



G20
INDONESIA
2022



SPINE20

INDONESIA . AUGUST 4-5, 2022

Annual Summit Guide



Venue

Bali Nusa Dua Convention Center (BNDCC)
Building 1

Address and contact: Kawasan Terpadu ITDC NW/1 Nusa
Dua, Bali, Indonesia

Detailed Information

WWW.SPINE20.ORG

Registration





SPINE20 – 2022 | Indonesia

Spine Care: Work Together to Recover Stronger

SPINE20 is a global effort to improve spine care by recommending policies to G20 countries and beyond to alleviate the burden of spine disease through various means, such as stimulating better spine health, advancing spine research, enhancing spine innovation pathways, and improving spine care and treatments through policies and government support



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WELCOME ADDRESS

Colleagues, Ladies, and Gentleman

I am truly happy to update you on the progress of the **SPINE20, 2022** meeting which will take place in one of the most beautiful places on earth, the island of the gods, **Bali, Indonesia** on **August 4th and 5th, 2022 at Bali Nusa Dua Convention Center (BNDCC)**. The SPINE20 team members have shown their remarkable commitment to the success of the upcoming SPINE20 meeting. Soon you will be able to access the program details that consist of seven symposia and one session on education featuring world renowned speakers who are experts in their field. Reflecting the G20 submit, the theme for SPINE20 2022 is **“Spine Care: Work Together to Recover Stronger”**.

In this Meeting Guide, you will find useful information such as program details, chairperson and speakers' profiles, guides for visiting Bali and how to register SPINE20, 2022 provides several options for participants, including virtual attendance. Bali, however, is almost back to normal and more than ready to welcome visitors in person. Please check the latest information on *visa on arrival*, as well as a very simple guide on travelling to Bali, which is available in the General Information section on the SPINE20 website; www.spine20.org. We are enthusiastic about meeting in person and want to assure you that the congress venue, hotels, and public facilities in Bali are fully implementing all health and safety protocols.

To warmly welcome all SPINE20 delegates, the organizing committee has planned a networking Cultural Dinner on the evening of August 4th. Dinner tickets can be purchased for a minimal charge on the registration page. We assure you that this will be a memorable evening to strengthen our friendship and collaboration.

SPINE20 is a global effort to improve spine care by recommending policies in G20 countries and beyond to alleviate the burden of spine disease through various means, such as stimulating better spine health, advancing spine research, enhancing spine innovation pathways, and improving spine care and treatments through policies and government support. These efforts will provide significant benefits for spine patients around the globe. We are committed to achieving this mission.

The Indonesian Spine Society and the Indonesia spine community together with the government of the Republic Indonesia are working hand in hand preparing to make this happen. The success of the 2022 G20 and SPINE20 meetings is our top priority.

We encourage you to regularly visit www.spine20.org for the latest news and updates. Please feel free to contact the secretariat at balimeeting@spine20.org for questions and inquiries. We shall see you soon in Bali.

SPINE20 – 2022

Hosting Society
Indonesian Spine Society

Meeting Chairperson
Bambang Darwono

Co-Chairs
Agus Rahim
Koji Tamai
Pierre Côté
Paulo Pereira
Sami AlEissa

SPINE20 Executive Board

EUROSPINE
Margareta Nordin
Thomas R. Blatter

German Spine Society (DWG)
Frank Kandziora
Markus Arand

North American Spine Society (NASS)
Edward Dohring
Eric Muehlbauer

Saudi Spine Society (SSS)
Ahmed Alturkistany
Sami I. AlEissa

Association of Spine Surgeons of India (ASSI)
H. S. Chhabra

Indonesian Spine Society (ISS)
Bambang Darwono

Italian Spine Society (SICV & GIS)
Giuseppe Costanzo

Japanese Society for Spine Surgery & Related Research (JSSR)
Manabu Ito

SPINE20 Speaker
Margareta Nordin



Bambang Darwono
Chairperson, SPINE20 – Indonesia
August 4-5, 2022



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.

Ten 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), Parliamentary 20 (P20), Supreme Audit Institution (SAI20) 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.



The 17th G20 Heads of State and Government Summit will take place at November 2022 in Bali, Indonesia. The Summit will be the pinnacle of the G20 process and intense work carried out within the Ministerial Meetings, Working Groups, and the different Engagement Groups throughout the year

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 to 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 treatments and rehabilitation through policies 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 Inaugural Meeting was held prior to the G20 Summit in Riyadh, 20 – 21 November 2020. In 2021 SPINE20 was held in Rome and on 4th to 5th of August 2022, it will be in Bali, Indonesia just prior to G20 meetings.



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 treatment and rehabilitation

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.

Founding societies



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 that showed an interested in contributing to the SPINE20 initiative by different means, their proposed contribution is subjected to the approval of the executive board as per SPINE20 policies.

Partner Societies for SPINE20 - Bali, August 4-5, 2022



**Association of Spine Surgeons
of India (ASSI)**

www.assi.in



**Indonesian Spine Society
(ISS)**

www.indonesianspinesociety.org



**Italian Spine Society
(SICV & GIS)**

www.gis-italia.org



**Japanese Society for Spine Surgery &
Related Research (JSSR)**

<http://www.jsr.gr.jp>



Brazilian Spine Society (BSS)

<https://www.coluna.com.br>

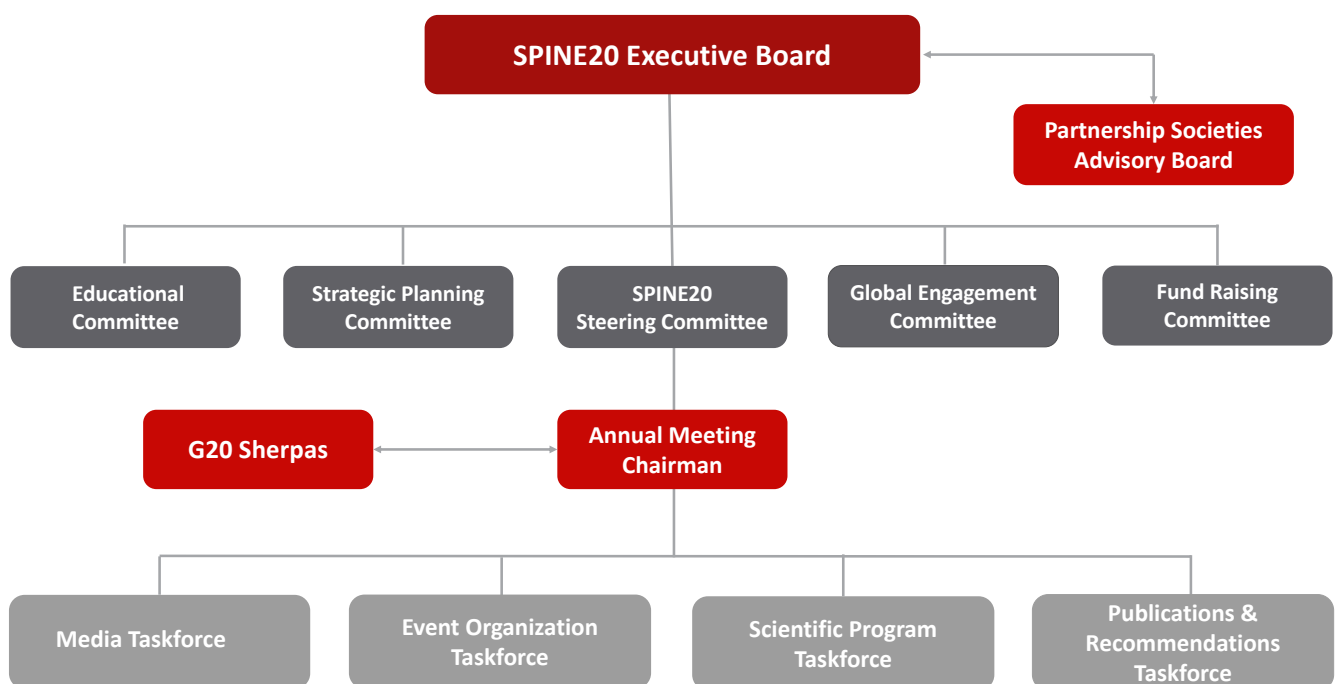
SPINE20 Organizational Structure

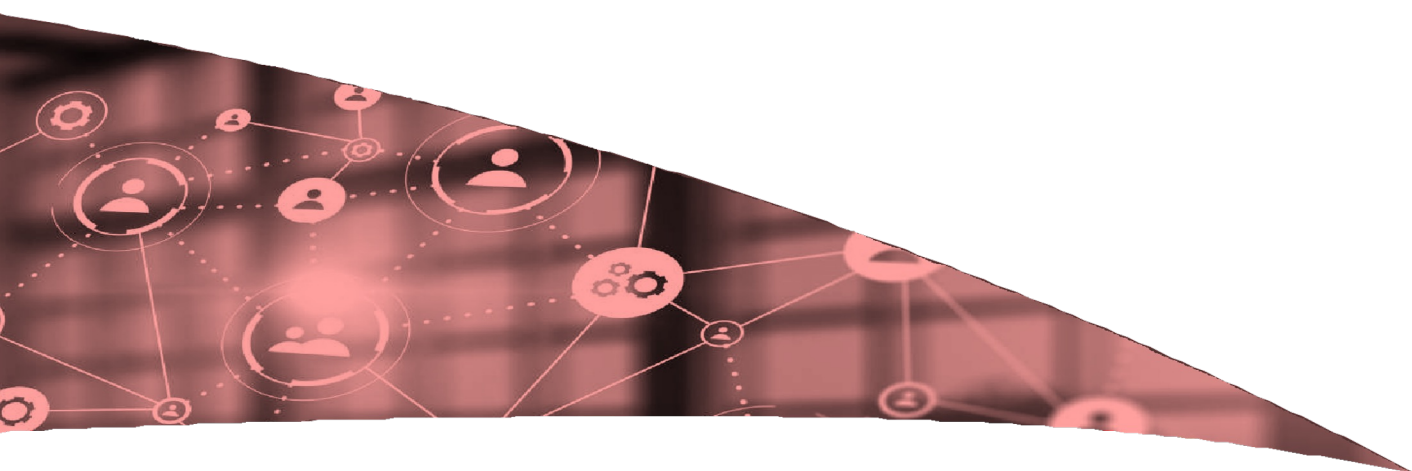
SPINE20 Executive Board is made up of 12 members:

- Eight members from the founding societies, two members from each ; SSS, EUROSPINE, DWG, NASS
- Three members from hosting partner societies, one from each; SICV & GIS (Host 2021), ISS (Host 2022) and ASSI (Host 2023).
- One member from the Partnership Advisory Board, JSSR (Advisory Board chairing society)

SPINE20 Partnership Advisory Board is made up of members from the approved partner professional societies/associations and a representative from the Executive Board.

- Support effective and sustainable operations of SPINE20 in cooperation with Executive Board to pursue the missions of SPINE20.
- Collect and consolidate opinions from Partner Societies and any other professional organization interested in spine care and prevention.





❖ **SPINE20 Steering Committee**

Represented by members from the different SPINE20 committees and aims to steer the SPINE20 activities throughout the years preceding the G20 Summits.

❖ **Strategic Planning Committee**

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

❖ **Global Engagement Committee**

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

❖ **Educational Committee**

The SPINE20 Education Committee (EdCom) is a multi-professional committee within the SPINE20 organization. We are responsible for identifying, sharing, and promoting to SPINE20 stakeholders evidence-based curricula, educational principles and policies that will improve the quality, performance and results of spine care education. The EdCom will play a key role in supporting and enhancing the outputs and reputation of SPINE20 as a vehicle for change in global spine care.

❖ **Fund-Raising Committee**

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

❖ **Scientific Program Task Force (SciTF)**

Aims to develop the scientific program for the annual meeting as per the approved formatting by the SPINE20 executive Board.

❖ **Publications and Recommendations Task Force (PRTF)**

Aims to rephrase and finalize the SPINE20 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.

❖ **Event Organization Task Force (liaison with G20)**

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



SPINE20

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Mission

Optimize 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 society's home country using an extensive global network of spine societies.
- f. Serving as an advocacy group globally and nationally through this identified SPINE20 initiatives.
- 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.

SPINE20 Annual Summits

Scientific Program

SPINE20 Summits is composed of multiple symposia, each symposium will address specific spine related domains. Multidisciplinary International Taskforces are meeting around the year to develop and forward the latest scientific and progress in spine care around the globe.

The SPINE20 program should always include:

- » Subjects of interest to 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 summit will be published every year in a peer reviewed journal to be available for concerned and interested people and organizations.

How will we ensure continuity?



SPINE20 Saudi Arabia, 2020
recommendations Packs and Executive Summary was released soon after Riyadh Meeting, SPINE20 Recommendations were published in the European Spine Journal 2021.



SPINE20 Italy, 2021
An update was presented in Rome 2021 of Saudi Arabia meeting. New recommendations were discussed and published in the European Spine Journal 2022.



SPINE20 Indonesia, 2022
New recommendation from SPINE20 Summit will be discussed during the Indonesia summit.



SPINE20 India, 2023

Further progress report on the impact of SPINE20 Recommendations will be presented at the opening session of 2023 SPINE20 India.



SPINE20 3rd Annual Summit

Indonesia | 4 -5 August 2022

THE STORY OF BALI

BALI

Bali is a province of Indonesia which is located between the islands of Java and Lombok island, Bali island is also commonly referred to as **The Island Of Thousands Temples**, **The Island of Gods**, and **Bali Dwipa**, Bali also has several small islands are also included in the province of Bali, including the island of Nusa Penida, Nusa Lembongan Island, Nusa Ceningan island, Serangan Island and Menjangan Island.

The capital of Bali is **Denpasar**, located in the south of the island, the island of Bali is renowned as a world tourism destination with unique art and culture. Bali island is the best place for a holiday with the world class accommodation.

Bali Geography

The island of Bali lies 3.2 km (2 mi) east of Java and is approximately 8 degrees south of the equator. Bali and Java are separated by the Bali Strait. East to the west, the island is approximately 153 km (95 mi) wide and spans approximately 112 km (69 mi) north to south; its land area is 5,632 km².

Bali's central mountains include several peaks over 3,000 meters in elevation. The highest is Mount Agung (3,142 m), known as the "mother mountain" which is an active volcano. Mountains range from center to the eastern side, with Mount Agung the easternmost peak. Bali's volcanic nature has contributed to its exceptional fertility and its tall mountain ranges provide the high rainfall that supports the highly productive agriculture sector.

South of the mountains is a broad, steadily descending area where most of Bali's large rice crop is grown. The northern side of the mountains slopes more steeply to the sea and is the main coffee producing area of the island, along with rice, vegetables, and cattle. The longest river, *Ayung River*, flows approximately 75 km.

The island is surrounded by coral reefs. Beaches in the south tend to have white sand while those in the north and west have black sand. Bali has no major waterways, although the *Ho River* is navigable by small sampan boats. Black sand beaches between *Pasut* and *Klatingdukuh* are being developed for tourism, but apart from the seashore temple of Tanah Lot, they are not yet used for significant tourism.



