



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE : 4401

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di Bioscienze

Scientist- in - charge: **Prof. ssa Giuseppina Caretti**

UMMU GUVEN

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Guvén
Name	Ummu
Date of birth	18,09,1987

PRESENT OCCUPATION

Appointment	Structure

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD	Stem Cell	Ege University, Izmir, Turkey	2019
Master	Stem Cell	Ege University, Izmir, Turkey	2014
Bachelor	Biology	Ege University, Izmir, Turkey	2011
Degree of medical specialization			
Degree of European specialization			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
November 26, 2018	American Association of Cancer Research (AACR)	Philadelphia, USA
April 13, 2016	European Association for Cancer Research (EACR)	Nottingham, UK
April 13, 2016	Association for Molecular Cancer Research (MOKAD)	Istanbul, Turkey

FOREIGN LANGUAGES



Languages	Level of knowledge
English	Excellent
Spanish	Basic

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2013	Aliye Uster Research Foundation, Scientific Research Project Award
2016	Turkish Academy of Sciences (TUBA) 3rd International Stem Cell Course Travel Grant
2018	The Scientific and Technological Research Council of Turkey (TUBITAK) International Research Fellowship Programme Award

TRAINING OR RESEARCH ACTIVITY

PhD Research Fellow

Feb 2018 - Feb 2019 University of Texas MD Anderson Cancer Center, Dept of Experimental Therapeutics, Houston, TX, USA (PI: Bulent Ozpolat, MD, PhD)

Fundamental Laboratory duties (cell culture, primer cell culture IF / ICC / IHC staining and monitoring, RT-PCR, western blot)

- Survival and toxicity analysis (MTS, Apoptosis, Cell cycle, invasion, migration, wound healing)
- Flow cytometry (Cell separation, Cell surface marker based separation, Cancer stem cell isolation, Viability, apoptosis, cell cycle analysis)
- Luciferase Reporter Assay
- IP (immunoprecipitation)
- Transfection (siRNA(gene silencing), miRNA (over expression, inhibition), GFP-tagging, gene overexpression)
- Tumor modelling on mice, IV, IP and subcutaneous injections
- Exosome Isolation from cell especially cancer stem cells and macrophages and biological fluids
- Isolation of RNA and miRNA from exosomes
- Preparing DOPC nanoliposomes for in-vivo miRNA treatments

Graduate Research Fellow

September 2011 - August 2019 Ege University, Institute of Health Science, Department of Stem Cell, Izmir, Turkey. (PI: Gulperi Oktem, MD, PhD)



- Fundamental Laboratory duties (cell culture, primer cell culture, 3D culture, IF / ICC / IHC stainings, RT-PCR, western blot)
- Survival and toxicity analysis (MTS, Apoptosis, Cell cycle, invasion, migration, wound healing)
- Flow cytometry (Cell separation, Cell surface marker based separation, Cancer stem cell isolation, Viability, apoptosis, cell cycle analysis)
- Embryo culturing (mice)
- Embryo micromanipulation (2-cell, 4-cell embryos and blastocysts collection from CD1 mice.)
- culturing/ co-culturing.
- ICSI and IVF Techniques (on mice)
- Tumor modelling on mice, IV, IP and subcutaneous injections
- Dendritic cell isolation from mice
- Laboratory management
- Contribute to the supervision and training of first year graduate students

PROJECT ACTIVITY

Year	Project
2018-2019	miR-193b is a novel regulator of Inhibition of Notch signaling by for targeting cancer stem cell and tumor microenvironment. (PhD Thesis Project)
2017- 2019	Characterization of Dental Pulp Mesenchymal Stem Cells Dependent on Age Group
2015-2018	Investigation of Cancer Stem Cell Differentiation in the Process of Embryonic Reprogramming with the effect of miRNA
2013-2015	Analysing of Epithelial Mesenchymal Transition Marker Changes in co- culture of prostate cancer stem cells and embryos
2015-2017	Demonstrating being of KDN (2-keto-3-deoxy-d-glycero-d-galacto-nononic Acid) binding to GM (single Nana Ganglioside) in Prostate Cells
2015-2017	Cytotoxic Effects of Geldanamycin and Flavopiridol on Prostate Cancer Cells
2013-2015	Apoptosis Related Molecules in Prostate and Breast Cancer Stem Cells
2013-2014	Analysing of KDN (2-keto-3-deoxy-d-glycero-d-galacto-nononic Acid) Expression



