

Prof. Selçuk SÖZER TOKDEMİR

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-3877-2020

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Education Information

Doctorate, University of Kentucky, Medicine, United States Of America 1999 - 2004

Undergraduate, Istanbul University, Cerrahpaşa Tıp Fakültesi, Turkey 1991 - 1997

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, CHARACTERIZATION AND FUNCTIONAL ANALYSIS OF A MURINE MODEL FOR CHRONIC MYELOID LEUKEMIA STEM CELLS, University of Kentucky, Graduate School, Medicine, 2004

Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Internal Medicine Sciences, Medical Genetics

Academic Titles / Tasks

Associate Professor, Istanbul University, Aziz Sancar Institute of Experimental Medicine, Department of Genetics, 2019 - Continues

Assistant Professor, Istanbul University, Aziz Sancar Institute of Experimental Medicine, Department of Genetics, 2010 - 2018

Assistant Professor, New York University, Mount Sinai School Of Medicine, Hematology, 2010 - 2018

Assistant Professor, New York University, Mount Sinai School Of Medicine, Hematology, 2009 - 2010

Courses

Moleküler Genetik, Postgraduate, 2022 - 2023

Advising Theses

- Sözer Tokdemir S., Miyeloproliferatif neoplazilerde JAK2 ve JAK2V617F MRNA hedefli nanopartikül uygulamasının cgas-sting yolağına etkilerinin araştırılması, Postgraduate, B.TOKCAN(Student), 2021
- Sözer Tokdemir S., Hücre dışı genom materyallerinin hematopoetik kök hücreler üzerindeki etkisi, Postgraduate, S.FULYA(Student), 2020
- Sözer Tokdemir S., Miyeloproliferatif neoplazi kökenli hücre dışı genomik materyallerin endotel hücrelere etkisinin incelenmesi, Postgraduate, C.ÇAĞIL(Student), 2020
- Sözer Tokdemir S., Hipoksik ve yüksek glükozlu ortamlarda IGF-I ve MGF'in nöral kök hücrelerde ekspresyonu ve proliferasyon üstündeki etkilerinin in vitro araştırılması, Postgraduate, T.GÜRBÜZ(Student), 2019
- Sözer Tokdemir S., Hematopoetik ve kanser kök hücrelerin hipoksik koşullardaki fonksiyonel ve genomik yanıtları, Postgraduate, C.VEYSEL(Student), 2019
- Sözer Tokdemir S., Polisitemia vera'da sitokin sinyal yolağının etkisi, Postgraduate, C.ALTUNAY(Student), 2018
- Sözer Tokdemir S., Maternal kandan fetal DNA izolasyonu ile rhesus D ve cinsiyet genotipleme, Postgraduate, B.YAŞA(Student), 2018
- Sözer Tokdemir S., Nöral kök hücre aktivasyonu, proliferasyonu ve migrasyonunda rolleri olan büyüme faktörlerinin karşılıklı etkileşimlerinin in vitro araştırılması, Postgraduate, B.SARYA(Student), 2017
- Sözer Tokdemir S., JAK2V617F mutasyonunun endotel hücreleri üzerindeki trombotik etkilerinin değerlendirilmesi, Postgraduate, H.HEKİMOĞLU(Student), 2017
- Sözer Tokdemir S., Miyeloproliferatif neoplazilerde gen ekspresyon değişimleri, Postgraduate, İ.USLU(Student), 2016
- Sözer Tokdemir S., JAK2V617F mutasyonunun altın nanoflakes kullanılarak tespiti, Postgraduate, E.APTULLAHOĞLU(Student), 2014
- Sözer Tokdemir S., JAK2V617F mutasyonunun endotel hücre fonksiyonları üzerindeki etkisinin epigenetik açıdan değerlendirilmesi, Postgraduate, A.GÖKSU(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of hypoxia on HIF-1 α and NOS3 expressions in CD34+ cells of JAK2V617F-positive myeloproliferative neoplasms**
Şoroğlu C. V., Uslu-Bıçak İ., Toprak S. F., Yavuz A. S., Sözer S.
Advances in Medical Sciences, vol.68, no.2, pp.169-175, 2023 (SCI-Expanded)
- II. **Reduced Production of JAK2V617F-positive Microparticles at Mild Hypothermia**
Hekimoglu H., Demirtas E. N., Sozer S.
In Vivo, vol.37, no.4, pp.1680-1687, 2023 (SCI-Expanded)
- III. **The role of Extracellular Genomic Materials (EGMs) in psychiatric disorders**
Kurtulmuş A., Toprak S. F., Koçana C. Ç., Sözer Tokdemir S.
TRANSLATIONAL PSYCHIATRY, vol.13, no.262, 2023 (SCI-Expanded)
- IV. **In Vitro investigation of insulin-like growth factor-i and mechano-growth factor on proliferation of neural stem cells in high glucose environment**
Gurbuz T. A., GÜLEÇ Ç., Toprak F., Toprak S., SÖZER TOKDEMİR S.
NEUROLOGICAL SCIENCES AND NEUROPHYSIOLOGY, vol.40, no.1, pp.27-36, 2023 (SCI-Expanded)
- V. **Circulating CD133(+/-) CD34(-) progenitors have increased c-MYC expressions in Myeloproliferative Neoplasms.**
Uslu Bıçak I., Tokcan B., Yavuz A. S., Sözer S.
Turkish journal of haematology : official journal of Turkish Society of Haematology, 2022 (SCI-Expanded)
- VI. **JAK2^{V617F} Positive Endothelial Cells Induce Apoptosis and Release JAK2^{V617F} Positive Microparticles.**
Hekimoğlu H., Toprak S. F., Sözer S.
Turkish journal of haematology : official journal of Turkish Society of Haematology, vol.39, pp.13-21, 2022 (SCI-Expanded)

