.* Effects of cod liver oil on tissue antioxidant pathways in normal and streptozotocin-diabetic rats. **CELL BIOCHEMISTRY AND FUNCTION** 20(4): 297-302, 2002.
- **35.** Pekiner B, Ulusu NN, Das-Evcimen N, Sahilli M, Aktan F, Stefek M, Stolc S, **Karasu** C. *Antioxidants in Diabetes-Induced Complications Study Group.* In vivo treatment with stobadine prevents lipid peroxidation, protein glycation and calcium overload but does not ameliorate Ca²⁺-ATPase activity in heart and liver of streptozotocin-diabetic rats: comparison with vitamin E. **BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR BASIS OF DISEASE** 1588(1): 71-78, 2002.
- **36.** Alkan A, Erdem ., Gunhan O, **Karasu** C. Histomorphometric evaluation of the effect of doxycycline on the healing of bone defects in experimental diabetes mellitus: A pilot study. **JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY** 60(8):898-904, 2002.
- **37.** Zobali F, Besler T, Ari N, **Karasu C.** (Antioxidants in Diabetes-Induced Complications) The ADIC Study Group. Hydrogen peroxide-induced inhibition of vasomotor activity: evaluation of single and combined treatments with vitamin A and insulin in streptozotocin-diabetic rats. **INTERNATIONAL JOURNAL OF EXPERIMENTAL DIABETES RESEARCH** 3(2): 119–30, 2002.
- **38.** Zobali F, Avci A, Canbolat O, **Karasu C.** Effects of vitamin A and insulin on the antioxidative state of diabetic rat heart: a comparison study with combination treatment. **CELL BIOCHEMISTRY AND FUNCTION** 20(2): 75-80, 2002.

- **39.** Kocak G, **Karasu C.** Elimination of O-center dot(2)-/H2O2 by alpha-lipoic acid mediates the recovery of basal EDRF/NO availability and the reversal of superoxide dismutase-induced relaxation in diabetic rat aorta. **DIABETES OBESITY & METABOLISM** 4(1): 69-74, 2002.
- **40.** Zobali F., Cakici I., **Karasu C.** Effects of peroxynitrite on the reactivity of diabetic rat aorta. **PHARMACOLOGY** 63(1): 58-64, 2001.
- **41.** Kocak G, Aktan F, Canbolat O, Ozogul C, Elbeg S, Yildizoglu-Ari N, **Karasu C.** *ADIC Study Group-Antioxidants in Diabetes-Induced Complications*. Alpha-lipoic acid treatment ameliorates metabolic parameters, blood pressure, vascular reactivity and morphology of vessels already damaged by streptozotocin-diabetes. **DIABETES NUTRITION & METABOLISM** 13(6): 308-318, 2000.
- **42.** Ozansoy G, Akin B, Aktan F, **Karasu C.** Short-term gemfibrozil treatment reverses lipid profile and peroxidation but does not alter blood glucose and tissue antioxidant enzymes in chronically diabetic rats. **MOLECULAR AND CELLULAR BIOCHEMISTRY** 216(1-2): 59-63, 2001.
- **43.** Yontem O, Sahilli M, **Karasu** C, Ozcelikay AT, Altan VM, Ari N. Troglitazone has no effect on K⁺-ATP channel opener induced-relaxations in rat aorta and in human saphenous veins from patients with type 2 diabetes. **LIFE SCIENCES** 68(5): 557-568, 2000.
- **44. Karasu** C. Time course of changes in endothelium-dependent and -independent relaxation of chronically diabetic aorta: role of reactive oxygen species. **EUROPEAN JOURNAL OF PHARMACOLOGY** 392(3): 163-173, 2000.
- **45. Karasu C.** Increased activity of H₂O₂ in aorta isolated from chronically streptozotocin-diabetic rats: Effects of antioxidant enzymes and enzyme inhibitors. **FREE RADICAL BIOLOGY AND MEDICINE** 27(1-2): 16-27, 1999.
- **46. Karasu C.** Acute probucol treatment partially restores vasomotor activity and abnormal lipid metabolism whereas morphological changes are not affected in a rta from long-term STZ-diabetic rats. **EXPERIMENTAL AND CLINICAL ENDOCRINOLOGY & DIABETES** 106(3): 189-196 1998.
- **47. Karasu** C, Ozansoy G, Bozkurt O, Erdogan D, Omeroglu S. Changes in isoprenaline-induced endothelium-dependent and -independent relaxations of aorta in long-term STZ-diabetic rats: Reversal effect of dietary vitamin E. **GENERAL PHARMACOLOGY** 29(4): 561-567, 1997.
- **48. Karasu** C, Ozansoy G, Bozkurt O, Erdogan D, Omeroglu S. *Antioxidants in Diabetes-Induced Complications (ADIC) Study Group.* Antioxidant and triglyceride-lowering effects of vitamin E associated with the prevention of abnormalities in the reactivity and morphology of aorta from streptozotocin-diabetic rats. **METABOLISM-CLINICAL AND EXPERIMENTAL** 46(8): 872-879, 1997.
- **49. Karasu** C, Dewhurst M, Stevens EJ, Tomlinson DR. Effects of anti-oxidant treatment on sciatic nerve dysfunction in streptozotocin-diabetic rats; comparison with essential fatty acids. **DIABETOLOGIA** 38(2): 129-134, 1995.

