

20th Turkish Neuroscience Congress 19–23 October 2022, Istanbul, Türkiye

Scientific Program

19 October 2022, Wednesday (Courses)

Course 1

09.30–17.30 **Microscopy techniques in neuroscience: histochemistry, immunohistochemistry and transmission electron microscopy**
Serap Arbak, Serap Şirvancı, Dilek Akakin, Merve Elmas, Deniz Yücel

Course 2

09.30–17.30 **Introduction to MATLAB**
Ata Akın, Sinem Burcu Erdoğan, Seda Dumlu, Elçim Kırımlı

Course 3

09.30–13.00 **Genome analyses in neurological disorders**
Eda Tahir Turanlı, Sibel Uğur İşeri, İlker Karacan

Course 4

14.00–17.30 **Machine learning applications on the biological data**
Emel Timuçin

Course 5

09.30–13.00 **Clinical anatomy of the central nervous system: approach with cadaver, model and three-dimensional methods**
Abdul Veli İsmailoğlu, Milena Can

Course 6

14.00–17.30 **Induction of brain tumors in mouse and follow-up with in-vivo imaging**
Samed Özer, Ekin Döngel, Dilan Acar

Course 7

09.30–17.30 **SPM course: basic fMRI and effective connectivity analyses**
Metehan Çiçek, Gözde Vatansever, Simge Altınok, Burcu Sirmatel, Hazal Şimşek

Course 8


09.30–17.30 **Functional connectivity analyses on resting state and task-based fMRI data with CONN software**
Ali Bayram, Bernis Sütçübaşı, Elif Kurt

Course 9

09.30–13.00 **Advanced morphometric analyses on MRI data with FreeSurfer software**
Andaç Hamamcı, Ulaş Ay, Emre Harı, Hüden Neşe

20 October 2022, Thursday		
Hall A	Hall B	Hall C
09.00–09.30	Opening Ceremony Güldal Süyen, Özlem Akman	
09.30–11.00	Panel 1: The neural basis of social cognition and morality: what have we learned from neuropsychology, neuroimaging and non-invasive brain stimulation studies? Moderator: Hakan Gürvit Speakers: Aslı Dermirtaş Tatlıdede, Hakan Gürvit, Elif Yıldırım	Panel 2: Comparative and computational evaluation of symptoms in Parkinson's disease after deep brain stimulation and medication intervention Moderator: Didem Gökçay Speakers: Didem Gökçay, Yusuf Özgür Çakmak, Atilla Yılmaz
		Symposium 1: Potential of the functional near infrared spectroscopy (fNIRS) technique in cognitive and clinical neuroscience research: what we can or cannot do? Moderator: Ata Akın Speakers: Aykut Eken, Hasan Onur Keleş, Sinem Burcu Erdoğan, Emre Yorgancıgil
11.00–11.15	Coffee Break	
11.15–12.15	Conference 1 Chair: Özlem Akman Regulation of cerebral blood flow by capillary pericytes in Alzheimer's disease, Covid-19 and hyperoxia David Atwell	-
12.15–13.45	Lunch Break Poster Discussion (P-01–P-31) Chairs: Tamer Demiralp, Devrim Öz Arslan, Mehmet Ergen, Bernis Sütçübaşı, Zeynep Küçük, Ani Kıçık	
13.45–14.45	Conference 2 Chair: Güldal Süyen Microcirculation: new target for neuroprotective therapy Müge Yemişçi Özkan	Conference 3 Chair: Metehan Çiçek Comparative study of the behavioral and neural basis of decision-making and time perception Fuat Balcı
14.45–15.00	Break	
15.00–16.30	Panel 3: In-vitro and in-vivo models for the investigation of the molecular mechanisms of neurological diseases Moderator: Selma Yilmazer Speakers: Emre Yakşi, Gizem Dönmez Yalçın, Merve Alaylıoğlu, İrem Atasoy	Panel 4: Trajectories of cognitive aging and their neuropathological basis Moderator: Mustafa Seçkin Speakers: Hande Özdinler, Ayça Erşen Danyeli, Tamar Gefen, Daniel T. Ohm
		Panel 5: Predictive coding in the brain – Perception as hypothesis testing? Moderator: Tamer Demiralp Speakers: Güven Güzeldere, Anil Seth, Romain Brette
16.30–17.00	Coffee Break	
17.00–18.00	Conference 4 Chair: Hakan Gürvit What happened to the 'mental' in 'mental' disorders Joseph E. Ledoux	-