The largest city is the provincial capital, Denpasar, near the southern coast. Its population is around 491,500 (2002). Bali's second-largest city is the old colonial capital, **Singaraja**, which is located on the north coast and is home to around 100,000 people. Other important cities include the beach resort, **Kuta**, which is practically part of Denpasar's urban area, and **Ubud**, situated at the north of Denpasar, is the island's cultural center. Three small islands lie to the immediate southeast and all are administratively part of the *Klungkung* regency of Bali: *Nusa Penida*, *Nusa Lembongan*, and *Nusa Ceningan*. These islands are separated from Bali by the Badung Strait.



To the east, the Lombok Strait separates Bali from Lombok and marks the biogeographical division between the fauna of the Indomalayan ecozone and the distinctly different fauna of Australasia. The transition is known as the *Wallace Line*, named after *Alfred Russel Wallace*, who first proposed a transition zone between these two major biomes. When sea levels dropped during the Pleistocene ice age, Bali was connected to Java and Sumatra and to the mainland of Asia and shared the Asian fauna, but the deep water of the Lombok Strait continued to keep Lombok and the Lesser Sunda archipelago isolated.



Top Reasons to Visit Bali

It's sunny all year!

Bali weather has 2 seasons – dry and wet – though you can expect mostly warm and humid days throughout the year. The dry season is from May to September. This offers sunny days and an average temperature of 31°C.



Most consider the mid-year period to be the best time to go to Bali. You can expect a good balance between sun, sand and surf during the time. The wet season is October to April, with occasional downpours and overcast skies. The windy months are between June and August, which Bali locals often refer to as the 'kite season', when the skies are dotted with colourful traditional Balinese kites.

Stunning beaches

Surfers love the waves at Nusa Lembongan near Nusa Penida. These islands are a 45 minutes boat trip from Nusa Dua or from Sanur.

At Nusa Penida's south western coast are the Manta Point and the Malibu point where divers can swim with Travalley, big rays, and even sharks. Kelingking Beach, Atuh beach and Broken beach among the most famous spots of Nusa Penida..



The best dive spots can be located at Menjangan island, with its reef flat, anchor wreck, eel garden and caves to explore. Located in the western part of Bali, you can enjoy the rare sight of deer swimming near the beach. Pemutaran is also famous for its diving activities renowned for reef conservation. Try exploring or trekking the West Bali National Park, where you may get up close and personal with Bali's rich flora and fauna, such as Jalak Bali or the Bali Starling.

Bali offers first-class adrenaline-pumping white water rafting down the spectacular Ayung River by Ubud. If you enjoy cycling, Ubud and its surrounding is a wonderful town to bike around. There are also good cycling paths at Uluwatu in the south.

Bali's unique culture

The many temples around Bali celebrate their anniversaries once every 6 Gregorian months according to the 210-day Balinese calendar. That means you'll most likely stumble across a lively ceremony during your visit.

Towering colourful fruit offerings, decorated shrines and lively processions are all ready for your camera. Rites of passage, even death, is a festive sight as *ngaben* cremations or Pelebon for royalties, is a sight to behold with towering effigies are carried to the funeral pyre.



The warmth of the people

Most people who have been to Bali will agree that the Balinese are the friendliest people. Making new friends is easier here than anywhere else, as locals are often interested in engaging in a conversation with anyone, including tourists. Their friendliness and genuine warmth have made tourists feel at home for decades.



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SCIENTIFIC PROGRAM

Scientific Program

The Scientific program is divided into multiple mini-symposia. Throughout the two-day event, there will be seven symposia and one session addressing the most important issues related to spine care, namely, education for the governments, decision makers, and spine care providers. In addition to that, there will be four keynote lectures by world experts from different backgrounds.

SPINE20 symposia are based on the specific domains that SPINE20 considered as critical for global spinal problems. These domains were selected by internationally represented multidisciplinary spine experts using a Delphi procedure. Each symposium will include evidence-based lectures, debate sessions and panel discussions. The last session in the meeting will be dedicated to discuss the proposed recommendations that emerge from the SPINE20 – Bali Summit. Additionally, this year SPINE20 will conduct an educational session to discuss the current challenges in Spine education and debate the necessary critical actions.

SPINE20 - Bali Summit aims to provide a platform where the experts meet, discuss and create policy recommendations on spine health care that will be presented to the G20 leaders, Sherpa and worldwide health authorities.

Symposia & Sessions

Symposia Domain Sub-domain Symposium Title	CHAIRPERSONS	
Wellness Quality of life Wellness health and spine care	B. Darwono ISS	G. Costanzo SICV & GIS
Access to care Diversity Rising up to the challenge posed by diversity for access to spine care	P. Pereira EUROSPINE	H. S. Chhabra ASSI
Value-based care Economy The reorientation of spine care: treatment collaboration for cost effective value proven patient centered care	D. Lahey NASS	F. Kandziora DWG
Research Priorities Excellence in research for better spine care	P. Vajkoczy DWG	H. Alsobayel SSS
Rehabilitation Spinal cord injury Spinal cord injury rehabilitation in the post covid era	W. Sullivan NASS	P. Côté EUROSPINE
Capacity building Patient Safety Capacity building to improve patient safety	S. Bajammal SSS	Agus Rahim ISS
Future of spine care Aging World aging and future of spine care	M. Ito JSSR	C. Menezes BSS
Education Session	CHAIRPERSONS	
The silent syndemic “Spinal Disorders” – the need for new approaches in global spine education	C. Pereira SPINE20 Education Committee	J. Larouche SPINE20 Education Committee

DAY 1 | THURSDAY AUGUST 4, 2022

07.30 – 08.00 Registration and Working Coffee

OPENING CEREMONY

Bambang Darwono

08.00 – 08.07 Welcome Dance & MC Greeting

08.07 – 08.10 National Anthem Indonesia Raya

08.10 – 08.25 **Welcome Remarks** *B. Darwono | T. Blatter | Dian Triansyah Djani, G20 Co-Sherpa*
08.25 – 08.35

OFFICIAL OPENING

KEYNOTE LECTURES

Chairpersons: B. Darwono, T. Blatter

08.35 – 08.45 **Sandiaga Salahuddin Uno** | Ministry of Tourism & Creative Economy, Republic of Indonesia

08.45 – 08.55 **Nouf Bint Mohammed** | King Khalid Foundation, Saudi Arabia

08.55 – 09.05 **Jeremy Grimshaw** | Ottawa Hospital Research Institute, Canada

09.05 – 09.15 **Shinta W Kamdani** | Chair, B20 Indonesia, Republic of Indonesia

09.15 – 10.00

SPINE20: The Organization and the way it is functioning

Chairpersons: Bambang Darwono (ISS), Guseppe Costanzo (SICV & GIS)

09.15 – 09.25 SPINE20 purpose and projects overview

T. Blatter | S. AlEissa

09.25 – 09.35 SPINE20 recommendations and publications

K. Tamai, E. Muehlbauer

09.35 – 09.45 Why SPINE20 is important to spine societies?

M. Ito

09.45 – 09.50 Report of World Health Summit – Rome 2022

E. Dohring, G. Costanzo

09.50 – 10.00 Where do we see SPINE20 in the future?

M. Nordin

10.00 – 10.20

Coffee Break

10.20 – 10.30

Introduction to Symposia: The international collaboration in SPINE20 symposia and defining recommendations

A. Rahim, P. Pereira

10.30 – 12.00
Symposium 1

Wellness health and spine care

Chairpersons: Bambang Darwono (ISS) | Giuseppe Costanzo (SICV & GIS)

10.30 – 10.42 Global Burden of spine disease and the impact on Wellness and Health

B. Darwono

10.42 – 10.54 Exploring the link between low back pain and mental illness: how do we improve overall wellness?

E. Muehlbauer

10.54 – 11.06 Key healthcare trend and developing a global integrated network in SPINE20

F. Tamburelli, A. Cicchetti, C. Ruosi

11.06 – 11.18 Evidence based strategies for the prevention of Spine diseases: cost and effectiveness analysis

G. Costanzo, B. Misaggi

11.18 – 11.25 Q & A

11.25 – 11.55 Panel Discussion

Faculty

11.55 – 12.00 Conclusion and take-home messages

B. Darwono, G. Costanzo

12.00 – 13.00

Lunch Break

DAY 1 | THURSDAY AUGUST 4, 2022

13.00 - 14.30 Symposium 2	Rising up to the challenge posed by diversity for access to spine care Chairpersons: <i>Harvinder Chhabra (ASSI) Paulo Pereira (EUROSPINE)</i>	
13.00 – 13.15	Access to spine care for ethnic minority population	<i>A. Bajamal</i>
13.15 – 13.30	Challenges in providing quality health spine care for other diverse populations	<i>S. Sharif</i>
13.30 – 13.45	How to promote consistent interprofessional spine care, given the diversity and availability of health professionals globally?	<i>A. Thapa</i>
13.45 – 14.00	Spine care amid diverse health care systems: is there a best one?	<i>A. Bang</i>
14.00 – 14.30	Panel discussion : Rising up to the challenge posed by diversity for access to spine care	<i>Faculty, H. Mhaidli</i>
14.30 - 16.00 Symposium 3	The Reorientation of spine care: Treatment collaboration for cost effective, value proven, patient centered spine care Chairpersons: <i>Donna Lahey (NASS) Frank Kandziora (DWG)</i>	
14.30 – 14.35	Introduction to “Value Based Spine Care”	<i>D. Lahey</i>
14.35 – 14.47	Pre-requisites for ensuring value in spine care	<i>O. Alshanqeety</i>
14.47 – 14.59	Multidisciplinary care coordination and Its impact In providing “Value Based Spine Care”	<i>E. Dohring</i>
14.59 – 15.11	Cost benefit ratio of various treatment options: the cost effectiveness of surgery for cervical myelopathy	<i>M. Fehlings</i>
15.11 – 15.23	The economic impact of early vs delayed treatment	<i>C. M Menezes</i>
15.23 – 15.35	Is High quality low cost spine surgery possible in the developing world	<i>S. Rajasekaran</i>
15.35 – 16.00	Panel discussion	<i>Faculty</i>
16.00 – 16.15	Break	
16.15 - 17.45 Symposium 4	Excellence in research for better spine care Chairpersons: <i>Peter Vajkoczy (DWG) Hana Alsobayel (SSS)</i>	
16.15 – 16.20	Introduction and background	<i>Hana Alsobayel</i>
16.20 – 16.30	Relevance of research for innovation and staying competitive with other specialties	<i>Peter Vajkoczy</i>
16.30 – 16.40	Clinical trial design: a global view of translation of evidence into practice	<i>Wilco Peul</i>
16.40 – 16.50	The reality of research in low and middle income countries	<i>Baron Zarate Kalfopulos</i>
16.50 – 17.00	Research priorities in spine for the next 10-20 years, Where should we focus on?	<i>Michael Fehlings</i>
17.00 – 17.10	Shifting the focus to primary spine care	<i>Eric Werner</i>
17.10 – 17.20	Q & A	<i>H. Alsobayel, P. Vajkoczy</i>
17.20 – 17.45	Panel discussion Q&A	<i>Faculty</i>
17.45	End Of Day One – Closing Remarks	

DAY 2 | FRIDAY AUGUST 5, 2022

07.30 - 08.00	Registration and Working Coffee	
08.00 - 09.30 Education Session	The silent syndemic “Spinal Disorders” – the need for new approaches in global spine education Chairpersons: <i>Cristina Pereira</i> <i>Jeremie Larouche</i>	
08.00 – 08.10	Spine Education Committee – Who we are & what we do	<i>J. Franke, M. Piccirillo</i>
08.10 – 08.15	Health and economic impact of spinal disorders	<i>J. Larouche</i>
08.15 – 08.25	Current challenges in spine education and guidelines: a global prospective	<i>C. Menezes</i>
08.25 – 08.30	Rethinking education for spine care professionals, how do we shift the paradigm?	<i>M. Campello</i>
08.30 – 08.35	Designing spine curricula to enhance competency across borders	<i>M. Nordin</i>
08.35 – 08.40	Building engaging and motivating Inter-Professional training program in spine care	<i>C. Pereira</i>
08.40 – 08.50	Applying IT to support mass patient education and collaborative practice in spine care	<i>I. Vlok</i>
08.50 – 08.55	How simulation will create a disruptive change in spine care professional training	<i>A. Ahmad</i>
08.55 – 09.00	Critical actions to mobilize healthcare agencies and appropriate resources	<i>R. Mullerpartan</i>
09.00 – 09.05	Key steps to engage and align academic societies, patient organizations and NGOs	<i>H. Chhabra</i>
09.05 – 09.25	Discussion & Questions	<i>J. Larouche, C. Pereira</i>
09.25 – 09.30	Take home message – What’s next?	<i>J. Franke</i>
09.30 – 09.45	Coffee Break	
09.45 – 11.15 Symposium 5	Spinal cord injury rehabilitation in the post covid era Chairpersons: <i>Pierre Côté (EUROSPINE)</i> <i>William Sullivan (NASS)</i>	
09.45 – 09.47	Introduction	<i>Chairpersons</i>
09.47 – 10.05	Why should a global SCI rehabilitation strategy be a priority for G20 nations?	<i>W. Sullivan</i>
10.05 – 10.25	How does the implementation of evidence-based rehabilitation programs benefit our communities?	<i>C. Kiekens</i>
10.25 – 10.45	What is required to design and implement SCI rehab programs in low- and middle-income countries?	<i>R. Pakasi</i>
10.45 – 10.55	Summary of key points	<i>P. Côté</i>
10.55 – 11.15	Panel Discussion – Q & A	<i>Faculty</i>

DAY 2 | FRIDAY AUGUST 5, 2022

11.15 – 12.45 Symposium 6

Capacity Building to improve patient safety

Chairpersons: *Sohail Bajammal (SSS) | Agus Hadian Rahim (ISS)*

11.15 – 11.20	Stakeholders of patient safety ecosystem in spine care: public, patients, healthcare professionals, and institutions	<i>Sohail Bajammal</i>
11.20 – 11.30	Public engagement to strengthen patient safety	<i>Rita Roy</i>
11.30 – 11.40	Patients' capacity building towards patient-centered care and its impact on patient safety	<i>Bambang Tutuko</i>
11.40 – 11.55	Building capacity with engaged team: the secret of achieving patient and staff safety	<i>Paul Barach</i>
11.55 – 12.10	Institutional patient safety capacity building: culture, environment, and policies	<i>Zakiuddin Ahmed</i>
12.10 – 12.15	Q & A	

12.15 – 12.40	Panel Discussion	<i>Faculty</i>
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12.40 – 12.45	Take home messages	<i>Sohail Bajammal</i>
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12.45 – 13.30 Friday Prayer & Lunch Break

13.30 – 15.00 Symposium 7

World aging and future of spine care

Chairpersons: *Manabu Ito (JSSR) | Cristiano Menezes (BSS)*

13.30 – 13.35	Introduction	<i>Manabu Ito</i>
13.35 – 13.47	World aging and needs of spine care	<i>Yukihiro Matsuyama</i>
13.47 – 13.59	Strategies in spine care to decrease the gap between "Life Expectancy and Healthy Life Expectancy"	<i>Asdrubal Falavigna</i>
13.59 – 14.11	Needs of comprehensive medical management for aged patients with spinal malalignment	<i>Naohisa Miyakoshi</i>
14.11 – 14.23	Sustainable spine care in the aging world	<i>Luiz Roberto Vialle</i>
14.23 – 14.35	Benefit of registries for spinal care and outcome assessment	<i>Everard Munting</i>
14.35 – 15.00	Panel Discussion	<i>Faculty</i>

15.00 – 15.15 Coffee Break

15.15 – 16.15

Discussion recommendations and voting SPINE20 - Indonesia, 2022

Chairs: *Bambang Darwono, Koji Tamai, Pierre Côté*

Discussion: *Paulo Pereira, Hana Alsobayel*

Recorder: *Kinga Bugara*

16.15 – 16.30



Welcome to SPINE20 India – 2023

Harvinder S. Chhabra

16.30

SPINE20 Indonesia – 2022 Closing Ceremony



Sandiaga Salahuddin Uno

Ministry of Tourism &
Creative Economy
Republic of Indonesia

Sandiaga Salahuddin Uno or better known as Sandiaga Uno, was inaugurated by President Joko Widodo as Minister of Tourism and Creative Economy/Head of the Tourism and Creative Economy Agency on December 23, 2020.

