



SPINE20

ROME • SEPTEMBER 17-18, 2021

Meeting Guide





Care for People's Health and Prosperity

*Spine20 new vision statement “**Care for People's Health and Prosperity**” emphasizes the ambition of the Societies to further reinforce health and prosperity as a core partner in multidisciplinary spine care, and to guarantee accessible and high-value spine therapy or advancing the care of patients with spine diseases and related disorders.*



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WELCOME ADDRESS

Dear Colleagues and Friends,

It is indeed our great honor to warmly welcome you all to the 2nd International Spine care Conference SPINE20, which will be held 17th and 18th September 2021 as a hybrid event, in Rome, Italy. The Conference will be organized around the theme **“SPINE20: Care for People’s Health and Prosperity”** and aims to promote top level research and to learn and discuss some of the latest trends in these research fields through close interaction with distinguished and prominent leaders who excel in the spine care field.

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

SPINE20 new vision statement **“Care for People’s Health and Prosperity”** emphasizes the ambition of the Societies to further reinforce health and prosperity as a core partner in multidisciplinary spine care, and to guarantee accessible and high-value spine therapy or advancing the care of patients with spine diseases and related disorders. Our goal is to deliver an outstanding program, which covers the entire spectrum of research & innovations in Spine Care, Spine Surgery and share the cross-cultural experiences of various treatment procedures and rehabilitation methods, by sharing ideas, updating knowledge and enhancing professional developments. There will be great opportunities for the sharing of the state-of-art and rapidly-advancing modern day management of spine illnesses.

The Conference in Rome takes place during the presidency of Italy at the G20 forum. For the first time, Italy is presiding over this globally important forum. It will give tremendous exposure to spine care in the Nation and beyond. SPINE20 will be spoken of in the future and our hearts and minds will swell with memories of tragedy, disruption, worry, sacrifice, challenges and the warmth of human kindness that only the likes of a global pandemic can bring with such intensity. And we will remember the privilege and responsibility we have as a society, to be a voice for those citizens and patients suffering from spine disease and related disorders, to ensure they continue to receive the health services they need.

While this decade began with some unique challenges, namely the global spread of COVID-19 and restriction of movement in many countries, we also witnessed a strong sense of solidarity, as people came together to support one another through the situation. As the world adapted to current realities, new digital solutions allowed us to remain connected. We hope to bring the value of these newly developed communication channels to this hybrid edition of the conference in 2021.

On behalf of the Executive and Scientific Program Committees of SPINE20, we ask you to stay engaged, keep us proactive and help us shape the future of Spine studies.

We look forward to welcoming you to SPINE20, 2021.



Giuseppe Costanzo
SPINE20 2021 Chair



Bernardo Misaggi
SICV & GIS President



SPINE20 Executive Committee

EUROSPINE

Margareta Nordin
Thomas R. Blattert

German Spine Society

Frank Kandziora
Ulf Liljenqvist

North American Spine Society

Eric Truumees
Eric Muehlbauer

Saudi Spine Society

Ahmed Alturkistany
Sami I. AlEissa

Association of Spine Surgeons of India

H. S. Chhabra

Indonesian Spine Society

Bambang Darwono

Italian Spine Society

Giuseppe Costanzo

SPINE20 Speaker

Margareta Nordin



WHO WE ARE?

G20

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

Historically, the G20 was founded in 1999 at the level of Finance Ministers and Central Bank Governors, the G20 gathered for high level discussions on macro-financial issues. In the wake of the 2008 global financial crises, the G20 was elevated to

include the leaders of member countries. The first G20 Leaders' Summit took place in Washington D.C in November 2008. Consonantly, the G20 agenda expanded beyond macro financial issues, to include socio-economic and development issues.

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



level, the G20 work is organized around the Finance and Sherpa Tracks, while civil society assembles through Engagement Groups.

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

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



The 2021 G20 Rome summit is the upcoming sixteenth meeting of Group of twenty (G20). The economy of Italy is the third-largest national economy in the European Union, the eight-largest by nominal GDP in the world, and the 13th largest by GDP (PPP). Italy is a founding member of the European Union, the Eurozone, the OECD, the G7 and the G20. Since December 1, 2020, Italy holds the Presidency of the G20, the international forum that brings together the world's major economies. Scheduled to take place in Rome, the capital city of Italy, on 30–31 October 2021.