- VII. **In vitro investigation of growth factors including MGF and IGF-1 in neural stem cell activation, proliferation, and migration.**
Tunç B. S., Toprak F., Toprak S. F., Sozer S.
Brain research, vol.1759, pp.147366, 2021 (SCI-Expanded)
- VIII. **Extracellular genetic materials and their application in clinical practice.**
Koçana C. Ç., Toprak S. F., Sözer S.
Cancer genetics, vol.252, pp.48-63, 2021 (SCI-Expanded)
- IX. **Assessment of Fetal Rhesus D and Gender with Cell-Free DNA and Exosomes from Maternal Blood.**
Yaşa B., Şahin O., Öcüt E., Seven M., Sözer S.
Reproductive sciences (Thousand Oaks, Calif.), vol.28, pp.562-569, 2021 (SCI-Expanded)
- X. **Does maternal blood exosomal DNA effective for the fetal RHD and SRY genotyping?**
Yasa B., Sahin O., SÖZER TOKDEMİR S.
EUROPEAN JOURNAL OF HUMAN GENETICS, vol.28, no.SUPPL 1, pp.152-153, 2020 (SCI-Expanded)
- XI. **BCR-ABL1 fusion gene acquisition of endothelial cells from K562 spent serum**
Kocana C. C., Toprak S. F., SÖZER TOKDEMİR S.
EUROPEAN JOURNAL OF HUMAN GENETICS, vol.28, no.SUPPL 1, pp.500, 2020 (SCI-Expanded)
- XII. **In situ detection of JAK2V617F within viable hematopoietic cells using gold nanoparticle technology**
Sozer S., Aptullahoglu E., Shivarov V., Yavuz A.
INTERNATIONAL JOURNAL OF LABORATORY HEMATOLOGY, vol.41, no.4, 2019 (SCI-Expanded)
- XIII. **In-Cell Detection By Flow Cytometry of JAK2 V617F Mutation Using Gold Nanoflares**
Aptullahoglu E., Uslu I., Yavuz A. S., SHIVAROV V., Sozer S.
BLOOD, vol.124, no.21, 2014 (SCI-Expanded)
- XIV. **Human CD34(+) cells are capable of generating normal and JAK2V617F positive endothelial like cells in vivo**
Sozer S., ISHII T., FIEL M. I., WANG J., WANG X., ZHANG W., GODBOLD J., XU M., HOFFMAN R.
BLOOD CELLS MOLECULES AND DISEASES, vol.43, no.3, pp.304-312, 2009 (SCI-Expanded)
- XV. **Correction of the Abnormal Trafficking of Primary Myelofibrosis CD34(+) Cells by Treatment with Chromatin-Modifying Agents**
WANG X., ZHANG W., ISHII T., Sozer S., WANG J., XU M., HOFFMAN R.
CANCER RESEARCH, vol.69, no.19, pp.7612-7618, 2009 (SCI-Expanded)
- XVI. **Involvement of mast cells by the malignant process in patients with Philadelphia chromosome negative myeloproliferative neoplasms**
WANG J., ISHII T., ZHANG W., Sozer S., DAI Y., MASCARENHAS J., NAJFELD V., ZHAO Z. J., HOFFMAN R., WISCH N., et al.
LEUKEMIA, vol.23, no.9, pp.1577-1586, 2009 (SCI-Expanded)
- XVII. **"Correction of the abnormal trafficking of primary myelofibrosis CD34+ cells by treatment with chromatin-modifying agents."Correction of the abnormal trafficking of primary myelofibrosis CD34+ cells by treatment with chromatin-modifying agents."**
WANG X., ZHANG W., ISHII T., SÖZER TOKDEMİR S., WANG J., XU M., HOFFMAN R.
CANCER RESEARCH, vol.vol.69, no.19, pp.7612-7618, 2009 (SCI-Expanded)
- XVIII. **The presence of JAK2V617F mutation in the liver endothelial cells of patients with Budd-Chiari syndrome**
Sozer S., FIEL M. I., SCHIANO T., XU M., MASCARENHAS J., HOFFMAN R.
BLOOD, vol.113, no.21, pp.5246-5249, 2009 (SCI-Expanded)
- XIX. **Circulating angiogenic monocyte progenitor cells are reduced in JAK2V617F high allele burden myeloproliferative disorders**
Sozer S., WANG X., ZHANG W., FIEL M. I., ISHII T., WANG J., WISCH N., XU M., HOFFMAN R.
BLOOD CELLS MOLECULES AND DISEASES, vol.41, no.3, pp.284-291, 2008 (SCI-Expanded)
- XX. **T cells from patients with polycythemia vera elaborate growth factors which contribute to endogenous erythroid and megakaryocyte colony formation**

