

Prof. Fatma Zühal UMUDUM

Personal Information

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International Researcher IDs

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Education

Doctorate, Ataturk University, Tıp Fakültesi, Tibbi Biyokimya, Turkey 1989 - 1993

Postgraduate, Ataturk University, Tip Fakültesi, Tibbi Biyokimya, Turkey 1986 - 1988

Foreign Languages

English, B1 Intermediate

Certificates, Courses and Trainings

Health&Medicine, TS ISO IEC 15189 TEMEL EĞİTİMİ, Tıp Fakültesi, 2011

Health&Medicine, İyi Bir klinik Laboratuvar Nasıl Olmalı, Tıp Fakültesi, 2007

Dissertations

Doctorate, Diabetiklerde Aldok Redüktaz Aktivitesi ve Lipid Peroksidasyonu, Atatürk Üniversitesi, Tıp Fakültesi, Tibbi Biyokimya, 1993

Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biochemistry

Academic Positions

Professor, Ataturk University, Tip Fakültesi, Temel Tıp Bilimleri, 2008 - Continues

Associate Professor, Ataturk University, Tip Fakültesi, Temel Tıp Bilimleri, 2003 - 2008

Assistant Professor, Ataturk University, Tip Fakültesi, Temel Tıp Bilimleri, 1996 - 2003

Assistant Professor, Ataturk University, Tip Fakültesi, Temel Tıp Bilimleri, 1996 - 2003

Courses

Postgraduate

Amino Acids, Peptides and Proteins, Postgraduate, 2021 - 2022, 2020 - 2021

BİYOKİMYAYA GİRİŞ, Postgraduate, 2019 - 2020

Nitrogen Compounds Biochemistry, Postgraduate, 2019 - 2020

BİYOKİMYASAL ANALİTİK HESAPLAMALAR, Postgraduate, 2019 - 2020

Undergraduate

temel tıp bilimleri -tibbi biyokimya, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

tibbi biyokimya, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

tibbi biyokimya, Undergraduate, 2021 - 2022, 2020 - 2021

Organik Kimya, Undergraduate, 2020 - 2021, 2019 - 2020

organik kimya, Undergraduate, 2019 - 2020

Supervised Theses

Umudum F. Z., Vücut Kitle İndeksine Göre Bireylerde Bazı İştah Parametrelerinin Belirlenmesi, Doctorate, G.ALYAR(Student), 2022

Umudum F. Z., Hipercolesterolemİ oluşturulmuş ratlarda Centranthus longiflorus ve β -Sitosterolün oksidatif stres ve lipid profili üzerine etkilerinin biyokimasal incelenmesi, Doctorate, S.AŞKIN(Student), 2019

Umudum F. Z., Doğu Anadolu bölgesindeki otizmli çocuklarda serum amino asit ve asimetrik dimetilarjinin düzeyleri, Doctorate, M.ALİ(Student), 2019

Umudum F. Z., Akciğer kanserli hastalarda apolipoprotein B ve apolipoprotein E gen polimorfizmlerinin belirlenmesi, Postgraduate, M.ALİ(Student), 2013

UMUDUM F. Z., Hiper ve hipotiroidili hastalarda homosistein,s-adenozilmetiyonin ve antioksidan düzeyleri, Postgraduate, H.Hakan(Student), 2005

Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Atatürk Üniversitesi, December, 2022

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Atatürk Üniversitesi, January, 2022

Associate Professor Exam, Doçentlik Sınav Jürisi, Üniversitelerarası Kurul, Ekim, Doçentlik sınavı, May, 2017

Journal articles indexed in SCI, SSCI, and AHCI

I. Effect of long-term negative energy on appetite hormone levels in individuals with prediabetes and diabetes

ALYAR G., Umudum F. Z., YÜCE N., Akbas N.

REVISTA DA ASSOCIAÇÃO MEDICA BRASILEIRA, vol.71, no.1, 2025 (SCI-Expanded)

II. Assessing lipid-lowering and plasma cholestryl ester transfer protein activity of Centranthus longiflorus and β -Sitosterol following administration to triton WR1339- treated rats.

