



Özge Karabıyık Acar, PhD

Address Kadikoy - Istanbul - Turkey
E-mail ozgeacark@gmail.com
Phone +90 545 5531666

Personal Information

Sex Female
Date of Birth 13/01/1988
Nationality Turkish
Driving License B - A2

Education

- **Ph.D. (Research Assistant) Yeditepe University – Istanbul**
Graduate School of Natural and Applied Sciences, Biotechnology (Full scholarship)
2010 – 2017
- **University Yeditepe University – Istanbul**
Genetics and Bioengineering
2006 – 2010
- **High School Bornova Anatolian High School – Izmir**
2002 – 2006
- **Secondary School Izmir Turk College – Izmir**
1994 – 2002

Work Experience

- **11/2019 – Yeditepe University – Graduate School of Natural and Applied Sciences, Biotechnology**
Job Title: Post-Doctoral Researcher
Introduction:
Tissue engineering; Parathyroid, Thyroid, Thymus
Cell culture; Stem cell and primer cell research, isolation and culturing
Biomaterials; Fabrication, polymer usage
Microscopy; Confocal, Fluorescence, Live cell imaging
Molecular biology techniques; Real-Time PCR, Flow cytometer, Western blot, ELISA

➤ 02/2018 – 10/2019

SACEM Hayat Teknolojileri A.Ş.

Job Title: Field Application & Marketing Specialist

Introduction:

Technical and application support to sales team and customers; analyzing data, troubleshooting problems and finding solutions for instruments and assays.

Application and marketing activities of responsible brands; perform instrument/product presentations and live demonstrations; identify, develop and implement marketing strategies and monitor the results for responsible products.

Responsible brands:

Merck-Millipore (Life Science); Scepter Cell Counter, Direct Detect Spectrometer, CellASIC ONIX Live Cell Analysis, Milliplex Multiplex Assays

Luminex; xMAP Instruments: Magpix, Luminex 100/200 and Flow Cytometry & Imaging Instruments: Amnis - CellStream, FlowSight, ImageStreamX and Guava - EasyCyte, Muse Cell Analyzer

LGC Standards; ATCC Cells and Microorganism, Mikromol Reference Standards

➤ 09/2010 – 10/2017

Yeditepe University – The Institute of Graduate Studies in Science and Engineering, Genetics and Bioengineering

Job Title: Research Assistant (Full Scholarship)

Introduction:

Tissue engineering; Cartilage, bone and nerve

Cell culture; Stem cell research, isolation and culturing

Biomaterials Research; Synthesis, fabrication, polymers, complex coacervation, electrospinning

Microscopy; Confocal and Fluorescence

Molecular biology techniques; Real-Time PCR, Flow cytometer, Western blot, ELISA

➤ 06/2009 – 08/2009

Hamburg University of Applied Sciences – Germany

Department: Faculty of Life Sciences Laboratory of Bioprocess Automation – Biotechnology Laboratory

Job Title: Intern

Introduction:

Production of the Recombinant Chemokine 1,3-del I-TAC in cultivations with Pichia Pastoris using the lab-scale bioreactor BIOSTAT Aplus.

Analytical methods to assess the fermentation by determining the target protein concentration and purity

Detailed internship report and university report can be shared when requested.

➤ 06/2008 – 07/2008

Izmir Institute of Technology (IZTECH)

Department: Molecular Immunology and Gene Regulation Laboratory

Job Title: Intern

Introduction:

Protein Analyze, SDS – PAGE Electrophoresis

Silver Staining

Cell Culture and Immunofluorescence Staining

➤ 08/2007 – 09/2007

Dokuz Eylül University Hospital - Izmir

Department: Medical Biology and Genetics Department

Job Title: Intern

Introduction:

Cell Culture, Giemsa Banding Technique,
DNA and RNA Isolation from Leukocyte,
FISH (Fluorescent in situ Hybridization),
Caryotype Analysis

Patents, Publications and Projects

Koaservat üretimi yöntemi ve bu üretim yöntemi ile elde edilen koaservatlar ve bunların doku iskelesi olarak kullanımı (WO2019054971A3), 2017

G.T. Kose, **O. Karabiyik Acar**, B. Kayitmazer

Hyaluronic acid/Chitosan coacervate-based scaffolds. *Biomacromolecules*, 2018, DOI: 10.1021/acs.biomac.8b00047

O. Karabiyik Acar, B. Kayitmazer, G.T. Kose

Surface modification of Ti6Al4V via micro-arc oxidation in AgC₂H₃O₂ containing electrolyte. *Surface Innovations*, 2018, DOI: 10.1680/jsuin.18.00007

D. A. Teker, F. Muhaffel, **O. Karabiyik Acar**, E. Nursen Topcuoglu, H. Guven Kulekci, G. Torun Kose, M. Baydogan, H. Cimenoglu

