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PERSONAL

Date of Birth	08.12.1978
Place of Birth	Diyarbakır, Kulp

EDUCATION

2004-2008	Ruhr University Bochum, Biophysics Department, Ph.D.
2000-2001	Ankara University, Child Health and Diseases/Pediatrics Molecular Genetics Department, M.S. (with thesis)
2001-2003	Middle East Technical University, Science and Technology Policy Studies, M.S. (without thesis)
1996-2000	Middle East Technical University, Molecular Biology and Genetics Department, B.S.

ACADEMIC POSITIONS

11/2021	Prof., Department of Basic Sciences, Atılım University, Turkey
01/2016-10/2021	Assoc. Prof., Department of Basic Sciences, Altınbaş University (previous name Istanbul Kemerburgaz University), Turkey
03/2013-12/2015	Assist. Prof., Department of Basic Sciences, Istanbul Kemerburgaz University

ADMINISTRATIVE DUTIES

2017-10/2021	Faculty Board and also Faculty Board of Management at Altınbaş University
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HONORS&AWARDS&SCHOLARSHIPS

1	METU Basic Science Scholarship Award for the B.S. study (1996-2000)
2	International Max Planck Institute Research School in Chemical Biology (IMPRS-CB) (2004-2007) (for the Ph. D. studies)
3	DAAD / STIBET 1 200 (2008)
4	Youth Travel Grant of FEBS (2009) (for SPATIAL 2009 Congress attendance)
5	FEBS Congress Secretariat Bursary (2009) (for 2009 Congress attendance)
6	Roche Bursary (2011) (for XXIII. National Biochemical Congress attendance)
7	Outstanding contribution in reviewing (2015) (for Biosensors & Bioelectronics)
8	Poster prize (2015) (for the review work at the 1st Brain Research School)

RESEARCH INTERESTS

FT-IR / Biosensors / Information theory / Molecular mimicry

PUBLICATIONS

1	J. Güldenaupt, Y. Adigüzel, J. Kuhlmann, H. Waldmann, C. Kötting, K. Gerwert, Secondary structure of lipidated Ras bound to a lipid bilayer, <i>FEBS Journal</i> , 275, 5910-5918, 2008
2	Y. Adigüzel, E. Yilmaz, N. Akar, Effect of eNOS and ET-1 polymorphisms in thromboangiitis obliterans, <i>Clinical and Applied Thrombosis-Hemostasis</i> , 16, 103-106, 2010
3	E. Yilmaz, R. Akar, S.T. Eker, G. Deda, Y. Adiguzel, N. Akar , Relationship between functional promoter polymorphism in the XBP1 gene (-116C/G) and atherosclerosis, ischemic stroke and hyperhomocysteinemia, <i>Molecular Biology Reports</i> , 37, 269-272, 2010
4	Y. Adiguzel, H. Kulah, CMOS cell sensors for point-of-care diagnostics, <i>Sensors</i> , 12, 10042-10066, 2012
5	Y. Adigüzel, P.I. Haris, F. Severcan, Screening of Proteins in Cells and Tissues by Vibrational Spectroscopy, in <i>Vibrational Spectroscopy in Diagnosis and Screening</i> (ed. F. Severcan, P.I. Haris), 53-108, Amsterdam, IOS Press, 2012
6	J. Musayev, C. Altiner, Y. Adiguzel, H. Kulah, S. Eminoglu, T. Akin, Capturing and detection of MCF-7 breast cancer cells with a CMOS image sensor, <i>Sensors and Actuators A-Physical</i> , 215, 105-114, 2013
7	Y. Adiguzel, H. Kulah, Studies on visual detection and surface modification testing of glass microfiber filter paper based biosensor, <i>Biosensors & Bioelectronics</i> , 54, 27-34, 2014
8	J. Musayev, Y. Adigüzel, H. Kūlah, S. Eminoglu, T. Akln, Label-Free DNA Detection Using a Charge Sensitive CMOS Microarray Sensor Chip, <i>IEEE Sensors JOURNAL</i> , 14, 1608-1616, 2014
9	H. Torul, H. Çiftçi, F.C. Dudak, Y. Adiguzel, H. Kulah, İ.H. Boyacı, U. Tamer, Glucose determination based on a two component self-assembled monolayer functionalized surface-enhanced Raman spectroscopy (SERS) probe, <i>Analytical Methods</i> , 6, 5097-5104, 2014
10	Y. Adiguzel, H. Kulah, Breath sensors for lung cancer diagnosis, <i>Biosensors & Bioelectronics</i> , 65, 121-138, 2015
11	Y. Adiguzel, Biophysical and biological perspective in biosemiotics, <i>Progress In Biophysics and Molecular Biology</i> , 121, 245-254, 2016
12	O. Flomenbom, G.U. Coban, Y. Adiguzel, Commentary on biophysical economics and evolving areas, <i>Biophysical Reviews and Letters</i> , 11, 55-61, 2016
13	Y. Adiguzel, Historical and critical review on biophysical economics, <i>Biophysical Reviews And Letters</i> , 11, 63-86, 2016
14	Y. Adiguzel, O. Flomenbom, G.U. Coban, From Physiocrats to fairness in nations, <i>Reports in Advances of Physical Sciences, Special Issue on Socio Econophysics</i> , 1, 1750001, 2016
15	Y. Adiguzel, Information theoretic approach in molecular interactions and implications in molecular evolution, <i>Nano Communication Networks</i> , 11, 36-41, 2017
16	Y. Adiguzel, Equalizing the information amounts of protein and mRNA by information theory, <i>Biosystems</i> , 159, 1-11, 2017
17	Y. Adiguzel, K.P.R. Valdez, G.Yurur, Medical use of sensor-based devices, the debates around and implementation in education, <i>Reports in Advances of Physical Sciences</i> , 2, 1850001, 2018
18	Y. Adiguzel, Molecular mimicry between SARS-CoV-2 and human proteins, <i>Autoimmunity Reviews</i> , 20, 102791, 2021
19	Y. Adiguzel, Peptides of H. sapiens and P. falciparum that are predicted to bind strongly to HLA-A*24:02 and homologous to a SARS-CoV-2 peptide, <i>ACTA Tropica</i> , 221, 106013, 2021
20	Y. Adiguzel, HLA-B*15: 01 alleline sahip bireylerde SARS-CoV-2'nin Nsp11 proteini ile moleküler taklidi, <i>Turk J Immunol</i> , 9, 95-104, 2021
21	Y. Adiguzel, Information Theoretic Approach in Allometric Scaling Relations of DNA and Proteins, <i>Chemical Biology and Drug Design</i> , 2021. doi:10.1111/cbdd.13988

