SPINE20

RIYADH · NOVEMBER 10–11, 2020

HYBRID MEETING

Inaugural Meeting **Guide**

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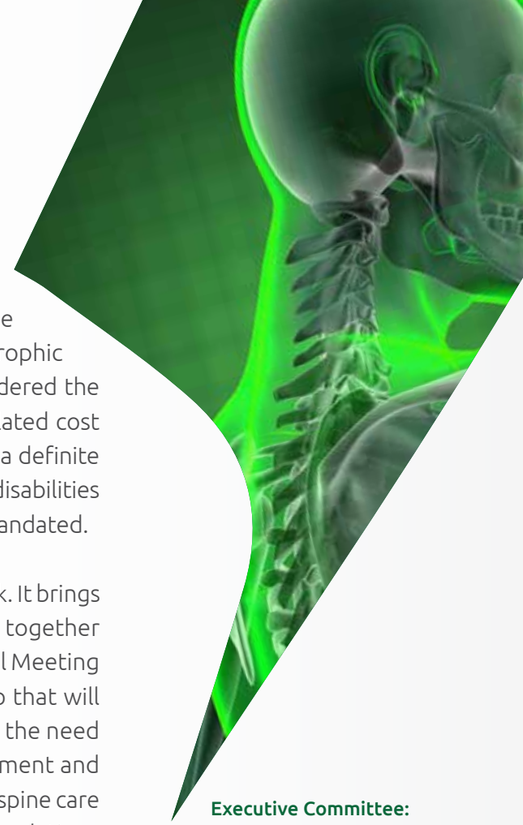
WELCOME ADDRESS



Eighty percent of the population will experience back pain at some stages of their life, some of those will end up having a catastrophic consequences, this would explain why Spine diseases are considered the major cause of disability globally and why it has the highest related cost in industrialized countries and emerging countries too. There is a definite need to improve spine care globally in order to decrease spine disabilities and costs. Advocacy, education and government policies are mandated.

SPINE20 can best be described as a global spine alliance think tank. It brings spine interested professional societies from all over the world together aiming to promote a spine care of excellence. SPINE20 Inaugural Meeting is created to establish a sustainable advocacy and policy group that will result in improved understanding of global spine health issues, the need for improved interprofessional education, access to care, treatment and prevention of disability for spine patients. The goal is to optimize spine care options for patients throughout the world by making recommendations to G20 members and Sherpas.

The working theme for SPINE20 in Riyadh 2020 is **"Ensuring Access to Quality Spine Care to Prevent Disability Throughout the World"** and its burden to global economies. Throughout the two days event, there will be eight Symposia focused on the most important subjects related to spine care, keynote lectures from world authorities and interactive debate sessions from a multidisciplinary faculty. All participants in the meeting and their respective societies will be included in the written policy recommendations to the G20 members and a publication in a peer reviewed journal. This program is for those leaders in the field who want to have a voice in enhanced global spine care. We have an interesting line up of societies already and more in the works.

On behalf of the Executive and Scientific Program Committees of SPINE20, it would be an honour and a privilege to welcome all esteemed experts and professional societies from all over the world for the first SPINE20 ever, we are looking forward to seeing you in November and achieve together successful meeting that should make a wonderful history.

We welcome you all, wishing to achieve together a successful event!

Executive & Scientific Committee
SPINE20, November 10–11, 2020

Executive Committee:

SSS
Sami I. AlEissa.
Ahmed Alturkistany.

DWG
Frank Kandziora.
Ralph Kothe.

EUROSPINE
Margareta Nordin.
Thomas R. Blattert.

NASS
Eeric Truumees.
Eric Muelhbauer.

Scientific Committee:

SSS
Faisal Konbaz.
Sami I. AlEissa.
Ahmed Alturkistany.
Hana Alsobayel.
Yahya Alqahtani.

DWG
Frank Kandziora.
Ralph Kothe.

EUROSPINE
Margareta Nordin.
Paulo M. Pereira.
Thomas R. Blattert.

ASSI
H.S Chhabra.
S. Rajasekaran.

NASS
Edward Dohring.
Eeric Truumees.
Eric Muelhbauer.
Jeffery Wang.
William Sullivan.

WHO WE ARE?

G20

The Group of Twenty, or the G20, is the premier forum for international economic cooperation. The G20 brings together the leaders of both developed and developing countries from every continent. Collectively, the G20 economies account for around 90% of the gross world product (GWP), 80% of world trade, two-thirds of the world population, and approximately half of the world land area. Throughout the year, representatives from G20 countries gather to discuss financial and socioeconomic issues.

Historically, the G20 was founded in 1999 at the level of Finance Ministers and Central Bank Governors, the G20 gathered for high level discussions on macro-financial issues. In the wake of the 2008 global financial crises, the G20 was elevated to include the leaders of member countries. The first G20 Leaders' Summit took place in Washington D.C in November 2008. Consonantly, the G20 agenda expanded beyond macro financial issues, to include socio-economic and development issues.

The presidency of the G20 rotates between member countries every year. The presidency plays a leading role in setting the agenda and organizing the Leaders' Summit, which is attended by the G20 Heads of State or Government. At the Summit, the leaders issue a declaration, or communiqué, based on policy discussions at meetings held throughout the year. In the run-up to the Summit, the presidency hosts several meetings featuring Ministers, senior government officials as well as civil society representatives. At the government level, the G20 work is organized around the Finance and Sherpa Tracks, while civil society assembles through Engagement Groups.

G20 Members are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union.

Eight official engagement groups; Business 20 (B20), Youth 20 (Y20), Labour 20 (L20), Think 20 (T20), Civil 20 (C20), Women 20 (W20), Science 20 (S20), Urban 20 (U20) and many Non-official engagement groups of different interests are carrying out different forms of activities throughout the year in order to provide the leaders during the summit with specific recommendations of their concerns.

For the Year 2020, Saudi Arabia will be the hosting country for G20. The economy of Saudi Arabia is considered to be the largest in the Middle East and the 18th largest in the world. Saudi Arabia has the world's second-largest proven petroleum and fifth largest proven natural gas reserves, as such, Saudi Arabia is considered an "energy superpower" . The Saudi G20 Presidency began 1 December 2019 and will end on 30 November 2020, the Leader's summit will be held on 21- 22 November 2020 in Riyadh.

SPINE20 INITIATIVE

Disorders of the spine with its multiple pathologies and trauma are the number one cause of disability that put enormous burden on the economy, back ailments can lead to extreme pain, inability to function, and subsequently job loss. Advocacy, education, and government policies are urgently needed in order to provide a value-based spine care where standardized practice based on best available evidence while controlling the health care cost.

SPINE20 is an advocacy group founded in 2019 by the Saudi Spine Society (SSS), EUROSPINE, the North American Spine Society (NASS) and the German Spine Society (DWG) in an effort to improve spine care on a global level through recommending policies in the G20 countries and beyond that help them alleviate the burden of spine disease through various means including stimulating better spine health, advance spine research, enhancing spine innovation pathways and improving spine care and treatments through polices and support from governments.

SPINE20 is a think tank that would also be in a position to provide governments with the expertise needed to improve spine care around the globe. developing a clear calendar of activities and form task-force groups to work on forming evidence-based policy recommendations. The goal is to optimise spine care options for communities and patients worldwide by making recommendations to G20 members and Sherpas. SPINE20 will be held just prior the G20 Summit in Riyadh from 20–21 November 2020. In 2021 SPINE20 will be held in Italy and 2022 in India just prior to G20 meetings.

The SPINE20 is looking to be one of the well-recognized non-official groups, currently, it is registered under the C20 official engagement group.

How can SPINE20 help governments alleviate the burden of spine disease and disability?

Serve as resource
for governments and larger institutions (national or international) in spine-related healthcare and prevention.

Advocate
for the prevention of spinal disorders e.g. exercise and education.

Stimulate innovation
to promote spine health.

Advance spine research
through advocacy for funding to improve our ability to care for patients.

Facilitate access to spine care and treatment
to improve function and decrease disability of spine patients.

What sets SPINE20 apart from other medical societies?

Opening doors for international advocacy
Few other medical society groups have been so proactively engaged in fostering this kind of international advocacy.

Improving spine health care on a global scale
SPINE20's advocacy could result in some significant benefit for our members in various countries and the spine patients we serve.