Aşkın S., Umudum F. Z.

Food science & nutrition, vol.12, no.11, pp.9788-9798, 2024 (SCI-Expanded)

III. Differences in the levels of the appetite peptides ghrelin, peptide tyrosine tyrosine, and glucagon-like peptide-1 between obesity classes and lean controls

Alyar G., Umudum F. Z.

LABORATORY MEDICINE, vol.55, no.5, pp.553-558, 2024 (SCI-Expanded)

IV. Changes in ghrelin, GLP-1, and PYY levels after diet and exercise in obese individuals

- ALYAR G., UMUDUM F. Z., Akba N.
REVISTA DA ASSOCIAÇÃO MEDICA BRASILEIRA, vol.70, no.1, 2024 (SCI-Expanded)
- V. Automation of extra-analytical phase for clinical laboratory
BAKAN E., UMUDUM F. Z.
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGİSİ, vol.46, no.2, pp.115-128, 2021 (SCI-Expanded)
- VI. The comparison of two glucose measurement systems: POCT devices versus central laboratory
Baygutalp N., BAKAN E., BAYRAKTUTAN Z., UMUDUM F. Z.
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGİSİ, vol.43, no.5, pp.510-519, 2018 (SCI-Expanded)
- VII. Evaluation of the analytical performances of Cobas 6500 and Sysmex UN series automated urinalysis systems with manual microscopic particle counting
BAKAN E., BAYRAKTUTAN Z., Baygutalp N., GÜL M. A., UMUDUM F. Z., BAKAN N.
BIOCHEMIA MEDICA, vol.28, no.2, 2018 (SCI-Expanded)
- VIII. Effects of sevoflurane and propofol on S100 β and neuron-specific enolase protein levels during cardiopulmonary bypass.
Erdem A. F., ŞAHİN Y., DOĞAN N., Umudum Z., BAYAR F., BULUT C., Alici H. A., Erkut B., Cesur M., CEVİZ M.
Nigerian journal of clinical practice, vol.19, no.2, pp.278-83, 2016 (SCI-Expanded)
- IX. A reference interval study for common biochemical analytes in Eastern Turkey: a comparison of a reference population with laboratory data mining.
BAKAN E., Polat H., Ozarda Y., ÖZTÜRK N., BAYGUTALP N., UMUDUM F. Z., BAKAN N.
Biochimia medica, vol.26, no.2, pp.210-23, 2016 (SCI-Expanded)
- X. S-100 beta and neuron-specific enolase levels in carbon monoxide-related brain injury
ÇAKIR Z., Aslan S., UMUDUM Z., Acemoglu H., AKOZ A., TURKYILMAZ S., ÖZTÜRK N.
AMERICAN JOURNAL OF EMERGENCY MEDICINE, vol.28, no.1, pp.61-67, 2010 (SCI-Expanded)
- XI. Nitric Oxide Levels in Erythrocyte of The Rabbits Which Implanted Ormocer Filling Materials into Connective Tissue
Yildiz M., Umudum Z., TAYSI S.
ASIAN JOURNAL OF CHEMISTRY, vol.21, no.4, pp.2610-2614, 2009 (SCI-Expanded)
- XII. Bone Turnover Markers in Patients with Type 2 Diabetes and Their Correlation with Glycosylated Haemoglobin Levels
Capoglu I., Ozkan A., Ozkan B., Umudum Z.
JOURNAL OF INTERNATIONAL MEDICAL RESEARCH, vol.36, no.6, pp.1392-1398, 2008 (SCI-Expanded)
- XIII. Nitric oxide synthase activity on erythrocyte of the rabbits which implanted composite resin filling materials into connective tissue
Yildiz M., Taysi S., Umudum Z.
ASIAN JOURNAL OF CHEMISTRY, vol.20, no.5, pp.3902-3906, 2008 (SCI-Expanded)
- XIV. Nitric oxide level and superoxide dismutase activity in serum of the patients with rheumatoid arthritis
SARI R. A., TAYSI S., UMUDUM F. Z., KUŞKAY S., BAKAN N.
Annals Of The Rheumatic Diseases, vol.62, pp.391, 2003 (SCI-Expanded)
- XV. Nitric oxide level and superoxide dismutase activity in serum of patients with rheumatoid arthritis
TAYSI S., Umudum Z., SARI R. A., KUŞKAY S., Bakan N.
PAIN CLINIC, vol.15, no.4, pp.429-434, 2003 (SCI-Expanded)
- XVI. Changes of PSA concentrations in serum and saliva of healthy women during the menstrual cycle
Aksoy H., Akcay F., Umudum Z., Yıldırım A., Memişogulları R.
ANNALS OF CLINICAL AND LABORATORY SCIENCE, vol.32, no.1, pp.31-36, 2002 (SCI-Expanded)
- XVII. Erythrocyte membrane glycation and NA(+)-K(+) levels in NIDDM.
UMUDUM F. Z., YÜCEL O., SAHİN Y., Bakan E.
Journal of diabetes and its complications, vol.16, pp.359-62, 2002 (SCI-Expanded)
- XVIII. Erythrocyte membrane glycation and NA+-K+ levels in NIDDM
UMUDUM F. Z., YÜCEL O., ŞAHİN Y. N., BAKAN E.
JOURNAL OF DIABETES AND ITS COMPLICATIONS, vol.16, no.5, pp.359-362, 2002 (SCI-Expanded)