ISHII T., ZHAO Y., SHI J., Sozer S., HOFFMAN R., XU M.

LEUKEMIA, vol.21, no.12, pp.2433-2441, 2007 (SCI-Expanded)

XXI. Behavior of CD34+ cells isolated from patients with polycythemia vera in NOD/SCID mice

Ishii T., Zhao Y., Sozer S., Shi J., Zhang W., Hoffman R., Xu M.

Experimental Hematology, vol.35, no.11, pp.1633-1640, 2007 (SCI-Expanded)

XXII. Leukemia stem cells in a genetically defined murine model of blast-crisis CML

NEERING S. J., BUSHNELL T., Sozer S., ASHTON J., ROSSI R. M., WANG P., BELL D. R., HEINRICH D., BOTTARO A., JORDAN C. T.

BLOOD, vol.110, no.7, pp.2578-2585, 2007 (SCI-Expanded)

XXIII. Effects of chromatin-modifying agents on CD34(+) cells from patients with idiopathic myelofibrosis

SHI J., ZHAO Y., ISHII T., HU W., Sozer S., ZHANG W., BRUNO E., LINDGREN V., XU M., HOFFMAN R.

CANCER RESEARCH, vol.67, no.13, pp.6417-6424, 2007 (SCI-Expanded)

XXIV. Haematopoietic cell lineage distribution of MPLW515L/K mutations in patients with idiopathic myelofibrosis

HU W., ZHAO Y., ISHII T., Sozer S., SHI J., ZHANG W., BRUNO E., HOFFMAN R., XU M.

BRITISH JOURNAL OF HAEMATOLOGY, vol.137, no.4, pp.378-379, 2007 (SCI-Expanded)

Articles Published in Other Journals

I. The Role of Growth Factors in Adult Neurogenesis and Neurodegenerative Diseases

Toprak F., Toprak S. F., Tokdemir S. S.

EXPERIMED, vol.11, no.1, pp.57-66, 2021 (Peer-Reviewed Journal)

II. Hücre-dışı Fetal DNA'dan Gerçek-zamanlı PZR ile Fetal Rhesus D Tespitinin Maliyet Değerlendirmesi

Yasa B., Şahin O., SÖZER TOKDEMİR S.

