Assoc. Prof. Bilal Ersen KERMAN

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Education Information

Doctorate, Johns Hopkins University, Biochemistry, Cellular And Molecular Biology, United States Of America 2001 - 2009
Undergraduate, Ihsan Dogramaci Bilkent University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, Turkey 1997 - 2001

Academic Titles / Tasks

Associate Professor, Istanbul Medipol University, Uluslararası Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2018 - Continues
Assistant Professor, Istanbul Medipol University, Uluslararası Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2015 - Continues
Research Assistant, The Salk Institute For Biological Studies, Laboratory Of Genetics-Gage, 2009 - 2015
Research Assistant, Johns Hopkins University, School Of Medicine, Department Of Cell Biology, 2002 - 2009

Courses

Makale Kulübü, Postgraduate, 2015 - 2016
Histoloji ve Embriyoloji-TIP1, Undergraduate, 2015 - 2016
Histoloji ve Embriyoloji-TIP2, Undergraduate, 2015 - 2016

Advising Theses

Bilal Ersen K., Makrofajların merkezi sinir sisteminin nöral hücreleri üzerindeki etkisinin analizi, Doctorate, F.İLAYDA(Student), 2022
Bilal Ersen K., Miyelinizasyon mekaniğinin floresan görüntüleme yöntemleri ile araştırılması, Postgraduate, Z.ALADAĞ(Student), 2021
Bilal Ersen K., The role of PEA3 proteins in neuroglia connectivity, Postgraduate, K.YURDUSEVEN(Student), 2020
Bilal Ersen K., Miyelin interaktomu: İkili graf tabanlı protein-protein etkileşimli ağlarla multipl skleroz'da hücre-hücre etkileşimlerinin tanımlanması, Postgraduate, E.ÇELİK(Student), 2018
Bilal Ersen K., Santral Sinir Sistemi Miyelinizasyon Dinamiklerinin Kantitatif Analizi, Doctorate, Ş.SEFİL(Student), 2018
Bilal Ersen K., İndüklenmiş pluripotent kök hücre tabanlı multiple skleroz modelinde oligodendrositlere özgü fenotiplerin

araştırılması, Postgraduate, B.KURT(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Combined segmentation and classificationbased approach to automated analysis of biomedical signals obtained from calcium imaging**
    Dursun G., Bijelić D., AYŞİT N., Vatandaşlar B. K., Radenović L., Çapar A., KERMAN B. E., Andjus P. R., Korenić A., ÖZKAYA U.
    PLoS ONE, vol.18, no.2 February, 2023 (SCI-Expanded)

II. **Two phases of macrophages: Inducing maturation and death of oligodendrocytes in vitro co-culture**
    Aydınlı F. İ., Er S., KERMAN B. E.
    Journal of Neuroscience Methods, vol.382, 2022 (SCI-Expanded)

III. **Multiple Sclerosis Biomarker Candidates Revealed by Cell-Type-Specific Interactome Analysis**
    Yurduseven K., Babal Y. K., Celik E., KERMAN B. E., Kurnaz I. A.
    OMICS A Journal of Integrative Biology, vol.26, no.5, pp.305-317, 2022 (SCI-Expanded)

IV. **Myelin detection in fluorescence microscopy images using machine learning**
    ÇİMEN S., Çapar A., Ekinci D. A., AYTEN U. E., KERMAN B. E., Töreyin B. U.
    Journal of Neuroscience Methods, vol.346, 2020 (SCI-Expanded)

V. **Motoneuron expression profiling identifies an association between an axonal splice variant of HDGF-related protein 3 and peripheral myelination**
    KERMAN B. E., Genoud S., Vatandaslar B. K., Denli A. M., Ghosh S. G., Xu X., Yeo G. W., Aimone J. B., Gage F. H.
    Journal of Biological Chemistry, vol.295, no.34, pp.12233-12246, 2020 (SCI-Expanded)

VI. **Species-specific maturation profiles of human, chimpanzee and bonobo neural cells**
    Marchetto M. C., Hrvoj-Mihic B., KERMAN B. E., Yu D. X., Vadodaria K. C., Linker S. B., Narvaiza I., Santos R., Denli A. M., Mendes A. P. D., et al.
    eLife, vol.8, 2019 (SCI-Expanded)

VII. **Science-inspired sustainable behavior**
    Kumar B., Jensen M. M., Strielkowski W., Johnston J. T., Sharma V., Dandara C., Shehata M. M., Struett M. M., Nikolaou A., Szymanski D. W., et al.
    Science, vol.364, no.6443, pp.822-824, 2019 (SCI-Expanded)

VIII. **Particular phosphorylation of PI3K/Akt on Thr308 via PDK-1 and PTEN mediates melatonin's neuroprotective activity after focal cerebral ischemia in mice**
    Kilic U., ÇAĞLAYAN A. B., BEKER M. Ç., Gunal M. Y., ÇAĞLAYAN B., YALÇIN E., KELEŞTEMUR T., Gundogdu R. Z., Yulug B., Yılmaz B., et al.
    Redox Biology, vol.12, pp.657-665, 2017 (SCI-Expanded)