Sandiaga Uno earned an academic degree in Bachelor of Business Administration from The Wichita State University, United States, and graduated with Summa Cum Laude predicate. Furthermore, he obtained a Master of Business Administration from The George Washington University, United States.

Sandiaga Uno is known as a big businessman with various experiences serving as directors of a number of companies in various sectors, including:

- Summa Group, Jakarta, May 1990 – June 1993
- Seapower Asia Investment Limited, Singapore, July 1993 – April 1994
- MP Holding Limited Group, Singapore, May 1994 – August 1995
- NTI Resources Limited, Calgary, Canada, September 1995 – April 1998
- PT Recapital 1997 - 2007
- PT Saratoga Investama Sedaya, April 1998 – June 2015

Sandiaga Uno's political career began when he was sworn in as Deputy Governor of DKI for the 2017-2022 period. During his time as deputy governor, he intensively made programs aimed at fostering entrepreneurship in Jakarta residents. He is also actively encouraging DKI Jakarta to become a halal tourist destination.

At the beginning of his leadership at the Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency, Sandiaga Uno brought the concepts of innovation, adaptation, and collaboration. Innovation is needed because in a short time there must be a fundamental change in revamping the tourism sector and the creative economy. Adaptation is needed considering that Indonesia is faced with the Covid-19 pandemic so that the tourism industry and the creative economy need to implement new habit adaptations or also known as Cleanliness, Health, Safety and Environmental Sustainability (CHSE). Meanwhile, collaboration is needed because to restore the tourism sector and the creative economy requires the involvement of all parties.

Keynote Speakers



Nouf Bint Mohammed

CEO, King Khalid Foundation
Saudi Arabia

Her Highness Princess Nouf bint Muhammad bin Abdullah is the CEO of the King Khalid Foundation (KKF), one of the leading non-profit organizations in the country. She has been a member of KKF's Board of Trustees since 1996 engaging in shaping KKF's finances and strategy. She leads KKF's programs towards the economic and social empowerment of vulnerable groups in the country. The foundation's goal is to create equal opportunities for all Saudis by: maximizing the impact of NGOs, encourage national companies to adopt environmental and social sustainability practices, invest in projects that increase the employability skills of disadvantaged groups, produce evidence-based research and provide policy solutions to Saudi decision-makers to help build a viable social protection system in Saudi Arabia.

She also leads the foundations global thought leadership around the promotion of the UN Sustainable Development Goals, and protecting inclusive growth. In 2020, she chaired the Civil 20 Engagement Group, one of the G20 engagement groups, representing the perspectives and voices of global civil society to G20 Leaders. Under her leadership, the C20 membership grew in inclusivity to include strong representation from the global south, resulting in the C20 hosting the biggest gathering of civil society organizations in the history of the G20, with more than 1,500 civil society organizations attending the C20 Summit, and 25,000 online viewers.

Princess Nouf is a longstanding philanthropist and a strong supporter of the empowerment of the non-profit sector in the country. Her Highness serves as the Chairperson of the Saudi ADHD Society, and a member of Alnahda Society for Women. She has also been a generous supporter of various Saudi nonprofits, including Saut: The Voice of Down Syndrome Society and Mawaddah Society. She is also a member of the National Center for Mental Health Promotion.

Keynote Speakers



Shinta W Kamdani

Chair, B20 Indonesia
Republic of Indonesia

As Owner and Chief Executive Officer of the Sintesa Group (www.sintesagroup.com), Shinta is responsible for the Management and Expansion of the Group's business interests in Indonesia. The Sintesa Group is an Indonesian group with 16 subsidiaries, which operate in the Property, Energy, Industrial Products, and Consumer Products.

As a businesswoman, Shinta also involves in numerous business and social activities, including as the Coordinating Vice Chairman III for Maritime,

Investment and Foreign Affairs, KADIN Indonesia of Indonesian Chamber of Commerce and Industry (KADIN Indonesia) and Employers' Association of Indonesia (APINDO), Executive Board of International Chamber of Commerce (ICC), President of Indonesia Business Council for Sustainable Development (IBCSO), as well as founder of Indonesia Business Coalition for Women Empowerment (IBCWE) and Angel Investment Network Indonesia (ANGIN), and the Member of APEC Business Advisory Council (ABAC) Indonesia. She also has been chosen by the United Nations as one of 30 global corporate leaders to join the Global Investors for Sustainable Development (GISD Alliance). She is also has been elected to serve as Chair of B20 Indonesia during the Indonesian Presidency at the 2022 G20 Summit.

Shinta graduated from Barnard College of Columbia University New York in 1989 and Executive Education at Harvard Business School, Boston, Massachusetts, USA in 2002.

As part of her achievement, she received awards amongst others from FORBES Asia's 50 Powerful Businesswomen (2012, 2013, & 2016), 30 Best CEOs by Business Indonesia Award in 2015, in 2017, she was decorated as the Commander of the Polar Star by the King Carl XVI Gustaf of Sweden and the Commander of the Order of Leopold of Belgium. And in 2019, she was awarded as Woman Entrepreneur of the Year at the Asia Corporate Excellence & Sustainability Award (ACES Award)

Keynote Speakers



Jeremy Grimshaw
Ottawa Hospital Research Institute
Canada

Dr. Jeremy Grimshaw a world leader in knowledge synthesis and translation. He co-leads COVID-END, a time-limited international network of evidence synthesis, recommendation and intermediary organisations to promote collaboration and co-operation across organisations to reduce inappropriate duplication of effort and better support decision makers (citizens, practitioners and policy makers during the pandemic).

Dr. Jeremy also co-leads the secretariat for the Global Commission on Evidence to support Societal Challenges that considers how **to build better evidence support systems** to meet the needs of diverse stakeholders (citizens, practitioners, policy makers) across all sectors (ie beyond health) in a post-pandemic world.



Keynote Speakers

Multi nationalities committees and taskforces are working around the year to prepare for the SPINE20 3rd Annual Summit in Indonesia



Bambang Darwono, Indonesia
Chair SPINE20, Indonesia 2022



Agus H. Rahim, Indonesia
Cochair SPINE20



Margareta Nordin, France
SPINE20 Speaker



Manabu Ito, Japan
Chair, Partnership Advisory Board



Paulo Pereira, Portugal
Cochair Scientific Taskforce



Sami AlEissa, SA
Cochair Scientific Taskforce



Koji Tami, Japan
Cochair PR Taskforce*



Pierre Côté, Canada
Cochair PR Taskforce*



Thomas Blattert, Germany
Chair Strategic Planning



Eric Muehlbauer, USA
Chair, Global Engagement



Edward Dohring, USA
Chair, Advocacy Committee



Jörg Franke, Germany
Cochair Education Committee



M. Piccirillo, Switzerland
Cochair Education Committee



Ahmed Alturkistany, SA
Executive Board Member



Frank Kandziora, Germany
Executive Board Member



Giuseppe Costanzo, Italy
Executive Board Member



Harvinder S. Chhabra, India
Executive Board Member



Markus Arand, Germany
Executive Board Member



Alaa Ahmad, Palestine
Committee Member



Arsanto Triwidodo, Indonesia
Committee Member



Alessandro Ramieri, Italy
Committee Member



Ana Ligia Gill Espuny, Brazil
Committee Member



Bernardo Misaggi, Italy
Committee Member



Carlo Ruosi, Italy
Committee Member



Donna Lahey, USA
Committee Member



Everard Munting, Belgium
Committee Member



Cristina Pereira, Portugal
Committee Member



Cristiano Menezes, Brazil
Committee Member



Giorgio Lofrese, Italy
Committee Member



Giovanni Andrea La Maida, Italy
Committee Member



Hana Alsonayel, SA
Committee Member



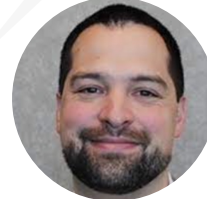
Ian Volk, South Africa
Committee Member



Jamiu Busari, Netherland
Committee Member



Jeffrey Wang, USA
Committee Member



Jeremie Larouche, Canada
Committee Member



Kinga Bugara, USA
Committee Member



Luca Ricciardi, Italy
Committee Member



Marco Campello, USA
Committee Member



Marco Teli, Italy
Committee Member



Patriick Hsieh, USA
Committee Member



Peter Vajkoczy, Germany
Committee Member



Raghava D. Mulukutla, India
Committee Member



Rajani Mullerpartan, India
Committee Member



Sabina Choinski, USA
Committee Member



Saiful Asmiragani, Indonesia
Committee Member



S. Rajasekaran, India
Committee Member



Sohail Bajammal, SA
Committee Member



William Sullivan, USA
Committee Member



Yahya Alqahtani, SA
Committee Member



Yudha Mathan Sakti, Indonesia
Committee Member



SYMPOSIA & EDUCATION SESSION

<i>Wellness Quality of life</i> Wellness health and spine care	30
<i>Access to care Diversity</i> Rising up to the challenge posed by diversity for access to spine care	32
<i>Value-based care Economy</i> The reorientation of spine care: treatment collaboration for cost effective value proven patient centered care	34
<i>Research Priorities</i> Excellence in research for better spine care	36
<i>Rehabilitation Spinal cord injury</i> Spinal cord injury rehabilitation in the post covid era	38
<i>Capacity building Patient Safety</i> Capacity building to improve patient safety	40
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Wellness and Spine Care

Subject overview

Wellness, following the Oxford Dictionary, is the state or condition of being in good Physical and Mental Health. Wellness plays a big role in human quality of life. Spine diseases are a global burden impacting wellness.

Spine diseases, and particularly low back pain, affect more than 80% of humankind, representing a social illness, and are the main cause of absence from work; moreover, the chronic pain cause anxiety and depression, with human and social costs that exceed many billions of dollars also in developing countries. However, since diseases of the spine do not threaten life, politicians and ministries of health neglect the problem compared to others not communicable diseases, not to mention Pandemics.

The Symposium aims to promote awareness and demonstrate how the best knowledge to date prove that education in proper nutrition, regular movement, ergonomics in the workplace, prevention and rehabilitation can really improve the Wellness, saving billions in painkillers and expensive surgery in neglected cases.

DAY ONE (August 4) - Symposium 1

Symposium Objectives

1. Brainstorm on promoting Spine Care into Wellness program
2. Focus on global spine care networking, prevention, rehabilitation, education for Wellness
3. Assess various spine care systems to promote the adoption of the most suitable one for wellness

Panel Discussion - Topics Highlights

1. Wellness and medical tourism program
2. How can global societies provide various spine care systems: networking, telemedicine, prevention, education, rehabilitation for the adoption of the most suitable in Wellness and Health, and could save a large cost caused by Low Back and Neck problems in the population

Detailed Program

10.30 – 10.42	Global Burden of spine disease and the impact on Wellness and Health <i>B. Darwono</i>
10.42 – 10.54	Exploring the link between LBP and mental illness: how do we improve overall wellness? <i>E. Muehlbauer</i>
10.54 – 11.06	Key healthcare trend and developing a global integrated network in SPINE20 <i>F. Tamburelli, A. Cicchetti, C. Rousi</i>
11.06 – 11.18	Evidence based strategies for the prevention of Spine diseases: cost and effectiveness analysis <i>G. Costanzo, B. Misaggi</i>
11.18 – 11.25	Q & A
11.25 – 11.55	Panel Discussion <i>Faculty</i>
11.55 – 12.00	Conclusion and take-home messages <i>B. Darwono, G. Costanzo</i>

Faculty



Bambang Darwono, Indonesia
Chairperson - ISS



Giuseppe Costanzo, Italy
Chairperson – SICV & GIS



Americo Cicchetti
Speaker - Italy



Bernardo Misaggi
Speaker - Italy



Carlo Ruosi
Speaker - Italy



Eric Muehlbauer
Speaker - USA



Francesco Tamburelli
Speaker - Italy



Rising up to the challenge posed by diversity for access to spine care

Subject overview

Access to care relates to the timely use of health services to achieve the best health outcomes. Diversity plays a vital role in limiting/promoting the access to spine care around the globe. The symposium aims to brainstorm on ways and means to promote widespread access to spine care, facing the challenges imposed by the shortage of resources, limited coverage, and local/regional backgrounds. Access to care for ethnic minorities and underserved populations is a growing concern and will receive a special emphasis on this symposium, together with the key role of integrated interprofessional care to optimize clinical outcomes. The response and performance of diverse health systems around the globe to rise to these challenges will be debated.

Symposium Objectives

1. Brainstorm on ways to promote widespread access to spine care
2. Focus on providing access to spine care for ethnic minority and underserved populations

DAY ONE (August 4) - Symposium 2

Symposium Objectives – cont'd

2. Outline strategies to promote and optimize interprofessional care for patients with spine ailments
3. Appraise the responses of the various healthcare systems to improve access to spine care globally

Panel Discussion - Topics Highlights

1. Access to spine care for ethnic minority population
2. Challenges in providing quality health spine care for other diverse populations
3. How to promote consistent interprofessional spine care, given the diversity and availability of health professionals globally
4. Spine care amid diverse health care systems: is there a best one?
5. Rising up to the challenge posed by diversity for access to spine care

Detailed Program

13.00 – 13.15	Access to spine care for ethnic minority population <i>A. Bajamal</i>
13.15 – 13.30	Challenges in providing quality health spine care for other diverse populations <i>S. Sharif</i>
13.30 – 13.45	How to promote consistent interprofessional spine care, given the diversity and availability of health professionals globally? <i>A. Thapa</i>
13.45 – 14.00	Spine care amid diverse health care systems: is there a best one? <i>A. Bang</i>
14.00 – 14.30	Panel discussion; Rising up to the challenge posed by diversity for access to spine care <i>Faculty, H. Mhaidli</i>

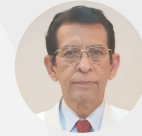
Faculty



Harvinder S. Chhabra, India
Chairperson - ASSI



Paulo Pereira, Portugal
Chairperson – EUROSPINE



Abdul Hafid Bajamal
Speaker - Indonesia



Salman Sharif
Speaker - Pakistan



Amit Thapa
Speaker - Nepal



Anand Bang
Speaker - India



Hani Mhaidli
Panelist - Spain

Reorientation of spine care: Treatment collaboration for cost effective, value proven, patient centered spine care

Subject overview

Low back pain (LBP) was the leading cause of Years Lived with Disability (YLDs) at 63.7 million in 2019 worldwide. It accounted for approximately 568.4 million prevalent cases and 223.5 million incident cases globally. Although the cost and disability from LBP vary substantially between countries, facts that remain consistent are that costs and disability are rising globally and we are facing greater challenges in managing the impact of the growing economic burden.