Experimed, vol.10, no.3, 2020 (Scopus)

III. Miyeloproliferatif Neoplazilerde JAK2V617F Mutasyonunun Endotel Hücrelerine Etkisi ve SOCS1-4 Gen Anlatımlarına Yansıması

Sözer Tokdemir S.

Sağlık Bilimlerinde İleri Araştırmalar Dergisi, vol.3, no.3, pp.135-147, 2020 (Peer-Reviewed Journal)

IV. Polisitemia Vera'da CXCL9-CXCR3 Sitokin Sinyal Yolağının Etkisi

Altunay C., Yavuz A. S., Sözer Tokdemir S.

Experimed, vol.8, no.3, pp.84-92, 2019 (Peer-Reviewed Journal)

V. cell free DNA and Genometastasis

Koçana Ç., Toprak S., Yasa B., Hekimoğlu H., Sözer Tokdemir S.

Experimed, vol.9, no.2, pp.69-74, 2019 (Peer-Reviewed Journal)

Books & Book Chapters

I. Hematopoez, Hematopoietik Kök Hücreler ve Genler

SÖZER TOKDEMİR S.

in: Genetik, Müge Sayitoğlu, Editor, Galenos, pp.38-49, 2019

II. MEME KANSERLERİNE KLİNİK GENETİK YAKLAŞIM

SÖZER TOKDEMİR S., kavasoglu a. n., KALAYCI YİĞİN A., SEVEN M.

in: MEME HASTALIKLARI KİTABI-GÜNCELLENEN BÖLÜMLER, Vahit Özmen,Zafer Cantürk. Nilüfer Güler, Ayhan Koyuncu ,Varol Çelik, Murat Kapkaç, Editor, Güneş Tıp, pp.1, 2019

III. Laser Capture Microdissection

SÖZER TOKDEMİR S., HOFFMAN R.

in: Laser Capture Microdissection, Murray,J, Editor, Humana Press, Inc. , California, pp.405-415, 2011

IV. Hematopoietic Stem Cell and Regenerative Medicine

SÖZER TOKDEMİR S., HOFFMAN R.

in: Translational Approaches in Tissue Engineering and Regenerative Medicine, Jeremy J. Mao, Editor, Artech House , New York, pp.49-68, 2008