IX. **Myelin disorders and stem cells: As therapies and models**
    Aydinli F. İ., Çelik E., Vatandaşlar B. K., KERMAN B. E.
    Turkish Journal of Biology, vol.40, no.5, pp.1068-1080, 2016 (SCI-Expanded)

Articles Published in Other Journals

I. **Identification of protein-protein interaction bridges for multiple sclerosis**
    Yazici G., Kurt Vatandaslar B., Aydin Canturk I., Aydinli F. I., ARICI DÜZ Ö., Karakoc E., KERMAN B. E., Alkan C.
    Bioinformatics, vol.39, no.4, 2023 (Scopus)

II. **A multi-spectral myelin annotation tool for machine learning based myelin quantification [version 1; peer review: 1 not approved]**
    Çapar A., ÇİMEN S., Aladağ Z., Ekinci D. A., AYTEN U. E., KERMAN B. E., Töreyin B. U.
    F1000Research, vol.9, pp.1-10, 2021 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **Myelin segmentation in fluorescence microscopy images Floresan mikroskop görüntülerinde miyelin segmentasyonu**
ÇİMEN S., Ekinci D. A., Cakir E., Ekşioğlu E. M., AYTEN U. E., Çapar A., Töreyin B. U., KERMAN B. E.
2019 Medical Technologies Congress, TIPTEKNO 2019, İzmir, Turkey, 3 - 05 October 2019

II. **DEVELOPMENT OF AUTOMATED ANALYSIS OF BIOMEDICALSIGNALS OBTAINED FROM CALCIUM IMAGING**
DURSUN G., ÇAPAR A., ÖZKAYA U., KERMAN B. E., Korenic A., Dunja B., Radenovic L., Pavle R A.
JOINT 12th EBSA congress10th ICBP – IUPAP congress, 20 - 24 July 2019

III. **Development of automated analysis of biomedical signals such as calcium imaging**
ÇAPAR A., ÖZKAYA U., DURSUN G., Korenic A., Dunja B., Milicevic K., Milosevic M., Pavle R A., KERMAN B. E., Radenovic L.
FENS Regional Meeting Belgrade Serbia, 10 - 13 July 2019

IV. **TIME LAPSE IGG-INDUCED CALCIUM SIGNALING ANALYSIS FOR ALS DIAGNOSIS**
ÇAPAR A., DURSUN G., KERMAN B. E., Korenic A., Dunja B., Radenovic L., Pavle R A.
FENS Regional Meeting Belgrade, 10 - 13 July 2019

V. **Refractive index tomography of myelinating glial cells**
Toy M. F., Vatandaslar B. K., Kerman B. E.
Quantitative Phase Imaging V 2019, California, United States Of America, 2 - 05 February 2019, vol.10887

VI. **DeepMQ: A deep learning approach based myelin quantification in microscopic fluorescence images**
ÇİMEN S., Çapar A., Ekinci D. A., KERMAN B. E., AYTEN U. E., Töreyin B. U.
26th European Signal Processing Conference, EUSIPCO 2018, Rome, Italy, 3 - 07 September 2018, vol.2018-September, pp.61-65

VII. **Automated Myelin Quantification From Cem to DeepMQ**
ÇİMEN S., ÇAPAR A., Ekinci D. A., AYTEN U. E., TÖREYİN B. U., KERMAN B. E.
Neubias The Bioimage Analysis Community Conference, Szeged, Hungary, 31 January - 02 February 2018, pp.121

VIII. **Kök Hücre Kullanımıyla Miyelin Oluşumunu ve Miyelinizasyon Hastalıklarını Modelleme**
KERMAN B. E.
XIII. İÜGEN Kış Okulu, İstanbul, Turkey, 4 - 06 March 2016

IX. **Modeling myelin formation and myelination disorders using stem cells**
KERMAN B. E.
MolBiyoKon2015, 27 - 29 November 2015

X. **A novel embryonic stem cell based myelination assay**
KERMAN B. E., Kim H. J., Mei A., Padmanabhan K., Georges S., Joens M. S., James AJ F., Japelli R., Chandross K. J., August P. R., et al.
Society for Neuroscience Annual Meeting – CDRF Hot Topics in Stem Cell Biology, San Diego, United States Of America, 9 - 13 November 2013

XI. **Development of an embryonic stem cell based myelination assay**
KERMAN B. E., Mei A., Kim H. J., Gage F. H.
Society for Neuroscience Annual Meeting, Washington, Kiribati, 12 - 16 November 2011

XII. **Transcriptional Control of Apical Mechanics During Tube Morphogenesis**
KERMAN B. E., Cheshire A. M., Zipfel W. R., Myatt M. M., Spector A. A., Andrew D. J.
The American Society for Cell Biology 47th Annual Meeting, Washington, Kiribati, 1 - 05 December 2007

XIII. **High Resolution Live Imaging of Deep Tissue Organogenesisin the Drosophila Embryo**
Cheshire A. M., KERMAN B. E., Andrew D. J.
47th Annual Drosophila Research Conference, Houston, United States Of America, 29 March - 01 May 2006

XIV. **Analysis of dalmatian suggests a role for the Nervous System in Drosophila Embryonic Trachea and Salivary Duct Development**
KERMAN B. E., Andrew D. J.
47th Annual Drosophila Research Conference, Houston, United States Of America, 29 March - 02 April 2006