# WORLD SPINE 9







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SPINE SOCIETY

Final Program

**45**<sup>™</sup> **Scoliosis Symposium** N. Giannestras - P. Smyrnis











Vasileios Lykomitros WS9 Chairman

We are delighted to welcome participants from all around the globe to World Spine 9, the ninth World Congress of Spine Surgery, in Athens-Greece.

The idea of hosting a combined spinal meeting between the World Spinal Column Society and the Hellenic Spine Society, as a representative of all the Balkan region, originates from the need for lifelong learning and interactive education on spine pathology and surgery.

The program of this meeting is multi-thematic and emphasis is given on controversial issues in spinal surgery as well as on new aspects such as tissue engineering and spinal technology advances. This unique collaborative meeting between spinal specialists from around the world will give an exceptional opportunity to exchange knowledge and experiences.

We are certain that this three-day program will provide new insights that you can apply to your practice as we will review the latest in spine surgery techniques and research, discuss our most complicated cases and debate clinical and surgical problems.

It is our honor and pleasure to welcome you all to the World Spine 9 & 15<sup>th</sup> Annual Congress of the Hellenic Spine Society & 45<sup>th</sup> Scoliosis Symposium "N. Giannestras - P. Smyrnis" to the city of Athens, the historical Capital of Science and Philosophy, hoping that you will enjoy your visit through its unique culture, picturesque sights and traditional gastronomy.



### CONGRESS OVERVIEW





It is my pleasure to welcome all participants to World Spine 9, the ninth World Congress of Spine Surgery, in Athens, Greece.

Following the successful eighth congress, WS8 that took place in 2018 in Portugal, we are looking forward to meeting an increased number of colleagues from all medical specialties involving spine surgery from around the world. The organizing committee of the congress is also happy to announce Greece as the host nation of World Spine 9. This bring us great memories of one of the most successful WS meeting in the past.

World Spine 9 will cover all the topics of spine surgery, such as MIS, endoscopy, motion preservation, stabilization, degenerative, tumor, deformity surgery, innovative and emerging technologies, biologics, and basic science related to spine surgery.

Spine surgery has always been constantly evolving with new physical, technological, and quantitative methods emerging to support medicine. In our field, there is continuous change and during recent years, we have witnessed even more rapid advancements in many areas, which calls for further reassessment of our professional development and education. It is the responsibility of spine surgeons to update knowledge and improve hands on expertise.

Our conference city Athens, Greece has a rich history from ancient times right up to these modern days. We would like you to enjoy our scientific program and the beautiful historic city of Athens.

I would like to express my thanks to Hellenic Spine Society and to their President Vassilis Lykomitros for hosting the event, and for choosing the excellent venue at the modern and well accessible Grand Hyatt.



### CONGRESS OVERVIEW



Title: World Spine 9

**Date:** November 3-5, 2022

Venue: Grand Hyatt Athens, Greece

Organization:



Hosted by:



Congress Language: English

Chairman: Vasileios Lykomitros

President of the WScS: Salman Sharif



**CADAVER PROGRAM** 

#### **PROGRAM**

### ATTC CENTER

Chairpersons: Ziya Gökaslan, Doug Orr, Mehmet Zileli, Konstantinos Paterakis, George Sapkas

08:00-08:15 Introduction

Ziya Gökaslan, Doug Orr

08:15-10:00	Lectures AULA HALL
08:15-08:30	Upper cervical anterior approaches Ziya Gökaslan
08:30-08:45	Lower cervical anterior approaches Nikolay Peev
08:45-09:00	Cervical anterior fixation and arthroplasty Paulo Pereira
09:00-09:15	Upper cervical posterior approaches  Mehmet Zileli
09:15-09:30	Upper cervical posterior fixation Nikolay Peev
09:30-09:45	Lower cervical posterior fixation and laminoplasty loannis Polythodorakis
09:45-10:00	Cervico-thoracic junction anterior-posterior approaches Ziya Gökaslan
10:00-10:30	Coffee break
10:30-12:30	Anatomy Lab 1
12:30-13:30	Lunch

