

SENIZ INANC SURER, M.Sc.

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Dokuz Eylül University
School of Medicine
Department of Medical Biochemistry
Balçova, İzmir/TURKEY

1. EDUCATION

2013- present

Ph.D. in Medical Biochemistry

Dokuz Eylül University, School of Medicine, İzmir, Turkey

Thesis: Investigation of the Role of Mitochondrial Glucose Metabolism Related with HIF-1 α in the Hypoxic Microenvironment of Head and Neck Cancer Cells

2009-2012

M.Sc. in Molecular Medicine

Dokuz Eylül University, School of Medicine, İzmir, Turkey

Thesis: Standardization of Collagen Zymography Method for Determining Matrix Metalloproteinases -1, -8 and -13 Activities

2004-2009

B.Sc in Biochemistry

Ege University, Faculty of Science, İzmir, Turkey

2. PROFESSIONAL EXPERIENCE

2009-present / Research and Teaching Assistance

Dokuz Eylül University School of Medicine, Department of Medical Biochemistry, İzmir-Turkey

Gulgun Oktay Laboratory

2015-2018 / Research Assistance

Dokuz Eylül University Institute of Oncology, Department of Translational Oncology, İzmir-Turkey

Yasemin Basbınar Laboratory

3. PROJECT EXPERIENCE

2018- present / Researcher

Project name: Evaluation of Synergistic Effects of Metformin and Dichloroacetate on Mitochondrial Energy Metabolism and Chemosensitivity of Cetixumab in Oral Cavity Cancer: Drug Repositioning (TUBITAK-118S576)

2017- present / Researcher

Project name: Repositioning of antipsychotic drugs, Sertaline and Penfluridol in Human Glioblastoma Cells

2015- present / Ph.D. Thesis

Project name: Investigation of the Role of Mitochondrial Glucose Metabolism Related with HIF-1alpha in the Hypoxic Microenvironment of Head and Neck Cancer Cells (DEU-2017.KB.SAG.001).

2015- 2018 / Researcher

Project name: The combination treatment of chemotherapy and radiotherapy for oral cavity and larynx cancer cell lines using gold, silver and platinum nanoparticles as drug nanocarriers (TUBITAK-115S483).

2015-2017 / Researcher

Project name: The assessment of combined graphene based nanomaterials loaded with cisplatin and laser induced hyperthermia in the treatment of oral cavity cancer: an in vitro study (TUBITAK-115S037).

2012-2014 / Researcher

Project name: Determination of possible relation between RhoC and Extracellular Proteolysis in terms of invasion and metastasis in colon cancer cells (DEU-2012.KB. SAG.066).

2008-2011 / Researcher

Project name: Investigation of expression alterations of migration and invasion related molecules in primary colorectal and metastatic liver tumors in relation to clinicopathological variables (DEU-2008.KB. SAG.026).

2009-2012 / M.Sc. Thesis

Project name: Standardization of collagen zymography method for determining matrix metalloproteinases -1, -8 and -13 activities (DEU-2011.KB. SAG.10).

4. PUBLICATIONS

Papers in International Journal

- **Inanc S**, Keles D, Eskiizmir G, Basbinar Y, Oktay G. Metformin And Dichloroacetate Combination Exert A Synergistic Effect On Cell Viability Of Oral Squamous Cell Carcinoma”, ENT Updates, 2019 (Accepted).
- **Inanc S**, Keles D, Oktay G. An improved collagen zymography approach for evaluating the collagenases MMP-1, MMP-8, and MMP-13, 2017, Biotechniques, 1;63(4):174-180.

Citation number: 4

- Hosgorler F, Keles D, Tanriverdi-Akhisaroglu S, **Inanc S**, et al. Anti-inflammatory and Anti-apoptotic Effect of Valproic Acid and Doxycycline Independent from MMP Inhibition in Early Radiation Damage, 2016, Balkan Med J, 33: 488-95.