PROJECTS

1	2009-2013, European Union 7. Frame Program, FP7-REGPOT-2009-1 Frame Program Project (245856) personnel. Project title: "METU-MEMS Research and Application Center"
2	2015-2016, TUBITAK 3001 Project (214Z261) PI. Project title: "Web-Tabanlı Protein İkincil Yapısı Tahmin Araçlarının FT-IR Spektrofotometrisi ile Protein İkincil Yapısının Deneysel Analizinde Kullanımının İncelenmesi" (in Turkish)
3	2016-2017, İKBU BAP Project (PB2016-I-006) PI. Project title: "ATR FT-IR Spektroskopi Tekniği ile Sığır Serum Albümin Proteinleri Üzerinde Agregasyon Araştırması" (in Turkish)
4	2019-2020, Altınbaş University BAP Project (PB2019-TIP4) PI. Project title: "Ortam koşullarında uzun süre ile günlük olarak gerçekleştirilen (ATR) FT-IR atmosferik ölçümü sinyalinin incelenmesi" (in Turkish) (postponed to 2021 due to pandemic)

CONFERENCE PRESENTATIONS

INTERNATIONAL CONFERENCES	
1	Y. Adiguzel, C. Köttling, J. Kuhlmann, H. Waldmann, K. Gerwert, ATR-FTIR Spectroscopy of Membrane Bound Ras Protein, 32nd FEBS Congress, Vienna, Austria, 2007
2	Y. Adiguzel, C. Köttling, J. Kuhlmann, H. Waldmann, K. Gerwert, ATR-FTIR Spectroscopy of Membrane Bound Ras Protein, 6th EBSA European Biophysics Congress, London, England, 2007
3	Y. Adiguzel, J. Güldenaupt, C. Köttling, J. Kuhlmann, H. Waldmann, K. Gerwert, ATR-FTIR Spectroscopy of Membrane Bound Ras Protein, ECSBM-2007: 12th European Conference on the Spectroscopy of Biological Molecules, Paris, France, 2007
4	Y. Adiguzel, S. Hippe, R. Stoll, EMBO Conference Series on Spatial Dynamics of Intracellular Signaling - SPATIAL 2009 - Overcoming Distance in Signaling Networks, "Signal Transduction Through Membrane Modulation", Jerusalem, Israel, 2009
5	Y. Adiguzel, S. Hippe, H.-J. Hauswald, R. Stoll, R. Heumann, Nitric Oxide Interaction with Cholesterol Containing Model Membranes, BIOTECH METU 2009 - International Symposium on Biotechnology: Developments and Trends, Ankara, Turkey, 2009
6	S. Hippe, Y. Adiguzel, C. Grote-Westrick, R. Heumann, Nitric Oxide Enhances Plasma Membrane Fluidity: A Novel Mechanism for Morphological Differentiation, Trinational Fall Meeting 2009 of the Societies of Biochemistry and Molecular Biology - International Meeting on Signal Transduction and Disease, Aachen, Germany, 2009
7	Y. Adiguzel, S. Hippe, H.J. Hauswald, R. Stoll, R. Heumann, Phosphorus NMR of Model Membrane Interaction with Nitric Oxide, 34th FEBS Congress - Life's Molecular Interactions, Prague, Czech Republic, 2009
8	H. Torul, U. Tamer, Y. Adigüzel, H. Ciftci, H.C. Koydemir, H. Kulah, SERS-Based Non-Enzymatic Glucose Detection on Chip, IMA 2013 - 8th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, Thessaloniki, Greece, 2013
9	H. Torul, Y. Adigüzel, H. Çiftçi, H.C. Koydemir, U. Tamer, H. Kulah, The Construction of a Optofluidic Platform Based On the Surface Enhanced Raman Spectroscopy and Measurement of Blood Sugar Levels, International Multidisciplinary Symposium on Drug Research & Development, Antalya, Turkey, 2013
10	J. Musayev, Y. Adigüzel, H. Külâh, S. Eminoğlu, T. Akın, Cell Detection Using A CMOS Image Sensor With Modified Pixel Structure Suitable For Bio-Chemical Surface Activation, MEMS 2013 - The 26th IEEE International

	Conference on Micro Electro Mechanical Systems, Taipei, Taiwan, 2013