13:30-15:00	Lectures AULA HALL
13:30-13:45	Posterior-posterolateral thoraco-lumbar approaches Salman Sharif
13:45-14:00	Lumbar transforaminal endoscopy  Hyeun Sung Kim
14:00-14:15	Lumbar tube guided surgery  Mehmet Zileli
14:15-14:30	Thoracic and lumbar pedicle screwing  Doug Orr
14:30-14:45	Posterior TL deformity correction Panagiotis Zoumpoulis (ATH)
14:45-15:00	Osteotomy techniques Onur Yaman
15:00-15:30	Coffee break
15:30-17:30	Anatomy Lab 2

### ATTC CENTER

08:15-10:00	Lectures	AULA HALL
08:15-08:30	Interbody fusion techniques TLIF, ALIF, XLIF Konstantinos Paterakis	
08:30-08:45	Anterior and lateral approaches to TL spine loannis Polythodorakis	
08:45-09:00	Thoracoscopic approaches  Hyeun Sung Kim	
09:00-09:15	Percutaneous pedicle screw fixation Nikolay Peev	
09:15-09:30	Vertebral body augmentation techniques Paulo Pereira	
09:30-09:45	Case for deformity correction Onur Yaman	
09:45-10:00	Case for osteotomy and or revision Nikolay Peev	
10:00-10:30	Coffee break	
10:30-12:30	Anatomy Lab 3	
12:30-13:30	Lunch	
13:30-15:00	Lectures	AULA HALL
13:30-13:45	Case for cervical trauma  Mehmet Zileli	
13:45-14:00	Case for thoracolumbar trauma Salman Sharif	
14:00-14:15	Case for endoscopic discectomy Hyeun Sung Kim	
14:15-14:30	Case for spine tumor Ziya Gökaslan	

**PROGRAM** 

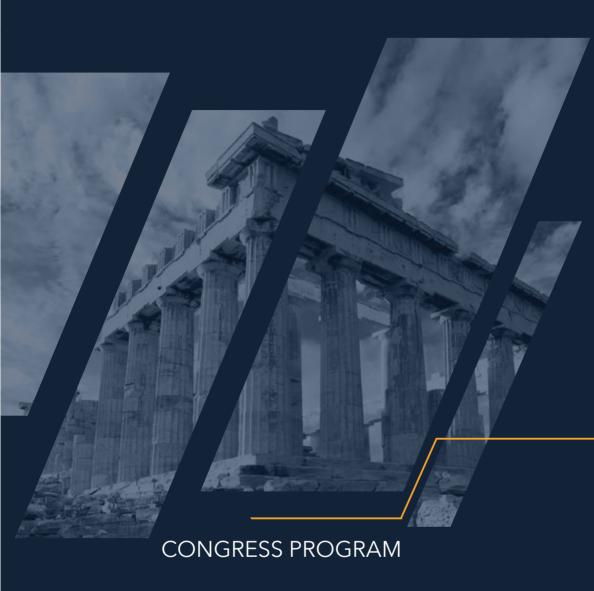
14:30-14:45	Case for lumbar interbody fusion  Doug Orr
14:45-15:00	Case for TL anterior/lateral approach Lilyana Angelov
15:00-15:30	Coffee break
15:30-17:30	Anatomy Lab 4

#### **Instructors:**

Ziya Gökaslan Doug Orr Nikolay Peev Paulo Pereira Mehmet Zileli Salman Sharif Hyeun Sung Kim Onur Yaman Lilyana Angelov Kostantinos Soultanis Elias Papadopoulos Marios Lykisas Kostantinos Paterakis Ioannis Polythodorakis Panagiotis Zoumpoulis Sotiris Papastefanou Dimos Bouramas Emmanouil Tsafantakis Andreas Morakis Vasilios Vougioukas George Sapkas









