

19th Turkish Neuroscience Congress

21 – 23 November 2021

Online



Time is indicated according to the local time in Istanbul, Turkey

21 November 2021 Sunday

- 10:00 – 12:30 **Workshop 1** (Breakout Room A): Comparative Analysis of Human Brain and Spinal Cord Anatomy Using High Resolution Imaging Techniques
Gülğün Şengül: Anatomy of Brain Stem and Spinal Cord in Rat and Human
Emel Ulupınar: Cross-Sectional Anatomy of the Human Brain
Uğur Toprak: Normal and Pathological Neuro-Radiological Imaging
- 10:00 – 12:30 **Workshop 2** (Breakout Room B): Experimental Models for Neurological and Neuropsychiatric Diseases
Tayfun Uzbay: Experimental Models for Neuropsychiatric Diseases: General Principles, Behavioral Tests and Model Examples for Anxiety, Depression and Schizophrenia
Ertuğrul Kılıç: Ischemia-Reperfusion and Trauma Models
Güven Akçay: Experimental Epilepsy Models
Dilara Nemutlu: Experimental Parkinson Models
- 12:30 – 12:45 Break
- 12:45 – 13:15 Congress Opening (Bayram Yılmaz, President, Neuroscience Society of Turkey)
Respect to Masters Session (Gönül Peker): To the Memory of Prof. Dr. Lokman Öztürk
- 13:15 – 14:15 **Conference 1**
Erin Schuman: The Logistics of Protein Supply at Synapses
Chair: Bayram Yılmaz
- 14:15 – 14:30 Break
- 14:30 – 16:15 Oral Communications – I (Breakout Room A) (OC01-OC07)
Chairs: Erdem Tüzün & Hülya Karataş Kurşun
- 14:30 – 16:15 Oral Communications – I (Breakout Room B) (OC54-OC60)
Chairs: Görsev Yener & Meltem Bahçelioğlu

- 14:30 – 16:15 Oral Communications – I (Breakout Room C) (OC61-OC67)
Chairs: Hale Sayan Özaçmak & Ramazan Bal
- 16:15 – 16:30 Break
- 16:30 – 18:00 **Panel 1** (Breakout Room A): Changing Technology in a Changing World- Digital Transformation in Health: Theory and Practice
Özgür Teke: Digital Transformation and Big Data Management in Health
Hakan Sarbanoğlu: Image Analysis is a Process that Starts from Fractals to Deep Learning
Antonio Di Ieva: Digital Pathology and Application Areas
M. Aydın Sav: Digital Pathology in Diagnostic Neuropathology
Chairs: M. Aydın Sav & Hakan Gürvit
- 16:30 – 18:00 **Panel 2** (Breakout Room B): Neuro-COVID
Hayrünnisa Bolay: COVID-19 Learnings from Headache
Betül Baykan: COVID-19 and Neurological Complications
Arzu Aral: Neuroimmunological Action Mechanisms of SARS-CoV-2
Chairs: Hayrünnisa Bolay & Arzu Aral
- 18:00 – 19:00 **Conference 2**
Alev Erişir: Reassessment of Visual Thalamus Synaptic Circuitry Using Volumetric Reconstructions and Statistical Modeling
Chair: Gülgün Şengül

22 November 2021 Monday

- 10:00 – 12:00 Oral Communications – II (Breakout Room A) (OC08-OC15)
Chairs: Müge Yemişçi Özkan & Şermin Genç
- 10:00 – 12:00 Oral Communications – II (Breakout Room B) (OC38-OC45)
Chairs: Işıl Aksan Kurnaz & Neslihan Serap Şengör
- 10:00 – 12:00 Oral Communications – II (Breakout Room C) (OC46-OC53)
Chairs: Feyza Arıcıoğlu & Metehan Çiçek
- 12:00 – 12:30 Lunch Break
- 12:30 – 13:30 **Conference 3**
Ali Ertürk: AI-Based Imaging Methods for the Next-Generation Biomedical Solutions
Chair: Emel Ulupınar
- 13:30 – 14:00 Zeiss presentation
- 14:00 – 14:10 Break
- 14:10 – 15:30 Poster Communications (Breakout Room A) (PC01-PC15)
Chairs: Ahmet Ayar & Aylin Yaba Uçar
- 14:10 – 15:30 Poster Communications (Breakout Room B) (PC16-PC30)
Chairs: Arzu Aral & Mete Özcan
- 15:30 – 15:45 Break
- 15:45 – 17:45 **Symposium 1** (Breakout Room A): Regulation of Feeding by Hypothalamic Circuits
Caner Çağlar: Restriction of Food Intake by Dorsomedial Hypothalamus
Yavuz Yavuz: Regulation of Food Intake by μ -Opioid Receptors on AgRP Neurons
Işın Çakır: Regulation of Leptin Sensitivity and Energy Homeostasis by Histone Deacetylase 6