21 October 2022, Friday		
Hall A	Hall B	Hall C
09.30–11.00	Panel 6: Brain microcirculation in health and disease Moderator: Turgay Dalkara Speakers: Turgay Dalkara, Yasemin Gürsoy-Özdemir, Şefik Evren Erdener	Symposium 2: Theory, history, importance and neuromodulation of brain oscillations in cognitive/ affective processes Moderators: Canan Başar-Eroğlu, Görsev Yener Speakers: Canan Başar-Eroğlu, Bahar Güntekin, Tuba Aktürk, Deniz Yerlikaya
		Panel 7: Social and biological underpinnings of punishment Moderator: Ozan Erözden Speakers: Ozan Erözden, Güçlü Akyürek, Tuna Çakar

10.30–11.00	Coffee Break		
11.00–12.00	Conference 5 Chair: Ersin Koylu How do context and expectations shape visual perception? Hüseyin Boyacı	-	-
10.30–11.00	Lunch Break		
12.30–13.00	Satellite Symposium: Neuroimaging techniques with eego systems Dr. Fabio Barollo  Healthcare Technologies & Solutions	-	-
13.30–15.00	Oral Presentations 1 (O-01 – O-06) Nervous system diseases and treatment approaches Chairs: Bayram Yılmaz, Yasemin Gürsoy Özdemir	Oral Presentations 2 (O-07 – O-12) Behavioral and cognitive neuroscience, neuroimaging Chairs: Görsev Yener, Bahar Güntekin	Oral Presentations 3 (O-13 – O-18) Molecular and cellular neuroscience Chairs: Uğur Özbek, Kaya Bilguvar
15.00–15.10	Break		
15.10–16.40	Panel 8: Gene regulation mechanisms in neurodegeneration Moderator: Erdiç Dursun Speakers: Duygu Gezen Ak, Kemal Uğur Tüfekçi, Erkan Kiriş	Symposium 3: Advances in translational epilepsy therapy discovery Moderator: Özlem Akman Speakers: Aristeia Galanopoulou, Stéphane Auvin, David Henshall	Panel 9: The role of offline and online evaluations in understanding dyslexia markers Moderator: Özgür Aydın Speakers: Sema Acar Ünalgan, Hazal Artuvan, Esmehan Özer, R. Duygu Temeltürk
16.40–17.00	Coffee Break		
17.00–18.00	Conference 6 Chair: Ahmet Ademoğlu Brain machine interfaces: from basic science to neuroprostheses and neurological recovery Miguel A. L. Nicolelis	-	-
18.00–19.00	Conference 7 Chair: Beki Kan Half a century in neuroscience: what I can and can't do with memories İsmail Hakkı Ulus	-	-

22 October 2022, Saturday

	Hall A	Hall B	Hall C
09.30–10.30	Panel 10: Why we still cannot treat 1/3 of the epilepsy cases efficiently? Moderators: Filiz Onat, Betül Baykan Speakers: Ebru Altındağ, Sibel Uğur İşeri, Nihan Çarçak Yılmaz	Panel 11: Cognition in Parkinson's and Alzheimer's disease: overlaps and dissociations Moderator: Hakan Gürvit Speakers: Hakan Gürvit, Esin Öztürk Işık, Ulaş Ay, Emre Harı	Panel 12: Obesity, chronobiology and circadian rhythm disorders: a multidisciplinary perspective Moderators: Aliye Tuğba Bahadır Speakers: Serpil Çeçen, Belma Haliloğlu, Aliye Tuğba Bahadır
10.30–11.00	Coffee Break		
11.00–12.00	Conference 8 Chair: Tamer Demiralp Body, brain and cognition György Buzsáki	-	-