**PROGRAM** 

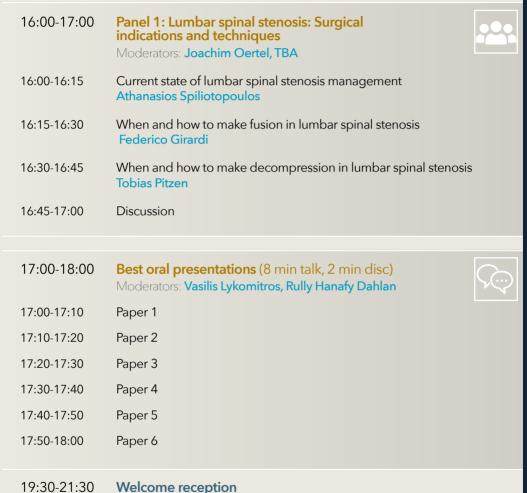


### HALL PARTHENON

13:00-13:15	Opening remarks Vasillis Lykomitros, Salman Sharif	
13:15-15:30	Keynote Lectures Moderators: Mehmet Zileli, TBA	
13:15-13:30	History of the World Spine Edward C. Benzel	
13:30-15:45	How to make MIS a disruptive surgery Richard Assakar	
13:45-14:00	Ultra MIS Surgery Michael Wang	
14:00-14:15	Spinal instability: An Emerging Concept Atul Goel	
14:15-14:30	Minimally Invasive Correction of Adult Spinal Deformity Richard Fessler	
14:30-14:45	Management of Primary Spine Tumors  Ziya Gökaslan	
14:45-15:00	Nonfusion Techniques for Scoliosis  David Marks	
15:00-15:30	Discussion	
15:30-16:00	Coffee break and poster view	









**PROGRAM** 



### HALL ULYSEES

16:00-17:00	Panel 2: Spinal cord injury: An update Moderators: Sait Naderi, TBA	90
16:00-16:15	Current state of the spinal cord injury management Richard Fessler	
16:15-16:30	Value of medical management in spinal cord injury Stacey Darwish	
16:30-16:45	Timing of surgery in spinal cord injury Paulo Pereira	
16:45-17:00	Discussion	
17:00-18:00	Oral presentations 1 (8 min talk, 2 min disc) Moderators: Sandeep Vaishya, TBA	
17:00-17:10	Paper 7	
17:10-17:20	Paper 8	
17:10-17:20 17:20-17:30	Paper 8 Paper 9	
17:20-17:30	Paper 9	
17:20-17:30 17:30-17:40	Paper 9 Paper 10	



**PROGRAM** 



## HALL CYCLADES

16:00-17:00 Failed Back Surgery Syndrome Moderators: Anastasios Christodoulou, TBA  16:00-16:15 Etiology- pathophysiology and how to prevent FBSS Thomas Apostolou  16:15-16:30 Pain management Patti Gatziani  16:30-16:45 Indications for revision lumbar disc surgery loannis Gelalis  16:45-17:00 Interventional rehabilitation Avraam Ploumis  17:00-18:10 Scoliosis Management Moderators: Panagiotis Korovesis, TBA  17:00-17:10 Conservative Management of Idiopathic Scoliosis Theodoros Grivas  17:10-17:20 Fusionless Scoliosis Today Elias Papadopoulos  17:20-17:30 Scoliosis Classification and selection of Fusion Levels Kostas Soultanis  17:30-17:40 AIS posterior fusion techniques - manoeuvres of correction Evangelos Christodoulou  17:40-17:50 Navigation in Spine Deformity Surgery Marios Lykisas  17:50-18:00 Adult Scoliosis Today: An Update Federico Girardi  18:00-18:10 Discussion	15:30-16:00	Coffee break and poster view	
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Federico Girardi	17:40-17:50		
18:00-18:10 Discussion	17:50-18:00	•	
	18:00-18:10	Discussion	



**PROGRAM** 



### HALL PARTHENON

08:00-09:00	Oral presentations 2 (8 min talk, 2 min disc) Moderators: Amjad Shad, TBA
08:00-08:10	Paper 13
08:10-08:20	Paper 14
08:20-08:30	Paper 15
08:30-08:40	Paper 16
08:40-08:50	Paper 17
08:50-09:00	Paper 18
09:00-10:15	Plenary Session 1: The Future of Spine Surgery Moderators: Edward C. Benzel, Abdelfattah Saoud
09:00-09:15	Global spine health: How can we improve?  Salman Sharif
09:15-09:30	How can we improve spine surgery education?  Edward C. Benzel
09:30-09:45	Can new technologies improve patient outcomes?  Michael Wang
09:45-10:00	How to prevent operating films, not the patients?  Mehmet Zileli
10:00-10:15	Discussion
10:15-10:45	Coffee break and poster view