- **50. Karasu** C, Soncul H, Altan VM. Effects of non-insulin dependent diabetes mellitus on the reactivity of human internal mammary artery and human saphenous vein. **LIFE SCIENCES** 57(2): 103-112, 1995.
- **51. Karasu** C, Altan VM. The role of the endothelium on enhanced contractile response of non-insulin-dependent diabetic rat aortae: effects of insulin treatment. **GENERAL PHARMACOLOGY** 25(4): 795-802, 1994.
- **52. Karasu** C, Altan VM. The role of endothelial cells on the alterations in vascular reactivity induced by insulin-dependent diabetes mellitus: effects of insulin treatment. **GENERAL PHARMACOLOGY** 24(3): 743-755, 1993.
- **53.** Ozansoy G, **Karasu** C, Altan VM. The effects of acetylcholine on insulin-dependent and non-insulin-dependent diabetic rat tracheal segments. **GENERAL PHARMACOLOGY** 24 (1): 159-164, 1993.
- **54.** Ozansoy G, **Karasu** C, Ozcelikay AT. The effect of oral vanadyl treatment on the reactivity of tracheal smooth muscle obtained from insulin-dependent diabetic rats. **GENERAL PHARMACOLOGY** 24(1): 115-119, 1993.
- **55.** Soncul H, Ersoz A, Gokgoz L, **Karasu** C, Ayrancioglu K, Sinci V, Altan M. Cardioplegia with adenosine and adenosine triphosphate in the isolated guinea pig heart. **JAPANESE HEART JOURNAL**. 33(6): 843-850, 1992.
- **56.** Gokgoz L, Soncul H, Sinci V, **Karasu** C, Kaptanoglu M, Yener A, Ersoz A. Dipyridamole induced myocardial recovery after global ischemia. **GENERAL PHARMACOLOGY** 23(3): 435-437, 1992.
- **57.** Soncul H, Gokgoz L, Ayrancioglu K, **Karasu** C, Kalaycioglu S, Ersoz A. Effect of ATP and verapamil as cardioplegic additives in the isolated guinea pig heart. **GENERAL PHARMACOLOGY** 23(5): 909-913, 1992.
- **58.** Soncul H, Gokgoz L, **Karasu C**, Ayrancioglu K, Ersoz A, Altan M, Yener A. Comparison of potassium and adenosine cardioplegia with or without verapamil in the isolated guinea pig heart. **GENERAL PHARMACOLOGY** 23(1): 89-93, 1992.
- **59. Karasu** C, Ozturk Y, Altan N, Yildizoglu-Ari N, Ikizler C, Altan VM. Thyroid hormones mediated effect of insulin on alloxan diabetic rat atria. **GENERAL PHARMACOLOGY** 21(5): 735-740, 1990.
- **60.** Altan VM, **Karasu** C, Ozuari A. The effects of type-1 and type-2 diabetes on endothelium-dependent relaxation in rat aorta. **PHARMACOLOGY BIOCHEMISTRY BEHAVIOUR** 33(3): 519-522, 1989.
- **61.** Yidizoglu-Ari N, Altinkurt O, Ozturk Y, Altan VM, Pekiner C, **Karasu C**. Decreased gastro-intestinal responses to salbutamol and serotonin in streptozotocin-induced diabetes: improving effect of insulin in vivo and in vitro. **GENERAL PHARMACOLOGY** 19(5): 665-668, 1988.

62. Ozturk Y, Yildizoglu N, Altan VM, **Karasu** C. Altered responses to calcium and trifluoperazine in K⁺-depolarized duodenum from alloxan diabetic rats. **PHARMACOLOGICAL RESEARCH COMMUNICATION** 19(9): 597-608, 1987.