Altering in CD133⁺/CD44^{+/low} Prostate Cancer Stem Cell

PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
2012	XI. National Histology and Embryology Congress with International Participation	Denizli, Turkey
2012	16th Ege Oncology Symposium	Izmir, Turkey
2014	XII. National Histology and Embryology Congress with International Participation	Ankara, Turkey
2014	Horizons In Molecular Biology & Genetics VI Symposium	Ankara, Turkey
2015	Stem Cells and Cancer Symposium	Manisa, Turkey
2016	XIII. National Congress of Histology and Embryology with International Participation	Izmir, Turkey
2016	Metabolism and Cancer Symposium	Izmir, Turkey
2016	International Conference on Genomics and Bioinformatics	Izmir, Turkey
2016	2 nd Congres of Cell Death Research Society-Turkey	Izmir, Turkey
2017	New Frontiers in Life Sciences	Izmir, Turkey

PUBLICATIONS

Books

[title, place, publishing house, year ...]

[title, place, publishing house, year ...]

[title, place, publishing house, year ...]

Articles in reviews

Active molecules on self renewal and differentiation processes in spermatogonial stem cells. (In Turkish). Turkish Society of Andrology Journal. Turkey, Turkish Society of Andrology Publishing, 2013.



Volume 55. (Review)

Goksel G, Bilir A, Uslu R, Akbulut H, **Güven U**, Oktem G. WNT1 gene expression alters in heterogeneous population of prostate cancer cells; decreased expression pattern observed in CD133+/CD44+ prostate cancer stem cell spheroids. *J BUON*. Greece, 2014 Jan- Mar;19(1):207-14.

Oktem G, Sercan O, **Güven U**, Uslu R, Uysal A, Goksel G, Ayla S, Bilir A. Cancer Stem Cell Differentiation: TGFβ1 and Versican could be triggering molecules for the organization of tumor spheroids. *Oncol. Rep.*, Greece, Spandidos Publications. 2014 Aug;32(2):641-9.

Soner BC, Aktug H, Acikgoz E, Duzagac F, **Güven U**, Ayla S, Cal C, Oktem G. Induced growth inhibition, cell cycle arrest and apoptosis in CD133+/CD44+ prostate cancer stem cells by flavopiridol. *Int J Mol Med*. Greece, Spandidos Publications. 2014 Nov;34(5):1249-56.

Duzagac F, Inan S, Simsek FA, Acikgoz E, **Güven U**, Khan AS, Rouhrazi H, Oltulu F, Aktug H, Erol A, Oktem G. JAK/STAT pathway interacts with intercellular cell adhesion molecule (ICAM) and vascular cell adhesion molecule (VCAM) while prostate cancer stem cells form tumor spheroids; *J BUON*. Greece, 2015 Sep-Oct;20(1):1250-1257

Acikgoz E, **Güven U**, Duzagac F, Uslu R, Kara M, Soner BC, Oktem G. Enhanced G2/M Arrest, Caspase Related Apoptosis and Reduced E-Cadherin Dependent Intercellular Adhesion by Trabectedin in Prostate Cancer Stem Cells. *PLoS One*, United Kingdom. PLoS Publishing Group, 2015 Oct 20;10(10):e0141090.

Erol A., Acikgoz E., **Güven U.**, Duzagac F., Turkkani A., Colcimen N., Oktem G. Ribosome Biogenesis Mediates Antitumor Activity of Flavopiridol in CD44⁺/CD24⁻ Breast Cancer Stem Cells. *Oncology Letters*. Greece, Spandidos Publications. 2017 September 22;6433-6440. doi.org/10.3892/ol.2017.7029

Acikgoz E, Aktug H, Yigitturk G, Demir K, **Güven U**, Duzagac F, Oltulu F, Yavasoglu A, Oktem G. Repression of the Notch pathway prevents liver damage in streptozotocin-induced diabetic mice. *Folia Histochem Cytobiol*. Poland, Via Medica Publishin Group, 2017;55(3):140-148. doi: 10.5603/FHC.a2017.0014.

Guler G, **Güven U**, Oktem G. Characterization of CD133+/CD44+ human prostate cancer stem cells with ATR-FTIR spectroscopy. *Analyst*. United Kingdom, Royal Society of Chemistry, 2019 Mar 21;144(6):2138-2149

Congress proceedings

Oktem G, Sercan O, **Güven U**, Uslu R, Uysal A, Ayla S, Goksel Ozturk G, Bilir A. Cancer stem cell differentiation: TGFβ1 and Versican could be triggering molecules for organizing of tumor spheroid composition. (Poster Presentation). The 5th EMBO Meeting, Amsterdam. 2013

Oktem G, Sercan O, **Güven U**, Uslu R, Uysal A, Ayla S, Goksel Ozturk G, Bilir A. Wnt1 gene expression alters heterogeneous population of prostate cancer cells; decreased expression pattern observed in