10:45-11:45	Panel 3: Minimally invasive spine surgery: Facts and fictions Moderators: Richard Fessler, TBA	
10:45-11:00	Current state of the minimally invasive spine surgery Richard Fessler	
11:00-11:15	When and how to make endoscopic decompression  Hyeun Sung Kim	
11:15-11:30	When and how to make MIS fusion Nikolay Peev	
11:30-11:45	Discussion	
11:45-12:00	Presidential Address Salman Sharif	
12:00-13:00	Luncheon Symposium A (Industry sponsored)	
13:00-14:30	Plenary Session 2: Revision spine surgery Moderators: Richard Assaker, TBA	1
13:00-13:15	Current state of revision spine surgery indications and techniques  Douglas Orr	
13:15-13:30	Indications for revision surgery or conservative management in implant failure Serdar Kahraman	
13:30-13:45	How to prevent and treat proximal junctional kyphosis  Michael Wang	
13:45-14:00	Adding L5-S1 to fusion: When and how?  Abdelfattah Saoud	
14:00-14:15	How to improve outcomes in revision spine surgery? Prokopis Annis	
14:15-14:30	Discussion	





14:30-15:30	Panel 5: Lumbar degenerative deformity: Management options Moderators: Douglas Orr, Kostas Zachariou
14:30-14:45	Current state of lumbar degenerative deformity surgery Richard Assakar
14:45-15:00	How to manage flat back syndrome and lumbar kyphosis?  Vasillis Lykomitros
15:00-15:15	How to manage degenerative scoliosis?  Douglas Orr
15:15-15:30	Discussion
15:30-16:00	Coffee break and poster view
16:00-18:00	German Friendship Meeting Moderators: Joachim Oertel, Markus Arand
16:00-16:15	Thoracoscopic fusions in thoracic and thoracolumbar pathologies  Markus Arand
16:15-16:30	TLIF versus microdecompression: Prospective study with clinical outcome parameters on VAS and treadmill Tobias Pitzen
16:30-16:45	Long term results of MIS Interlaminar dynamic stabilization in lumbar spinal stenosis, comparison vs MIS Interlaminar rigid fusion vs: Prospective randomized study Sebastian Gitter
16:45-17:00	Different concepts in spinal endoscopic surgery  Joachim Oertel
17:00-17:15	Indications and techniques for advanced sacro-iliacal screw fixation  Marcus Richter





17:15-17:30	Update in modern lumbar fusion surgery Ulf Liljenquist
17:30-17:45	Endoscopic Lumbar Spine Surgery Benedikt Burkhardt
17:45-18:00	Discussion
20:00-22:30	Award Paper Presentation, Spine Tumor book Launch, Hand over the Presidencey, Greek Awards



**PROGRAM** 



### HALL ULYSEES

08:00-09:00	Oral presentations 3 (8 min talk, 2 min disc) Moderators: Aftab Younus, TBA
08:00-08:10	Paper 19
08:10-08:20	Paper 20
08:20-08:30	Paper 21
08:30-08:40	Paper 22
08:40-08:50	Paper 23
08:50-09:00	Paper 24
10:45-11:45	Panel 4: Metastatic spine tumors: Management options Moderators: Ziya Gökaslan, Alex Kelekis
10:45-11:00	Current state of the metastatic spine tumor management Ziya Gökaslan
11:00-11:15	Personalized oncological therapy for the spine tumor surgeon Ganesh M Shankar
11:15-11:30	Indication of surgery or radiosurgery Liliana Angelov
11:30-11:45	Discussion
12:00-13:00	Luncheon Symposium B (Industry sponsored)
13:00-14:30	Plenary Session 3: Cervical trauma management Moderators: Ioannis Polythodorakis, Dimitris Korres,
13:00-13:15	Anatomical remarks for cervical spine trauma Victor Hugo Perez