Citation number: 2

Abstracts in International Journal

- **Inanc S**, Keles D, Sipahi M, Baskin Y, Oktay G, “Effects of Metformin and Dichloroacetate on Mitochondrial Energy Metabolism in Oral Cavity Cancer Cells”, 43th FEBS Congress, Volume:8 Page: 334, Supplement S1, Prag, Czech Republic, July 2018.
- Eskiizmir G, Baskin Y, **Inanc S**, Somek K, Calibası G, Yapici K, “Graphene-based nanoparticles: a novel nanodrug for cancer” 41th FEBS Congress, Volume: 283 Page:102, Kusadasi, Turkey, September 2016.
- Keles D, Oktay G, Sipahi M, **Inanc S**, Djamgoz MBA, "The effect of voltage-gated sodium channel on matrix metalloproteinase expression and activity in human breast cancer cells", 40th FEBS Congress, FEBS Journal, Volume: 282 Pages: 318-318 Supplement: 1 Special Issue: SI Meeting Abstract: P33-018, Germany, July 2015.
- **Inanc S**, Keles D, Oktay G, "Standardization of collagen zymography method for determining matrix metalloproteinases -1, -8 and -13 activities", FEBS JOURNAL, Volume:281, Pages:503, FEBS EMBO 2014 Congress, Paris, France August 2014.
- Keles D, Sipahi M, **Inanc S**, Oktay G, "RHOC-GTPase promotes colon cancer cell invasion in matrix metalloproteinase dependent manner", FEBS JOURNAL, Volume: 281, Pages:500, FEBS EMBO 2014 Congress, Paris, France August 2014.
- Keles D, **Inanc S**, Canda AE, Terzi MC, Sipahi M, Fuzun M, Oktay G, "The expression and activity levels of RhoC, ROCK-I, ROCK-II and MMP-2 in colorectal cancer", FEBS

Journal, Volume: 539, Pages: 37. FEBS and 22th IUBMB Congress, Sevilla, Spain, September 2012

- Keles D, **Inanc S**, Canda E, Terzi M, Sipahi M, Ellidokuz H, Fuzun M, Oktay G, " The effects of RhoC, ROCK-II and MMP-2 on colorectal cancer invasion",Turkish Journal of Biochemistry, Congress special issue", 23th National Biochemistry Congress, Adana, Turkey, November 2011
- Oktay G, Keles D, **Inanc S**, Canda A, Unek T, Sipahi M, Terzi M, Karademir S, Astarcioglu I, "The contribution of RhoC via MMP-2 activation to colorectal cancer liver metastasis ", Turkish Journal of Biochemistry, Congress Special Issue 1, 23th National Biochemistry Congress, Adana, Turkey, November 2011.

5. PRESENTATIONS

- Baskin Y, **Inanc S**, Elcitempe TB, Akcay D, Calibas Kocal G, Alicikus Z, Eskiizmir G, Yapici K, "Silver nanoparticles: A novel radiosensitizer for the treatment of oral cavity cancer cell line" 2nd EACR Conference Radiation Break-through from DNA damage responses to precision cancer therapy, Page:45, Oxford, UK, March 2018 (Poster presentation).
- **Inanc S**, Cakiroglu E, Somek K, Karaca G, Akcay D, Alicikus LZ, Ellidokuz H, Eskiizmir G, Yapici K and Baskin Y, "Gold Nanoparticles: A novel nanoparticle for radiosensitization in oral cavity cancer", EuroMedLab 2017, Athens, Greece, June 2017 (Poster presentation).
- Eskiizmir G, Baskin Y, **Inanc S**, Duman S, Calibas G, Karaca G, Yapici K, "Investigation of the chemo-photo-thermal effect of the active targeted graphene oxide cetuximab nano-drug complex induced by pulsed laser in oral cavity cancer", 22th National Cancer Congress, Antalya, Turkey, April 2017 (Oral presentation).
- Baskin Y, Eskiizmir G, **Inanc S**, Elcitempe TB, Calibas Kocal G, Alicikus Z, Akcay D, Yapici K, "The effects of gold nanoparticle that is nano drug carrier in radiotherapy resistant oral cavity cell line", 22th National Cancer Congress, Antalya, Turkey, April 2017 (Poster presentation).
- Keles D, Oktay G, Sipahi M, **Inanc S**, Djamgoz MBA, "Matrix Metalloproteinase Expression and Activity in Human Breast Cancer Cells: Association with Voltage-Gated Sodium Channel", 3rd EACR Sponsored Anticancer Agent Development Congress, Izmir, Turkey, May 2015 (Poster presentation).