Determining value is a challenging proposition for Spine Care providers pitting health care outcomes against expenditures. In a world though, where low back pain accounts for most years lived with disability, value-based care for spinal disorders is of paramount importance. Economic analysis of spine care interventions is critical in determining treatments with proven value. Even when determined, Multidisciplinary efforts at care coordination is necessary to prevent suboptimal isolated treatment recommendations and costly disability. Integrated, collaborative approaches need to continue to be established and built upon to ensure affordable solutions to this growing economic burden

DAY ONE (August 4) - Symposium 3

Symposium Objectives

1. Provide insight into the cost-effectiveness of preventive and therapeutic strategies.
2. Expand Partnerships to aid in understanding the shared dilemma of providing Value Based Spine Care
3. Demonstrate how multidisciplinary collaboration provides a pathway to value by improving outcomes, enhancing patient experience and reducing cost
4. Develop a comprehensive plan and approach to improve health outcomes by providing value-based care
5. Provide the G20 Health Ministers valuable input with regard to cost effective care of Spinal disorders.

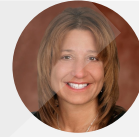
Panel Discussion - Topics Highlights

1. The Necessity of Collaboration and Care Coordination in Achieving Value.
2. How Cost Effective, Patient Centered Care, Outcome Driven Care Equates to Value.
3. How the Timing of Treatment has an Impact on Value.
4. Does Value Have the Same Meaning Throughout the World.

Detailed Program

14.30 – 14.35	Introduction to “Value Based Spine Care” <i>D. Lahey</i>
14.35 – 14.47	Pre-requisites for ensuring value in spine care <i>O. Alshanqeety</i>
14.47 – 14.59	Multidisciplinary care coordination and Its impact In providing “Value Based Spine Care” <i>E. Dohring</i>
14.59 – 15.11	Cost benefit ratio of various treatment options: the cost effectiveness of surgery for cervical myelopathy <i>M. Fehlings</i>
15.11 – 15.23	The economic impact of early vs delayed treatment <i>C. Menezes</i>
15.23 – 15.35	Is high quality low cost spine surgery possible in the developing world <i>S. Rajasekaran</i>
15.35 – 11.55	Panel Discussion <i>Faculty</i>

Faculty



Donna Lahey, USA

Chairperson - NASS



Frank Kandziora, Germany

Chairperson - DWG



Cristiano M. Menezes

Speaker - Brazil



Edward Dohring

Speaker - USA



Michael Fehlings

Speaker - Canada



Omar Alshanqeety

Speaker – Saudi Arabia



S. Rajasekaran

Speaker - India



Excellence in Research for better spine care

Subject overview

Spine ailments are in the top conditions that are costly and leading to more years lived with disability. Advancement in spine care is vital and this can only be with support for excellence in research, development and innovation. High quality research informs better decision making and cost-effective care, hence, better health outcomes. Excellence in research, development and innovation requires interdisciplinary team effort including clinicians, scientists, researchers, data analysts, funders, decision makers, and other relevant disciplines or organizations. In this symposium we will shed light on the road to excellence in research for better spine care, with a focus on building capacity, research translation and research priorities and we call upon countries to put spine care high in their research agenda to help minimize cost and improve health of their communities.

DAY ONE (August 4) - Symposium 4

Symposium Objectives

1. Provide insight into the cost-effectiveness of preventive and to identify the current status of research in spine care.
2. To build the case to support excellence in research, development and innovation for better spine care.
3. To raise awareness about the pitfalls related to evidence translation in spine practice.
4. To identify the strategic objectives and priorities in research, development and innovation for spine care.

Panel Discussion - Topics Highlights

1. Building research capacity among clinicians (importance of research & innovation to advance spine practice)
2. Research translation in different culture and designing clinical trials in different cultures and settings.
3. Define focus areas in research in spine – the current status and future of research in spine practice
4. WHO Strategic objectives of digital health

Detailed Program

16.15 – 16.20	Introduction and background <i>H. Alsobayel</i>
16.20 – 16.30	Relevance of research for innovation and staying competitive with other specialties <i>P. Vajkoczy</i>
16.30 – 16.00	Clinical trial design: a global view of translation of evidence into practice <i>W. Peul</i>
16.40 – 16.50	The reality of research in low and middle income countries <i>B. Kalfopoulos</i>
16.50 – 17.00	Research priorities in spine for the next 10-20 years, where should we focus on? <i>Michael Fehlings</i>
17.00 – 17.10	Shifting the focus to primary spine care <i>E. Werner</i>
17.10 – 17.20	Q & A <i>Hana Alsobayel, Peter Vajkoczy</i>
17.20 – 17.45	Panel Discussion <i>Faculty</i>

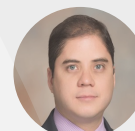
Faculty



Hana Alsobayel, Saudi Arabia
Chairperson – SSS



Peter Vajkoczy, Germany
Chairperson - DWG



Baron Zarate Kalfopulos
Speaker – Mexico



Erik Werner
Speaker - Norway



Michael Fehlings
Speaker - Canada



Wilco Peul
Speaker – Netherland



Spinal cord injury rehabilitation in the post covid era

Subject overview

Spinal Cord Injury (SCI) is a world-wide problem with variable epidemiology based on a variety of socio-economic factors. There are also significant local, regional, and national variations in the care of patients with SCI. Because of the lack of available resources in some areas of the world, those with SCI are provided little to no rehabilitation or equipment such as mobility devices. This can lead to limited functional recovery, poor quality of life, decreased involvement in society roles, institutionalization, disability and increased costs (both direct and indirect). The care of individuals with SCI has also been impacted by the global COVID pandemic: this includes patients avoiding health care facilities, health care resources being re-directed, and provision of necessary equipment being negatively impacted by logistical issues. SPINE 20 is committed to working to improve the care provided to patients with SCI.

DAY TWO (August 5) - Symposium 5

Symposium Objectives

1. Discuss how SCI is an important global health issue
2. Understand how rehabilitation for SCI can be a benefit for all G-20 nations
3. Understand process for development of appropriate SCI care in areas lacking services

Detailed Program

09.30 – 09.32	Introduction <i>Chairpersons</i>
09.32 – 09.50	Why should a global SCI rehabilitation strategy be a priority for G20 nations? <i>William Sullivan</i>
09.50 – 10.10	How does the implementation of evidence-based rehabilitation programs benefit our communities? <i>Carlotte Kiekens</i>
10.20 – 10.30	What is required to design and implement SCI rehab programs in low- and middle-income countries? <i>Ronald Pakasi</i>
10.30 – 10.40	Summary of Key points <i>Pierre Côté</i>
10.40 – 11.00	Panel Discussion <i>Faculty</i>

Faculty



Pierre Côté, Canada
Chairperson - EUROSPINE



William Sullivan, USA
Chairperson - NASS



Carlotte Kiekens
Speaker - Italy



Ronald Pakasi
Speaker - Indonesia





Capacity building to improve patient safety

Subject overview

The World Health Assembly (WHA72.6) has adopted a resolution in 2019 that urges member states to recognize patient safety as a health priority and an essential component for strengthening health care systems in order to achieve universal coverage.

The World Health Organization has highlighted the following facts in its patient safety fact sheet. The occurrence of adverse events due to unsafe care is likely one of the 10 leading causes of death and disability in the world. Unsafe care occurs in all spectrum of care (hospitals and outpatient) and all spectrum of countries (from low-income to high-income).

In high-income countries, it is estimated that one in every 10 patients is harmed while receiving hospital care. Nearly half of these adverse events are preventable. **In low- and middle-income countries**, 134 million adverse events occur in hospitals resulting in 2.6 million deaths each year. In primary and outpatient healthcare, as many as 4 in 10 patients are harmed globally and upto 80% of harm is preventable.

The burden of harm due to unsafe care includes diagnostic and management errors and adverse events. Most commonly, medication errors, health care-associated infections, unsafe surgical procedures, unsafe injections practices, unsafe transfusion practices, sepsis and venous thromboembolism. Financially speaking, 15% of total hospital activity and expenditure in OECD countries is direct result of adverse events. Investments in reducing patient harm can lead to significant financial savings and better patient outcomes.

DAY TWO (August 5) - Symposium 6

Symposium Objectives

1. Understand the complexity of patient safety ecosystem at the national level and the interactions and dependencies between different players of the ecosystem
2. Appreciate the importance of building capacity of the public in the domain of patient safety through public engagement and involvement of non health public sectors in improving the patient safety.
3. Identify the importance of building capacity of the patients and their caregivers through patient engagement and empowerment and its impact on patient safety
4. To learn from successful models of healthcare providers capacity building efforts in patient safety
5. To understand the impact of organizational patient safety culture and teamwork on patient safety outcomes.
6. To learn from successful models of institutional accreditation and center certification and the impact on patient safety.

Panel Discussion - Topics Highlights

1. How can national societies improve patient safety nationally and globally?
2. Financial savings resulting from patient safety initiatives.

Detailed Program

11.15 – 11.20	Stakeholders of patient safety ecosystem in spine care: public, patients, healthcare professionals, and institutions <i>S. Bajammal</i>
11.20 – 11.30	Public engagement to strengthen patient safety <i>R. Roy</i>
11.30 – 11.40	Patients' capacity building towards patient-centered care and its impact on patient safety <i>B. Tutuko</i>
11.40 – 11.55	Building capacity with engaged team: the secret of achieving patient and staff safety <i>P. Barach</i>
11.55 – 12.10	Institutional patient safety capacity building: culture, environment, and policies <i>Z. Ahmed</i>
12.10 – 12.15	Q & A
12.15 – 12.40	Panel Discussion <i>Faculty</i>
12.40 – 12.45	Take-home messages <i>S. Bajammal</i>

Faculty



Sohail Bajammal, Saudi Arabia
Chairperson - SSS



Agus H. Rahim, Indonesia
Chairperson - ISS



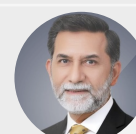
Bambang Tutuko
Speaker - Indonesia



Paul Barach
Speaker - Austria



Rita Roy
Speaker - USA



Zakiuddin Ahmed
Speaker - Pakistan

World Aging and future of spine care

Subject overview

The World Health Organization estimated that the number and proportion of people aged 60 years and older in the population is increasing worldwide. In 2019, the number of people aged 60 years and older was 1 billion. This number will increase to 1.4 billion by 2030 and 2.1 billion by 2050. This increase is occurring at an unprecedented pace and will accelerate in the coming several decades, particularly in developing countries.

Every person in any national should have the opportunity to live long independently with healthy life. Spine disorders, especially in the aging population, is recognized as one of the major leading causes of the disability that shortens the healthy life expectancy of the aged population significantly. In the near future, the burden of spine disorders in such population will dramatically increase not only to each individual but also to governments and societies. In order to take possible measures to prolong the healthy life expectancy in the aged population, law makers need to be aware of this urgent threat to the human being and should establish strategies to remedy this unprecedented situation

DAY TWO (August 5) - Symposium 7

Symposium Objectives

The aim of this symposia could be divided into three divisions.

1. To highlight problems of future of spine care in the aging world from individual and societal perspective
2. To clarify burdens of future of spine care in the aging world from health-care system perspective
3. To propose sustainable solutions for future of spine care in the aging world

Panel Discussion - Topics Highlights

1. Better spine care environment and lengthy healthy life expectancy
2. Comprehensive medical management for the elderly with spinal malalignment
3. Sustainability of spine care in limited budgets and resources
4. Utility of national medical database(registry) for creating strategies to prolong healthy life expectancy

Detailed Program

13.30 – 13.35	Introduction <i>M. Ito</i>
13.35 – 13.47	World aging and needs of spine care <i>Y. Matsuyama</i>
13.47 – 13.59	Strategies in spine care to decrease the gap between "Life Expectancy and Healthy Life Expectancy" <i>A. Falavigna</i>
13.59 – 14.11	Needs of comprehensive medical management for aged patients with spinal malalignment <i>N. Miyakoshi</i>
14.11 – 14.23	Sustainable spine care in the aging world <i>L. Vialle</i>
14.23 – 14.35	Benefit of registries for spinal care and outcome assessment <i>E. Munting</i>
14.35 – 15.00	Panel Discussion <i>Faculty</i>

Faculty



Manabu Ito, Japan
Chairperson - JSSR



Cristiano Menezes, Brazil
Chairperson – BSS



Asdrubal Falavigna
Speaker - Brazil



Luiz Roberto Vialle
Speaker - Brazil



Everard Munting
Speaker - Belgium



Naohisa Miyakoshi
Speaker - Japan



Yukihiro Matsuyama
Speaker - Japan

Overview

We describe “spinal disorders” as a silent syndemic because they create a set of health problems involving two or more affiliations, which can interact to generate a multiplier effect that contributes to the excess burden of this disease in our populations.

While there are no accurate global figures that capture the true cost of treatments, rehabilitation, work productivity loss and family burden caused by spinal disorders, most commenters agree the cost is not measured in USD millions, rather in hundreds of billions.

We suggest all stakeholder groups must share the responsibility for the failure to mobilize resources and distribute critical knowledge against this hidden syndemic. However, we see standardized, quality controlled and universally accessible education as a key driver to change behaviors, mobilize resources, and improve patient outcomes.

The presentations in this symposium will be five-minute summaries of an Education Committee eBrochure which will act as pre-summit reading material. For the EdCom, Bali 2022 will be our start, as we aim to uncover the challenges and opportunities for education to effectively limit and actively manage this global syndemic.

Education Session

The silent syndemic
“Spinal Disorders” – the
need for new
approaches in global
spine education





Cristina Pereira
Co-Chair - Portugal



Jeremie Larouche
Co-Chair – Canada



Alaa Ahmad
Speaker – Palestine



Cristiano Menezes
Speaker - Brazil



Harvinder Chhabra
Speaker - India



Ian Volk
Speaker –South Africa



Jörg Franke*
Speaker – Germany



Michael Piccirillo*
Speaker– Switzerland



Marco Campello
Speaker - USA



Margareta Nordin
Speaker - France



Rajani Mullerpatan
Speaker - India

The Education Committee acts as a change agent by providing validated and relevant evidence that supports better education on spine care. its purpose is to promote to healthcare providers, payers and consumers validated and accessible educational programs and information, as well as knowledge simple implementable solutions for the prevention, the treatment, and the rehabilitation of spinal disorders.

The Education Committee would like to create a paradigm change in the way our stakeholders think about and invest in spine care education. If the committee can achieve this, it will be a game-changer!