Macroporous biodegradable cryogels of synthetic poly(α -amino acids): An evaluation of their chondrogenic potential. *Soft Matter*, 2017, DOI: 10.1039/C7SM02074K

T. Sedláčik, **O. Karabiyik Acar**, H. Studenovská, I. Kotelnikov, J. Kučka, Z. Konečná, T. Zikmund, J. Kaiser, G. Kose, F. Rypacek

Optimisation of micro-arc oxidation electrolyte for fabrication of antibacterial coating on titanium. *Materials technology: Advanced Performance Materials*, 2017, DOI: 10.1080/10667857.2017.1391931

D. A. Teker, F. Muhaffel, M. Kilic, **O. Karabiyik Acar**, G. Cempura, M. Baydogan, N.G. Karaguler, G.T. Kose, A.C. Filemonowicz, H. Cimenoglu

The effect of accelerated mineral trioxide aggregate on odontoblastic differentiation in dental pulp stem cell niches. *International Endodontic Journal*, 2017, DOI: 10.1111/iej.12747 - Financial support of Marmara University, Scientific Research Commission (SAG-C-DRP-280214-0036), 2013-2014

P. Kulan, **O. Karabiyik**, G.T. Kose, B. Kargul

Biocompatibility of accelerated mineral trioxide aggregate on stem cells derived from human dental pulp. *International Endodontic Journal*, 2016, DOI: 10.1016/j.joen.2015.10.015 - Financial support of Marmara University, Scientific Research Commission (SAG-C-DRP-280214-0036), 2013-2014

P. Kulan, **O. Karabiyik**, G.T. Kose, B. Kargul

Poly (α -amino acid)-based fibrous scaffolds modified with surface-pendant peptides for cartilage tissue engineering. *J Tissue Eng Regen Med.*, 2015, DOI: 10.1002/term.1982 - Financial support of ASCR-TUBITAK (111M031) 2012-2013

J. Svobodová, V. Proks, **Ö. Karabiyik**, A.C. Çalikoğlu Koyuncu, G.T. Köse, F. Rypáček, H. Studenovská

The usage of hyaluronic acid-chitosan coacervates for cartilage tissue engineering (Thesis Project), 2014-2017

O. Karabiyik Acar, B. Kayitmazer, G.T. Kose

Molecular investigation of the inhibition of bone formation after spongiuous allografting of the MSC isolated from bone and adipose tissues, TOTBID (Association of Turkish Orthopedy and Traumatology), 2011-2012
T. Beyzadeoglu, K. Yüksel, **Ö. Karabiyik**, F. Altintas, A. Ivkovic, C.H. Evans, R.M. Porter, G.T. Köse

Biodegradable polypeptide-based hydrogels for soft tissue regeneration, Tübitak Joint Research and Development Project, 2011-2013
G. Torun Köse, M. Ramazanoglu, **Ö. Karabiyik**, A.C. Calikoglu, J. Svadobova, T. Sedlacik, V. Proks, H. Studenovska

Nerve regeneration on a system consisting of PLGA tubes and laminin-1-collagen nanofibers, EOréal Women Scientist of Turkey Scholarship Project, 2011-2012
G. Torun Köse, D. Yücel, **Ö. Karabiyik**, A.İ. Kanneci, V. Hasircı

The effect of nitric oxide on tissue transglutaminase mediated cell migration (Graduation Project), 2009-2010
O. Karabiyik, D. Telci

Research Interests

Tissue Engineering, Stem Cell Research, Biomaterials, Complex Coacervation

Teaching Experience

BTEC 535 Mammalian Tissue Engineering (2019-2020)
GBE 492 Undergraduate Project (2015-2017)
GBE 216 Classical and Molecular Genetics Laboratory (2011- 2017)
GBE 203 Microbiology Laboratory (2010-2011)

Computer Skills

MS Office Programs: Excellent
Matlab: Excellent
Origin: Excellent
Fortran: Good
GraphPad Prism: Excellent

Language Skills

English Reading: Advanced, Writing: Advanced, Speaking: Advanced
➤ March 5th, 2017 – **YÖKDİL Exam: 95**
German Reading: Beginner, Writing: Beginner, Speaking: Beginner

Certificates and Seminars:

- October 11th– 14th, 2018 – 7th Multidisciplinary Cancer Research & 1st Basic Oncology Conference, Izmir, Turkey
Muse Cell Analyzer Workshop (Oral Presentation & Application)
- January 19th– 21st, 2018 – Writing Project Proposal in the Field of Health Science and Project Management Course-
TUBITAK 2237, Istanbul, Turkey
- September 20th, 2017 – 2nd TUBA-KAST Bilateral Symposium (Biotechnology and its applications), Istanbul, Turkey

➤ September 4th – 8th, 2017 – 28th Annual Conference of the European Society for Biomaterials, Athens, Greece
Effect of silver acetate concentration on the microstructural and antibacterial properties of oxidized titanium (Oral Presentation),