- Inanc S, Keles D, Oktay G, “Standardization of collagen zymography method for determining matrix metalloproteinases -1, -8 and -13 activities”, IVth Multidisciplinary Cancer Research Congress Bursa, Turkey, December 2012 (Oral presentation).
- Yuksel Egrilmez M, **Inanc S**, Ozkaya F, Salimi R, Harmanci D, Safari R, Kirkali G, Astarcioglu I, Akdogan G, "An Outlook to Journal Publications from Thesis of MSc and PhD Students at Dokuz Eylül University Graduate School of Health Sciences", 6th ORPHEUS Conference PhD Quality Indicators for Biomedicine and Health Sciences Conference Book p: 52, Izmir, Turkey April 2011 (Poster presentation).

6. TEACHING SKILLS

2013- present, Dokuz Eylul University Department of Medical Biochemistry

- Basic Laboratory Principles and Methods (BIO6059)- Homogenization techniques, total protein assays, SDS-PAGE, zymography

7. LABORATORY SKILLS

- Many years of experience in Molecular biology techniques; SDS-PAGE, Zymography (Collagen, Gelatin, Casein), Western Blot, ELISA, RT-PCR et al.
- Rich experience of nanomaterials, nano-drugs in cancer
- Cell culture
- Basic biochemistry techniques
- Cell proliferation assay, such as; MTT, WST-1 assay, x-CELLigence system
- Drug screening
- Apoptosis and cell cycle assay
- Colony assay
- Isolation of type I collagen from rat tail tendon

8. SCHOLARSHIP

- 2018- The Federation of European Biochemical Societies (FEBS)

Bursary for FEBS Congress in Prague, Czech Republic; includes registration and travel.

- 2016- Turkish Biochemical Society (TBS)

Bursary for 41th FEBS Congress in Kusadasi, Turkey; includes registration

- 2015- The Scientific and Technological Research Council of Turkey (TUBITAK)

Bursary for TUBITAK Project name (115S483): The combination treatment of chemotherapy

and radiotherapy for oral cavity and larynx cancer cell lines using gold, silver and platinum nanoparticles as drug nanocarriers

- 2014- The Federation of European Biochemical Societies (FEBS)

Bursary for FEBS-EMBO Congress in Paris, France; includes registration and travel.

- 2012- The Scientific and Technological Research Council of Turkey (TUBITAK)

Bursary for 4th Multidisciplinary Cancer Research Congress in Bursa, Turkey; includes registration.

- 2011- The Scientific and Technological Research Council of Turkey (TUBITAK)

Bursary for 23th National Biochemistry Congress in Adana, Turkey; includes accommodation.

9. AWARDS & HONOUR

- 2017- Best Oral presentation award

39th Turkish National Otorhinolaryngology and Head and Neck Surgery Congress, Turkey

Project name: Investigation of laser-induced carbon nanotubes, nano-ribbon-cisplatin nano-drug chemo-photo-thermal activity in oral cavity cancer

- 2017- Prof. Dr. Bedii Gorbon Award (Best Project award in Radiation Oncology)

National Cancer Congress, Turkey

Project name: The effects of gold nanoparticle that is nano drug carrier in radiotherapy resistant oral cavity cell line

- 2017-Prof. Dr. Ali Haydar Taspinar Award (Best Project award in Basic Science)

National Cancer Congress, Turkey

Project name: Investigation of the chemo-photo-thermal effect of the active targeted graphene oxide cetuximab nano-drug complex induced by pulsed laser in oral cavity cancer

- 2011- Best poster award

23th National Biochemistry Congress, Turkey

Poster name: The effects of RhoC, ROCK-II and MMP-2 on colorectal cancer invasion

10. ATTENDED CONGRESS

- 43th FEBS Congress / Prague-The Czech Republic, 2018 July

- 23th National Cancer Congress / Antalya-Turkey, 2017 April

- FEBS-EMBO Congress / Paris-France, 2014 August

- FEBS-Special Meeting /Kusadasi-Turkey, 2012 November
- 4th Cancer Research Congress / Bursa-Turkey, 2012 December
- 23th National Biochemistry Congress / Adana-Turkey, 2011 November
- 6th ORPHEUS Conference PhD Quality Indicators for Biomedicine and Health Sciences/Izmir Turkey, 2011 April

12. MEMBERSHIPS

- Federation of European Biochemical Societies (FEBS) (2010- Present)
- European Association for Cancer Research (EACR) (2010- Present)
- Turkish Biochemical Society (TBS) (2010- Present)
- Turkish Molecular Cancer Research Association, MOKAD (2010- Present)