Refereed Congress / Symposium Publications in Proceedings

- I. **Miyeloproliferatif Neoplazilerde Eksozom Kompleks Alt Birimi, EXOSC1'in Artan Gen Anlatımı**
DEMİRTAŞ E. N., SÖZER TOKDEMİR S.
Ulusal Hematoloji KONGresi, 1 November - 01 May 2023
- II. **JAK2 Ve JAK2v617f MRNA Hedefli Altın Nanopartikül Uygulamasının Jak/Stat Yolağı Üzerindeki Etkisi**
TOKCAN B., SÖZER TOKDEMİR S.
Ulusal Hematoloji KONGresi, Antalya, Turkey, 01 November 2022
- III. **In vitro Investigation for the role of IGF-I and MGF in High Glucose Environment on Neural Stem Cell Proliferation**
Sozer S., Gurbuz T., Tunc S. B., Ates K.
51st Conference of the European-Society-of-Human-Genetics (ESHG) in conjunction with the European Meeting on Psychosocial Aspects of Genetics (EMPAG), Milan, Italy, 16 - 19 June 2018, vol.27, pp.289-290
- IV. **Hypoxia induced HIF1 α and NOS3 Expression Profiles in JAK2V617F Positive Cancer Stem Cells of Polycythemia Vera**
Sözer Tokdemir S.
13th Balkan Congress of Human Genetics, Edirne, Turkey, 17 - 21 April 2019, pp.120
- V. **Miyeloproliferatif Neoplazilerde MYC Gen Anlatımı**
SÖZER TOKDEMİR S.
41. Ulusal Hematoloji Kongres ve Balkan Hematoloji Günü", Antalya, Turkey, 21 - 24 October 2016, pp.1
- VI. **The expression analysis of F2R gene in JAK2V617F mutation positive Polycythemia Vera (PV)**
SÖZER TOKDEMİR S.
European Society of Human Genetics, Barselona, Spain, 21 - 24 May 2016, pp.1
- VII. **Evaluation of Micro particle Production by JAK2V617F positive the Endothelial Cells**
SÖZER TOKDEMİR S.
European Society of Human Genetics, Barselona, Spain, 21 - 24 May 2016, pp.1
- VIII. **SUCCESSFUL TRANSFECTION OF JAK2V617F LENTIVIRUS**
Sözer Tokdemir S.
5. International Congress on Leukemia Lymphoma and Myeloma, İstanbul, Turkey, 21 - 24 May 2015, pp.148-149
- IX. **The JAK2V617F Mutation Is Present in the Liver Endothelial Cells of Patients with Budd-Chiari Syndrome.**
Sozer S., FIEL I. M., SCHIANO T., FELLER F., MASCARENHAS J., HOFFMAN R.
50th Annual Meeting of the American-Society-of-Hematology, San-Francisco, Costa Rica, 6 - 09 December 2008, vol.112, pp.965
- X. **Correction of the Abnormal Trafficking of Primary Myelofibrosis CD34(+) Cells by Treatment with Chromatin Modifying Agents**
Wang X., Zhang W., Ishii T., SÖZER TOKDEMİR S., Wang J., Xu M., Hoffman R.
50th Annual Meeting of the American-Society-of-Hematology/ASH/ASCO Joint Symposium, San-Francisco, Costa Rica, 6 - 09 December 2008, vol.112, pp.45
- XI. **Two classes of progenitor cells in patients with myeloproliferative disorders are capable of generating JAK2V617F(+)CD31(+)CD144(+) endothelial cells**
Sozer S., ISHII T., ZHANG W., WANG J., XU M., HOFFMAN R.
49th Annual Meeting of the American-Society-of-Hematology, Georgia, United States Of America, 8 - 11 December 2007, vol.110
- XII. **Characterization and functional analysis of a murine model for chronic myeloid leukemia stem cells**
Sozer S., ECHLIN D., ROSSI R., GRIMES B., JORDAN C.

46th Annual Meeting of the American-Society-of-Hematology, California, United States Of America, 4 - 07 December 2004, vol.104

XIII. Analysis of NF-kB inhibiting drugs in a mouse model of CML

Sozer S., GUZMAN M., ECHLIN D., GRIMES B., HROMOS R., JORDAN C.

32nd Annual Scientific Meeting of the International-Society-for-Experimental-Hematology, Paris, France, 5 - 08 July 2003, vol.31, pp.228

XIV. Leukemic stem cell analysis in a mouse model of CML blast crisis.

ECHLIN-BELL D., Sozer S., GRIMES B., SAUVAGEAU G., JORDAN C.

44th Annual Meeting of the American-Society-of-Hematology, PHILADELPHIA, PENNSYLVANIA, 6 - 10 December 2002, vol.100

Other Publications

I. Hematopoetik Kök Hücreler

SÖZER TOKDEMİR S.

Presentation, pp.1-2, 2016

II. İstanbul Üniversitesi Kök Hücre Kulübü Sempozyumu Hematopoetik Neoplazilerde Kanseri Başlatan Hücreler

SÖZER TOKDEMİR S.

Presentation, pp.5-6, 2016

Supported Projects

SÖZER TOKDEMİR S., TOPRAK S. F., KOÇANA C. Ç., Project Supported by Higher Education Institutions, Hücre dışı JAK2V617F pozitif genom parçasının endotel hücre üzerindeki etkileri, 2020 - Continues

SÖZER TOKDEMİR S., KOÇANA C. Ç., Project Supported by Higher Education Institutions, Miyeloproliferatif Neoplazi Kökenli Hücre Dışı Genomik Materyallerin Endotel Hücrelere Etkisinin İncelenmesi, 2019 - 2020

SÖZER TOKDEMİR S., TOPRAK S. F., Project Supported by Higher Education Institutions, Hücre Dışı Genom Materyallerinin Hematopoetik Kök Hücreler Üzerindeki Etkisi, 2019 - 2020