SPINE20

Mission

Optimise treatment in the global community to ensure patients have access to the best spine care possible in their respective regions.

Vision

A world where appropriate spine care helps minimise global disability and dramatically improve the lives of those suffering from spine problems so their families and communities can thrive.

Objectives

The Societies will further the mission of the Spine20 initiative by collectively working on the following objectives:

a. Educating all levels of health care practitioners in the global community on appropriate evidence-based spine care.

b. Educating spine patients and their families and communities by providing high quality adapted educational materials.

c. Enhancing local support and economic conditions for spine practitioners by Partner good spine health policies within health ministries and governmental programs across the globe.

d. Improving global research funding for spine care (including public health, prevention, treatment alternatives and prevention of disability from spinal disorders).

e. Serving as a resource for governmental agencies and Sherpas for establishing improved access and spinal care globally and within each Party's home country using an extensive global network of spine societies.

f. Serving as an advocacy group globally and nationally through this identified Spine20 initiative.

g. Improving access to spine care and spine specialists globally through advocacy within the global community and within the Societies' home countries.

h. Establishing a minimum standard for training of care and prevention of spinal disorders globally for all those who treat spine patients, including nurses, chiropractors, physical therapists, osteopaths, exercise physiologists, general practitioners, surgeons and other spine specialists at the highest levels.

Founding societies

الجمعية السعودية للعمود الفقري
SAUDI SPINE SOCIETY

EURO SPINE

Deutsche Wirbelsäulengesellschaft
DWG

NASS
ADVANCING GLOBAL SPINE CARE

Saudi Spine Society (SSS)
www.saudispine.org

EUROSPINE
www.eurospine.org

German Spine Society (DWG)
www.dwg.org

North American Spine Society (NASS)
www.spine.org

Partner societies

Spine related professional society from all over the world who showed an interested in contributing to the SPINE20 initiative in different means, their proposed contribution in subjected to the approval of the executive committee as per SPINE20 policies.

Partner societies for SPINE20, Riyadh, November 10-11, 2020

ASSI ASSOCIATION OF SPINE SURGEONS OF INDIA

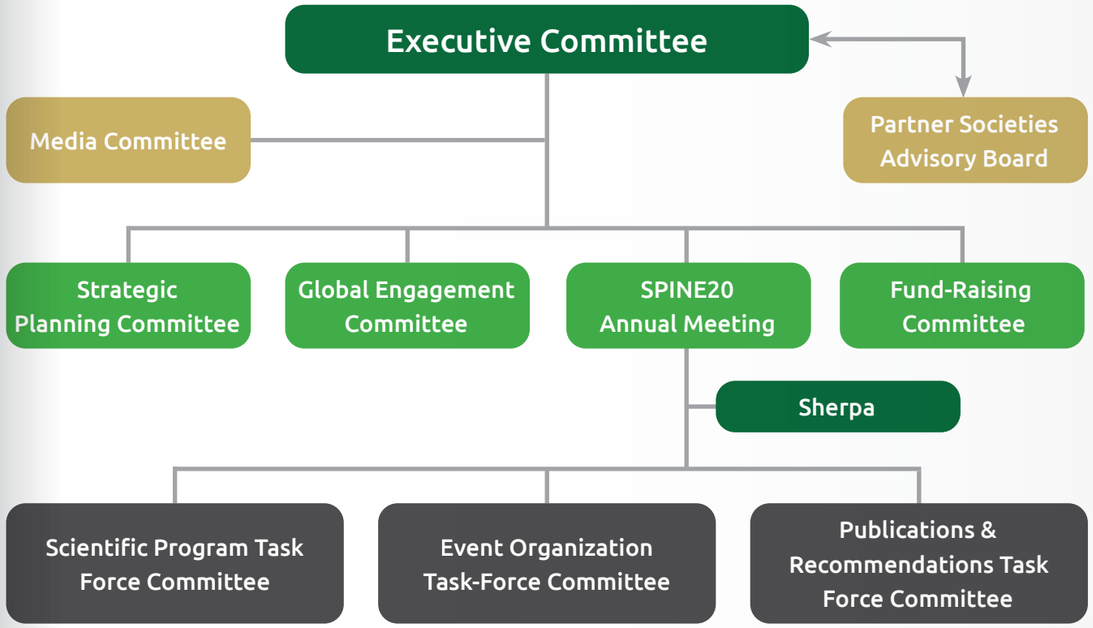
Association of Spine Surgeons of India (ASSI)
www.assi.in

Italian Spine Society
www.gis-italia.org

SPINE20 Organizational Structure

The Executive Committee is made up of:

- Saudi Spine Society, EUROSPINE, DWG, NASS (founding societies).
- Italian Spine Society (Host 2021).
- Association of Spinal Surgeons of India (Host 2022).



Committees and Task Forces

1. Strategic planning committee:

Aims to clarify and solidify SPINE20 purpose and mission and formulate a plan in how to achieve our goals.

2. Fund-Raising Committee

Aims to ensure financial resources and identify potential income opportunities in order to cover SPINE20 activities and general expenses.

3. Global Engagement Committee

Aims to internationalize the SPINE20 by building bridges and collaboration with professional, public, governmental and non-governmental organizations.

4. Scientific Program Task Force Committee:

Aims to develop the scientific program for the annual meeting as per the approved formatting by the executive committee.

5. Publications and Recommendations Writing Task Force Committee

Aims to rephrase and finalize the recommendations proposed by the scientific committee and prepare the final version for publications in peer reviewed journals and submit a version of recommendations to the G20 Sherpa.

6. Event Organization Committee liaison with G20 (task force)

Aims to assure a proper logistical arrangement for the SPINE20 meeting.

Inaugural SPINE20 meeting

Inaugural SPINE20 meeting

For SPINE20 Inaugural meeting, we are looking for an extremely organized and highly professional meeting, there will be a clear organizational structure, a year calendar of activities, assigned committees and taskforces that work in different projects. The ultimate goal of the meeting is to provide an evidence based scientific program where a clear and strong recommendation and policies could successfully emerge. These recommendations will be debated and approved by esteemed spine expert and professional societies prior to present them to the G20 leader. **SPINE20 will call for its first meeting in Riyadh, Nov. 10-11, 2020.**

Scientific Program

SPINE20 will be formed of 8 symposia, each symposium will address different spine related domains to. Specific evidence-based recommendations.

A multidisciplinary international scientific committee has prepared the scientific content.

The SPINE20 programme should always include:

- Subjects of interest of the host country.
- Subjects addressing the announced theme of the G20 meeting in a given year.
- Permanent domains that address universal spine health, spine care, spine research and innovation.

Target Audience

- Spine Practitioners.
- Global Spine leaders.
- Health Economists.
- Public Health Leaders.
- Health Strategic planners.
- Spine Industrial Leaders and Investors.
- Government Health Officials and Legislators.
- Non-Government Organisations Interested in Spine Health.

Recommendations and Publication

The Approved SPINE20 recommendations for each meeting will be published every year in a peer reviewed journal to be available for concerned people and organizations.

How will we ensure continuity?

SPINE20

SPINE20 Saudi Arabia, 2020

Suggested policy recommendations for improving spine care and health from the symposia presenters will be reviewed and discussed onsite and submitted to G20 leaders.

SPINE20

SPINE20 Italy, 2021

A status update on post-SPINE20 Saudi Arabia outcomes will be presented at the opening session of 2021 SPINE20 Italy .

SPINE20

SPINE20 India, 2022

A progress report on the impact of SPINE20 Italy will be presented at the opening session of 2022 SPINE20 India .

Further follow up will be carried out each year during the SPINE20 meeting to address the progress of adopting the recommendation, SPINE20 meeting will be carried out each year in the country hosting the G20 meeting.

HISTORY

SPIRITUAL

NATURE

PEOPLE

CULTURE

FAMILY

ECONOMY

FUTURE

URBANIZATION

SPORT

SAUDI ARABIA

The Story of Riyadh

Riyadh is a large metropolis surrounded by desert. The city, which is the Kingdom's capital, has an inspiring tale of growth, triumph, and prosperity. Located in the heart of the country in an area historically and locally known as the Najd, Riyadh currently boasts a population of over 7 million people, attracting new residents every day.