12.00–13.30	Lunch Break Poster Discussion (P-32 – P-62) Chairs: Mehmet Kaya, Duygu Gezen Ak, Erkan Kiriş, Yasemin Keskin Ergen, Ali Bayram, Çiğdem Ulaşoğlu-Yıldız		
13.30–14.30	Conference 9 Chair: Canan Başar-Eroğlu A new view on the neural fundamentals of complex cognition Onur Güntürkün	-	-
14.30–14.40	Break		
14.40–16.40	Oral Presentations 4 (O-19 – O-26) Nervous system diseases and treatment approaches Chairs: Nevzat Kahveci, Gizem Dönmez Yalçın	Oral Presentations 5 (O-27 – O-34) Neuroimaging, behavioral and cognitive neuroscience Chairs: Evrim Gülbetekin, Hasan Onur Keleş	Oral Presentations 6 (O-35 – O-42) Behavioral and cognitive neuroscience Chairs: Ashi Demirtaş-Tatlıdede, Sinem Burcu Erdoğan
16.40–17.00	Coffee Break		
17.00–18.30	Panel 13: “White rabbit” and “Lucy in the sky”: return of the psychedelic drugs Moderator: A. Yağız Üresin Speakers: A. Yağız Üresin, Emine Akalın, Bilgin Saydam, R. Ebrar Akıncı, Selçuk Şen	Panel 14: Molecular mechanisms of neurological disorders – Contemporary experimental approaches Moderator: Vuslat Yılmaz Speakers: Erdem Tüzün, Çağhan Kızıl, George Tofaris	Panel 15: Neurobiology of language Moderator: Mustafa Seçkin Speakers: Mustafa Seçkin, Robert S. Hurley, Koray Tarhan

23 October 2022, Sunday

	Hall A	Hall B	Hall C
09.00–11.00	Oral Presentations 7 (O-43 – O-50) Molecular and cellular neuroscience Chairs: Eda Tahir Turanlı, Güvem Gümüş Akay	Oral Presentations 8 (O-51 – O-58) Nervous system diseases and treatment approaches Chairs: Ayça Erşen Danyeli, Nurcan Orhan	Oral Presentations 9 (O-59 – O-66) Neural networks and computational neuroscience, behavioral and cognitive neuroscience Chairs: Tolga Esat Özkurt, Aykut Eken
11.00–11.30	Coffee Break		
11.30–12.30	Conference 10 Chair: Neslihan Serap Şengör Temporal summation and masking in the sense of touch Burak Güçlü	-	-
12.30–13.30	Lunch Break		
13.30–14.40	Conference 11 Chair: Filiz Onat Genetics and modeling of pediatric brain disease Kaya Bilguvar	Conference 12 Chair: Belma Bekçi Amygdaloid targets of the basal forebrain neuromodulator systems Güneş Ünal	-
14.30–14.45	Coffee Break		
14.45–16.45	Oral Presentations 10 (O-67 – O-74) Behavioral and cognitive neuroscience Chairs: Güneş Ünal, Gökçer Eskikurt	Oral Presentations 11 (O-75 – O-82) Neuroimaging and neuromicroscopy, behavioral and cognitive neuroscience Chairs: Ata Akın, Ali Bayram	Oral Presentations 12 (O-83 – O-90) Nervous system diseases and treatment approaches, behavioral and cognitive neuroscience Chairs: Müge Yemişçi Özkan, Nihan Çarçak
16.45–17.00	Closing Ceremony		