



THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

81ST ANNUAL SCIENTIFIC MEETING
WALDORF ASTORIA CAVALIERI ROME
SCIENTIFIC PROGRAM AT A GLANCE

WEDNESDAY, SEPTEMBER 18, 2019

ITALIAN NEUROSURGICAL SOCIETY & AMERICAN ACADEMY OF NEUROLOGICAL SURGERY - COMBINED SCIENTIFIC PROGRAM

1:00 – 1:20 Welcome and Introduction – Alex Olivi & Michael McDermott

Welcome Remarks from the SINch: *Roberto Delfini and Alberto Delitala*

Moderators: Michael McDermott & Francesco Tomasello

1:20 – 1:45 Neurotraumatology and Neurosurgery: A Worldwide Approach

Franco Servadei (*Italy*)

1:50 – 2:10 Trends & New Developments in Glioma Therapy

E. Antonio “Nino” Chiocca (*AAcNS*)

2:15 – 2:35 The Treatment of Pediatric AVMs

Marco Cenzato (*Italy*)

2:40 – 2:55 Trends & New Developments in Endovascular Therapy

Howard Riina (*AAcNS*)

2:55 – 3:15 - BREAK

Moderators: Antonio Raco & Alex Olivi

3:20 – 3:40 Endonasal Approaches to Craniopharyngiomas

Paolo Cappabianca (*Italy*)

3:45 – 4:05 Trends & New Developments in Spinal Surgery

Mark Hadley (*AAcNS*)

4:10 – 4:30 Changing Paradigms in Neurosurgical Education. The Case of Virtual Reality and Surgical Simulation

Francesco DiMeco (*Italy*)

4:35 – 4:55 Trends & New Developments in Functional - Epilepsy

G. Rees Cosgrove (*AAcNS*)

5:00 – 5:20 Intraoperative Neurophysiological Monitoring in Spinal Cord Tumor Surgery: How Much Evidence Do We Need?

Francesco Sala (*Italy*)

5:30 Adjourn

Evening Social Event:
Opening Reception ~ 6:30 pm – 9:00 pm
Terraza Aranci, Waldorf Astoria Cavalieri Hotel
Business Casual Attire recommended



THURSDAY, SEPTEMBER 19, 2019

7:30 – 7:35 WELCOMING REMARKS

Michael McDermott (Scientific Program Chair) & Alex Olivi (Local Arrangements Chair)

7:35 – 8:45 Peer Reviewed Abstract Session I: Functional Science

Moderators: Daniel Yoshor

7:35 – 7:45 Safety/Efficacy of Bone Marrow-Derived Mesenchymal Stem Cell (SB623) Implantation After Chronic Traumatic Brain Injury

Gary Steinberg

7:45-7:55 Extracellular microRNAs in Blood Differentiate Between Ischemic and Hemorrhagic Stroke

Yasar Kalani

7:55 – 8:05 Hemodynamic Predictors of Long-Term Patency in Cerebral Revascularization Surgery

Fady Charbel

8:05 – 8:15 Early Results of Clinical Testing of a Visual Cortical Prosthetic in Blind Subjects

Daniel Yoshor

8:15 – 8:25 Nerve transfers to improve upper extremity function and quality of life in tetraplegic patients

Wilson Ray

8:25 – 8:35 Mapping brain response patterns to Deep Brain Stimulation with fMRI

Andres Lozano

8:35 – 8:45 Trigeminal Nerve Stimulation as a Neuroprotectant

Raj Narayan

8:45-9:25 Peer Reviewed Abstract Session II: Spine Science

Moderators: Nicholas Theodore & Mark Shaffrey

8:45 - 8:55	12-Month Safety and Efficacy Results from the SCiStar Study – A Phase 1/2a Trial of
	Richard Fessler
8:55 - 9:05	Early Surgery and Recovery in Central Cord Syndrome: Analysis of 211 Patients from a Prospective, Multi-Center Dataset
	Michael Fehlings
9:05 - 9:15	Transpedicular vertebrectomy for thoracic spine metastasis
	Ehud Mendel
9:15 - 9:35 Break	
9:35-10:45 Peer Reviewed Abstract Session III: Tumor Science Moderators: Nino Chiocca & Mitchel Berger	
9:35 - 9:45	Meningioma Genomic Subgroup and Predicting Post-operative Patient Outcomes: Implications for Treatment and Follow-up
	Jennifer Moliterno
9:45 - 9:55	Oncolytic G207 Produces immunologic Signature Predicting Response to Therapy
	James Markert
9:55 - 10:05	Evolution of Low Grade Gliomas During Malignant Transformation
	Mitchel Berger
10:05 - 10:15	Flies, worms and fish: What do these have to do with brain tumours?
	Jim Rutka
10:15 - 10:25	Neurosurgical management of sinonasal malignancies involving the skullbase. A 25-year experience.
	Franco DeMonte
10:25 - 10:35	Opening of blood brain barrier in the hippocampus and entorhinal cortex in Alzheimer's disease with focused ultrasound
	Ali Rezai
10:35 - 10:45	CAR T cell therapy for glioblastoma: Current observations and future directions
	Don O'Rourke
10:50-11:50 Peer Reviewed Abstract Session 4: Vascular Science Moderators: Elad Levy & Robert Spetzler	