Riyadh's landmarks demonstrate a visual walk-through of the Kingdom's historical timeline; from Al-Masmak Fort, Murabba Palace, and the Red Palace, to the modern architecture of King Abdullah Financial District, and the various cultural and art spaces throughout the city. Ad Diriyah, located on the outskirts of Riyadh, is at the traditional heart of the country with historical distinction as the

Kingdom's original capital. Extensive efforts have been made to preserve and renovate the area; while also making it accessible to the general public—with lively shops, restaurants, and open air spaces.

Scientific Program

The Scientific program is structured in multiple mini-symposiums formatting. Throughout the two days event, there will be eight symposiums focused in the most important subjects related to spine care. These symposiums were chosen carefully by internationally represented multidisciplinary spine experts forming the SPINE20 scientific committee. Each symposium will include evidence-based lectures, debate session and voting session for the proposed recommendations. There will be as well keynote lectures by world experts from different backgrounds.

The ultimate goal of the SPINE20 meeting is to provide a platform where the experts could meet, discuss and create policy recommendations on spine health care that could be presented to the G20 leaders and worldwide health authorities. The eight symposiums are as follow:

SPINE20 Symposiums

	Symposium	Chairman & Co-Chairman	
1	Aging spine in aging population	Frank Kandziora	Edward Dohring
2	Future of spine care	Thomas Blattert	H. S. Chhabra
3	Spinal Cord Injuries	Faisal Konbaz	Bernardo Misaggi
4	Children and adolescent spine	G. Constanzo	Ahmed Alturkistany
5	Spine health burden on economy	E. Truumees	Eric Muehlbauer
6	Spine educational standards	Paulo Pereira	Ralph Kothe
7	Spine related disabilities	Margareta Nordin	Sami AlEissa
8	Patient safety & spine care	S. Rajasekaran	William Sullivan

SPINE20 Inaugural Meeting Team

November 10-11, 2020

Dr. Sami I. AlEissa
Saudi Arabia
Chair, SPINE20

Prof. Thomas Blattert
Germany
Co-Chair, SPINE20

Prof. Eeric Truumees
USA
Co-Chair, SPINE20

Dr. Faisal Konbaz
Saudi Arabia
Chair, Scientific Committee

Prof. Margareta Nordin
France
Chair, Publication
& Recommendation

Mr. Eric Muehlbauer
USA
Chair, Global Engagement

Dr. A. Alturkistany
Saudi Arabia

Prof. Bernardo Misaggi
Italy

Dr. Edward Dohring
USA

Dr. Fahad Alhelal
Saudi Arabia

Prof. F. Kandziora
Germany

Prof. G. Constanzo
Italy

Dr. Yahya Alqahtani
Saudi Arabia

Prof. H.S. Chhabra
India

Dr. Hana AlSobayel
Saudi Arabia

Prof. Jeffrey Wang
USA

Prof. Jörg Franke
Germany

Prof. Koji Tamai
Japan

Prof. Marco Teli
Italy

Mr. Michael Piccirillo

Prof. Paulo M. Pereira
Portugal

Prof. Ralph Kothe
Germany

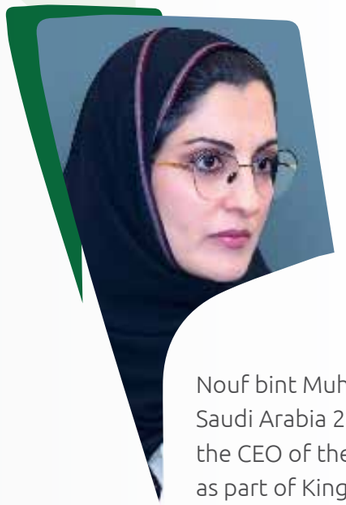
Dr. Sohail Bajammal
Saudi Arabia

Prof. S. Rajasekaran
India

Prof. William Sullivan
USA

Dr. Abdullah AlSaeed
Saudi Arabia

Keynote Speakers



Nouf bint Muhammed

Nouf bint Muhammad is the Chair of the official G20 Saudi Arabia 2020's Civil Society Engagement Group and the CEO of the King Khalid Foundation. She has served as part of King Khalid Foundation's Board of Trustees since 1996, playing a key role in shaping the foundation's finances, strategy and activities. Nouf has been a longstanding philanthropist and a strong supporter of civil society and its growth in Saudi Arabia.

She has contributed to the development of the King Khalid Foundation's current strategic direction, focusing on creating equal opportunities and prosperity in Saudi Arabia as well as the Foundation's engagements and support for the non-profit sector. Nouf serves as the Chair of the Saudi ADHD Society, and a member of AlNahda Society for Women. Princess Nouf graduated from the University of Phoenix with a degree in business management and has represented both King Khalid Foundation and the Saudi ADHD Society in several international civil society forums.

Dr. Alarcos Cieza

Dr Alarcos Cieza is a native of Spain. Prior to joining WHO in September 2014, she served as Chair and Professor of Medical Psychology at the Faculty of Social and Human Sciences at the University of Southampton in the United Kingdom. After obtaining her MSc in psychology in Madrid, Spain, she conducted a Master in Public Health and obtained a PhD in Medical Psychology from the Ludwig-Maximillians University in Munich, Germany.

She led the research unit for over ten years at the Department of Physical Medicine and Rehabilitation and then at the Pettenkofer School of Public Health at the Ludwig-Maximilians-University, Munich, Germany.

Dr Cieza oversees WHO's work on vision, hearing, rehabilitation and disability. This includes the implementation of the Universal eye health: a global action plan 2014–2019, the World Health Assembly Resolution 70.13, Prevention of deafness and hearing loss, and the Disability Action Plan 2014-2021.

SPINE20 Program at a Glance

DAY ONE, November 10th

Meetings start at 3:00 pm Riyadh time (UTC +3)

3:00 PM - 3:10 PM	Welcome Message	Sami AlEissa
3:10 PM - 3:20 PM	Role of Societies in promoting global spine care	Eric Muehlbauer
3:20 PM - 3:30 PM	SPINE20 initiative; history, vision, mission & objectives	Margareta Nordin
3:30 PM - 5:00 PM	SPINE20 symposium 1 Aging Spine in Aging Population	Frank Kandziora Edward Dohring
5:00 PM - 6:30 PM	SPINE20 symposium 2 Future of Spine Care	Thomas Blattert H. S. Chhabra
6:30 PM - 6:45 PM	Break	
6:45 PM - 7:15 PM	Keynote Lecture 1; Princess Nouf bint Muhammad	
7:15 PM - 8:30 PM	SPINE20 symposium 3 Spinal Cord Injury	Faisal Konbaz Bernardo Misaggi
8:30 PM - 10:00 PM	SPINE20 symposium 4 Children and Adolescent Spine	Giuseppe Constanzo Ahmed Alturkistany

DAY TWO, November 11th

3:00 PM - 4:30 PM	SPINE20 symposium 5 Spine Educational Standard	Paulo Pereira Ralph Kothe
4:30 PM - 6:00 PM	SPINE20 symposium 6 Spine Related Disabilities	Margareta Nordin Sami AlEissa
6:00 PM - 6:10 PM	Break	
6:10 PM - 6:40 PM	Keynote Lecture 2; Dr. Alarcos Cieza	
6:40 PM - 8:10 PM	SPINE20 symposium 7 Patient Safety & Spine Care	S. Rajasekaran William Sullivan
8:10 PM - 9:25 PM	SPINE20 symposium 8 Spine Health Burden on Economy	Eeric Truumees Eric Muehbauer
9:25 PM - 9:30 PM	Closing Remarks & Announcement for SPINE20 Italy	

Symposia

Aging spine in Aging Population 26

Future of Spine Care 28

Spinal Cord Injury 30

Children and Adolescent Spine 32

Spine Educational Standards 34

Spine Disability 36

Patient Safety and Spine Care 38

Spine Health Burden on Economy 40

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Symposium #1

Aging spine in Aging Population

Overview

The aging population resulting in an aging of the spine is among the most common reasons for disability. While in 2012 810 million people worldwide (11.5 % of global population) have been 60 years or older this number will increase to 2 billion in 2050 (22 % of global population). The cost of disability associated with low back pain reaches up to 6% GDP in some countries and the elderlies are the most affected ones. Common reasons for spinal disability include spinal canal stenosis with walking disturbance, deformity with chronic low back pain and osteoporosis associated with osteoporotic spine fractures.