*Cochairs Education Commttee

Education Session

Faculty

DAY TWO (August 5) - Education Session

Topics Highlights

1. Health and economic impact of spinal disorders
2. Current challenges in spine education
3. Limitations in current spine treatment guidelines and recommendations
4. Rethinking education for spine care professionals. how do we shift the paradigm?
5. Designing spine curricula to enhance competency across borders
6. Building engaging and motivating inter-professional training programs in spine care
7. Translating inter-professional spine training programs into collaborative practice
8. Applying information technology to support mass patient education of spinal disorders
9. How simulation will create a disruptive change in spine care professional training
10. Critical actions to mobilize healthcare agencies and resources
11. Key steps to engage and align academic societies

Detailed Program

08.00 – 08.10	Spine Education Committee – Who we are & what we do <i>J. Franke, M. Piccirillo</i>
08.10 – 08.15	Health and economic impact of spinal disorders <i>J. Larouche</i>
08.15 – 08.25	Current challenges in spine education and guidelines: a global prospective <i>C. Menezes</i>
08.25 – 08.30	Rethinking education for spine care professionals, how do we shift the paradigm? <i>M. Campello</i>
08.30 – 08.35	Designing spine curricula to enhance competency across borders <i>M. Nordin</i>
08.35 – 08.40	Building engaging and motivating Inter-Professional training program in spine care <i>C. Pereira</i>
08.40 – 08.50	Applying IT to support mass patient education and collaborative practice in spine care <i>I. Vlok</i>
08.50 – 08.55	How simulation will create a disruptive change in spine care professional training <i>A. Ahmad</i>
08.55 – 09.00	Critical actions to mobilize healthcare agencies and appropriate resources <i>R. Mullerpartan</i>
09.00 – 09.05	Key steps to engage and align academic societies, patient organizations and NGOs <i>H. Chhabra</i>
09.05 – 09.25	Discussion & Questions <i>J. Larouche, C. Pereira</i>
09.25 – 09.30	Take home message – What's next? <i>J. Franke</i>



Appendix:

SPINE20 TEAM & SPEAKERS BIOGRAPHIES



Bambang Darwono, Indonesia

Chair SPINE20 Indonesia, Executive Board Member

Prof Bambang is a Senior Lecturer Faculty of Medicine at the Veteran Pembangunan Nasional University and at the Tarumanagara University, He is the head of orthopaedic sections of Pluit Hospital and Gading Pluit Hospital, Jakarta. Prof. Bambang obtained his Medical degree in 1975 from Private University of UNISSULA Semarang and the General Surgery from University of Diponegoro Semarang in 1986, he became an orthopaedic Surgeon in 1990 State from University of Indonesia Jakarta, and in 2000, he achieved his Ph.D from State University of Gajah Mada Yogyakarta. Prof Bambang is involved in many professional and consulting activities, he was the President of The Indonesian Spine Society and he is currently a Council Member of PASMISS, he is currently a member of many international society such as APOA, APASTAB, AAOS, SICOT, IDI, SAS, NASS, APSAS.



AGUS HADIAN Rahim, Indonesia

Cochair SPINE20 Indonesia

Born in 1960, Dr. Rahim is an orthopaedic spine surgeon practicing at Dr.Hasan Sadikin Hospital, Bandung, Indonesia and also the head of Orthopaedic and Traumatology Department at the same hospital. He graduated as orthopaedic surgeon at Faculty of Medicine, Universitas Padjadjaran. He is currently the president of Indonesian Spine Society and a member of AOSpine, APOA-spine section, Pedicle Club Indonesia (PCI, Indonesian Orthopaedic Spine Society (IOSS), and NASS. He is very concern about spinal diseases, applying both conservative and surgical treatment to his patient. He is also keen to wrote and publish journal about spinal diseases and management.



Margareta Nordin, France

SPINE20 Speaker, Executive Board Member

Margareta Nordin, Dr. Med. Sci., PT, Research Professor, Departments of Orthopedic Surgery and Environmental Medicine, NYU Grossman School of Medicine, New York University, New York, NY, USA, has authored 5 books and >250 peer reviewed papers, participated in seven international based task forces on spine pain and received multiple awards, first woman President of ISSLS, EUROSPINE, World Spine Care Europe, and adjunct professor at multiple universities. She is a member of WHO Package of Rehabilitation Intervention for low back pain and the Speaker for SPINE20. Her primary interest is prevention of disability with focus on evidence, cultural adaptation, and acceptance.



Manabu Ito, Japan

Chairperson, Partnership Advisory Board, Executive Board Member

Manabu Ito, MD, PhD is an orthopedic spine surgeon working as Medical Director, National Hospital Organization Hokkaido Medical Center, Sapporo, Japan. His academic appointments include Clinical Professor, Department of Orthopedic Surgery, Hokkaido University Graduate School of Medicine and Visiting Professor, Material Science, Osaka University Graduate School of Engineering. He is the current president of Japanese Scoliosis Society and Chairperson of AOSpine Asia Pacific as well as the partner society advisory board of SPINE20.



Paulo Pereira, Portugal

Cochair Scientific Taskforce

Paulo Pereira, MD, PhD is a Portuguese board-certified neurosurgeon specialized in spine surgery, Consultant of Neurosurgery, Head of the Spine Unit of the Department of Neurosurgery, at Centro Hospitalar Universitário São João and Invited Assistant Professor at Faculty of Medicine of the University of Porto, Portugal. Prof. Pereira is Past President and current President of the Audit Board of the Portuguese Neurosurgical Society (SPNC), 2nd Vice-President of Ibero-Latin American Spine Society (SILACO), Secretary of the World Spinal Column Society (WScS), member of the Education Committee of EuroSpine and co-chair in EuroSpine Education Week.



Koji Tamai, Japan

Cochair Publication and Recommendation Taskforce

Koji Tamai MD, PhD is Japanese board-certified spine surgeon, currently a lecturer at Osaka Metropolitan University, Osaka, Japan. He is a chair of the SPINE20 Publication and Recommendation task force in 2021. In addition to the works as spine surgeons, he loves to conduct research to develop better treatment strategies for spinal disease. His major research field is cervical spine, but recently he is also performing several research projects about the improvement of patient's Quality of Life, large scale cohort studies detecting the effect of COVID-19, artificial intelligence in spinal diagnosis and surgery, as well as basic science.



Pierre Côté, Canada

Cochair Publication and Recommendation Taskforce

Professor Côté is an epidemiologist. He holds the Canada Research Chair in Disability Prevention and Rehabilitation and he is a Professor in the Faculty of Health Sciences at the University of Ontario Institute of Technology. He is also the director of the Institute for Disability Prevention and Rehabilitation Research and a Professor of Epidemiology at the Dalla Lana School of Public Health at the University of Toronto. His research focuses on the etiology, prognosis and management of disability related to spine pain and mental health. Professor Côté has published more than 310 scientific papers in peer-reviewed journals.



Sami AlEissa, Saudi Arabia

Cochair Scientific Taskforce, Executive Board Member

Dr. AlEissa is a consultant Spine Surgeon, associate professor, and the head of orthopedic and spine services at King Abdulaziz Medical City, Riyadh, Saudi Arabia. His main practice involves different aspects of complex spine pathologies. Dr. AlEissa has led the Orthopedic Scientific Council in the SCFHS and he is currently a member of higher medical authority at the Ministry of Health. Dr. AlEissa is the founding president of Saudi Spine Society, and he is a Co-founder of SPINE20 and the chairman for SPINE20 meeting inaugural in Riyadh, 2020. Dr. AlEissa was awarded King Abdulaziz Medal of Excellence by the order of King Abdullah Bin Abdulaziz.



Thomas Blatter, Germany

Chair Strategic Planning Committee, Executive Board Member

Thomas Blatter is an orthopaedic and trauma surgeon, specialized in spinal surgery and trauma management. He holds a position as Professor at Leipzig University, Germany.

Former resident of Harvard University, Boston, and spine fellow at Fritz Magerl's Spine Center in St. Gallen, Switzerland, he is the current President of EUROSPINE, the Spine Society of Europe and also an Educational Advisor to AO Spine Europe. Since 2016 he holds the title of Visiting Professor at Xi'an Jiaotong University Medical College Honghui Hospital in China. He is also Associate Editor of Orthopaedic Surgery and a regular reviewer for Spine and Biomaterials. Prof. Blatter brings a strong expertise in spinal trauma and spinal tumours and additionally focuses on osteoporotic spine, minimally invasive procedures, and augmentation techniques with biomaterials.



Eric Muehlbauer, USA

Chair Global Engagement Committee, Executive Board Member

Eric J. Muehlbauer, MJ, CAE 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 Masters 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).



Edward Dohring, USA

Chair Advocacy Committee, Executive Board Member

President of the NASS, Dr. Dohring trained at Yale Medical School, Spine Institute of New England, & Harborview Hospital. Founder of the interdisciplinary Spine Institute of Arizona, he has participated in IDE research on disc replacement and minimally invasive surgery. Clinical Professor of Arizona College of Medicine, he is dedicated to education, is active on the ACGME, AAOS, & NASS Spine Surgery Residency/ Fellowship Guidelines Committees, and has trained over 25 spine surgery fellows. Editorial Board member of The Spine Journal, he is corresponding author of "Lumbar Disc Nomenclature: Version 2.0," the only paper published simultaneously in SPINE & The Spine Journal. He has volunteered his surgical skills in Ghana, Kenya, Tanzania, Haiti, Cambodia and Nepal. Outside the world of spine care, he is an avid mountain climber, and summited Mount Everest in 2019.



Jörg Franke, Germany

Cochair Education Committee

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 EUROSPIN, where he currently holds the position as general secretary. He was Board member of the German spine society and IGASS. Dr. Franke is Co-Founder of Spine 20 and was and active part of this initiative of major spine organisations of the world.



Michael Piccirillo, Switzerland

Cochair Education Committee

Directly after qualifying as a Microbiologist, Michael made a life changing decision and moved directly into healthcare business management. Michael 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, academic societies, medical startups and designing learning experience and customer engagement programs.

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.

Michael brings over 30 years business management experience to the SPINE20 EdCom, having managed multi-million-dollar product lines, supported startups with raising millions of dollars in funding and prepared engaging commercial strategies to drive sales. His goal in the EdCom is to create and align a high-performance team that will drive a paradigm change in the value, and access to spine care education.



Ahmed Alturkistany, Saudi Arabia

Executive Board Member

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, it is a tertiary care hospital that receives patient from all over the kingdom which keeps Ahmed on his toes all the time. 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.



Frank Kandziora, Germany

Executive Board Member

Born 1968 in Germany, Prof. Dr. med. Frank Kandziora graduated and promoted as "Dr. med." from the J. W. Goethe-University in Frankfurt. After starting his training at the Orthopedic University Hospital in Frankfurt he moved to the Charité University Hospital in Berlin to train first as a general surgeon, finally specializing in trauma surgery. After finishing also his orthopedic training and his PhD thesis he became associated Professor at the Humboldt-University and Head of the Charité Spine Group at the Center of Musculo-Skeletal Surgery, Campus Virchow Clinic. 2008 he moved back to Frankfurt and became head of department at the multidisciplinary Center for Spinal Surgery and Neurotraumatology at the BGU Hospital. Currently he is teaching as Professor at the Goethe-University in Frankfurt. He has published more than 200 original articles, received multiple scientific awards and has been president and long-term board member of several national and international scientific organizations. Recently, he has also become Editor-in-Chief of the Brain and Spine Journal published by EUROSPINE and EANS.



Giuseppe Costanzo, Italy

Executive Board Member

Giuseppe Costanzo is born in Roma, Italia, October 18 1950; become M.D. at Sapienza Rome University in 1975 specialising in Ortopaedics and in Rehabilitation; pupil of professor Giorgio Monticelli, second president of European Spine Deformities Society, became Secretary of this Society till 1989, Vice president SICV&GIS since 2016, President since 2018. He visited Pierre Stagnara in Lyon and Hong Kong University studying Spine deformities, infectious diseases and anterior approach. Nominated associated professor of orthopedics since 1987 and full professor since 1999 in L'Aquila University, in 2004 was called in Rome University Sapienza. He has been Director of Orthopaedics in Policlinico Umberto I in Rome.



Harvinder S. Chhabra, India

Executive Board Member

Dr. Chhabra is Chief of Spine Service and Medical Director at Indian Spinal Injuries Centre, New Delhi. He is the President of Spinal Cord Society & Delhi Spine Society, Immediate Past President of International Spinal Cord Society (ISCOs) & Association of Spine Surgeons of India. He is the Editor-in-Chief of "ISCOs textbook on Comprehensive Management of Spinal Cord Injuries" & elearnSCI.org, an ISCOs online learning web-based portal. Dr Chhabra has 150 publications and 25 full-length chapters in leading textbooks. He has been bestowed with various awards including ISCOs Society Medal, Asian Spinal Cord Network Star award and Order of the star of the Italian solidarity by Italian Government. He has won ASSI Clinical research award for 2014, 2015, 2016, 2017, 2019 & 2022.



Markus Arand, Germany

Member Executive Board

Markus Arand PhD, Associate Professor Medical Faculty University of Ulm, Germany, Chief Surgeon Level 1 Hospital Ludwigsburg, Germany. Since > 30 years involved in clinical care research and basic research of the spine resulting in various peer reviewed publications, Member of the board of the German Spine Association (DWG) and German Trauma Association since > 10 years, President elect DWG 2023.



Cristiano M. Menezes, Brazil

Committee Member & Speaker

- Graduated Medical School – Federal University of Minas Gerais (UFMG), Brazil
- Orthopedic Residency at Hospital Ortopédico - Belo Horizonte, Brazil.
- Spine Surgery fellowship at Texas Back Institute, Dallas, USA
- Doctorate in Orthopedics– University of São Paulo (USP-RP), Brazil
- President of Brazilian Spine Society (2021-2022)
- Chief - Spine Surgery department and fellowship coordinator, Columna Institute, Ortopédico/ Biocor/ HVS Hospitals, Belo Horizonte, Brazil. AOSpine Center.



