






Emine Afra DEMIRCI

İnönü Mah. Kayışdağı Cd 
No:232-Ataşehir/IST
+90 5434721295 
afrademirci@gmail.com 

Education

2011–2015

Bioengineering / Ege University, Izmir-Turkey

GPA – 3.17(out of 4)

2015–2017

**Master of Science in Biomedical Technologies /
Izmir Katip Celebi University, Izmir-Turkey**

GPA – 3.67(out of 4)

Thesis: Effects Of Beta-Tricalcium Phosphate Concentration On Osteogenic Differentiation Of Human Mesenchymal Stem Cells In Chitosan Based Composite Scaffolds

Advisor: Asst. Prof. Dr Ozan Karaman

2018–

Ph.D. Candidate in Biotechnology Dept.

Yeditepe University, İstanbul-Turkey

Experience

12.2018 –

**Auditor – Technical Expert /
Szutest Conformity Assessment Co.**

10.2016 – 10.2018

**Production Supervisor- Responsible Manager /
Bonegraft Biomaterials Co.**

09.2014– 10.2014

Intern / Novartis AG, Turkey

Incoming Material Control Laboratory

08.2014 – 09.2014

Intern / Bogazici University, Turkey

Participated project: Tissue Scaffold Productin Approach with Biomimetics of Bone Surface

08.2013 – 10.2013

Intern / Imperial College of London, UK

Participated project : To investigate the effect of Ranaolazine on adhesion of highly metastatic human breast cancer cells(MDA-MB 231)

07.2012 – 10.2012

Intern / Carnegie Mellon University, USA

Participated project: Hyperthermia Cancer Treatment with Nanoparticles

Academic Background

Publications

- Ercan, U. K., İbiş, F., Dikyol, C., Horzum, N., Karaman, O., Yıldırım, Ç., **Demirci, E.** (2018). Prevention of bacterial colonization on non-thermal atmospheric plasma treated surgical sutures for control and prevention of surgical site infections. PloS one, 13(9), e0202703.
- Arık N., İnan A., **Demirci E.A.**, Ercan U.K., Karaman O., Horzum N. "Modification of electrospun PVA/PAA scaffolds by cold atmospheric plasma: alignment, antibacterial activity, and biocompatibility." Polymer Bulletin: 1-16.
- Karaman O., Kelemek S., **Demirci E.A.**, İbiş F., Ulu M., Ercan U.K. " Synergistic Effect of Cold Plasma Treatment and RGD Peptide Coating on Cell Proliferation over Titanium Surfaces" Tissue Engineering and Regenerative Medicine 15.1 (2018): 13-24.
- Gümüştay M., **Demirci E.A.**, Karaman O., Kaya A. " Comparative Assessment of Pulsed Electromagnetic Fields (PEMF) and Pulsed Radio Frequency Energy (PRFE) on an In Vitro Wound Healing Model " International Journal of Applied Electromagnetics and Mechanics Preprint: 1-11.
- **Demirci E.A.**, Karaman O., "Fabrication And Characterization Of 3d Nanofiber Based Scaffolds For Bone Tissue Engineering", IEEE explore.
- **Demirci E.A.**, Kelemek S., İbiş F., Ulu M., Ercan U.K, Karaman O. "The Evaluation of Wettability and Cell-Surface Interactions on Modified Titanium Discs with Atmospheric Cold Plasma Application and RGD Peptide Conjugation: In Vitro Study" IEEE explore
- Görgülü H., İbiş F., **Demirci E.A.**, Ulu M., Ercan U.K, Karaman O., Akçay H. "In Vitro Evaluation of the Effects of Atmospheric Cold Plasma Application on Titanium Mesh " Yeditepe J Dent. 2018; 14(2): 25-30
- Karaman O., Onak G., **Demirci E.A.**, Kahraman E., "Integrin binding peptide promotes in vitro wound closure in the L929 mouse fibroblasts" The European Research Journal, August 24, 2017 - 10.18621/eurj.318606

Oral and Poster Presentations

- Demirci E.A., Uğur O., Atagür M., Karaman O., Multilayer Biodegradable Synthetic Barrier Membranes For Periodontal Regeneration, TERMEX 2018, 04.09.18, Kyoto-Japan
- İbiş F., **Demirci E.A.**, Karaman O., Korkmaz-Ekren P., Bacakoğlu F., Ercan U.K., “Evaluation of Antimicrobial Activity of Nebulized Plasma-Treated Liquids for Control of Ventilator Associated Pneumonia”, 6 th International Conference on Plasma Medicine (ICPM-6), September 4-9, 2016, Bratislava, Slovakia (Poster Presentation).
- **Demirci E.A.**, Karaman O., “Osteogenic differentiation of human mesenchymal stem cells on nanofiber based microtubular scaffolds”, European Chapter Meeting of the Tissue Engineering and Regenerative Medicine International Society 2016, 28 June - 1 July 2016, Uppsala, Sweden (Poster Presentation).
- Arık N., İnan A., İbiş F., **Demirci E. A.**, Ercan U. K., Karaman O., Horzum N., “Effect of cold plasma treatment on electrospun nanofibers”, 4th International Conference on Electrospinning 2016, 28 June - 1 July 2016, Otranto, Italy (Poster Presentation).
- **Demirci, E.A.**, Anıl, M., Şendemir Ürkmez, A., “Fabrication of Chitosan Scaffold with Enlarged Pore Size for Using In Tissue Engineering Applications” , 21st International Biomedical Science and Technology Symposium, BIOMED, November, 22-24 2015, Antalya, Turkey (Poster Presentation).

Book Chapters

- M. Şen, **E.A. Demirci**, O. Karaman, Electrospun Scaffolds for Vascular Tissue Engineering, Electrospun Materials for Tissue Engineering and Biomedical Applications: Research, Design and Commercialization, Elsevier, 2016, Chapter 7

Scholarships and Projects

- Culture of 3D Microspheres on Porous Chitosan Scaffold-TUBITAK 2209-A University Students Domestic Research Projects Support Program (Coordinator)
- Osteogenic differentiation of human mesenchymal stem cells on osteon mimetic microtubular scaffolds, TUBITAK, 214M268 (Researcher)

Certificates and Courses

Education on Animal Use for Researchers – Marmara University Animal Experiments Local Ethics Committee ,Istanbul, Turkey, November 07-18, 2016

COST ACTION MP1206 3rd International Training School on Electrospinning of Nanofibers and Their Characterization: Hands-on Experience at UNAM-Institute of Materials Science & Nanotechnology , Bilkent University, Ankara, Turkey, June 1 3, 2016.

First Aid Certificate – Ekoglobal Occupational Health And Safety Centre, 11-12.12.2017

Languages

Turkish – Mother tongue
English – Advance
Japanese – Basic

Computerskills

- ✓ Microsoft Office
- ✓ Visual Basic
- ✓ SPSS