Symposium Objective

The objective of the symposium is to demonstrate that the aging population and especially the aging spine represent an enormous global burden. It will demonstrate the impact on how our population, especially the growing elder population is affected and the medical perspective of typical diseases, including treatment options for geriatric spine patients. Finally, the symposium will provide recommendations from the SPINE20 group how to address this growing problem.

Topics Highlights

The symposium will present a concept of the aging population, the associated demography, as well as the causes and potential solutions. The natural history of the aging spine and the three most important disease patterns, like spinal canal stenosis, degenerative lumbar deformity and osteoporotic spine fractures will be outlined. Further, the symposium will provide approaches and treatment options to reduce the burden of the aging spine.

Faculty

Speakers

Michael G. Fehlings, Canada
Professor, Neurosurgeon & Spine Surgeon University of Toronto, Toronto, ON

Robert Gunzburg, Belgium
Professor, Orthopedic & Spine Surgery Free University of Brussels

David Wong, USA
Consultant Orthopedic & Spine Surgery
Denver Spine Surgeons, Denver, CO

Sigurd Berven, USA
Professor, Orthopedic & Spine Surgery University of California San Francisco, CA

Yahya Alqahtani, Saudi Arabia
Consultant Orthopedic & Spine Surgery Security Forces Hospital, Riyadh

Co-Chairs

Frank Kandziora, Germany
DWG

Edward Dohring, USA
NASS

DAY ONE (November 10th) - Symposium 1

Aging spine in aging population

3:30 PM - 3:45 PM	The aging of the population: The changing epidemiology of spine disorders, Michael G. Fehlings
3:45 PM - 4:00 PM	The aging of the population: a growing concern for the spine care in the twenty century – natural history, cause and clinical problems. Robert Gunzburg
4:00 PM - 4:15 PM	The “unhappy triad” of the aging spine; Spinal canal stenosis and spondylolisthesis, David Wong
4:15 PM - 4:30 PM	Degenerative deformities Sigurd Berven
4:30 PM - 4:45 PM	Osteoporosis and compression fractures Yahya Alqahtani
4:45 PM - 5:00 PM	Discussion on draft recommendations

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Symposium #2

Future of Spine Care

"Future Strategies to Improve Access to Affordable and Quality Spine Care"

Subject overview

With demographic changes and changing lifestyle, the world would witness more spine problems than ever before. With technological, biological, medical and surgical advances, the future is bright for improved standards of care in spine related disorders. In a global scenario, it is necessary to develop strategies to improve access to affordable and quality spine care. This symposium is focused on the potential advancements which could help achieve this goal.

Symposium Objective

This symposium aims to prioritize most urgent aspects of future developments in spine care for the attention of G20 leaders. The specific objectives would be :

1. To identify and understand the various advances in spine care which could help improve access to quality spine care
2. To discuss strategies on how to improve global access to these advancements in spine care.

Topics Highlights

- Telemedicine.
- Day care centers.
- Virtual reality.
- Robotics.

Faculty

Speakers

Suken A. Shah (USA)
Associate Professor of Orthopaedic Surgery and Pediatrics at Thomas Jefferson University Philadelphia, PA

Alan S. Hilibrand (USA)
Co-Director of Spine Surgery `& Director of the Spine Fellowship Rothman Orthopaedic Institute, Philadelphia, PA

Kern Singh (USA)
Co-Director MIS Institute, Department of Orthopaedic Surgery, Rush University Medical Center, Chicago, IL

Andrea Luca (Italy)
Consultant Spinal Surgeon, Adult & Paediatric Deformity, IRCCS Galeazzi - Milan

Sami Haddadin (Germany)
Chair of Robotics Science & System Intelligence, Munich School of Robotics & Machine Intelligence, Technical University of Munich, Munich

Co-Chairs

Thomas R. Blattert, Germany
EUROSPINE

HS. Chhabra, India
ASSI ASSOCIATION OF SPINE SURGEONS OF INDIA

DAY ONE (November 10th) - Symposium 2

Future of Spine Care	
5:00 PM - 5:15 PM	Role of telemedicine to improve access to quality and affordable care Suken A. Shah
5:15 PM - 5:30 PM	Will day care spine centres take precedence in the future? Alan S. Hilibrand
5:30 PM - 5:45 PM	Prospective application of virtual reality in improving access to quality and affordable spine care Kern Singh
5:45 PM - 6:00 PM	Virtual reality for (remote) education and future of augmented reality in medical care Andrea Luca
6:00 PM - 6:15 PM	Future of robotics and artificial intelligence in spine care Sami Haddadin
6:15 PM - 6:30 PM	Panel discussion recommendations

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Symposium #3

Spinal Cord Injury

Comprehensive management of spinal cord injury

Subject overview

Spinal cord injury is a devastating disease that carries large social, emotional & financial burden on the patients & their families. These injuries are common in all regions of the world and affects all health care systems. Patients with spinal cord injury require long term care & multidisciplinary management aiming for the best outcome possible. The majority of spinal cord injury patients are from the young population, which also adds further challenge in the form of loss of productivity & trying to optimize their condition to be able to return back actively to the community.

Symposium Objective

1. Highlight the significant burden of spinal cord injuries on the health care system & the economy from the financial, social and medical aspects
2. Present the evidence based medicine comprehensive treatment protocol to ensure the optimal outcomes.
3. Emphasis on the importance of preventive measures.
4. Discuss the latest research updates related to spinal cord injury & the possible future management strategies and what we need to do to prevent fraud treatments for these vulnerable patients
5. Explore the role of Rehabilitation with special attention to long term rehabilitation.

Topics Highlights

- Epidemiology, Economic burden, prevention programs, fighting fraud treatments & experiments.
- Reintegrating the spinal cord injury patients into the community.
- Challenges in the developing economies.
- The role of rehabilitation on the short and long terms.
- Preventive measures.
- Comprehensive management for the spinal cord injured patients.
- Stem cell treatment & other promising treatment strategies.

Faculty

Speakers

Jeff Wang (USA)
Professor of Orthopaedic & Spine Surgery
USC Spine Center, Los Angeles, CA

H.S. Chhabra (India)
Chief of spine services & Medical Director
Indian Spine Surgery Center, New Dehli

Sohail Bajammal (Saudi Arabia)
Assistant Professor Orthopaedic Surgery Consultant Orthopedic & Spine Surgery
Umm Al-Qura University, Mecca

Antonello Valerio Caserta (Italy)
Chief Spinal Cord Injury Rehabilitation Unit, Milan

Co-Chairs

Faisal Konbaz, Saudi Arabia

Bernardo Misaggi, Italy

DAY ONE (November 10th) – Symposium 3

Spinal Cord Injury	
7:15 PM - 7:30 PM	The burden of spinal cord injuries Sohail Bajammal
7:30 PM - 7:45 PM	Comprehensive treatment protocols for the spinal cord injured patients Jeffrey Wang
7:45 PM - 8:00 PM	Patients' return to work following spinal cord injury: the role of rehabilitation Antonello Valerio Caserta
8:00 PM - 8:15 PM	Ethics in spinal cord injury care & research: Current concerns & possible solutions H.S. Chhabra
8:15 PM - 8:30 PM	Panel discussion recommendations

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Symposium #4

Children and Adolescent Spine

Subject overview

In the past, back pain was considered to be uncommon problem among children and adolescents, however, recent reports suggest that back pain is relatively common in this age group. Approximately 50% of kids and teenagers experience back pain at some point, up to 10% of them may have it severe enough to keep them out of school or sports. Although most back pain is generally not due to an underlying serious problem, this is not always the case, conditions like tumors, infections, deformities, spondylolysis or trauma should be always rolled out, as a matter of fact, some spine diseases may worsen severely in absence of back pain as a clinical presentation. Parents and spine practitioner should always have a high index of suspicion to rolled out the presence of red flags in the kids' clinical presentation.

Symposium Objective

1. Highlight the importance of the unique nature of spine health in kids and adolescent.
2. Develop recommendations that address preventive, detective and quality interventions measures in approaching and managing back pain.

Topics Highlights

- Healthy spine in a healthy child; proper nutrition and efficient physical exercises.
- Back Pain in growing child, should we get worried?
- Early detection of major spine pathologies in kids, how could we make it efficient.
- Complexity of pediatric spine pathology, expertise and resources.
- Spine pathologies in kids, do they behave different.
- Access to quality spine care for kids in limited recourses areas, how could we help?.