11	Y. Adiguzel, H. Kulah, Progress on the Studies on Visual Detection and Surface Modification Testing of Glass Microfiber Filter Paper Based Biosensor, Biosensors & Bioelectronics 2014 - 3rd International Conference and Exhibition on Biosensors & Bioelectronics, San Antonio, USA, 2014
12	Y. Adiguzel, Utilization of Dialysis Membrane for Biosensor Applications by UV Spectrophotometric Detection, 1. International Electronic Conference on Sensors and Applications, Electronic Conference, 2014
13	Y. Adiguzel, Blood Serum Protein Measurement with Dialysis Membrane for Biosensor Applications by UV Spectrophotometry, NanoNG14 - Nanoscience and Nanotechnology for Next Generation, Elazığ, Turkey, 2014
14	Y. Adiguzel, Biosensor Approach by UV Spectrophotometric Detection, 59th Annual Meeting of the Biophysical Society, Baltimore, USA, 2015 (<i>Could not attend the conference but the abstract was published: Biophysical Journal, Volume 108, Number 2, Supplement 1, p483a, 27 January 2015</i>)
15	Y. Adiguzel, Modeling of Biomolecular Systems Interactions, Web-Based Structure Prediction as Supplementary Tools to Protein Secondary Structure Analysis with FT-IR Spectroscopy, Dynamics, and Allostery: Bridging Experiments and Computations, İstanbul, Turkey, 2014
16	Y. Adiguzel, Information Communication Theory in Biology and Biosemiotics, Gatherings in Biosemiotics 15, Copenhagen, Denmark, 2015
17	Y. Adiguzel, Information Theoretic Approach for the DNA and Protein Length Relation, Ecology and Evolutionary Biology Symposium, Ankara, Turkey, 2015
18	Y. Adiguzel, Epigenetics in Brain Research, 1st Brain Research School, Isparta, Turkey, 2015
19	Y. Adiguzel, Information Theoretic Approach for Equalizing the Protein and mRNA Entropies, IV. International Molecular Biology Congress, Ankara, Turkey, 2015
20	Y. Adiguzel, What is Extra to Learn from Protein Drying Measurements, 41st FEBS Congress – Molecular and Systems Biology for a Better Life, Kuşadası, Turkey, 2016
21	Y. Adiguzel, Vibrational Spectroscopy and Clay Studies, 5th Mediterranean Clay Meeting, Çeşme, Turkey, 2016
22	F. Korkmaz, A. Dogan, Y. Adiguzel, Web Server-Based Structure Prediction as Supplementary Tool for Secondary Structure Analysis of Proteins with FT-IR, IV. BAU Drug Design Congress, İstanbul, Turkey, 2016
23	Y. Adiguzel, Exploring the Allometric Scaling Rules in Relation to the Average Protein Lengths and the Use of Implementing the Information Theoretic Approaches, V. International Molecular Biology Congress, İstanbul, Turkey, 2017
24	Y. Adiguzel, F. Korkmaz, Study on the Protein Secondary Structure Analysis with ATR FT-IR, 5 th International BAU Drug Design Congress, İstanbul, Turkey, 2017
25	Y. Adiguzel, Information Theory for Equalizing the Residue-Wise Information Amounts of the Proteins and Protein-Coding DNA, 4. International Electronic Conference on Entropy and Its Applications, Electronic Conference, 2017, doi:10.3390/ecea-4-05017
26	Y. Adiguzel, Biosensors with UV Spectrophotometric Detection, 4. International Electronic Conference on Sensors and Applications, Electronic Conference, 2017, doi:10.3390/ecsa-4-04928
27	Y. Adiguzel, Information Theory in Ecology and Evolution, 5 th Ecology and Evolutionary Biology Symposium 2018, Izmir, Turkey, 2018
28	Y. Adiguzel, F. Korkmaz, Protein Secondary Structure Analysis with ATR FT-IR, International Congress on Biological and Medical Sciences, Niğde, Turkey, 2018