- XIX. **Nitric oxide levels and lipid peroxidation in plasma of patients with gastric cancer**
BAKAN E., TAYSİ S., POLAT M. F., DALGA S., Umudum Z., Bakan N., Gümüş M.
JAPANESE JOURNAL OF CLINICAL ONCOLOGY, vol.32, no.5, pp.162-166, 2002 (SCI-Expanded)
- XX. **The effect of adrenalectomy on leptin levels and some metabolic parameters in rats with diet-induced obesity**
YILMAZ A., SÜLEYMAN H., UMUDUM F. Z., ŞAHİN Y. N.
BIOLOGICAL & PHARMACEUTICAL BULLETIN, vol.25, no.5, pp.580-583, 2002 (SCI-Expanded)

Articles Published in Other Journals

- I. **Serum Amino Acid Levels in Children with Autism Spectrum Disorder by Liquid Chromatography-Mass Spectrometry/Mass Spectrometry**
GÜL M. A., umudum f. z., KURT N., ÖZGERİŞ F. B., Türkeli Ö. N., TURAN B., DURSUN O. B., KELEŞ M. S.
Archives of Basic and Clinical Research, vol.5, no.1, pp.208-217, 2023 (Peer-Reviewed Journal)
- II. **Düzenli egzersize yanıt olarak idrar irisin, alfa 1-mikroglobulin ve retinol bağlayıcı protein düzeyleri**
Bayraktutan Z., Bakan E., Kılıç Baygutalp N., Gül M. A., Ozan M., Çelik M., Erduhan S., Umudum F. Z.
International Journal of medical biochemistry, vol.2, no.1, 2019 (Conference Book)
- III. **Beta-fibrinogen 455 G/A and angiotensin converting enzyme ins/del polymorphisms in patients with lung cancer**
Alp H. H., UMUDUM F. Z., BAKAN E.
Eastern Journal of Medicine, vol.23, no.3, pp.160-167, 2018 (Scopus)
- IV. **The value of cardiac troponin T to determine myocardial injury in coronary artery bypass surgery**
Medical Journal of Atatürk University 2001 33 4 97 102 Turkish
ÜNLÜ Y., CEVİZ M., UMUDUM F. Z., KOÇAK H., KARAKELLEOĞLU Ş.
EURASIAN JOURNAL OF MEDICINE, vol.33, pp.97-102, 2001 (ESCI)
- V. **Determination Of free Fatty Acid Composition in Plasma Membranes of Neutrophils in Diabetics**
KELEŞ M. S., DEMİR Y., ALTUNTAŞ İ., UMUDUM F. Z., BAKAN E.
Turkish journal of medical Sciences, vol.30, no.5, pp.465-468, 2000 (Scopus)
- VI. **Kardiyopulmonar Baypass ta Kullanılan Farklı Priming Solüsyonlarının Böbrek Fonksiyonlarına Etkileri**
KÜRŞAD H., ONUR A., DOĞAN N., BECİT N., TONBUL H. Z., UMUDUM F. Z., USLU S.
Türk Anestezi Reanimasyon Mecmuası, vol.25, pp.57-61, 1997 (ESCI)