Faculty

Speakers

Marco Crostelli (Italy)
Consultant on pediatric spine
Ospedale Pediatrico Bambino Gesù, Roma

Carlo Ruosi (Italy)
Professor of orthopedics, Università Federico II, Napoli

Marco Brayda Bruno (Italy)
Consultant on spine surgery, Istituto Ortopedico Galeazzi, Milan

Bernardo Misaggi (Italy)
Chief of Spinal Surgery Unit
Orthopedic Institute G. Pini, Milan

Majed AlOsaimi (Saudi Arabia)
Consultant Pediatric Spine Surgeon, King Abdulaziz Medical City, Riyadh

Co-Chairs

Giuseppe Costanzo, Italy

Ahmed Alturkistany, Saudi Arabia

DAY ONE (November 10th) – Symposium 4

Children and adolescent spine	
3:00 PM - 3:15 PM	Spine Disease in Pediatric Population, how do they behave different? Majed Alosaimi
3:15 PM - 3:30 PM	Fitness, nutrition and obesity in young population Bernardo Misaggi
3:30 PM - 3:45 PM	Prevention (screening); Best and cost effective conservative treatment both in developing and industrialized countries. Marco Crostelli
3:45 PM - 4:00 PM	Complexity of Spine pathology of growing spine: infections, tumours, deformities; Role of genetics and cost -effective diagnostic tools Carlo Ruosi
4:00 PM - 4:15 PM	Indications and strategies for surgical treatment; options to reduce risk, blood loss and instrumentation costs in developing countries. Marco Brayda Bruno
4:15 PM - 4:30 PM	Panel discussion recommendations

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Symposium #5

Spine Educational Standards

Subject overview

Continuing education is a demand in all professions, but it assumes particular relevance in health sciences, in order to ensure that professionals maintain their skills and competence, while they learn about new and developing areas in their field. In the particular case of spine care, knowledge advances at a fast pace and treatments frequently involve a multidisciplinary team. Each professional must understand his/her role within the team and be aligned with the treatment goals, in order to convey a coherent message to the patient. Hence, continuing education in an interdisciplinary environment becomes imperative to ensure the best healthcare for patients with spinal problems. Postgraduate curricula for professionals treating spine patients must be standardized, so that it is possible to evaluate and compare results, optimize resources and provide value-based healthcare. On the other hand, educational standards and curricula must adapt to the most prevalent spine-related conditions in the population, the needs and priorities of the health system and the available resources.

Symposium Objective

This symposium aims to provide a platform for discussion on the importance of continuing education for health professionals in an interdisciplinary context globally and about its impact on spine-related health of populations.

Topics Highlights

- The importance of continuing adult learning in medicine and its impact on health.
- Education on spine-related problems globally.
- Interdisciplinary education as a model to improve spine-related health of populations.
- Education curricula for healthcare professionals treating patients with spine-related pathologies.
- How to adapt standards globally, across regions/countries with sundry resources, cultures and healthcare priorities.

Faculty

Speakers

Dominique Rothenfluh, (United Kingdom)
Consultant Orthopedic Surgeon
Oxford University Hospitals, Oxford

Hana I. Alsobayel, (Saudi Arabia)
Physiotherapy Consultant & Associate Professor, Rehabilitation Sciences
College of Applied Medical Sciences, King Saud University, Riyadh

Mehmet Zileli, MD (Turkey)
Professor of Neurosurgery
Ege University Neurosurgery Department, Izmir

Jamiu O. Busari (Netherlands)
Consultant Pediatrician & Dean, Health Professions Education, HOH Academy, Aruba, Associate professor of medical education, Educational development and research department
Maastricht University, Maastricht

Edward J. Dohring, MD (USA)
Orthopedic surgeon
Spine Institute of Arizona, Scottsdale, AZ

Co-Chairs

Paulo Pereira, Portugal
EUROSPINE

Ralph Kothe, Germany
DWG

DAY TWO (November 11th) – Symposium 5

Spine Educational Standards	
3:00 PM - 3:15 PM	The importance of continuous adult learning in medicine and its impact on health Jamiu Busari
3:15 PM - 3:30 PM	Education curriculum developed by EuroSpine, including surgeons and non-surgeons, research and interdisciplinar care Dominique Rothenfluh
3:30 PM - 3:45 PM	Interprofessional education as a model to improve spine-related health of populations Hana Alsobayel
3:45 PM - 4:00 PM	Spine education globally, with a particular focus on less developed countries Mehmet Zileli
4:00 PM - 4:15 PM	Educational standard for spine Practitioners Edward J. Dohring
4:15 PM - 4:30 PM	Panel discussion recommendations

SPINE20
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Symposium #6

Spine Disability

Subject overview

It is estimated that more than 1 billion people are disabled globally. Spine pain i.e. low back pain and neck pain are among the most common reasons for disability. In fact, low back pain is the leading cause of Years Lived with Disability (YLDs) in the world. The cost of low back pain disability alone reaches up to 6% of GDP in some countries. Women, the elderly and low-income populations are the most affected, thus, it is urgent for governments to mitigate the increasing burden of spine disability on health, the economy, and our social security systems and by developing policies to prevent its development and reduce its human and economic burden.

Symposium Objective

This symposium aims to increase the understanding of the enormous global burden of disability related to spine disorders. We will demonstrate its impact from a medical, a biopsychosocial and environmental perspectives. Specifically, we will show how it impacts the health of our populations, our economies, and the productivity of our workforces. The symposium will consider all age groups. Children and adolescents, the active working population, and the growing elderly population. The symposium will provide recommendations from the SPINE20 group for the prevention of spine disability.

Topics Highlights

The symposium will present the concept of disability and loss of function as per The World Health Organization's (WHO) recommendations. The presentations will answer the following questions.

» What does it mean to have a spine ailment and being disabled ?

» Evidence examples why the community and government should care.
» Why it must be a priority to prevent spine disability in children and adolescents, the adult , and the elderly populations.
» The symposium will provide facts and examples of approaches, successful interventions, and policies to reduce the burden of spine disability.
» The symposium will give recommendations for action at government and World Organization levels.

Faculty

Speakers

Pierre Côté (Canada)
Professor and Canada Research Chair in Disability Prevention and Rehabilitation, Faculty of Health Sciences, Ontario Tech University. Director, Centre for Disability Prevention and Rehabilitation at Ontario Tech University and CMCC, Oshawa, ON

L. Rachid Salmi (France)
Professor, Université de Bordeaux, Institut de santé publique, d'épidémiologie et de développement (ISPED), Bordeaux School of Public Health (past-chair) ,INSERM U-1219, Bordeaux Population Health (Injury Epidemiology, Transportation, Occupation team), Bordeaux

Hazzaa Al Hazzaa (Saudi Arabia)
PhD, Lifestyle and Health Research, Health Science Research Center, Princess Nourah bint Abdulrahman University, Riyadh

Andrew Briggs (Australia)
Professor of Health Systems and Services Research, School of Physiotherapy and Exercise Science, Curtin University, Perth

Alexandra Rauch (Switzerland)
Sensory Functions, Disability and Rehabilitation Unit; Department for Noncommunicable Diseases; World Health Organization; Geneva

Co-Chairs

Margareta Nordin, France
EUROSPINE

Sami Aleissa, Saudi Arabia
SAUDI SPINE SOCIETY

DAY TWO (November 11th) – Symposium 6

Spine disability	
4:30 PM - 4:45 PM	What is disability and what does it mean for patients, the community, and governments ? Pierre Côté
4:45 PM - 5:00 PM	Evidence needs for sound prevention and policy recommendations regarding disability" L. Rachid Salmi
5:00 PM - 5:15 PM	Physical Activity and Bone Health in Children and Adolescents: A Chance to Maximize Peak Bone Mass. Hazzaa Al Hazzaa
5:15 PM - 5:30 PM	Supporting integrated care in spinal pain : implications for global health policy with focus on the elderly population. Andrew Briggs
5:30 PM - 5:45 PM	WHO Rehabilitation 2030: Development of a Package of Interventions for Rehabilitation - Interventions for Low Back Pain. Alexandra Rauch
5:45 PM - 6:00 PM	Panel discussion recommendations

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Symposium #7

Patient Safety and Spine Care

Subject overview

The number of spine surgeries is ever increasing globally and they are associated with overall higher rates of complication due to the nature of the bony and the intimately related major neuronal and vascular structures. These complications may happen intra-operatively or the postoperative period and literature shows that unfavourable outcome may range from 10 to 15% for simple micro-discectomies. These can however be as high as even 50% for adult spinal deformities where the surgical time is prolonged, the blood loss is high and the patient may have many co-morbidities. Being a highly sensitive domain, these complications have attracted a high incidence of medico-legal issues with huge compensations.