10:50 - 11:00 Functional Connectivity Deficits After Subarachnoid Hemorrhage

Greg Zipfel

11:00 - 11:10 Microbiome Signatures of Cavernous Angioma

Sean Polster

11:10 - 11:20 The New Generation Hydrogel Endovascular Aneurysm Treatment Trial (HEAT): Final Results

Bernard Bendok

11:20 - 11:30 The R2eD AVM score: a novel predictive tool for arteriovenous malformation presentation with hemorrhage

Judy Huang

11:30-11:40 Cerebral Aneurysm Formation and Rupture: Role of Nrf2 Signaling

Aaron Dumont

11:40 - 11:50 Early Gene Deletion Generates a High-Fidelity Transgenic Mouse Model of Familial Brain Arteriovenous Malformations

Michael Lawton

11:50 - 12:00 Break

12:00 - 12:50 **Special Lecture I**

Moderator: Alex Golby / James Rutka

The Rhetoric of Medicine: Lessons on Professionalism From Ancient Greece

Nate Selden/Nigel Nicholson

Evening Social Event:

Visit to the Musei Vaticani and Sistine Chapel

Dinner at the Paolo VI Residence and Terrace

Buses depart from hotel at 5:30 pm- Business casual attire recommended



FRIDAY, SEPTEMBER 20, 2019

7:30 - 7:35 WELCOME & REMARKS

Michael McDermott (Scientific Program Chair) & Alex Olivi (Local Arrangements Chair)

7:35-8:35	Peer Reviewed Abstract Session V: Vascular Moderators: Michael Lawton & E. Sander Connolly
7:35 - 7:45	Deletions in CWH43 Cause Sporadic Idiopathic Normal Pressure Hydrocephalus Mark Johnson
7:45-7:55	NEWTON-2: Randomized, Double-blind, Placebo-controlled study of EG 1962 in Aneurysmal Subarachnoid Hemorrhage R. Loch MacDonald
7:55-8:05	When Flow Diversion Fails: Predictive Factors of Incomplete Aneurysm Occlusion after Pipeline Embolization Chris Ogilvy
8:05-8:15	Transradial Cerebral Angiography: A Safer Alternative Felipe Albuquerque
8:15-8:25	Somatic mutations in cerebral aneurysms Rose Du
8:25-8:35	Intracranial Aneurysms: Does Size Really Matter? Phil Stieg
8:35-9:15	Peer Reviewed Abstract Session VI: Tumor Moderators: Henry Brem & Don O'Rourke
8:35-8:40	Long-Term Outcomes in the Treatment of Pediatric Skull Base Chordomas Paul Gardner
8:40-8:50	MRI Perfusion Radiomic Machine Learning Identifies Pseudoprogession in Glioblastoma - A Multicenter Study Pascal Zinn
8:50-9:00	The evolution of epilepsy surgery for children: lessons from tuberous sclerosis complex over 20 years Howard Weiner
9:00-9:10	Stimulated Raman Histology for Rapid Neurosurgical Intraoperative Histology: A Prospective Series Allan Levi
9:10-9:20	Role of Visual Cortex in Essential Tremor Jean Regis

9:20-9:30	Break
9:30-10:30	Peer Reviewed Abstract Session VII: Spine Moderators: Kevin Foley & Praveen Mummaneni
9:30-9:40	Early Results from the CSM-S RCT: Quality of Life, Cost, and Complications Zohar Ghogawala
9:40-9:50	Fusion for Spondylolisthesis Is Associated with Greater Improvements: A Multicenter Registry Study Kevin Foley
9:50-10:00	Frailty, Long-Term Outcomes and Management Implications for Type II Odontoid Fractures in the Elderly Michelle Clarke
10:00-10:10	The use of intraoperative sodium fluorescein for diagnostic biopsy of intramedullary spine cord lesions Timothy Ung
10:10-10:20	Robot-Assisted vs Freehand Instrumentation in Short-Segment Lumbar Fusion: Experience with Real-Time, Image-Guided Spinal Robot Nicholas Theodore
10:20-10:30	Maximal Safe Resection in Thalamic Gliomas is Superior to Biopsy: Personal Reflections on 40 Cases Mustafa Baskaya
10:30-11:30	Peer Reviewed Abstract Session VIII: Functional/Trauma/Vascular Moderators: Bernard Bendok / Sepi Amin-Hanjani
10:30-10:40	Dopamine, serotonin, and norepinephrine micro-fluctuations during conscious choice and subjective experience in humans Charles Branch
10:40-10:50	Intracranially delivered IL-12 secreting CAR T cells recruit host immunity to eradicate heterogeneous GBM John Sampson
10:50 - 11:00	A New Treatment for Acute TBI – a phase II multicenter trial using novel MRI derivatives as surrogate outcome measures Howard Eisenberg
11:00-11:10	Dynamic blood brain barrier regulation in mild traumatic brain injury Gerald Grant
11:10-11:20	Computer-Learning to Identify High Risk Unruptured Aneurysms and Guide Decision Making: Rupture Resemblance Score Elad Levy