D. Teker Aydogan, F. Muhaffel, M. Menekse, O. Karabiyik Acar, G. Cempura, M. Baydogan, N. Gul Karaguler, G.T. Kose, A. Czyrska-Filemonowicz, H. Cimenoglu

➤ May 12th – 14th, 2017 – The 22nd Biomedical Science and Technology Symposium (BIOMED), Ankara, Turkey
Coacervate usage in tissue engineering (Poster presentation),

O. Karabiyik Acar, S. Bedir, B. Kayitmazer, G.T. Kose

➤ May 3rd – 5th, 2017 – International R&D Collaboration Summit and Fair, Istanbul, Turkey

➤ April 2nd – 6th, 2017 – 253rd American Chemical Society National Meeting & Exposition (ACS), California, United States

Coacervates from biopolymers for cartilage tissue regeneration (Oral presentation),

O. Karabiyik Acar, B. Kayitmazer, G.T. Kose

➤ November 2nd, 2016 – Bioprinting in Tissue Engineering, Polymeric Materials & Bioceramic Composites (Workshop), Kocaeli University, Kocaeli, Turkey

➤ October 15th – 18th, 2015 – 2nd International Congress on Stem Cell and Cellular Therapies, Antalya, Turkey

Usage of accelerated mineral trioxide aggregate for odontoblastic differentiation (Poster presentation),

O. Karabiyik, P. Kulan, B. Kargul, G.T. Kose

➤ August 16th – 20th, 2015 – 250th ACS National Meeting & Exposition, Boston, United States

Coacervates of ionic polysaccharides for tissue engineering (Oral presentation),

O. Karabiyik, B. Kayitmazer, E.K. Iyilik, G.T. Kose

➤ July 1st – 4th, 2015 – 25th Congress of the International Association of Paediatric Dentistry (IAPD), Glasgow, United Kingdom

Cytotoxicity of accelerated mineral trioxide aggregate on stem cells from human dental pulp (Poster presentation),

P. Kulan, O. Karabiyik, G.T. Kose, B. Kargul

➤ September 8th – 12th, 2013 – 25th European Conference on Biomaterials, Madrid, Spain

Comparison of Hydrogel-like and Fibrous Poly(alpha-Amino Acid)-Based Scaffolds for Cartilage Tissue Engineering (Poster Presentation),

G. Torun Köse, A.C. Çalikoğlu Koyuncu, Ö. Karabiyik, M. Ramazanoğlu, J. Svobodova, V. Proks, H. Studenovska

➤ June 17th – 20th, 2013 – The European Chapter Meeting of the Tissue Engineering and Regenerative Medicine International Society (TERMIS-EU), Istanbul, Turkey

Effect of biomimetic modification of porous polypeptide hydrogels on stem cell chondrogenesis (Poster Presentation),

H. Studenovska, V. Proks, J. Kučka, Ö. Karabiyik, A.C. Çalikoğlu Koyuncu, M. Ramazanoğlu, G.T. Köse

➤ September 23rd – 26th, 2012 – 15th European Congress on Biotechnology, The European Chapter Meeting of the Tissue Engineering and Regenerative Medicine

Porous polypeptide-based hydrogels as matrices for stem cells attachment (Poster Presentation),

H. Studenovska, T. Sedlačik, V. Proks, O. Karabiyik, M. Ramazanoğlu, G. Torun Kose

➤ June 29th – June 30th, 2012 – Career in Polymers IV, Prague, Czech Republic

Fibrous poly (α -amino acid)-based scaffold for cartilage tissue engineering (Poster Presentation),

Ö. Karabiyik, J. Svobodová, A.C. Çalikoğlu, V. Proks, M. Ramazanoğlu, G. Torun Köse, H. Studenovská

➤ January 16th – 26th, 2012 – Certificate of Animal Use in Experimental Research - Yeditepe University, Istanbul

➤ November 1st – 4th, 2011 – XX. International Conference on Oral and Maxillofacial Surgery, Santiago, Chile
Osteoblast cell adhesion on RBM and sand blasted acid etched titanium surfaces: Preliminary results (Poster Presentation),

G.T. Köse, Ö. Karabıyık, C. Şener, A. Altun

➤ January 13th – 16th, 2010 – Workshop on Current Trends in Molecular Nanobiosciences, Bilkent University, Ankara

➤ January 10th – 13th, 2010 – Winter School on Frontiers in Nanomedicine and Nanobiotechnology, Bilkent University, Ankara

➤ November 2nd – 3rd, 2007 – Gene Therapy Symposium, Yeditepe University, Istanbul

Social Activities

Pilates – Mat & Reformer Instructor

Piano

Latin dance

Tennis

Yeditepe University Biotechnology Group Member-2008+