Alaa Ahmad, Palastine

Committee Member & Speaker

Professor – Orthopedic Department - Palestine Polytechnic University
Adjunct professor – Biomedical Engineering Department- University of Toledo
Exam Board Member COSECSA Pediatric Orthopedic
Co-Director – Pediatric Spine Program Tanzania Project, MOI Hospital - Weill Cornell Medicine
Director – Pediatric Spine Program Fernando Velez Paiz Hospital Managua, Nicaragua
President - World Orthopedic Concern (WOC)
Member, Education Committee - SPINE 20
Chair, Spine Committee - SICOT
Editorial Board Member. Journal of Pediatric Orthopedic B
Board Review Member- Global Spine Journal (GSJ), SICOT-J, Spine Journal, Journal of Clinical Neuroscience
Co- editor Book, Co-author 5 book chapters, 20 papers in global peer reviewed journals
Licensed in Palestine, Jordan, Israel



Arsanto Triwidodo, Indonesia

Committee Member

Arsanto Triwidodo, was born on 02 Sept 1963 at Yogyakarta central Java, post graduated Medical Doctor, medical Faculty Univ Gadjah Mada University on 1987, Orthopaedic and Traumatology Univ of Indonesia 2001, Fellowship on Orthopaedic Spine Surgeon 2004 research scholar in Spine Surgery syracuse UNNYUpstate USA on 2005, Master of Health Law SoegijoPranoto Cathollic Univ 2008, DoctoralDegree Univ Of Indonesia 2019 Novel DevelopmentDesign Prototype of Lumbosacroiliaca Prothesis post totalLumbosacroectomy on Chordoma patient.
Past Presiden Indonesisn Orthopaedic Spine Society, Head Dept Orthopaedic and Traumatology Koja General Hospital North Jakarta



Alessandro Ramieri, Italy

Committee Member & Speaker

Alessandro Ramieri is a Medical and Philosophy Doctor (MD, PhD). He graduated in Medicine and Surgery and post-graduated in Orthopedics and Traumatology from the Sapienza Rome University. He received the degree of PhD in Pathophysiology and Muscle-Skeletal Disorders from the same University. Afterwards, he earned a two year fellowship at the Spinal Surgery Department of the S. Pertini Hospital in Rome. He currently is a researcher at the Rome University "La Sapienza", with a teaching position as Professor. He devoted much of his professional activities to the spinal diseases, applying conservative and surgical treatments. He is a Silver Member of the AOSpine and the AO Subaxial Fractures and Sacral Fractures International Validation Groups. Since 2011 and 2014, he is part of the EUROSPINE Spine Course Diploma for Surgeons and the Taskforce Research Course Diploma of the EUROSPINE. He is a Member of the Editorial Board and Reviewer for the World Journal of Orthopedics.



ANA LÍGIA GIL ESPUNY, Brazil

Committee Member

- Advisor at the BSS - Brazilian Spine Society
- Bah!Business Co-founder
- CAPES/CNPQ scholarship for research
- Doctoral student in Marketing at PUCRS (Pontifical Catholic University of Rio Grande do Sul)
- Master in Marketing from UNISINOS (University of Vale dos Sinos)
- MBA in Strategy, Project Management, and Innovation at FADERGS (Rio Grande do Sul State Development College)
- Graduated from UERS (University of the State of Rio Grande do Sul)



Bernardo Misaggi, Italy

Committee Member & Speaker

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. Since 2009 is the Chairman of Spine Surgery Unit of Orthopaedics Institute Gaetano Pini. Currently the SICV & GIS president.

Author of numerous articles and book chapters, he is professor of the orthopaedic surgery residency programme of the University of Milan. He is President of the Italian Spine Society and Member of European Spine Group and Italian Society of Orthopaedics and Traumatology Bernardo Misaggi (Italy)



Carlo Ruosi, Italy

Committee Member & Speaker

Specialized in Orthopedics and Traumatology at the Federico II University with full marks and honors
Specialized in Physical Medicine and Rehabilitation at the Federico II University with full marks and honors
Full Professor of Pathology of the Locomotor System - Physical And Rehabilitation Medicine at the Department of Public Health of the Federico II University

Director of the School of Specialization in Physical and Rehabilitative Medicine at Federico II University
Coordinator of the Course in Orthopedic Techniques at the Federico II University



Cristina Pereira, Portugal

Committee Member & Speaker

Cristina Freitas Pereira is a Physiatrist and the Technical Director of the Department of Physical and Rehabilitation Medicine at CUF Porto Hospital, Portugal. She received her medical degree from Faculty of Medicine of Porto University and completed her residency in Physical and Rehabilitation Medicine at S. João Hospital. She holds post-graduate diplomas in Hydrology and Climatology, Contemporaneous Acupuncture, and Sports Medicine. She concluded the Eurospine Diploma in Interprofessional Spine Care in 2021. Dr. Freitas Pereira is invited lecturer at Faculty of Medicine of Porto University and member of several scientific societies. She has been member of organizing committees and speaker in national and international scientific meetings.



Donna Lahey, USA

Committee Member & Speaker

Donna Lahey, RN is a Registered Nurse First Assist, Research Nurse and CEO of the multidisciplinary Spine Institute of Arizona. She was one of the first non-physicians to present research at a NASS meeting, and then became one of the first non-physician members of NASS. In 2015 she received NASS's David Selby Award for contributions to the art and science of spinal disorder management. Donna is the first non-MD/PhD member to hold a position on the NASS Board of Directors. She is Chair of the NASS Coding Committee and Co-Chair of the SpinePac Advisory Committee, and is a member of the CME and Payor Policy Review Committees as well as the Advocacy Council where she serves to advance the interests of the Spine Community with legislators in Washington D.C. She has been an invited lecturer both nationally and internationally, representing the interests of patients and spine practitioners around the world.



Everard Munting, Belgium

Committee Member & Speaker

Professor Everard Munting, MD, PhD, is an orthopedic surgeon. After a five-year research fellowship in biomechanics and biomaterials, leading to several original developments in the field of arthroplasty and bioactive materials, he did a clinical fellowship in Canada, at the Toronto General hospital in the spinal Unit with Prof John Kostuik. He is currently active in a community hospital in Ottignies, Belgium.

He is specialized in spinal deformity surgery in the adult and the adolescent. His spine unit is a Eurospine Surgical Spine Center of excellence in deformity and degenerative pathology.

His is involved in register based clinical research. He is a founding member of the Spine Society of Belgium. He is Past President of EUROSPINE as well as Past President of the Belgian Orthopedic and Traumatology Society (SORBCOT). Most recently, he participated in the successful launching of Brain and Spine, the official scientific journal of EUROSPINE and EANS, the European Association of Neurosurgical Societies.



Giorgio Lofrese, Italy

Committee Member

Dr. Lofrese is a neurosurgeon specialized in cranio-cervical junction diseases and minimally invasive spine surgery and a PhD in Neuroscience and Neurotechnologies. Former resident of the Catholic University in Rome, he completed his training in Milan, Bologna, and New York, concluding it in Curitiba with an AOSpine clinical fellowship. He is currently permanent neurosurgeon at the Bufalini Hospital in Cesena, and consultant neurosurgeon at the State Hospital of the Republic of San Marino. Awarded with the European Young Researcher Award (AOSpine) and the Young Neurosurgeon Award (WFNS), dr. Lofrese in 2021 has created a new app for iPads, Spine Fine⁰, for evaluating hand function impairment/recover in patients with cervical spinal cord injury.



Giovanni Andrea La Maida, Italy

Committee Member

Born in 1970 in Milan Italy, dr. Giovanni Andrea La Maida graduated as medical doctor in 1995 at the Public University of Milan. He started his training period at the Orthopaedic Institute G. Pini of Milan and in 2001 he graduated as an orthopaedic surgeon. After a period of spine fellowship at the McGill University in Montreal (CA), in 2002 he went back in Italy to start working as a spine trauma surgeon at Niguarda Hospital in Milan. In 2010 he moved as an orthopaedic spine surgeon to the Spine Surgery Department of the Ortopaedic Institute G. Pini in Milan.

He is active member of the Italian Spine Society SICV-GIS and of AOSpine Italy.



Hana Alsobayel, Saudi Arabia

Committee Member & Speaker

Hana Alsobayel is an Associate Professor and consultant in physical therapy at King Saud University in Riyadh, Saudi Arabia. Obtained her MSc. from Queen's University in Canada, followed by PhD from King's College London in UK. For over 25 years, she has been involved in research and practice mainly in self-management for chronic conditions and innovation in healthcare. She is one of the former presidents of Saudi Physical Therapy Association and currently a board member of the Saudi Spine Society. Her contribution in education and research was recognized by receiving the World Physiotherapy International Service Award in 2019.



Adriaan Johannes Vlok, South Africa

Committee Member & Speaker

Prof Vlok holds the postgraduate degrees MMed (Neurosurgery), FC(Neurosurgery) and PhD. He is Head of Division Neurosurgery at Stellenbosch University and Chief Specialist at Tygerberg Academic Hospital in Cape Town. Dr. Vlok is the current president of the College of Neurosurgeons (SA) and the National Chairperson of AO Spine(SA). He is actively involved in national and international training and serves on the executive committees of the South African Neurosurgical and Spine Societies. He also serves on the WFNS Spine Education committee. He is the current clinical director of the Sunskill post-graduate skills training facility at Stellenbosch University.



Jamiu Busari, Netherland

Committee Member & Speaker

Jamiu Busari is a consultant pediatrician and Dean of health Professions Education at Horacio Oduber Hospital, Aruba. He is also an associate professor of medical education at Maastricht University, Netherlands. Jamiu is a Maastricht University alumnus, a Harvard Macy Scholar and an HBS executive education graduate in Managing Health Care Delivery. He is a member of EUROSPINE www.eurospine.org and a faculty member for the Eurospine diploma in interprofessional spine care (EDISC). He is a former executive member of the Netherlands Association for Medical Education (NVMO) and former advisor to the European Respiratory Society (HERMES projects). **For further information :** <https://nl.linkedin.com/in/jamiubusari>



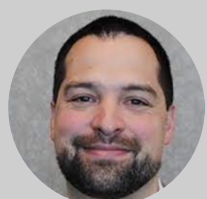
Jeffrey Wang, USA

Committee Member

Jeffrey C. Wang is currently a Professor of Orthopaedic Surgery and Neurosurgery at the Keck School of Medicine at the University of Southern California (USC). He is Co-Director of the USC Spine Center and Fellowship Director of the USC Spine Fellowship.

To date, Dr. Wang has published over 500 articles, 23 book chapters, and several textbooks. Moreover, he has made over 1000 presentations regionally and internationally and has been a visiting professor throughout the United States, Europe, and Asia. He also serves on multiple editorial boards, and is the Editor-in-Chief of the *Global Spine Journal*.

He is a Past Chairman of AOSpine, Past President of the North American Spine Society, Past President of the Cervical Spine Research Society, and a Past President of the Society for Brain Mapping and Therapeutics.



Jeremie Larouche, Canada

Committee Member & Speaker

Jeremie Larouche is an assistant professor of orthopaedic surgery at the University of Toronto. He is the associate program director for the residency program as well as the fellowship director for Sunnybrook's division of spine surgery. A passionate educator, he is always looking for ways to improve how surgery is taught. Dr Larouche is also an executive member of the Canadian Spine Society and an Associate member of the AO Spine Knowledge Forum Tumor. His research interests focus on the use of technology to improve resident knowledge and skill acquisition.



Kinga Bugara, USA

Committee Member

Kinga Bugara has been executive assistant and project manager for NASS for the last 3 years. She works primarily with the NASS board of directors and key external groups like Spine20 and others. She has exceptional organizational skills and is a great communicator. Prior to coming to NASS she was an office manager for a dental group. She brings those organizational skills to NASS. One thing she is really adept at is anticipating the needs of others. She was born in Poland but has lived in the Chicago area since she was 7 years old.



Luca Ricciardi, Italy

Committee Member & Speaker

Dr. Ricciardi has graduated in Medicine and Surgery in 2013 and completed the Residency program in Neurosurgery in 2019. From 2019 he is a consultant neurosurgeon, and PhD candidate in Neurosensory Plasticity. Dr. Ricciardi completed a research fellowship at Mayo Clinic, Rochester, NY, USA and a clinical fellowship in spinal deformities at Catholic University of the Sacred Heart. Dr. Ricciardi is invited professor at Catholic University of the Sacred Heart and at LUISS Guido Carli University. Dr. Ricciardi authored more than 70 peer-reviewed papers and he is a Guest Editor for Systematic Reviews and Meta-Analyses for the Journal of Neurosurgical Sciences.



Marco Campello, USA

Committee Member & Speaker

Marco Campello is a Clinical Associate Professor at the Department Orthopedic Surgery, NYU Grossman School of Medicine. He teaches at the Program of Ergonomics and Biomechanics. He is the director of the NYU Langone Occupational and Industrial Orthopedic Center. He is a clinician and researcher. His research interest is in the prevention and treatment of work-related musculoskeletal disability. He has a special interest in interdisciplinary intervention and work-related health outcomes. Dr. Campello has been involved in the translation of research into clinical practice more specifically the biopsychosocial model in management of musculoskeletal disorders. He has published several articles in these areas.



Marco Teli, Italy

Committee Member

Marco Teli, MD; FEBOT (Italy - UK)

Marco Teli is a Consultant Orthopaedic Spinal surgeon and Clinical Director at the department of spinal surgery of the Rizzola Academy in Venice Italy and honorary Consultant Spinal Surgeon at the Walton centre NHS Trust in Liverpool UK. He teaches at the Milan Bicocca and Liverpool schools of Medicine. Dr Teli is currently chair of the Spine Tango registry committee and President elect of Eurospine, the Spine Society of Europe.



Patriick Hsieh, USA

Committee Member & Speaker

Patrick C. Hsieh, MD, brings to his patients an expertise in complex spine surgery and advanced minimally invasive surgical techniques, including reconstructive surgery for spinal deformities such as scoliosis, spinal trauma, and malalignment. He is also internationally known spine tumor expert for complex spine tumors such as chordomas, primary spine tumors, and spinal cord tumors.

Dr. Hsieh's research priorities include improving patient outcomes in spine surgery and spinal oncology treatments, along with developing new treatment methods for primary spine tumors. Early in his career, he served as a distinguished scholar at the National Institutes of Health's Howard Hughes Medical Institute, where he conducted research in neurogenetics and neuro-oncology.

Dr. Hsieh is a sought-after speaker at national and international medical conferences. Since 2017, he has served as an Unaffiliated Neurotrauma Consultant for the National Football League (NFL) and the NFL Players Association. He was chosen as one of America's Top Doctors by Castle Connolly.



Peter Vajkoczy, Germany

Committee Member & Speaker

Prof VAJKOCZY is Full Professor and Chairman of the Department of Neurosurgery, Charité - Universitätsmedizin Berlin, Germany. His clinical special fields of interest in Brain Surgery are Vascular Neurosurgery (Aneurysms, AVMs, Bypass) and Neurooncology (Glioma, Skull Base Surgery, Pituitary Surgery). In Spine Surgery his fields of interest are Degenerative Spine Disease, Spinal Oncology, and Spinal Navigation. His research fields are biology of blood vessels, the pathophysiology underlying brain tumors, the pathogenesis and therapy of spinal metastatic disease, neuroimmunology of the spinal cord, the relevance of the sagittal balance for degenerative spine disease, and image-guided / robotic spine surgery. He has published and co-authored a total of 591 Pubmed-listed papers. He is a member of the German Neurosurgical Society, EANS, WFNS, the Germany Academy of Neurosurgery, the German Spine Society, AO Spine and the European Spine Society.



Raghava D. Mulukutla, India

Committee Member & Speaker

Dr. Raghava D Mulukutla is the Director and Chief of spine surgery at Udaionni Hospital and Apollo Health city, Hyderabad, India. He was the Past President of Association of Spine Surgeons of India (2017-2019) and currently the President of Orthopaedic Association of South Indian States (OASIS). He is an International Faculty for AOSpine Asia Pacific and is the Editorial Board member of Indian Spine Journal and Asian Spine Journal. Has publications in International Journals, wrote Chapters in Spine text books and was one of the Editors in Chief for 8 Monographs in Spine.