With this background, the need for taking necessary steps to ensure utmost safety of patients undergoing spinal surgery cannot be understated and this is the topic of discussion for symposium.

Symposium Objective

The major objective of the symposium is to highlight the impact and cost of unsafety and complications in spine surgery. Emphasis will be made on the fact that Safety involves care right from the time of diagnosis to the entire process of treatment. The symposium is targeted to provide an overview of the various risk-stratification protocols to reduce complication, other strategies and patient-specific approaches in surgical decision making which may help in enhancing the patient safety. The role of major technological advancements in spine surgery including navigation, robotics, neuromonitoring etc in reducing the complications will also be discussed.

Faculty

Speakers

Alex Vaccaro (USA)
Professor and Chairman of Orthopaedic
Rothman Orthopaedic Institute
Professor and Attending Surgeon of Neurosurgery, Thomas Jefferson University Hospital Philadelphia, PA

Ajoy Prasad Shetty (India)
Senior Consultant in Spine Surgery, Departments of Orthopaedics, Ganga hospital, Coimbatore

Jeff Wang (USA)
Professor of Orthopaedic & Spine Surgery
USC Spine Center, Los Angeles, CA

Tim Pigott (UK)
Consultant Spinal Surgeon UK
The Walton Centre, Liverpool

Co-Chairs

Shanmuganathan Rajasekaran, India
ASSI

William Sullivan, USA
NASS

DAY TWO (November 11th) – Symposium 7

Patient Safety and Spine Care	
6:40 PM - 6:55 PM	The social and economic cost of unsafety in spine care Alex Vaccaro
6:55 PM - 7:10 PM	Role of risk stratification strategies Ajoy Prasad Shetty
7:10 PM - 7:25 PM	Patient-specific and not physician-specific decisions Jeffrey Wang
7:25 PM - 7:40 PM	Enhancing safety through teamwork Tim Pigott
7:40 PM - 7:55 PM	Role of modern technology Vs Cost in patient safety (navigation, robotics, neuro-monitoring for all cases) Shanmuganathan Rajasekaran
7:55 PM - 8:10 PM	Discussion on draft recommendations

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Symposium #8

Spine Health Burden on Economy

Subject overview

The cost of spine disability and spine care on the global economy is enormous. Spine problems can also have devastating impacts on individual and families. We must examine steps to decrease the burden of spine disease across the globe.

Symposium Objective

To understand spine health Burden on Economy from the aspect of specific and common problems between emerging and developed countries and understand how we might mitigate these impacts.

Topics Highlights

» Spine health Burden on Economy in developing countries.
» The Global Burden of Disease.
» Cost of Spine Care.
» Cost of Disability.
» Limitation of insurance systems.

Spine health Burden on Economy in developed counties
» Focusing on the working population.
» Focusing on the elderly population.
» Focusing on limitation of insurance system.

Disability Prevention – (ACSM)
» Systemic causes.
» Exercise is Medicine Program.

Quality of Life Improvement after Spine Surgery

Faculty

Speakers

Joseph Ihm (USA)
Associate Professor, Northwestern Feinberg School of Medicine
Chicago, IL

Koji Tamai, (Japan)
Professor, University of Osaka, Osaka

Eric J. Muehlbauer (USA)
EXECUTIVE DIRECTOR, North American Spine Society, Chicago, IL

Eeric Truumees (USA)
Professor of Orthopaedic Surgery and Neurosurgery at the Dell Medical School, University of Texas, Houston, TX

Co-Chairs

Eric J. Muehlbauer, USA
NASS

Eeric Truumees, USA
NASS

DAY TWO (November 11th) – Symposium 8

Spine Health Burden on Economy	
8:10 PM - 8:25 PM	Spine Health Burden on Economy in Developing Countries E. Truumees
8:25 PM - 8:40 PM	The Global Burden of Disease: Costs of Spine Care and Disability E. Muehlbauer
8:40 PM - 8:55 PM	Disability Prevention - (ACSM) Joseph Ihm
8:55 PM - 9:10 PM	Quality of Life Improvement after Spine Surgery Koji Tamai
9:10 PM - 9:25 PM	Discussion on draft recommendations

SPINE20 Inaugural Meeting Team

Ahmed Alturkistany *(Saudi Arabia)*

Ahmed Alturkistany is the current president of Saudi Spine Society as well as full time orthopedic and spine surgeon at King Faisal Specialist Hospital and Research Center-Jeddah/ Kingdom of Saudi Arabia. He earned medical degree from King Khalid University in Abha/ Kingdom of Saudi Arabia, then completed Orthopedic residency program at McMaster University in Hamilton/Canada and he became a fellow of the Royal College of physician and surgeon of Canada in 2012. he completed 3 years of fellowship in pediatrics orthopedic and pediatric spine surgery across Canada starting from University of British Columbia, University of Alberta and finally McGill university. Health care management is of a great value for him, for that he earned a master degree in Management from McGill university in order to help to achieve his goals in health care sector in Saudi Arabia. He is proud to be in the executive committee of Spine20.

Bernardo Misaggi *(Italy)*

Prof. Misaggi is an orthopaedic surgeon that has developed a specific experience in vertebral surgery since 1987. He learned from and assisted Prof. G.A. Frassi, who founded the Scoliosis and Vertebral Pathology Center in Gaetano Pini Orthopedics Institute of Milan. He deepened and developed his studies in the field, perfecting the techniques through fellowships in important international centres. He performed more than 5000 vertebral procedures as first operator, mainly scoliosis corrections, trauma surgeries and degenerative torso-lumbar pathologies. Since 2009 is the Chairman of Spine Surgery Unit of Orthopaedics Institute Gaetano Pini.
Author of numerous articles and book chapters , he is professor of the orthopaedic surgery residency programme of the University of Milan. He is Vice President of the Italian Spine Society and Member of European Spine Group and Italian Society of Orthopaedics and Traumatology

Edward Dohring *(USA)*

Dr. Dohring is a graduate of Dartmouth College and Yale Medical School, and completed his Spine Surgery training at the Spine Institute of New England and at the University of Washington Harborview Hospital in Seattle. In 1998 he founded the Spine Institute of Arizona, a multidisciplinary group practice which provides chiropractic, physical therapy, pain management, and surgical care services. Dr. Dohring is Clinical Professor at the Midwestern College of Medicine, and his year- long Spine Surgery Fellowship program has trained over 25 spine surgeons in the newest minimally invasive and navigation- based surgery techniques, some of which he helped research and develop. He is a co-author of the standard nomenclature guide for reporting lumbar MRI findings. Dr. Dohring is Vice-President of the North American Spine Society, former NASS Chair of Education, and has been on Resident and Fellow Education Guidelines Committees with NASS, the AAOS, the ABOS, and the ACGME.

Eeric Truumees *(USA)*

Dr. Eeric Truumees is a fellowship trained, board certified orthopaedic spine surgeon with a special focus on complex, cervical spine reconstruction and spinal trauma surgery. He is Professor of Orthopaedic Surgery and Neurosurgery at the Dell Medical School, University of Texas. He is currently the President of the North American Spine Society.
His academic work has included more than 15 NIH and industry sponsored multicenter trials, which generated over 30 peer reviewed publications of original research, 40 invited publications, and 50 chapters and monographs. He is editor of AAOS Orthopaedic Knowledge Update Spine, 5th Edition. Dr. Truumees' honors include membership in Alpha Omega Alpha, the Cervical Spine Research Society, the American Orthopaedic Association and Detroit Hour Magazine "Top Doctor" status. He is Editor-in-Chief of AAOS Now. Dr. Truumees sits on the editorial boards of the Journal of Bone and Joint Surgery, The Spine Journal, Spine and the Journal of the American Academy of Orthopaedic Surgeons.