29	Y. Adiguzel, Could Allometric Scaling Rules be Valid for Proteins, 6 th International BAU Drug Design Congress, Istanbul, Turkey, 2018
30	Y. Adiguzel, Improvement of the information theoretic approach for the DNA size and the protein length relation, 6 th Ecology and Evolutionary Biology Symposium 2019, Ankara, Turkey, 2019
31	Y. Adiguzel, Information theory to explain allometric relation among genes' and proteins' lengths, 7 th International Congress of the Molecular Biology Association of Turkey, Istanbul, Turkey, 2019
32	Y. Adiguzel, Can information communication theory be used to explain allometric relation between genes and proteins, The 12 th International Symposium on Health Informatics and Bioinformatics, Izmir, Turkey, 2019
33	Y. Adiguzel, Determination of Proteins Compatible with Allometric Scaling Relation between Genes and Proteins Lengths, Along with Their Encoding Gene Lengths, 7 th International BAU Drug Design Congress, Istanbul, Turkey, 2019
34	Y. Adiguzel, Possible Molecular Mimicry - Four 10mers in Human and <i>P. Falciparum</i> are Homologous to YFCTCYGLF of SARS-CoV-2 and All Predicted to Bind Strongly to HLA-A*24:02, 12th International Congress on Autoimmunity, online, 2021
35	Y. Adiguzel, Coronavirus-Associated Molecular Mimicry Through Homology to a 15mer SARS-CoV-2 Peptide, 12th International Congress on Autoimmunity, online, 2021
36	Y. Adiguzel, Molecular Mimicry Between Peptides of SARS-CoV-2 and Neutrophil Extracellular Traps Related Proteins, 6th European Congress on Immunology, online, 2021
INTERNATIONAL MEETINGS	
1	Y. Adiguzel, Coronavirus-Associated Molecular Mimicry Through Homology to a 15mer SARS-CoV-2 Peptide (<i>The same presentation as that in the 12th International Congress on Autoimmunity</i>), Shoenfeld Fridays' Mosaic of Autoimmunity e-Meetings, e-Meeting #58, online, 2021
2	Y. Adiguzel, Molecular Mimicry Study Between Peptides of SARS-CoV-2 and Neutrophil Extracellular Traps Related Proteins, Shoenfeld Fridays' Mosaic of Autoimmunity e-Meetings, e-Meeting #62, online, 2021
3	Y. Adiguzel, Associated Features of Omicron Variant Based on Previous Variants, Shoenfeld Fridays' Mosaic of Autoimmunity e-Meetings, e-Meeting #83, online, 2021
NATIONAL CONFERENCES (IN TURKISH)	
1	Y. Adigüzel, F. Severcan, Effect of Radioprotective Agent Amiphostine on Neutral Model Membrane, XVI National Biophysics Congress, Ankara, Turkey, 2004
2	Y. Adiguzel, S. Hippe, H.-J. Hauswald, R. Stoll, R. Heumann, Signal Transduction Through Membrane Modulation, NANOTR-V: 5th National Nanoscience and Nanotechnology Conference, Eskişehir, Turkey, 2009
3	Y. Adiguzel, S. Hippe, H.-J. Hauswald, R. Stoll, R. Heumann, Lipids as Potential Building Blocks of the New Era Smart Materials, Winter School on Frontiers in Nanomedicine and Nanobiotechnology, Ankara, Turkey, 2010
4	Y. Adigüzel, H. Külâh, MicroElectroMechanical Systems Based Products for Point-of-Care Diagnostics, 23. National Biochemistry Congress, abstract-Turkish Journal of Biochemistry, Adana, Turkey, 2011
5	H. Külâh, Y. Adigüzel, Biosensors and BioMEMS for Microbiology Applications, 7. National Diagnostic and Molecular Microbiology Congress, conference paper, Ankara, Turkey, 2012
6	Y. Adigüzel, Lipid Membrane Electrochemistry, Electrochemistry Workshop with International Participation, Nanostructure Modified Electrochemical and Bioelectrochemical Systems, Muğla, Turkey, 2013