11:20-11:30 Distribution and radiologic features of SEDAVFs in a modern single-center series of patients with spinal vascular shunts

Giuseppe Lanzino

11:30 -11:40 HDFT as a tool to enhance outcomes in the management of hypereloquent lesions

Robert Friedlander

11:40-11:50 Break

11:50-12:20

Special Lecture 2

Introduction of Academy Special Lecturer: Alex Olivi & Mike McDermott

Fast cars and fast trains: The Ferrari and Italo stories

Luca Cordero di Montezemolo

12:20 - 1:20

Presidential Address

12:20 - 12:30

Introduction of the Academy President : Mark Johnson

12:30 - 1:20

Quo Vadis, Academia?

Nino Chiocca, MD

Evening Social Event:
Academy Gala Dinner
Villa Miani
Attire: Black Tie Optional



7:30 – 8:25	<u>Special Lecture 3: The Oldfield Lectureship</u>
7:30 – 7:35	Introduction, Moderator: Nino Chiocca
7:35 - 8:05	Oldfield Lecture: Bench to bedside development of a novel STAT3 inhibitor for CNS malignancies - Amy Heimberger
8:05 - 8:15	NIH Funding Overview: Russell Lonser
8:15 - 8:20	NREF Funding Overview: Reg Haid
8:20 - 8:25	AAcNS/NREF Young Clinician Award Update – Brian JA Gill
8:25 - 8:30	AAcNS/NREF Research Fellowship Grant Update – Benjamin Grannan
8:30 - 8:40	American Academy Young Clinician Investigator Award – North America Single-cellular representations of semantic meaning during natural language perception Benjamin L. Grannan
8:40 - 8:50	American Academy Young Clinician Investigator Award – Italy Monitoring language networks in the asleep patient during surgery: an electrophysiological approach - Davide Giampiccolo
8:55 – 9:30	<u>Special Lecture 4:</u>
8:55-9:00	Introduction of Academy Special Lecturer: Alex Olivi
9:00-9:30	<i>Thirty generations of winemaking and still feeling young</i> Lamberto Frescobaldi, President Azienda Agricola “Marchesi Frescobaldi” Firenze
9:30 - 10:30	Peer Reviewed Abstract Session 9: Various topics Moderators: Jacques Morcos / Robert Harbaugh
9:30-9:40	Brain growth and developmental outcome after treatment of post-infectious hydrocephalus in infants in Uganda Abhaya Kulkarni
9:40-9:50	Impact on Facial Nerve Outcomes and Extent of Resection Using Subperineural Dissection Technique for Surgical Resection James Liu
9:50-10:00	Phase 0/1 Clinical Trial of Low-Dose Capecitabine in Recurrent GBM: Global Immune Fingerprinting of Tissue and Blood Michael Vogelbaum

10:00-10:10	Sexual Dysfunction: Prevalence, Prognosis, and Predictors of Outcomes in Patients Operated for Lumbar Spondylolisthesis
	Praveen Mummaneni
10:10-10:20	Cerebro-vascular remodeling following ischemic stroke: cellular and molecular mechanisms.
	Robert Dempsey
10:20-10:30	Glioblastoma organoids: A model system for patient-specific therapeutic testing
	Steven Brem
10:30-10:45 Break	
10:45-11:55	Peer Reviewed Abstract Session 10: Various topics Moderators: Michael McDermott / Aviva Abosch
10:45-10:55	Outcomes from Asleep and Awake Dominant Temporal Lobe Glioma Surgery: Risk, Extent of Resection, and Survival
	Michael McDermott
10:55-11:05	Real-time CED of Nanoliposomal CPT-11 for recurrent GBM: Interim results of a phase I clinical trial
	Manish Aghi
11:05-11:15	Leptomeningeal dissemination, a sinister pattern of medulloblastoma growth
	Daniel Fults
11:15-11:25	Characteristics of Clots Retrieved by Mechanical Thrombectomy Associated with Stroke Etiology and Device Performance
	Adnan Siddiqui
11:25-11:35	Integration of 5-ALA and CEUS in the Surgical Resection of High Grade Glioma
	Alex Olivi
11:35-11:45	Mesenchymal Stem Cell Delivery of Oncolytic Adenovirus Delta-24-RGD Following Surgical Resection of Glioblastoma
	Fred Lang
11:45-11:55	An Epigenetic Liquid Biopsy Machine Learning Algorithm to Predict Glioma and Glioma Subtypes
	Steve Kalkanis
12:00	Closing Remarks Meeting Adjourn 2020 Scientific Chair - Aviva Abosch

Immediately following Adjournment, Lamberto Frescobaldi will host a wine tasting entitled “*A Journey Through Tuscany*”