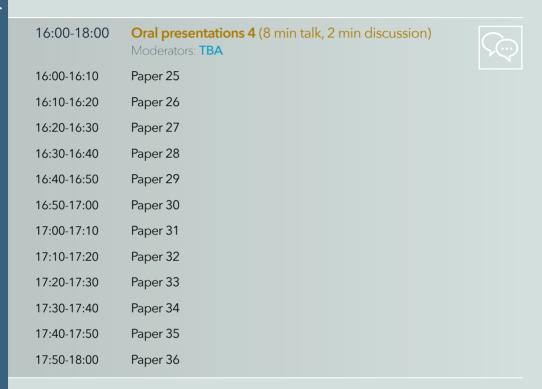


13:15-13:30	Current state of cervical spine trauma management  Joachim Oertel	
13:30-13:45	How to manage locked cervical facets? Sait Naderi	
13:45-14:00	Management of odontoid fractures  loannis Polythodorakis	
14:00-14:15	Management of hangman fractures Nikolay Peev	
14:15-14:30	Discussion	
14:30-15:30	Panel 6: Cervical spondylotic myelopathy and OPLL: What is new?  Moderators: Liliana Angelov, TBA	•••
14:30-14:45	Current state of the CSM and OPLL management Sandeep Vaishya	
14:45-15:00	Surgical management in multilevel CSM	
	Abdul Karim Msaddi	
15:00-15:15	Abdul Karim Msaddi Surgical indications and techniques for OPLL Amjad Shad	



# **CONGRESS**PROGRAM







**PROGRAM** 



### HALL CYCLADES

08:00-09:00	Symposium Moderators: Nikos Haftouras, TBA	انها
08:00-08:15	Cauda Equina Syndrome: Timing of Surgery as a Matter of Debate  Athanasios Maniotis	
08:15-08:30	Clinical results in Treatment of Spinal Cord Injuries by transplantation of olfactory mucosa autograft Christos Gogos	
08:30-08:45	Anterior craniocervical lesions - The far lateral approach to the junction Stavros Polyzoidis	
08:45-09:00	Spinal Cord Gliomas Management: Controversies, Advances and Challenges Eleni Tsianaka	
10:45-12:00	Dynamic Stabilization of the Spine: Indications, Contraindications, Technique	
	Moderators: Christos Grigoriadis, TBA	
10:45-11:00	the contract of the contract o	
10:45-11:00 11:00-11:15	Moderators: Christos Grigoriadis, TBA Interspinous Dynamic Stabilization	
	Moderators: Christos Grigoriadis, TBA Interspinous Dynamic Stabilization Aikaterini Karagianni Posterior Transpedicular Dynamic and Hybrid Stabilization	
11:00-11:15	Moderators: Christos Grigoriadis, TBA  Interspinous Dynamic Stabilization Aikaterini Karagianni  Posterior Transpedicular Dynamic and Hybrid Stabilization Eleni Karakosta  Total Disc Replacement in Lumbar Spine	
11:00-11:15 11:15-11:30	Moderators: Christos Grigoriadis, TBA Interspinous Dynamic Stabilization Aikaterini Karagianni Posterior Transpedicular Dynamic and Hybrid Stabilization Eleni Karakosta Total Disc Replacement in Lumbar Spine Panagiotis Spinos Total Disc Replacement in Cervical Spine	