SÖZER TOKDEMİR S., USLU BİÇAK İ., TOKCAN B., Project Supported by Higher Education Institutions, Miyeloproliferatif Hastalıklarda Kanseri Başlatan Hücrelerin Karakterizasyonu Ve Fonksiyonel Analizi, 2019 - 2020

SÖZER TOKDEMİR S., HEKİMOĞLU H., Project Supported by Higher Education Institutions, JAK2V617F MUTASYONUNUN ENDOTEL HÜCRELERİ ÜZERİNDEKİ TROMBOTİK ETKİLERİNİN DEĞERLENDİRİLMESİ, 2015 - 2020

SÖZER TOKDEMİR S., YAŞA B., Project Supported by Higher Education Institutions, Maternal Kandan Fetal DNA İzolasyonu ile Rhesus D ve Cinsiyet Genotipleme, 2018 - 2019

SÖZER TOKDEMİR S., ŞOROĞLU C. V., Project Supported by Higher Education Institutions, Hematopoietik ve Kanseri Kök Hücrelerin Hipoksik Koşullardaki Fonksiyonel ve Genomik Yanıtları, 2018 - 2019

SÖZER TOKDEMİR S., Project Supported by Higher Education Institutions, Miyeloproliferatif Neoplazide PAR Yolağı Etkilerinin Gen Ekspresyon Paneli ile Tayini, 2017 - 2019

SÖZER TOKDEMİR S., ATEŞ K., Project Supported by Higher Education Institutions, HİPOKSİK VE YÜKSEK GLÜKOZLU ORTAMLARDA IGF-I ve MGF'İN NÖRAL KÖK HÜCRELERDE EKSPRESYONU VE PROLİFERASYON ÜSTÜNDEKİ ETKİLERİNİN İN VİTRO ARAŞTIRILMASI, 2015 - 2019

Bayrak A. E., Ünaltuna N., Sözer Tokdemir S., Güven Z. G., Çoban N., Geyik F., TUBITAK Project, Metabolik Sendrom ve Alzheimer hastalığı ilişkisi, 2015 - 2019

SÖZER TOKDEMİR S., ALTUNAY C., Project Supported by Higher Education Institutions, Polisitemia Vera'da Sitokin Sinyal Yolağının Etkisi, 2017 - 2018

SÖZER TOKDEMİR S., HEKİMOĞLU H., USLU İ., Project Supported by Higher Education Institutions, Altın Nanoflakes Kullanarak JAK2V617F Mutasyonunun Akım Ölçerde Hücre İçi Tesbiti, 2014 - 2018

SÖZER TOKDEMİR S., AYDINTUĞ T., TUNÇ B. S., Project Supported by Higher Education Institutions, NÖRAL KÖK HÜCRE

AKTİVASYONU PROLİFERASYONU VE MİGRASYONUNDA ROLLERİ OLAN BÜYÜME FAKTÖRLERİNİN ARAŞTIRILMASI, 2016 - 2017

SÖZER TOKDEMİR S., ATEŞ K., Project Supported by Higher Education Institutions, NÖRAL KÖK HÜCRE AKTİVASYONU, PROLİFERASYONU VE MİGRASYONUNDA ROLLERİ OLAN BÜYÜME FAKTÖRLERİNİN KARŞILIKLI ETKİLEŞİMLERİNİN IN VITRO ARAŞTIRILMASI, 2015 - 2017

SÖZER TOKDEMİR S., Project Supported by Higher Education Institutions, Endotel Hücrelerinde JAK2V617F Mutasyonunun JAK/STAT Yolağı Üzerindeki Etkileri, 2013 - 2017

SÖZER TOKDEMİR S., Other International Funding Programs, JAK2V617F Mutasyonunun Endotel Hücre Fonksiyonları Üzerindeki Rolü, 2011 - 2015

Patent

SÖZER TOKDEMİR S., JAK2 V617F Mutasyonunun Altın Nanopartikül Ajanı Kullanılarak Tespit Yöntemi, Patent, CHAPTER A Human Needs, 2019

Metrics

Publication: 49

Citation (WoS): 418

Citation (Scopus): 469

H-Index (WoS): 9

H-Index (Scopus): 10

Non Academic Experience

Mount Sinai School of Medicine

University of Illinois at Chicago