Ali Deniz Güler: Dopamine Receptor 1 in the AgRP-Neurons Control the Size of Rewarding Meals

Chairs: Deniz Atasoy & Ali Deniz Güler

15:45 – 17:15 **Symposium 2** (Breakout Room B): Neuroscience Application Areas: Aviation, Cyber Security and Neuroarchitecture

Murat Perit Çakır: Neuroergonomics: Applications of Neuroscience in Aviation Psychology & Ergonomics

Cengiz Acartürk: The Use of Neuroscience in Information and Communication Technologies: End User Applications and Cyber Security Perspectives

Burcu Aysen Ürgen: Neuroarchitecture: How Do We Design the Built Environment taht is Informed from Neuroscience?

Chairs: Gönül Peker & Arzu Karabay

15:45 – 17:15 **Panel 3** (Breakout Room C): Chronobiology and Circadian Rhythm Disorders: A Multidisciplinary Perspective

Serpil Çeçen: Sleep-Wake Physiology and Circadian Rhythms

Aliye Tuğba Bahadır: Sleep, Circadian Rhythms, Psychiatric Disorders in Childhood and Adolescence

Dilşad Türkdoğan: Childhood Epilepsy, Sleep and Circadian Rhythms

Chairs: Lütfü Hanoğlu & Aliye Tuğba Bahadır

17:45 – 18:00 Break

18:00 – 19:00 **Conference 4**

Cenk Ayata: Spreading Depression: Brain's Antiepileptic Protective Mechanism

Chair: Yasemin Gürsoy Özdemir

23 November 2021 Tuesday

10:00 – 11:30 Oral Communications – III (Breakout Room A) (OC16-OC21)

Chairs: Sacit Karamürsel & Erkan Kılınc

10:00 – 11:30 Oral Communications – III (Breakout Room B) (OC27-OC32)

Chairs: Tamer Demiralp & Lütfiye Kanıt

10:00 – 11:30 Oral Communications – III (Breakout Room C) (OC68-OC73)

Chairs: Haluk Keleştimur & Selim Kutlu

11:30 – 11:45 Break

11:45 – 12.45 **Conference 5**

Mehmet Fatih Yanık: Engineering Brain Activity Patterns for Therapeutics of Disorders

Chair: Ertuğrul Kılıç

12:45 – 13:00 COMMAT presentation

13:00 – 13:30 Lunch Break

13:30 – 14:45 Oral Communications - IV (Breakout Room A) (OC22-OC26)

Chairs: Ersin Koylu & Burak Güçlü

13:30 – 14:45 Oral Communications - IV (Breakout Room B) (OC33-OC37)

Chairs: Nuhan Puralı & Bahar Güntekin

13:30 – 14:45 Oral Communications - IV (Breakout Room C) (OC74-OC78)

Chairs: Süleyman Sandal & Güvem Gümüş Akay

14:45 – 15:00 Break

15:00 – 16:00 **Conference 6**

Georg Northoff: The "Common Currency" of Brain and Mind - A Spatiotemporal Approach

Chair: Erdal Ağar

16:00 – 16:15 Break

16:15 – 17:45 **Panel 4** (Breakout Room A): Past, Present and Future of Neuroscience

Turgay Dalkara: 30 Years of Hacettepe University Neurological Science PhD Program

İsmail Hakkı Ulus: Brief History of Turkish Neuroscience Congresses (2001-2021)

Gürkan Öztürk: Nobel Prizes: Two Warm and Touchy Subjects and Future Perspectives

Chairs: Emel Ulupınar & Bayram Yılmaz

16:15 – 17:45 **Symposium 3** (Breakout Room B): Applications of Nanobiotechnology in Neuroscience

Sibel Bozdağ Pehlivan: Nano-Drug Delivery Applications in Management of Neurological Diseases and Brain Tumors

Morteza Heidarzadeh: Exosomal Delivery of Therapeutic Modulators through the Blood–Brain Barrier

Emel Sokullu: 3D Hydrogel Organoid Platforms for the Representation of Neurological Disease Models

Mehmet Kaya: The Role of Gold Nanoparticles in Drug Delivery to the Brain; Preclinical Experiences

Chairs: Ahmet Hacımüftüoğlu & Mehmet Kaya

17:45 – 18:15 Awards & Closing Ceremony