Eric Muehlbauer *(USA)*

Excutive Director, North American Spine Society. Mr. Muehlbauer has been Executive Director since September 1994. He became a Certified Association Executive in 2002. He has a Bachelor of Arts from Knox College where he was the Hunter Trophy winner (highest GPA of athletes) and hold the record for most career punt returns. He also has Master of Jurisprudence in Health Law & Policy from Loyola University Chicago Law School. He has done additional coursework on Strategic Perspectives in Non-profit Management at the Harvard University School of Business. NASS has become a well-respected voice in the health policy field and a leader in the areas of Ethics and Hands-on Education through use of its Spine Education and Research Center. He is a member of the American Society of Law, Medicine and Ethics (ASLME) and the American Association of Medical Society Executives (AAMSE).

Fahad -Alhelal *(Saudi Arabia)*

Fahad Alhelal, MBBS, MSc, MBA proud to be a graduate of College of Medicine King Saud University, Riyadh, Saudi Arabia. He successfully completed his orthopedic residency in National Guard Hospital, Riyadh in 2015. Between 2016-2018, he was a clinical spine fellow in London, ON, Canada. His training focused on adult and pediatric spine pathologies. During his fellowship, he shows some passion to Biomechanics of spine in which he acquired his Master of Surgery with thesis title "Design, development, manufacturing and biomechanical testing of Stand-alone cage for posterior lumbar interbody fusion" from Western University London, Ontario 2018. Also, he gains more skills in administrative and business filed by acquiring MBA from Ivey Business School, London, Ontario 2019. Currently, he is working is National Guard Hospital, Riyadh as a Spine Consultant with many clinical and administrative work. He is elected Vice President Saudi Spine Society since 2019-Current time.

Faisal Konbaz *(Saudi Arabia)*

Dr Konbaz is an orthopedic surgery Assistant professor, college of medicine at king Saud Bin Abdulaziz university for health sciences, consultant Orthopedics and spine surgery at king Abdulaziz medical city - national guard health affairs, in Riyadh, KSA. He is currently the chairman of the Continuous professional development committee at the Saudi spine society and the chairman of the scientific committee for the SPINE20 meeting which will be held in Riyadh November 10,11 2020.

Frank Kandziora *(Germany)*

Prof. Kandziora graduated from and was promoted to "Dr. med." by the J. W. Goethe-University in Frankfurt. When he finished his orthopedic training and his PhD thesis, he became associated Professor ("Priv.-Doz.") at the Humboldt-University and Head of the Charite Spine Group at the Center of Musculoskeletal Surgery, Campus Virchow Clinic (CVK). In 2008, he took over the chairman position at the multidisciplinary Center for Spinal Surgery and Neurotraumatology at the BGU Hospital in Frankfurt. Currently, he is teaching at the Goethe-University in Frankfurt. He has published more than 100 original articles, has received multiple scientific awards, and is a board member of several national and international scientific organizations and foundations. He is currently the president of the German spine society (DWG) and the chairman of the EUROSPINE task force of the spine center of excellence certification program.

Giuseppe Constanzo *(Italy)*

President of the Italian Society of spine surgery SICV&GIS; full professor of Orthopedics and Traumatology at Sapienza University and Chief of the Department of Orthopedic Surgery "A" and Spine Deformities at Policlinico Umberto I, Rome.
Since 1979, as a researcher of Rome University with Giorgio Monticell, he focused on the study of spine deformities and pathologies, with long stages in Lyon with Pierre Stagnara, first President of the European Spine Deformities Society; he attended stages at the Queen Mary Hospital in Hong Kong for the study of anterior spine surgery. He was General Secretary of the European Spine Deformities Society, now Eurospine, for the first six years after its foundation. Prof. Giuseppe is an author and Co-author of many books, book chapters and of more than 150 papers and he is a guest speaker in many meetings of national and international Societies of Spine Surgery.

Harvinder Singh Chhabra *(India)*

Dr. Chhabra is Chief of Spine Service and Medical Director at Indian Spinal Injuries Centre, New Delhi. He is the President of International Spinal Cord Society and Associations of Spine Surgeons of India. His expertise is grounded by over 25 years of experience as an orthopedic surgeon. As Chairperson of Prevention Committee of International Spinal Cord Society, he has taken various initiatives amongst which are SCI Day on 05th September and ISCoS Spinal Injury Database. Dr. Chhabra has brought up many research projects in management of spinal cord injuries. Recently, he helped the ISCoS in publishing a textbook on 'Comprehensive Management of Spinal Cord Injuries' as Editor in Chief. He had also helped develop elearnSCI.org, an online learning web-based portal for health professionals on Comprehensive Management of Spinal Cord Injuries as Chief Editor. He is Peer reviewer at various journals. Dr Chhabra has 108 publications and 24 papers & full-length chapters in the leading textbooks to his credit.

Hana I. Alsobayel *(Saudi Arabia)*

Hana Alsobayel is an Associate Professor and consultant in physical therapy at King Saud University in Riyadh, Saudi Arabia. Obtained her MSc. in Rehabilitation Therapy from Queen's University in Canada, followed by PhD in Physiotherapy from King's College London in UK. For over 25 years, she has been involved in academia and research in national and international universities. Her research interests and publications are mainly in self-management of chronic conditions, physical activity assessment and promotion, and cultural adaptation of disability evaluation and outcome measurement. Professionally, she has been active in the development of physical therapy profession nationally and internationally. She is one of the women leaders in higher education in Saudi Arabia through her various senior managerial posts. Her contribution in education and research was acknowledged by the World Physiotherapy by receiving the International Service Award in 2019. She has participated in many international and national conferences and symposia.

Jeffrey Wang *(USA)*

Professor Wang is a Professor of Orthopaedic Surgery and Neurosurgery at the Keck Medical Center at University of Southern California (USC) and being the Co-Director of the USC Spine Center and Fellowship Director of the USC Spine Fellowship, Prof. Wang is the Past Chairman of AOSpine, and on the board of directors of several major spine societies (North American Spine Society, Cervical Spine Research Society, Collaborative Spine Research Society). He is the past President of the Cervical Spine Research Society, and a Past President of the North American Spine Society. Dr. Wang has published over 400 articles, 23 book chapters, and several textbooks. Moreover, he has made over 800 presentations regionally and internationally and has been a visiting professor throughout the United States, Europe, and Asia. He has been the honored guest speaker at several international Spine, Orthopedic, and Neurosurgery Society Meetings. He also serves on multiple editorial boards and is the Editor-in-Chief of the Global Spine Journal

Jörg Franke *(Germany)*

Dr Franke currently serves as Head and Chairmen of the Department of Orthopedics at Klinikum Magdeburg (academic teaching hospital of the university of Magdeburg). His clinical interest is mainly all spinal disorders including all major pathologies such as Deformity adult and pediatric. degeneration, infections, tumours and trauma. His research interest is focused on clinical studies of new techniques and devices as well sagittal balance adaptation in the elderly. He published over 60 articles in peer reviewed journal and gave over 2000 presentations on international conferences and training courses. Dr. Franke is a member of various national and international medical associations and societies including the German Spine Society, IGASS and EUROSPINE, where he currently holds the position as general secretary. He is Board member of the German spine society and IGASS. Dr.Franke is Co-Founder of Spine 20 and was an active part of this initiative of the major spine organisations of the world.

Koji Tamai *(Japan)*

I was born in Hiroshima, and grew up in Osaka, Japan. I am currently a lecturer at Osaka City University and an attending spine surgeon at Osaka City University Hospital with 13 years of experience as medical doctor. My philosophy of care is "to treat the patient but not just the disease." This means that although our theoretical target is the spinal disease, we have to take care of the "patient," regardless of whether we elect for conservative or surgical therapy.
In addition to the works as spine surgeons, I love to conduct research to find other treatment, and develop better treatment strategies for each disease. My major research filed is cervical spine, but recently I am also perfuming several researches about the improvement of patient's QOL, detecting the pain with wearable device, artificial intelligence in spinal diagnosis and surgery, as well as basic science with iPS cel
I was born in Hiroshima, and grew up in Osaka, Japan. I am currently a lecturer at Osaka City University and an attending spine surgeon at Osaka City University Hospital with 13 years of experience as medical doctor. My philosophy of care is "to treat the patient but not just the disease." This means that although our theoretical target is the spinal disease, we have to take care of the "patient," regardless of whether we elect for conservative or surgical therapy.
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Marco Teli *(Italy)*

Dr. Marco Teli currently working as a consultant orthopaedic spinal surgeon at the department of neurosurgery of the Walton centre NSH Trust in Liverpool UK. his titles are MD; FEBOT (fellow of European Board of Orthopaedics and Traumatology). He graduated and specialised in Orthopaedics in Italy and subspecialised (fellowship trained) in Glasgow and London.Dr. Marco Teli is the chair of the Spine Tango registry committee and President elect of Eurospine, the Spine Society of Europe.