SPINE20 INITIATIVE

Disorders of the spine with its multiple pathologies and trauma are the number one cause of disability that put enormous burden on the economy, back ailments can lead to extreme pain, inability to function, and subsequently job loss.

Advocacy, education, and government policies are urgently needed in order to provide a value-based spine care where standardized practice based on best available evidence while controlling the health care cost.

SPINE20 is an advocacy group founded in 2019 by the Saudi Spine Society (SSS), EUROSPINE, the North American Spine Society (NASS) and the German Spine Society (DWG) in an effort to improve spine care on a global level through recommending policies in the G20 countries and beyond that help them alleviate the burden of spine disease through various means including stimulating better spine health, advance spine research, enhancing spine innovation pathways and improving spine care and treatments through 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 will be held in Italy and 2022 in Indonesia just prior to G20 meetings.



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

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

Serve as resource

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

Advocate

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

Stimulate innovation

to promote spine health.

Advance spine research

through advocacy for funding to improve our ability to care for patients.

Facilitate access to spine care and treatment

to improve function and decrease disability of spine patients.

What sets SPINE20 apart from other medical societies?

Opening doors for international advocacy

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

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



Mission

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



Vision

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



Objectives

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

- a. Educating all levels of health care practitioners in the global community on appropriate evidence-based spine care.
- b. Educating spine patients and their families and communities by providing high quality adapted educational materials.
- c. Enhancing local support and economic conditions for spine practitioners by partner good spine health policies within health ministries and governmental programs across the globe.
- d. Improving global research funding for spine care (including public health, prevention, treatment alternatives and prevention of disability from spinal disorders).
- e. Serving as a resource for governmental agencies and Sherpas for establishing improved access and spinal care globally and within each Party's home country using an extensive global network of spine societies.
- f. Serving as an advocacy group globally and nationally through this identified SPINE20 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.