Rajani Mullerpatan, India

Committee Member & Speaker

Dr. Rajani Mullerpatan, promotes movement as a prophylactic and therapeutic tool in spine-care. As Professor-Director of MGM School of Physiotherapy, MGM Institute of Health Sciences, Navi Mumbai, India, she is engaged in building a competent Physiotherapy task force in Primary Spine-Care in India. She is identifying needs and gaps in spine-care at primary and tertiary care levels in rural and urban settings and designing interdisciplinary culturally palatable solutions, exploring them at MGM Centre of Human Movement Science and translating them into patient care. She contributes to development of WHO Package of Rehabilitation Intervention for low back pain



Sabina Choinski, USA

Committee Member

Sabina Choinski is the Manager of International Programming and Development at The North American Spine Society (NASS) where she leads many initiatives within the NASS International (NASSi) team. Sabina has been credited with exceptional communication and organizational skills and prides herself in being a part of an organization that aims to advance global spine care. Sabina attended DePaul University where she received her Bachelor of Arts degree in Public Relations and Advertising with a Minor in Business Administration



Saiful Asmiragani, Indonesia

Committee Member & Speaker

Dr. Syaifullah is a consultant Spine Surgeon at Saiful Anwar Hospital and Lecturer at Faculty of Medicine, Brawijaya University. He has completed his orthopedic residency in Dr Soetomo Hospital - Airlangga University, Surabaya in 2003, and he joined a spine fellowship at Ciptomangunkusumo Hospital-University of Indonesia in 2007. Currently he is being appointed as Director of Nursing and Medical Services at Saiful Anwar Hospital, Malang, East Java, Indonesia. He is also a member of The Indonesian College of Orthopaedic and Traumatology, and his main practice involves different aspects of spine pathologies. Dr. Syaifullah is the current President of Indonesia Spine Society.



Shanmuganathan Rajasekaran, India

Committee Member & Speaker

Dr. S Rajasekaran is the Chairman of the Department of Orthopaedics and Spine Surgery in Ganga Hospital, Coimbatore, India. He is Current President of the Asia Pacific Spine Society, the immediate Past Chair of AOSpine International, SICOT, ISSLS and CSRS-AP. Apart from busy clinical work, he is also interested in research which is concentrated on outcomes of major trauma, disc degeneration and spinal infections. He is the recipient of four ISSLS Award, NASS Outstanding paper award for three consecutive years and the EUROSPINE Open Paper Award. Dr. Rajasekaran has 304 publications in international journals, 70 national publications and 475 international and 546 national presentations. He has contributed 65 chapters in international books and is the Chief Editor of a Video Atlas of Spine Surgery and the ASSI Textbook on Spinal Infections & Trauma.



Sohail Bajammal, Saudi Arabia

Committee Member & Speaker

Dr. Bajammal is an academic orthopedic spine surgeon at Umm Al-Qura University, Makkah, Saudi Arabia. He was the founding Vice President of the Saudi Spine Society (2016-2019). He has held multiple healthcare and educational leadership positions in Saudi Arabia. He completed orthopedic surgery residency training at McMaster University and spine surgery fellowship at the University of Calgary. He completed a Master of Science in Health Research Methodology at McMaster University and currently an MBA candidate at the University of Massachusetts Amherst. He was a Certified Professional in Healthcare Quality (CPHQ) and was a Certified Professional in Patient Safety (CPPS). He is a certified surveyor at the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI).



William Sullivan, USA

Committee Member & Speaker

William Sullivan, MD received his medical degree from Emory University School of Medicine and completed residency in Physical Medicine and Rehabilitation at Northwestern University / Rehabilitation Institute of Chicago. He is currently a Professor in the Department of Physical Medicine and Rehabilitation at Vanderbilt University. He was President 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.



Yahya Alqahtani, Saudi Arabia

Committee Member

Dr. Alqahtani is a spine and orthopedic consultant working in the medical services on the presidency of state security in Riyadh. He is an executive board member and the treasurer of Saudi Spine Society. He is a member of SPINE20 founding team. Dr. Alqahtani specialty and sub-specialty training was in 3 countries (Saudi Arabia, France, Canada) he was exposed to different health systems and was able to appreciate their impact on the quality of patients' life.



Yudha Mathan Sakti, Indonesia

Committee Member

2006 DR. Hasan Sadikin General Hospital Bandung, West Java
 2009 Surgery Department University of Gadjah Mada – Sardjito General Hospital Jogjakarta
 2012 Orthopaedic & Traumatology Department University of Gadjah Mada – Sardjito General Hospital Jogjakarta (awarded as the best candidate for the board national exam of orthopaedic and traumatology)
 2014 Spine Surgeon, Kolegium Ilmu Orthopaedi dan Traumatologi Indonesia – Fakultas Kedokteran Universitas Indonesia, Jakarta, Indonesia
 2021 Presiden MISST Asean, 2021 Vice President Young Surgeon APOA, 2021 Board of Faculty Spine Society Basic Course, 2019 Education Commission Member Indonesian College of Orthopaedic and Traumatology
 2019 Professional Development and Continuing Education (CPD/CME) Indonesian Orthopaedic Association
 2019 Chairman of the Education and Research Commission (Research) Pedicle Club Indonesia



A. Hafid Bajamal, Indonesia

Speaker

- Medical Doctor, Airlangga University.
- Neurology Training, Airlangga University/Dr Soetomo Hospital.
- Full Training in Neurosurgery, Catholic University, St. Radboud Hospital, Nijmegen. Nederland.
- PhD. of Medical Science, Airlangga University, Professor of Neurosurgery, Airlangga University
- Chairman of Neurosurgery Dep., Airlangga University/ Dr Sutomo Hospital.
- Chairman of Brain Clinic, Surabaya.
- President of Indonesian Neurosurgical Society. President of ASEAN Neurosurgery Association
- Member of Spine Committee WFNS



Americo Cicchetti, Italy

Speaker

Professor of Healthcare Management at the Faculty of Economics, Università Cattolica del Sacro Cuore, Rome (Italy) and Director of the Advanced School of Health Economics and Management. He is the Director of Research of the Health Technology Assessment Unit of the A. Gemelli University Hospital in Rome. He has been associated partner of the European Network of Health Technology Assessment and Director of Health Technology Assessment International. Associate editor of Frontiers in Medical Technology – Regulatory Affairs and of the International Journal of Health Technology Assessment in Healthcare. Americo Cicchetti has actively participated as co-PI to numerous EU research projects regarding HTA applications such as ADHOPHTA (Adopting HTA in European Hospitals), IMPACT HTA, and others. He has been member of the Price and Reimbursement Committee of the Italian National Drug Agency (AIFA) from 2009 to 2015. He authored more than 150 papers and 10 books.



Amit Thapa, Nepal

Speaker

- Professor (Neurosurgery), Kathmandu University & Director, Advance Neurosciences Centre
- Head of Department, Neurosurgery, Kathmandu Medical College Teaching Hospital
- Vice President: Nepalese Society of Neurosurgeons (NESON) & Vice President: Nepal Epilepsy Society (NES)
- Chairman, Neuro Spine Chapter of NESON
- Past Editor-in-Chief: Nepalese Journal of Neurosciences (NJNS)
- Publication: numerous articles in peer reviewed journals & guest lectures
- Special interests: Spine, Peripheral nerve surgery, Minimal Invasive Neurosurgery. Current advocacy for "National Spine Health Program", a collaborative approach across various surgical and non-surgical professional societies



Anand Bang, India

Speaker

Dr. Anand Bang is a physician and public health expert. He is the Joint Director of the organization Society for Education, Action & Research in Community Health (SEARCH), an organization focused over 37 years on providing medical care, conducting research to develop models for health care for the tribal & rural communities of India and influencing policies. He is the founding member of the Center of Spine & Joint Health at SEARCH. He is also the Advisor for the Tata Trusts, the oldest & the largest philanthropic trusts in India. He has been the Consultant to the Ministry of Health & Family Welfare, Government of India for the National community based ASHA program & Universal Health Care. He has also been the Advisor to the Chief Minister of Maharashtra, the second largest State of India, for social sectors policies, programs and partnerships.



Asdrubal Falavigna, Brazil

Speaker

Chair of AO Spine International Board. Vice-Rector of Caxias do Sul University. Dean of the Medical School at the University of Caxias do Sul (UCS) from 2008 to 2016. Coordinator of Health Science Post-Graduation in Medicine of UCS from 2016 to 2021. Director of Health Science Center of UCS since 2018. Award from the City Council of Caxias do Sul for Services rendered to Health in the Municipality in May 2011. International Liaison of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves since 2016.



Bambang Tutuko, Indonesia

Speaker

Medical Doctor, Faculty of Medicine University of Indonesia, 1979, Compulsory training for military officer, 1980, Police officer training, 1982. Anesthesiology and Intensive Therapy Specialist Doctor, Faculty of Medicine University of Indonesia 1989. Intensivist, Faculty of Medicine University of Indonesia 1997

Chair of the Board of Specialists and Sub-specialists, Medical Services Development Council, Indonesian Medical Association, 2018 – 2021, Chair of the Confederation of ASEAN Society of Anesthesiologists, 2013 – 2015, President of the Indonesian Society of Anesthesiology and Intensive Therapy, 2007 - 2009 & 2010 - 2013

Currently, Chair of Indonesian National Patient Safety Committee, Indonesian Ministry of Health, 2020 – 2023. Chair of the Board of Specialists and Sub-specialists, Medical Services Development Council, Indonesian Medical Association, 2022 - 2024. Member of Hospital Ethics Code Council, Indonesian Hospital Association, Jakarta Chapter 2017 – 2023. Chair of the Medical Advisory, Premier Bintaro Hospital.



Baron Zarate Kalfopulos, Mexico

Speaker

Spine Surgeon Instituto Nacional de Rehabilitación / Médica Sur Mexico City
Assistant Professor Orthopaedic Surgery Universidad Nacional Autónoma de México (UNAM)
Assistant Professor Spine Surgery Universidad Nacional Autónoma de México (UNAM)
AO Spine Center director Instituto Nacional de Rehabilitación México
Past President of the Mexican Association of Spine Surgeons (AMCICO)

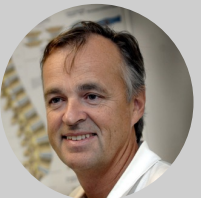


Charlotte Kiekens, Belgium

Speaker

Charlotte Kiekens is a Belgian Physical and Rehabilitation (PRM) physician, working in Italy since 2020, after 30 years at the University Hospitals Leuven – KU Leuven. She was Director of the Spinal Unit at the Montecatone Rehabilitation Institute 2020-2021, and is currently head of the PRM unit at Ospedale San Giuseppe, IRCCS MultiMedica in Milano. She is Co-Director of Cochrane Rehabilitation, which she cofounded in 2016. She is the chair of the International Society of PRM (ISPRM)-WHO Liaison committee, member of the European Academy of Rehabilitation Medicine, Senior Fellow of the European Board of PRM and ISCoS Fellow.

She chairs the Professional Practice Committee at the UEMS (European Union of Medical Specialists) PRM Section. She has been involved in teaching and research activities and published over 150 papers in PubMed, 20 book chapters and she gave lectures at national and international conferences, including in low-and middle-income countries in Asia and Africa.



Erik Werner, Norway

Speaker

Erik L. Werner, MD, PhD, is a family physician in Arendal, Norway, and professor in general practice at the University of Oslo. Low back pain has been a major topic in his research for more than 20 years, as well as disability and unspecific health complaints. At the university he is the head of the 5th year of medical school, where general practice is the principal topic. He also takes place in the EUROSPINE EDISC faculty which is an advanced learning program for health care providers aiming at increasing interprofessional treatment of back pain.



Francesco Tamburelli, Italy

Speaker

Prof. Francesco Tamburelli is an Orthopedic Surgeon and Spinal Surgeon, Associate Professor of Orthopedic Catholic University of Rome, Chief of Spinal Surgery Unit Fondazione Policlinico Universitario A. Gemelli – IRCCS Rome



Hani Mhaidli, Spain

Speaker

Orthopaedic spine surgeon Spine clinic Nestor de la torre 22, Las Palmas 35006 Spain
Spine fellowship at Johns Hopkins Baltimore 1992

Head of the Spine Department, University Hospital of Gran Canaria Dr. Negrin Las Palmas de G.C. since 1993.
Associate Professor of Orthopedics at the University of Las Palmas, Department of Clinical Science, since 1991
Ph.D. Universidad de Las Palmas de Gran Canaria, November, 2006.

President of Iberian and Latin-American Spine Society SILACO 2019- 2021. SRS Board of directors 2016-2018.
Chairman Scoliosis Research Society Awards & Scholarship Committee 2014- 2015. President of the Spanish Spine Society (GEER) 2011-2013. Director of SRS Global Outreach Program in Marrakech since 2010-2018
Chairman of SRS Worldwide Conferences in Valencia Spain 2013, Lima Peru 2015; Marrakech Morocco 2015 and Barcelona Spain 2019. Active participation at The G20 World Brain Mapping & Therapeutic Scientific Summit 2018 Buenos Aires and Osaka Japan 2019 , also attended



Luiz Roberto Vialle, Brazil

Speaker

Professor of Orthopedics, School of Medicine
Pontifical Catholic University

Spine Unit, Cajuru University Hospital, and Medical Director, Curitiba Spine Center
Brazilian Spine Society, Founder and Past President

Chairman AOSpine Latin America 2003/2007, Chairman AOSpine International, 2009/2012

Editorial Board: European Spine Journal, Brazilian Orthopedic Journal, Coluna/Columna Journal

Editor, Master Series on Spine, Thieme, AO Surgery Reference, Spine, The Spine (book) Jaypee, 2019, and a Deputy Editor: Global Spine Journal

25 Book Chapters, 80 Publications, and 505 Lectures on Courses and Congresses



Michael Fehlings, Canada

Speaker

Dr. Michael Fehlings is a Professor of Neurosurgery and Co-Director of the University of Toronto Spine Program. He combines an active clinical practice in complex spinal surgery at Toronto Western Hospital with a translationally oriented research program focused on discovering novel treatments for the injured spinal cord. He has published over 1000 peer-reviewed articles (h-index 109) chiefly in the area of central nervous system injury and complex spinal surgery. Dr. Fehlings has held prominent leadership roles, including Past President of the International Neurotrauma Society, past President of the Cervical Spine Research Society, and led several international clinical research trials.



Naohisa Miyakoshi, Japan

Speaker

Naohisa Miyakoshi, MD, PhD is a professor and chairman of the Department of Orthopedic Surgery at Akita University Graduate School of Medicine, Japan. He is a spine surgeon and a council member of the Japanese Society for Spine Surgery and Related Research (JSSR). His recent research focuses specifically on the comprehensive management of postural deformities in patients with osteoporosis. He has also been conducting basic research on bone and mineral metabolism for over 20 years.