Margareta Nordin *(France)*

Margareta Nordin is Dr. Med. Sci., PT, Departments of Orthopaedics and Environmental Medicine, School of Medicine, New York University (NYU), New York, NY, USA. She was the President of the International Society for the Study of the Lumbar Spine, World Spine Care Europe and EUROSPINE. Dr. Nordin is a founding member of SPINE20.
Dr. Nordin is the founder of the Occupational and Industrial Orthopaedic Center, NYU Langone Medical Center and the Past Program Director of the Program of Ergonomics and Biomechanics, Graduate School of Arts and Science, NYU. She has been a panel member of 7 larger international taskforces on low back pain, neck pain and musculoskeletal disorders. She has published 240 peer reviewed scientific articles and is the author of several books in biomechanics and musculoskeletal disorders. She is currently an expert for low back pain at the World Health Organisation. Dr. Nordin's primary interest is to prevent disability from spine disorders

Michael Piccirillo *(Switzerland)*

Directly after qualifying as a Microbiologist, Michael made a life changing decision and moved directly into healthcare business management. He has supplemented his science training with specific professional courses in the field of Marketing and Business Administration.
His practical experience and achievements cross a diverse range of jobs in the commercial (pharmaceuticals, diagnostics, biotechnology, and medical devices) and non-profit medical sectors (academic societies and charities) across five continents.
As the first Executive Director of AO Spine and later AO Trauma, he forged and guide two of the largest surgical communities in the world. Since then he has spent years consulting spine centers, other academic societies and business in designing learning experiences and customer engagement. Michael joined NASS in 2019 to support the creation of NASS International to design and manage programs across the globe, evolving NASS into the world's first truly global multi-professional community.

Paulo M. Pereira *(Portugal)*

Paulo Pereira, MD, PhD is a Portuguese board-certified neurosurgeon specialised in spine surgery, currently Consultant of Neurosurgery and Head of the Spine Unit of the Department of Neurosurgery, at Centro Hospitalar Universitário São João and Assistant Professor at Faculty of Medicine of the University of Porto, Portugal.
Prof. Pereira is Past President and current President of General Assembly of the Portuguese Neurosurgical Society, Secretary of the World Spinal Column Society, member of the Nomination Committee of EuroSpine, co-chair of Degenerative Module of EuroSpine Education Week and Chairman of the Young Neurosurgeons Award Committee of the World Federation of Neurosurgical Societies.

Ralph Kothe *(Germany)*

Dr. Ralph Kothe is an orthopedic surgeon, specialized in spine surgery . He received his medical degree from the University of Hannover and completed a research fellowship with Prof. Panjabi at Yale University . He is currently the Head of the Clinic for Spine Surgery at Schon Hamburg Eilbek. Dr. Kothe has a huge experience in spine research field. He is currently the secretary of German Spine Society (DWG) and a member of multiple Societies such as German Spine Society (DWG) , German Society for Orthopaedics and Orthopaedic Surgery (DGOOC) , German Association for Orthopaedic Rheumatology (DGROH), Spine Society of Europe (SSE) , Cervical Spine Research Society (CSRS - European Section) and German Section of the Association for Medical Education in Europe (GMA).

Sami I. AlEissa, MD *(Saudi Arabia)*

Dr. AlEissa is a consultant adult and pediatric Spine Surgeon and an associate professor at the college of medicine, KASU-HS. He is the Head of orthopedic and spine services, KAMC, Riyadh. His main practice involves different aspects of complex spine pathologies. Dr. AlEissa has led the Orthopedic Scientific Council for the Saudi Commission of Health Specialties for 4 years, and he is currently a member of higher medical authority at the Ministry of health. Dr AlEissa is a co-Founder of the Saudi Spine Society and was the 1st president for its first 3 years. He is also a Co-founder of SPINE20 and he will be the chairman for the SPINE20 meeting in Riyadh, November 10-11, 2020. Dr. AlEissa was awarded King Abdulaziz Medal of Excellence by the order of the Custodian of the two Holy Mosque, King Abdullah Bin Abdulaziz Al-Saud.

Shanmuganathan Rajasekaran *(India)*

Prof. Rajasekaran is the Chairman of Department of Orthopaedics, Trauma & Spine Surgery, Ganga Hospital, Coimbatore. Currently, He is the Chair of AOSpine International Board, President Elect, Asia Pacific Spine Society, and Chairman, Constitution Review Committee of APOA. Prof. Rajasekaran led many professional organizations, e.g.; SICOT, CSRS-AP, ASSI, Indian Orthopaedic Association. Prof. Rajasekaran was the Hunterian Professor for the year 2011-12 by the Royal College of Surgeons of England and a 'Distinguished Visitor' to Harvard Medical International. Prof. Rajasekaran is the Deputy Editor of The Bone & Joint Journal, the Journal of SPINE, Global Spine Journal, and Editorial board member of European Spine Journal. Prof. Rajasekaran has 326 publications, and 960 international presentations, he contributed 59 chapters in international books and is the Chief Editor of a Video Atlas of Spine Surgery and the ASSI Textbook on Spinal Infections & Trauma. Prof. Rajasekaran was awarded many international prestigious research awards.

Thomas R. Blattert *(Germany)*

Prof. Blattert is an orthopedic and trauma surgeon, specialized in spinal surgery and trauma management. He currently holds a position as Professor and Medical Director of the Department for Spine Surgery and Traumatology at Orthopaedische Fachklinik Schwarzach, Germany.
Former resident of Harvard University, Boston, and spine fellow at Fritz Magerl´s Spine Center in St. Gallen, Switzerland, he is the current Vice President of EUROSPINE, the Spine Society of Europe and holds a title of Visiting Professor at Xi´an Jiaotong University Medical College Honghui Hospital, China. He is Associate Editor of Orthopaedic Surgery and a regular reviewer for Spine and Biomaterials. Prof. Blattert brings a strong expertise in spinal trauma and spinal tumors and additionally focuses on osteoporotic spine, minimally invasive procedures, and augmentation techniques with biomaterials.

William Sullivan *(USA)*

William Sullivan, MD received his medical degree from Emory University School of Medicine and completed residency in Physical Medicine and Rehabilitation (PM&R) from Northwestern University / Rehabilitation Institute of Chicago. He is currently a Professor in the Department of Physical Medicine and Rehabilitation at Vanderbilt University and Service Chief of PM&R at Nashville VA/Tennessee Valley Health Care System. Prior to that, he served as PM&R Fellowship director and Musculoskeletal Block Director for the University of Colorado School of Medicine. He has been elected asPresident of the North American Spine Society (NASS) for 2019-2020. He has served as Coding Committee Co-Chair and NASS Advisor to the AMA/RUC committee as well as member of the Nominating Committee and Membership Committee. He was also Co-Chair of the Medical program for the Emerging Technology Spine Education Summit for 10 years. He is proud to be an Honorary Member of the Saudi Spine Society

Yahya Alqahtani *(Saudi Arabia)*

Dr. Alqahtani is a Spine surgery consultant working at Security Forces Hospital in Riyadh.
He is an Executive Board member of the Saudi Spine Society. Dr. Alqahtani specialty and sub-specialty training was in 3 countries (Saudi Arabia, France, Canada), he was exposed to different health system and was able to appreciate their impact on the quality of patient's life.

Abdullah Alsaeed *(Saudi Arabia)*

Dr.Alsaeed received his medical degree from Qassim University , Saudi Arabia in 2013 .
He successfully completed his orthopedic residency in National Guard Hospital, Riyadh in 2019 . He is currently an assistant professor and the head division of Orthopedic surgery Department at Qassim University .

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