7	Y. Adigüzel, Comparison of Web-based Programs for Protein Secondary Structure Analysis, 25. National Biophysics Congress, Trabzon, Turkey, 2013
8	M. Kazak, Y. Adigüzel, Blood Serum Protein Measurement with Dialysis Membrane for Biosensor Applications by UV Spectrophotometry, 26. National Biophysics Congress, Tokat, Turkey, 2014
9	M. Kazak, Y. Adigüzel, Analysis of the Web Servers' Based Structure Prediction as Supplementary Tools for the Protein Secondary Structure Analysis, 27. National Biophysics Congress, Malatya, Turkey, 2015
10	Y. Adigüzel, Information Theoretic Approach for Equalizing the Protein and mRNA Entropies, 27. National Biophysics Congress, Malatya, Turkey, 2015
11	Y. Adigüzel, What is biophysical economics, 28-29. National Biophysics Congress, Istanbul, Turkey, 2017
12	Y. Adigüzel, Formative/Normative Evaluation Model that can also be Adapted as Summative for Area Elective Course based on Student-Presentation, 1. National Vocational Education "Health" Congress, Istanbul, Turkey, 2018
13	Y. Adiguzel, K.P.R. Valdez, Debates and expectations around the health informatics and medical use of sensor-based devices, 3. National Applied Ethics Congress, Ankara, Turkey, 2018
14	Y. Adigüzel, Discussion of using peer review in the technical elective courses based on student presentation, National Medical Education Symposium 2019, Eskisehir, Turkey, 2019
15	Y. Adiguzel, Allometric relation between the lengths of genes and protein, 31. National Biophysics Congress, Adana, Turkey, 2019
16	Y. Adigüzel, Information Theoretic Approach in Allometric Scaling Relations of DNA and Proteins – Evaluation of Our Earlier and Current Approach (<i>presented in Turkish</i>), 1. International Congress on Multidisciplinary Studies in Health Sciences, Virtual Conference, 2020
17	Y. Adigüzel, A Molecular Mimicry Study on the Relation of COVID-19 and Autoimmunity, 25. National Immunology Congress, Virtual Conference, 2020
18	Y. Adiguzel, Amino Acid Frequencies in SARS-CoV-2 Proteome, 32. National Biophysics Congress, Virtual Conference, Turkey, 2021

CITATIONS

Sum of times cited without self-citations (ISI Web of Science):	219
H-index (ISI Web of Science):	8

COURSES GIVEN IN THE LAST 3 YEARS (2019-2020, 2020-2021, 2021-2022 fall)

1	Lectures in the MED101, MED103, MED204, MED205, MED253, MED308 committee courses and MED352 elective course at the School of Medicine, Altınbaş University
2	Lectures in the MED105, MED107, MED108, MED110, MED214, MED225, MED223 committee courses at the School of Dentistry, Altınbaş University
3	Lectures in the BMSE503 graduate course at the Biomedical Sciences Master Program, Altınbaş University
4	Lectures in the MED105, MED301, MED303 committee courses at the School of Medicine, Atılım University