



THE 3rd INTERNATIONAL CONFERENCE ON
**HYPERBARIC OXYGEN THERAPY
AND THE BRAIN**

Hosted by the Israeli Society for Hyperbaric and Diving Medicine (ISHDM)

18th-20th of May 2017, Yam Suf Hotel, Eilat, Israel



Scientific Program

Thursday 18 May 2017

10:30-11:30 Gathering & Registration

11:30-13:30 Session I: Pressure Related Brain Injuries and Dysfunction

11:30-12:00 Invited opening lecture: **The pathology of traumatic brain injuries (TBI)**
Lee Goldstein, USA

12:00-12:25 Invited lecture: **HBOT and combat medicine: blast injury during water immersion**
Yehuda Melamed, Haifa, Israel

12:25-12:50 Invited lecture: **Decompression sickness (DCS) and brain Injuries**
Costantino Balestra, Brussels, Belgium

12:50-13:05 **A new mode of arterial decompression bubble development and spinal DCS**
Ran Arieli, Haifa, Israel

13:05-13:30 Invited lecture: **HPNS - pressure induced brain impairments**
Yoram Grossman, Beer-Sheva, Israel

13:30-13:45 Cellular and molecular mechanisms underlying hyperbaric pressure modulation of NMDA receptors
Alice Bliznyuk et al, Beer-Sheva, Israel

13:45-14:00 Discussion

14:00-15:00 Lunch break

15:00-17:00 Session II: Traumatic Brain Injuries (TBI) and Oxygen levels

15:00-15:30 Invited lecture: **Blood-brain barrier (BBB) function in TBI**
Alon Friedman, Beer-Sheva, Israel

15:30-16:00 Invited lecture: **HBOT induced mitochondrial protection in TBI**
Jean Soustiel, Tel-Aviv, Israel

16:00-16:15 The therapeutic impact of HBOT on recovery from TBI in mice
Shlomi Toussia-Cohen et.al., Tel-Aviv, Israel



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- 16:15-16:30 BBB disruption following CNS-oxygen toxicity
Ricarina Rabinovitz et al., Haifa, Israel
- 16:30-16:45 The effects of astrocytes exposure to various oxygen concentrations
Dana Venker et al., Tel-Aviv, Israel
- 16:45-17:00 Does day-night reversal increase the risk of CNS-OT in oxygen divers?: Measurements of markers of oxidative stress
Yehuda Danino et al., Haifa, Israel

17:00-17:30 Coffee break

17:30-19:00 Session III: Post Concussion Syndrome (PCS)

- 17:30-18:00 Invited lecture: **PCS in athletes**
Jeffery Kutcher, USA
- 18:00-18:20 Invited lecture: **The current clinical data on HBOT for PCS**
Amir Hadanny, Tel-Aviv, Israel
- 18:20-18:40 Non-invasive recordings of multi-channel EEG event-related potentials (ERPs) in PCS and other brain pathologies
Amir Geva, Beer-Sheva, Israel
- 18:40-19:00 General discussion for sessions II and III

20:30 Social event: Spa Cocktail, Dolphin Reef

Friday, 19 May 2017

06:00-07:00 HBOT morning run (sponsored)

08:30-10:30 Session IV: Cognitive Functions and Alzheimer's Disease

- 08:30-09:00 Invited lecture: **New trends in cognitive evaluation and their use in hyperbaric patients**
Gil Suzin, Tel-Aviv, Israel
- 09:00-09:20 Invited lecture: **Diabetes and Cognitive impairment**
Michal Beeri, New York City, USA
- 09:20-09:50 Invited lecture: **How HBOT ameliorates the pathophysiology of Alzheimer's disease**
Uri Asheri, Tel-Aviv, Israel



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- 09:50-10:10 Invited lecture: **The normobaric oxygen paradox**
Costantino Balestra, Brussels, Belgium
- 10:10-10:25 Hyperbaric oxygen as an enhancing factor for brain activity and multitasking performance.
Dor Vadas, Rehovot, Israel
- 10:25-10:40 General discussion
- 10:40-11:00 Coffee break**
- 11:00-13:00 Session V: Reverse Aging**
- 11:00-11:30 Invited lecture: **The concept of reverse aging and the potential use of HBOT**
Shai Efrati, Tel-Aviv, Israel
- 11:30-11:45 HBOT and the rejuvenating brain
Amir Hadanny, Tel-Aviv, Israel
- 11:45-12:00 HBOT and the rejuvenated kidney
Keren Doenyas-Barak, Tel-Aviv, Israel
- 12:00-12:15 HBOT and the Ischemic heart
Oran Tzuman, Tel-Aviv, Israel
- 12:15-12:30 HBOT and the microbiome
Ilan Youngster, Tel-Aviv, Israel
- 12:30-12:45 Pre-conditioning with hyperbaric oxygenation reduces post plastic surgical complications in high risk smoking population
Tali Friedman, Tel-Aviv, Israel
- 12:45-13:00 General discussion
- 13:00-14:00 Lunch break**
- 14:00-16:00 Session VI: Stroke (CVA), Anoxic Brain Damage and CO Poisoning**
- 14:00-14:30 Invited lecture: **Defining hypoxia**
Philip B James, Dundee, Scotland
- 14:30-14:45 Invited Lecture: **Selecting the optimal post stroke patient for HBOT**
Shai Efrati, Tel-Aviv, Israel



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- 14:45-15:00 HBOT for post stroke cognitive impairments
Ido Meiraz, Tel-Aviv, Israel
- 15:00-15:15 A novel approach to multidisciplinary rehabilitation of patients with neurological impairments in hyperbaric center
Gil Suzin, Tel-Aviv, Israel
- 15:15-15:30 Treatment of carbon monoxide intoxication / encephalopathy with HBOT- 26 years' experience 1986-2013- retrospective review of an alternative treatment protocol
JS Cooper et al, Nebraska, USA
- 15:30-15:45 HBOT beyond usual therapeutic window enhances neurological recovery after carbon monoxide poisoning,
JS Cooper et al, Nebraska, USA
- 15:45-16:00 HBOT for spinal cord ischemia after thoracoabdominal aortic aneurysm repair
R. Katznelson, Toronto, Canada
- 16:00-16:15 General Discussion
- 16:15-16:30 Coffee break**
- 16:30-18:15 Session VII: Post Traumatic Stress Disorder (PTSD) and Chronic Pain Syndromes**
- 16:30-17:00 The effect of HBOT on different sub-groups of fibromyalgia patients
Amir Hadanny, Tel-Aviv, Israel
- 17:00-17:30 Brain pathology induced by early and late severe psychological trauma
Ilan Kutz, Tel-Aviv, Israel
- 17:30-17:45 The use of HBOT for patients suffering from child abuse with fibromyalgia as presenting clinical syndrome
Yair Bechor, Tel-Aviv, Israel
- 17:45-18:00 HBOT in the Clinical Pathway, as a reliable integrative treatment for fibromyalgia.
Pasquale Longobardi, Ravenna, Italy
- 18:00-18:15 Effects of HBOT on chronic pain in patients with radiation tissue injury
R. Katznelson, Toronto, Canada
- 18:15-18:30 Discussion
- 21:00 Social event**



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Saturday, 20 May 2017

- 10:00-12:00 Boat cruise at the gulf of Eilat
12:30 Diving in the Red Sea (Your own responsibility)



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