Books

- I. **Medical Biochemistry Applications: Translation From Third Edition**
Umudum F. Z., Karakoç A., Bakan E., Bakan N. (Editor)
Kültür Eğitim Vakfı Yayınları, Erzurum, 2019
- II. **Medical Biochemistry Applications**
BAKAN N., UMUDUM F. Z., KARAKOÇ A.
Kültür Eğitim Kitap ve Kirtasiye, Erzurum, 2019
- III. **TİBBİ BİYOKİMYA UYGULAMALARI**
BAKAN N., UMUDUM F. Z., KARAKOÇ A.
ERZURUM KÜLTÜR EĞİTİM KİTAP KİRTASIYE, 2016
- IV. **Tıbbi Biyokimya Uygulamaları**
BAKAN N., UMUDUM F. Z., KARAKOÇ A.
erzurum kültür eğitimkitap kirtasiye, Erzurum, 2014
- V. **Tıbbi Biyokimya Uygulamaları**
BAKAN N., UMUDUM F. Z., KARAKOÇ A.

- Aktif Yayınevi, 2012
- VI. DENEYSEL BİYOKİMYA
BAKAN N., UMUDUM F. Z., AVCI B., ERMAN F.
Aktif Yayınevi, Erzurum, 2003
- VII. DENEYSEL BİYOKİMYA
BAKAN N., UMUDUM F. Z., ERMAN F., AVCI B.
Aktif Yayınevi, Erzurum, 2000
- VIII. DENEYSEL BİYOKİMYA
BAKAN N., UMUDUM F. Z., ERMAN F., AVCI B.
ŞAFAK YAYINEVİ, Erzurum, 1999

Papers Presented at Peer-Reviewed Scientific Conferences

- I. Beta-Fibrinogen-4555 G/A and Angiotensin Converting Enzyme I/D Gene polymorphisms in Patients with Lung Cancer
ALP H. H., UMUDUM F. Z., BAKAN E., KAYNAR H.
SANKO University Innovation in Medicine Summit-3, 11 - 13 May 2017, (Summary Text)
- II. Serum sICAM 1 and E selectin Levels in Patients with Lung Cancer
AŞKIN S., KARAKOÇ A., UMUDUM F. Z., BAKAN N., KIZILTUNÇ A.
27. Ulusal Biyokimya Kongresi, Turkey, 3 - 06 November 2015, (Summary Text)
- III. THE APPLICABILITY OF REFERENCE RANGES BETWEEN ANY TWO AUTOMATED ANALYZERS A CROSS CHECK STUDY
POLAT H., KILIÇ BAYGUTALP N., ÖZTÜRK N., BAKAN E., UMUDUM F. Z.
IFCC WorldLab İstanbul 2014, 24 - 28 June 2014, (Full Text)

Funded Projects

UMUDUM F. Z., ALYAR G., Project Supported by Higher Education Institutions, Vücut Kitle İndeksine Göre Bazı İştah Parametrelerinin Belirlenmesi, 2021 - 2022

Metrics

Publication: 66
Citation (WoS): 232
Citation (Scopus): 286
H-Index (WoS): 8
H-Index (Scopus): 8

Congress and Symposium Activities

International Biochemistry Congress 2017, Attendee, Erzurum, Turkey, 2017