CD133+/ CD44+ prostate cancer stem cells. (Oral Presentation) XII. National Histology and Embryology Congress with International Participation, Ankara, Turkey. 2014
Acikgoz E, Guven U, Duzagac F, Uslu R, Oktem G. Cytotoxic and apoptotic effects of Trabectedin (ET-743) on CD133+/ CD44+ Human prostate cancer cells. (Poster Presentation). XII. National Histology and Embryology Congress with International Participation, Ankara, Turkey. 2014
Duzagac F, Deveci R, Guven U, Acikgoz E, Oktem G. In-vitro Modulating of KDN (Deamino Neuraminic Acid) Expression in Prostate Epithelial Cells and Prostate Cancer Stem Cells. (Poster Presentation). XII. National Histology and Embryology Congress with International Participation, Ankara, Turkey. 2014
Guven U, Duzagac F, Acikgoz E, Ergur B, Uslu R, Oktem G. Alteration on Stem Cell Markers in CD133+/CD44+/low Prostate, Breast and Colon Cancer Cells. (Poster Presentation). XII. National Histology and Embryology Congress with International Participation, Ankara, Turkey. 2014
Duzagac F, Inan S, Simsek FA, Acikgoz E, Guven U, Rouhrazi H, Demir K, Ozcinar E, Oktem G. JAK/STAT pathway interacts with intercellular cell adhesion molecule (ICAM) and vascular cell adhesion molecule (VCAM) while prostate cancer stem cells form tumor spheroids. (Poster Presentation) 1st. Molecular Urology Meeting, Istanbul., Turkey 2014
Oktem G, Karagenc L, Guven U, Esmen K, Duzagac F, Acikgoz E, Ozcinar E, Aktug H, Yavasoglu A, Uysal A. Injection of CD133+/CD44+ Human Prostate Cancer Stem Cell into Blastocyst and Hatched Blastocysts Inner Cell Mass. (Poster Presentation) 6th. Biannual Meeting of the Turkish Society of Reproductive Medicine. Antalya, Turkey 2014
Rouhrazi H, Turgan N, Guven U, Uysal A, Oktem G. Altered Expression of Apoptosis-related Genes in Cancer Stem Cells in a Prostate Cancer Model. (Poster Presentation) 2 nd Congres of Cell Death Research Society-Turkey, Izmir, Turkey 2016
Guven U, Mokhlis H, Kahraman N, Ivan C, Duzagac F, Lopez-Berestein G, Oktem G, Ozpolat B. miR-193b is a novel regulator of inhibition of Notch signaling by for targeting cancer stem cell and tumor microenvironment. (Poster Presentation), American Association for Cancer Research (AACR) Annual Meeting Atlanta, Georgia, USA. 2019
Duzagac F, Lopez-Berestein G, Kanlikilicer P, Rodriguez-Aguayo C, Cardenas-Zuniga R, Guven U, Oktem G, Ozpolat B. Regulatory role cancer stem cells (CSCs)-derived exosomal miRNAs in ovarian cancer growth and progression (Poster Presentation) American Association for Cancer Research (AACR) Annual Meeting . Atlanta, Georgia, USA. 2019

OTHER INFORMATION



Courses

Germ Cell Extracting and Micromanipulation Practical Course (16 hours) in Ege University Faculty of Medicine, Department of Histology and Embryology, Izmir 2015.

Embryo Manipulations in Mices and Used Methods in Transgenic Mouse Production Practical Course (35 hours). The Scientific and Technological Research Council of Turkey, Marmara Research Center (TUBITAK MAM), Gebze, Turkey 2015.

Antibody Production Training Course (35 hours) in Ege University Department of Bioengineering, Izmir, Turkey 2015.

EMBO Practical Course on Bioinformatics and Genome Analysis, International Biomedicine and Genome Institute, Izmir, Turkey 2016.

Turkish Academy of Sciences (TUBA) 3rd International Stem Cell Course: "Innovative Cell Therapies in Hematologic-Oncology", Antalya 2016.

Ege University, Local Ethic Committee of Animal Experiments, Animal Care and Use Training (80 hours) Izmir, Turkey 2017

Online Animal Training (IACUC) (40 hours) , University of Texas, MD Anderson Cancer Center , Houston, TX, USA 2018

IPA (Ingenuity Pathway Analysis) training (12 hours), University of Texas, MD Anderson Cancer Center , Houston, TX, USA 2018

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Izmir, Turkey November 5, 2019

Ummu GUVEN

SIGNATURE