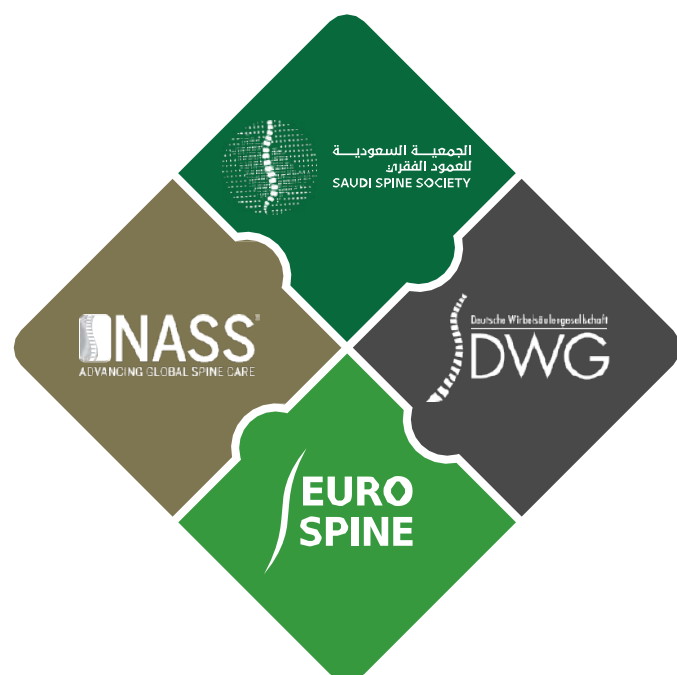
Founding societies



الجمعية السعودية
للعمود الفقري
SAUDI SPINE SOCIETY



ADVANCING GLOBAL SPINE CARE



Saudi Spine Society (SSS)
www.saudispine.org

EUROSPINE
www.eurospine.org

German Spine Society (DWG)
www.dwg.org

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

Partner societies

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

Partner Societies for SPINE20, Rome, September 17-18, 2021



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



**Indonesian Spine Society
(ISS)**
www.indonesianspinesociety.org

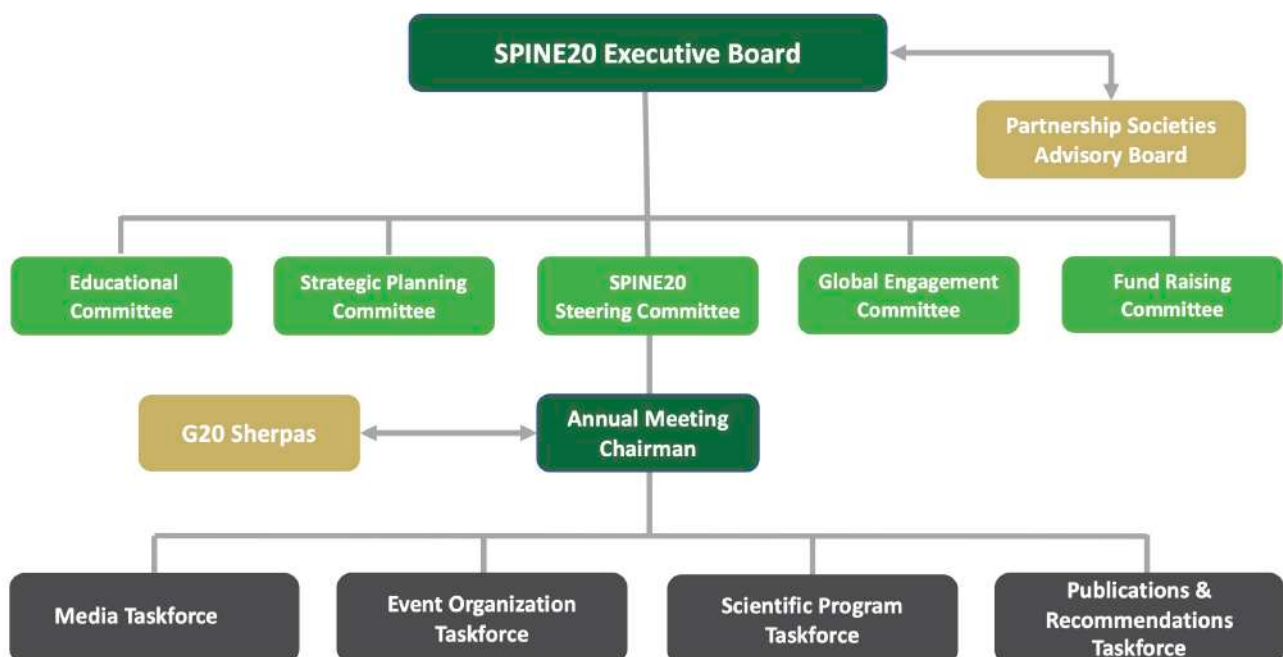


**Italian Spine Society
(SICV & GIS)**
www.gis-italia.org

SPINE20 Organizational Structure

The Executive Committee is made up of:

- » Saudi Spine Society, EUROSPINE, DWG, NASS (founding societies).
- » Italian Spine Society (Host 2021).
- » Indonesian Spine Society (Host 2022).
- » Association of Spinal Surgeons of India (Host 2023).



SPINE20

Committees and Task Forces

❖ **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**

Aims to develop global educational program based on evidence and best practices.

❖ **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**

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

❖ **Publications and Recommendations Task Force**

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.

Scientific Program

SPINE20 MEETING is composed of multiple symposia, each symposium will address specific spine related domain.

A multidisciplinary international Scientific committee and Task force are meeting around the year to develop the scientific content.

The **SPINE20** program should always include:

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

Target Audience

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

Recommendations and Publication

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



How will we ensure continuity?



SPINE20 Saudi Arabia, 2020

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



SPINE20 Italy, 2021

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



SPINE20 Indonesia, 2022

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



SPINE20 India, 2023

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

The background is a solid dark green color. It is decorated with several large, abstract, overlapping shapes in a gold or light brown color. These shapes are geometric, featuring sharp points and curved edges, resembling stylized leaves or modern architectural elements. They are scattered across the frame, with some pointing towards the top and others towards the bottom.

SPINE20 2nd Annual Meeting

Rome | 17-18 September

THE HISTORY OF ROME

"Oh Rome! My country! City of the soul!"