12:00-13:00	Luncheon Symposium A	
13:00-14:30	Full Endoscopic Session Moderators: Konstantinos Vlahos, TBA	
13:00-13:15	Neuromodulation in Degenerative Spine Disease Demetris Peios	
13:15-13:30	Intra Foraminal approach Pavlos Christodoulou	
13:30-13:45	Trans Laminar approach  Dimitris Papageorgiou	
13:45-14:00	Tubular and Endoscopic approaches Comparison for Lumbar DDD Alex Brodis	
14:00-14:15	Full Endoscopic Decompression in Spinal Stenosis Sebastian Ruetten	
14:15-14:30	Discussion	
14:30-15:30	CranioCervical Junction  Moderators: Ioannis Magras, TBA	
14:30-14:45	CranioCervical Junction Disorders Nikos Paidakakos	
14:45-15:00	Fractures of the CranioCervical Junction Konstantinos Barkas	
15:00-15:15	CranioCervical Junction Tumors Athanasios Spiliotopoulos	
15:15-15:30	Lessons Learned during Surgery Lateral Mass AtlantoAxial Junction Dimos Bouramas	







16:00-17:00	Recurrent lumbar degenerative disk disease (LDDD), treatment strategies Moderators: Konstantinos Fountas, TBA	نها
16:00-16:15	Diagnosis and conservative treatment for Recurrent Lumbar DDD Ioannis Nikolaidis	
16:15-16:30	Surgical Treatment for Recurrent Lumbar Disc Prolapse Alex Bibis	
16:30-16:45	Adjacent Segment Disease post Lumbar Fusion for Spinal Stenosis Aris Prassas	
16:45-17:00	Minimal Invasive and Endoscopic Surgery for DDD  George Vastardis	
17:00-18:00	The New Era - Integrating Artificial Intelligence in Spine Surgery Moderators: Panagiotis Zoumpoulis, Vasilios Vougioukas	نها
17:00-17:15	Artificial Intelligence in patient pre operative evaluation and prognosis of post operative outcome in spinal surgery Pavlos Angourakis	
17:15-17:30	Cybernics, IoT/IoHT in functional regeneration post spinal cord injuries  Konstantinos Starantzis	
17:30-17:45	Wireless navigation in complex spine cases: should we trust the machine?  Vasilios Vougioukas	
17:45-18:00	Spinal metastatic disease - impact of artificial intelligence in a global treatment protocol  Panagiotis Zoumpoulis	
18:00 - 19:00	Bulgarian Friendship Meeting	



**PROGRAM** 



### HALL CYCLADES

	Moderators: Nikolay Gabrovsky, TBA	
18:00-18:15	Robotics in neurosurgery Peter Ilkov	
18:15-18:30	3d printing in neurosurgery Nikolay Velinov	
18:30-18:45	MIS 9-year experience - lessons learned Nikolay Gabrovsky	
18:45-19:00	Spinal navigation for challenging vertebroplasties Peter Ilkov	



**PROGRAM** 



### HALL PARTHENON

08:30-10:00	Panel 7: Osteoporotic vertebral fractures: Management options Moderators: Michael Wang, TBA
08:30-08:45	Current state of the osteoporotic vertebral fractures management  Jose Antonio Soriano Sanches
08:45-09:00	Conservative management of osteoporotic vertebral fractures Abdul Karim Msaddi
09:00-09:15	When and how vertebral augmentation? Sait Naderi
09:15-09:30	When and how open surgery for osteoporotic vertebral fractures? Rully Hanafy Dahlan
09:30-09:45	How to prevent new osteoporotic fractures?  Abdelfattah Saoud
09:45-10:00	Discussion
10:00-10:30	Coffee break and poster view
10:30-12:00	Plenary Session 4: Complication avoidance in spinal deformity surgery  Moderators: Paulo Pereira, Ioannis Gelalis
10:30-10:45	Current state of complication avoidance in spinal deformity surgery Richard Assakar
10:45-11:00	How to prevent implant failure in deformity surgery?  David Marks
11:00-11:15	How to manage a failure in osteoporotic patients?  Amjad Shad
11:15-11:30	Can navigation and robotics reduce complications?  Joseph S. Butler



# **CONGRESS**PROGRAM



11:30-11:45	Special measures in elderly patients Lilyana Angelov
11:45-12:00	How to improve outcomes in spinal deformity surgery? Elias Papadopoulos
12:00-12:15	Closing Ceremony - WS9 CONGRESS