Omar Alshanqeety, Saudi Arabia

Speaker

Adviser to the Chief Executive Officer

Program for Health Assurance and Purchasing
Ministry of Health, Kingdom of Saudi Arabia

Dr. Alshanqeety is a Saudi physician, health economist. He currently serves as an adviser to the CEO of has of the Program for Health Assurance and Purchasing (PHAP), the is the entity designed to be the public payer for healthcare services in Saudi Arabia. Dr. Alshanqeety helped establish PHAP and served as its founding CEO for 4 years. He also served, and currently serves, on the boards of several healthcare organisations in the Kingdom. Prior to that, Dr. Alshanqeety had years of experience in management consulting and academic research. He earned his medical degree from King Saud University in Riyadh, Saudi Arabia, and his MPH and PhD in health economics from the University of Michigan in the United States.



Paul Barach, Austria

Speaker

Professor Paul Barach is a practicing anesthesiologist and international safety science expert and a passionate believer in smart health information technology and monitoring to improve the safety and quality of healthcare. Paul is a double boarded anaesthesiologist and critical care physician-scientist, and trained at Harvard University and Massachusetts General Hospital. Paul has held positions of Chief Quality Officer, Associate Chief Medical Officer, Associate Dean and Director of the Center for Simulation and Patient Safety at large academic medical centers. Paul has more than 25 years of experience as a practicing physician and physician executive in the military and in academic medical centers and integrated delivery systems. Paul has a long history of intersecting clinical, information technology and operational responsibilities with executive management, business and entrepreneurial roles including as senior hospital executive in academic medical centers and integrated delivery systems. Paul holds academic positions as Lecturer and Senior Advisor to Dean, Jefferson College of Population Health; Sigmund Freud University in Vienna, Austria; Milan Polytechnic, Italy; University of Queensland, Australia; University of Birmingham, UK; National Cancer Center in Seoul, Korea; Riphah University, Pakistan; & at MUHAS University, Tanzania.



Rita Roy, USA

Speaker

Dr. Rita Roy is Chief Executive Officer of the National Spine Health Foundation, leading the only patient-centered 501(c)(3) nonprofit dedicated to improving spinal healthcare through education, advocacy and research. With decades of medical and entrepreneurial expertise, Dr. Roy oversees the foundation's mission to help patients overcome debilitating spine conditions. She hosts the Get Back To It Podcast, telling real stories of spinal healing and recovery. Dr. Roy is a member of the FDA Patient Engagement Advisory Committee and on the Board of the U.S. Bone and Joint Initiative. Published in many peer reviewed journals, she often appears in the media. Dr. Roy received her medical degree from George Washington University where she completed a general surgery internship/residency.



Ronald Pakasi, Indonesia

Speaker

Completed his medical doctor degree and residency training in Physical Medicine and Rehabilitation (PM&R) both in Universitas Indonesia, Jakarta.

He is now a neuromuscular rehabilitation consultant and has been working in Fatmawati Central Hospital Jakarta in spinal cord injury rehabilitation unit, Medical Rehabilitation Dept. since 2008.

Fatmawati Central Hospital is the national referral hospital for Orthopedic and Rehabilitation, specialized in spinal injuries and also a Type A Teaching Hospital.

His current activities include: Chief of Medical Rehabilitation Dept.; director of spinal cord injury rehabilitation module; lecturer in Fakultas Kedokteran Universitas Indonesia; guest lecturer in PM&R residency program in Universitas Padjajaran, Bandung and Universitas Diponegoro, Semarang; chairman of the Indonesian Spinal Cord Network (INASCoN); and member of the Asian Spinal Cord Network (ASCoN).



Salman Sharif, Pakistan

Speaker

President: World Spinal Column Society

Chairman: WFNS Spine Committee

Past President: Pakistan Society of Neurosurgeons

Executive Committee Member: Asia Pacific Representative, International Federation of Neuroendoscopy, Past President, Middle East Spine Society, Asian Congress of Neurological Surgeons, Asia Pacific Cervical Spine Society, South Asian Neurological Surgeons

EDITORIAL BOARD: World spinal Column Journal Turkey, World Neurosurgery, Asian Spine Journal Korea, Asian Journal of Neurosurgery Japan, Journal of Neurosciences in rural health India, Turkish Neurosurgical Journal, Director/ President of over 30 international workshops/ conferences including ACNS/ World Spine/ Liaquat, international symposium/ trainers educational programs, President, Karachi Spine 2017



Wilco Peul, Netherland

Speaker

Wilco Peul is professor of Clinical Neurosurgery in Leiden since 2008 and chair of a cooperation of 3 hospitals in Leiden & The Hague (University Neurosurgical Center Holland). Besides his particular interest in reconstructive spine surgery and neurotraumatology, he is a certified senior PhD (cum laude) Epidemiologist. With regard to Spine Research he is a member of the Editorial Board of Cochrane Back Review Group since that time and since 2017 proud to be an active member of the Neurotraumatology and the Spine Section of WFNS.

He is member of the EANS Neurotraumatology committee and served for 8 years for the Spine Committee responsible for the European training in cooperation with Eurospine until 2017. Currently he is president of the UEMS Neurosurgery section (EU, Bruxelles) on behalf of EANS. Since 2020 Wilco is Board member of ZonMW (The Netherlands Organisation for Health Research and Development) and started in 2021 as Editor-in-Chief of the new EANS-Eurospine journal "Brain & Spine".



Yukihiro Matsuyama, Japan

Speaker

Yukihiro Matsuyama, MD, PhD is the Director, Professor & Chairman Hamamatsu University School of Medicine Member, Board of Directors of Japanese Orthopaedic Association (JOA) 1989 Committee Member for Orthopaedic Board Examination, JOA, 2007-2009, Past president of the Japanese Society for Spine Surgery and Related Research Society

International member

Active Fellow and Member of SRS 2009, Member of CSRS 2010 Associate member of the AO Spine Knowledge Forum Deformity 2016, Associate member of the AO Spine Knowledge Forum Deformity 2016, Stealing member of the AO Spine Knowledge Forum Deformity 2019, Scolio-RISK-1 study team 2017, PEEDS study team 2017

Award

Scoliosis Research Society Russell S.hibbs Clinical Award 2013
Scoliosis Research Society Whitecloud Award for Best Clinical Paper 2015



Zakiuddin Ahmed, Pakistan

Speaker

Dr. Zakiuddin Ahmed is a strategist, entrepreneur, trailblazer, motivational speaker, coach, mentor and a visionary leader who specializes in fostering collaborations to create socially beneficial, sustainable and innovative solutions. His areas of interest, expertise and experience are: Digital Health, Patient Safety & Healthcare Quality, Health Research and Healthcare Leadership.

As a Physician leader and an expert in human behavior, he has trained and helped hundreds of senior physicians, CEOs, MDs and government officials in their journey of self -exploration, development and leadership.

Dr. Ahmed holds the following leadership positions: Adjunct Professor, Digital Health, HSA University; Chairman, International Conference on Patient Safety (ICPS); Project Director, Riphah Institute of Healthcare Improvement & Safety, Riphah International University; CEO, Digital Care; Secretary, Health Research Advisory Board and Founder & Executive Coach, Institute of Innovation Leadership in Medicine – IiLM.

ACCREDITATION (NASS)

CONTINUING MEDICAL EDUCATION (CME) CREDIT

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The North American Spine Society and SPINE20. The North American Spine Society is accredited by the ACCME to provide continuing medical education for physicians.

The North American Spine Society designates this live activity for a maximum of 12.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

HOW TO CLAIM YOUR CME

Log into your NASS account via www.spine.org/CME to claim CME. You will not be able to submit answers or print a certificate until the meeting concludes on Friday, August 5, 2022 at 5:30 p.m. WITA (Central Indonesia Standard Time UTC+8 hours).

EVALUATION AND EDUCATIONAL CERTIFICATES

After the meeting, you may submit your evaluation electronically and print your CME certificate directly from the NASS website. Visit www.spine.org/cme to claim education credit and to print CME certificates. Contact education@spine.org with questions.



ACCREDITATION (IDI)

The IDI Professional Credit Unit (SKP) is proof of the participation of a doctor (physician only) in the Continuing Professional Development program. This credit is given for both clinical activities (related to medical services directly and indirectly) and non-clinical activities (teaching, researching and health management). The IDI Professional Credit Unit (SKP) for SPINE20-2022 is printed in the certificate of attendance





DISCLOSURES

NASS DISCLOSURE POLICY INFORMATION

NASS Conflict of Interest Disclosure Policy

NASS is dedicated to offering high quality programming that is of the highest standards of academic rigor, intellectual veracity and professionalism. In order to achieve this goal, NASS has developed a Conflict of Interest Disclosure Policy. A full version of this policy is available at: www.spine.org/DisclosurePolicy. The goal of this policy is to create a uniform system that encourages disclosures of situations in which there is even the potential for bias, without any implications regarding actual bias. All authors and faculty speaking at the Annual Meeting have been required to submit such disclosures.

Important Terms

- **Ineligible Company:** Organizations that are not eligible for accreditation, previously known as commercial interests, are those whose primary business is producing, marketing, selling, reselling, or distributing healthcare products used by or on patients
- **Relevant Financial Relationships:** Financial relationships are relevant if the educational content an individual can control is related to the business lines or products of the ineligible company.
- **Commercial Support:** Financial or in-kind support from ineligible companies.

Commercial Support Information

On occasions where NASS accepts financial or in-kind support from ineligible companies, NASS attests that the support does not establish a financial relationship between the ineligible company and planners, faculty, and others in control of the education. NASS is responsible for ensuring that all educational activities remain independent of the ineligible company and that the support does not result in commercial bias or commercial influence in the education.

Commercial Support Statement

Financial and in-kind support was provided for select activities. Supporters and type of support are listed throughout the program and noted outside session rooms when applicable.

Disclosure of Financial Relationship Information

NASS asks individuals in control of content for this activity (planners, faculty, reviewers, authors, staff, others) to disclose all financial relationships with any ineligible companies that they have had during the past 12 months using the NASS online disclosure module at www.spine.org/disclosure.

Ineligible companies, previously known as commercial interests, are those whose primary business is producing, marketing, selling, re-selling or distributing healthcare products used by or on patients. There is no minimum financial threshold; participants must disclose all financial relationships, regardless of the amount, with these companies. NASS asks all participants to disclose regardless of whether they view the financial relationships as relevant to the education.

Since healthcare professionals serve as the trusted authorities when advising patients, they must protect their learning environment from industry influence to ensure they remain true to their ethical commitments. Many healthcare professionals have financial relationships with ineligible companies/commercial interests. By identifying and mitigating relevant financial relationships, we work together to create a protected space to learn, teach, and engage in scientific discourse free from influence from organizations that may have an incentive to insert commercial bias into education.

Relevant Financial Relationship Identification and Mitigation

After disclosure information is received and prior to implementation of the educational activity, NASS staff and peers review them to determine whether the relationships are relevant to the education. Please note that identification of relevant financial relationships does not necessarily mean that the individual is unable to participate in the planning and implementation of the education activity. Rather, the accreditation standards require that relevant financial relationships are mitigated before their roles are assumed in the activity.

Financial relationships, or notice of the absence of, will be made available visually on a PowerPoint® slide before each presentation, virtually in each session room and in the Disclosure Index. Disclosures are also available on the SPINE20 website.

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Conflict of Interest Disclosure Index

Ranges of financial compensation as provided to NASS are as follows:

None: Existing relationship but no remuneration in prior calendar year

- Level A. \$100 to \$1,000
- Level B. \$1,001 to \$10,000
- Level C. \$10,001 to \$25,000
- Level D. \$25,001 to \$50,000
- Level E. \$50,001 to \$100,000
- Level F. \$100,001 to \$500,000
- Level G. \$500,001 to \$1M
- Level H. \$1,000,001 to \$2.5M
- Level I. Greater than \$2.5M

SPINE20 Meeting 2022 Program Disclosures - current as of 07/20/2022

**Staff denoted with an asterisk*

Last name, First Name: Type of disclosure: Company Name (Level).

All relevant relationships listed for these individuals have been mitigated.

Ahmad, Alaaeldin A.: Board of Directors: World Orthopedic Concern (Nonfinancial); Research Support (Staff and/or materials): Medtronic (None, Paid directly to institution/employer).

Blatter, Thomas R.: Board of Directors: EUROSPINE (Nonfinancial, President), SPINE20 Executive Board (Nonfinancial); Consulting: Medtronic (B); Scientific Advisory Board: Medtronic (B); Speaking and/or Teaching Arrangements: Leipzig University (None); Trips/Travel: Conference S (B).

*Bugara, Kinga M.: Other: North American Spine Society (Salary).

Campello, Marco A.: Speaking and/or Teaching Arrangements: EUROSPINE (B, Outside 12-Month Requirement).

*Choinski, Sabina: Other: North American Spine Society (Salary).

Cote, Pierre: Grants: CIHR (F, Paid directly to institution/employer); Research Support (Investigator Salary): Canada Research Chair-Canadian Institutes of Health Research (E, Paid directly to institution/employer); Speaking and/or Teaching Arrangements: Eurospine (B); Trips/Travel: European Spine Society (Travel Expense Reimbursement, Paid directly to institution/employer), Eurospine (B).

Darwono, Aloysius B.: Consulting: Spirit Spine (Travel Expense Reimbursement, Paid directly to institution/employer); Speaking and/or Teaching Arrangements: Cousin Biotech (Travel Expense Reimbursement, Paid directly to institution/employer).

Dohring, Edward J.: Board of Directors: NASS President (Travel Expense Reimbursement); Other Office: AAOS (Travel Expense Reimbursement); Private Investments: Anzu (1%, .03%).

Fehlings, Michael G.: Stock Ownership: Inteligex Inc. (Future Compensation Expected).

Ito, Manabu: Board of Directors: AO Foundation (C), Japanese Scoliosis Society (Nonfinancial), The Japanese Society For Spine Surgery And Related Research (Nonfinancial), The Japanese Spinal Instrumentation Society (Nonfinancial).

Lahey, Donna M.: Speaking and/or Teaching Arrangements: NASS (A, Paid directly to institution/employer); Trips/Travel: NASS (Travel Expense Reimbursement, Paid directly to institution/employer).

Menezes, Cristiano M.: Consulting: NuVasive (F).

Muehlbauer, Eric J.: Board of Directors: North American Spine Society (Salary).

Pereira, Paulo M.: Consulting: Medtronic (B, Paid directly to institution/employer).

Piccirillo, Michael: Board of Directors: Bioretec (Salary, Paid directly to institution/employer); Consulting: Gelmetix (Salary), NASS (Salary, Paid directly to institution/employer), OSGENIC (Salary, 3,000 Shares, Paid directly to institution/employer), Stöckli Medical (Salary, Paid directly to institution/employer).

Roy, Rita T.: Research Support (Investigator Salary): National Spine Health Foundation (Salary).

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Sullivan, William J.: Board of Directors: NASS (Executive Committee); Trips/Travel: NASS (Travel Expense Reimbursement).

The following participants have nothing to disclose:

Ahmed, Zakiuddin
Al Eissa, Sami Ibrahim
Alshanqeety, Omar
Alsobayel, Hana
Arand, Markus
Asmiragani, Syaifullah
Azharuddin, D.
Bajamal, A. Hafid
Bajammal, Sohail S.
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