**PROGRAM** 



### HALL ULYSEES

08:30-10:00	Panel 8: Craniocervical junction instability: Management options Moderators: Atul Goel, TBA
08:30-08:45	Current state of the craniocervical junction instability management Atul Goel
08:45-09:00	Complex Chiari: Should we change our management?  Joachim Oertel
09:00-09:15	Management of pediatric Chari Guirish Solanki
09:15-09:30	Management of rheumatoid basilar invagination loannis Polythodorakis
09:30-09:45	When to add occiput to fusion?  Mehmet Zileli
09:45-10:00	Discussion
10:00-10:30	Coffee break and Poster view
10:30-12:00	Oral presentations 5 (8 min talk, 2 min discussion) Moderators: Hyeun Sung Kim, TBA
10.20.10.40	
10:30-10:40	Paper 37
10:30-10:40	Paper 37 Paper 38
10:40-10:50	Paper 38
10:40-10:50 10:50-11:00	Paper 38 Paper 39
10:40-10:50 10:50-11:00 11:00-11:10	Paper 38 Paper 39 Paper 40
10:40-10:50 10:50-11:00 11:00-11:10 11:10-11:20	Paper 38 Paper 39 Paper 40 Paper 41
10:40-10:50 10:50-11:00 11:00-11:10 11:10-11:20 11:20-11:30	Paper 38 Paper 39 Paper 40 Paper 41 Paper 42



**PROGRAM** 



### HALL CYCLADES

08:30-10:00	Oral presentations 6 (8 min talk, 2 min discussion)
08:30-08:40	Paper 46
08:40-08:50	Paper 47
08:50-09:00	Paper 48
09:00-09:10	Paper 49
09:10-09:20	Paper 50
09:20-09:30	Paper 51
09:30-09:40	Paper 52
09:40-09:50	Paper 53
09:50-10:00	Paper 54
10:00-10:30	Coffee break and poster view
10:30-12:00	Eurospine Symposium: Lumbar Degenerative Scoliosis. From A to Z. Moderators: Thomas Blattert, Stavros Stavridis
10:30-10:45	Introduction and case presentation Stavros Stavridis
10:45-11:00	Surgery avoidance and non-surgical management. When and how?  Arion Kapinas
11:00-11:15	Decompression only. When and how? Konstantinos Paterakis
11:15-11:30	Short fusion. When and how? Efthimios Samoladas
11:30-11:45	Long fusion. When and how? Sotiris Papastefanou
11:45-12:00	Discussion





12:00-13:30	AOSpine Symposium on primary spine tumors Moderators: Andreas Morakis, Nick Sekouris
12:00-12:15	Epidemiology and genetic profile of primary spine tumors Parmenion Tsitsopoulos
12:15-12:30	Interventional radiology for diagnosis and treatment of primary spine tumors  Alex Kelekis
12:30-12:45	Radiosurgery: Indications and limitations for primary spine tumors Vassilis Kouloulias
12:45-13:00	Surgical strategies and techniques in extradural vertebral primary tumors  Spyridon Pneumaticos
13:00-13:15	Surgical strategies and techniques in intramedural lesions  Marcel Ivanov
13:15-13:30	Discussion
13:30-14:30	Lunch Break
14:30-15:30	Spondylodiscitis Moderators: Emmanouil Tsafantakis, Achilles Bountis
14:30-14:45	Epidemiology, clinical presentation and differential diagnosis of spondylodiscitis  Konstantinos Zygogiannis
14:45-15:00	Approaches of microbiologic diagnosis of spondylodiscitis.  Andreas Stylianidis
15:00-15:15	Radiografic evaluation Konstantinos Pikoulas
15:15-15:30	Conservative and surgical treatment Savvas Moschos



**PROGRAM** 



### HALL CYCLADES

15:30-16:30	Debates Moderators: George Sapkas - Ioannis Makrygiannakis
	To operate or not in painless drop foot
15:30-15:45	Not to operate painless drop foot  Savvas Grigoriadis
15:45-16:00	To operate painless drop foot  Balogiannis loannis
16:00-16:15	To remove implants or not after thoracolumbar fracture fixation Against removing Implants Andreas Baikousis
16:15-16:30	In favor to remove implants Stavros Stavridis