Lord Byron, English Poet
(1788-1824)

ROME, THE IMMORTAL CITY

There is, in the beauty of Rome and in its strength, a unique experience of History, from monument to monument, from Antiquity to the Renaissance, from the arches of the Colosseum to the dome of St. Peter's, passing through the baroque fountains of Piazza Navona, Rome has been a palimpsest of overlapping temporalities for more than 2,000 years of history.

It was said: "Rome is the city of souls" and we would gladly add, "Rome is the city which speaks to all souls and that will know how to tell everyone the word we are waiting for."

ROME, CRADLES OF CIVILISATION

Rome, rightly named as the Eternal City, crystallizes all the periods of history that have shaped our Western civilization. To walk in Rome is to travel through time and reread a page of our culture at every step.

From early settlers to the Republic through to the Imperial age (first to fifth century AD) and Papacy, Rome has collected all sorts of the most advanced culture, politics, military organization and fine arts the world has seen.

ROMA ... AMOR

The word Rome's anagram spells Amor, which in Latin means Love and derives possibly from A (not) and Mors (death). Love has the same root as Life. Here is another reason why the City is known as 'the Immortal'.

The scene, which we could say of an ancient "clinic", sees the doctor Japix, kneeling, intent with a scalpel to heal a cut on Aeneas's right thigh, while the worried mother Venus comes to help her son. The goddess holds in her right hand the veil under which a precious diadem appears to shine, while -under the reassuring arm of her father- little Ascanio, future founder of Alba Longa, wipes his tears of anguish with a cloth. The hero watches gratefully and confidently at her mother as she hands him a bundle of providential alfalfa.



Fresco found in Pompeii

EUROPEAN CITIZENSHIP

The Roman Empire, thanks to the Romanization of the provinces conquered over the centuries, became the first successful attempt of legal, cultural and economic integration. It was under Augustus that Rome first began to look like a world capital: its splendid monuments hewn from richly colored marble were, Pliny the Elder wrote in A.D. 70, "the most beautiful buildings the world has ever seen."



With the completion of the Colosseum in A.D. 80 and Emperor Trajan's massive Forum in A.D. 113, the image of Rome we carry today was virtually complete. With more than one million inhabitants, the megalopolis had become the greatest marvel of antiquity: "Goddess of continents and peoples, Oh Rome, whom nothing can equal or even approach!" gushed the poet Martial in the early second century A.D.

Latin has remained, until modern times, the basic language of intellectual exchanges and ecclesiastical, as well as the language used in legal documents.

Once the status of *Civis Romanus* was granted (from 200 AD), every citizen of the Empire would enjoy equal rights. This idea thus prefigures the legal form of today European citizenship!

RENAISSANCE

After the fall of the late Empire in the fifth century AD, Rome underwent a series of dramatic changes in a period known as 'dark centuries' before resurrecting under the rule of new Kings, the Popes. At the end of the Medieval age, it was ready to become one of two leading cities where a cultural movement now known as Renaissance took place. The other city is called Florence, and it lies today at 2 hrs from Rome's central rail station on the excellent fast Italian train, called 'Pendolino' ('The swinger').



The Creation of Adam by Michelangelo Galilei, 1508-1512

In fact, the center of the Italian Renaissance shifted from Florence to Rome throughout the 15th century, as it became a beacon of humanist ideals.

The Renaissance in the city-state of Rome began in the early 15th century during a time of relative peace. This allowed art and other Renaissance pursuits to flourish. It was an incredible time of beauty, blossoming with creativity and curiosity. It led to the rise of Italian geniuses like Leonardo da Vinci, Galileo, Dante, Michelangelo and much more. Famous artists such as Andrea Mantegna, Giovanni Bellini, Titian, Raphael, Botticelli, Donatello all producing their famous masterpieces during this era.

COVID PANDEMIC

Italy and Rome have suffered massively from the first wave of the Covid pandemic in Europe. Italy has the second largest death toll after Britain from 2020, nevertheless its vaccine campaign organized under military rules by a very effective Government has gained fast momentum.

Currently, 36 million (62%) people in Italy have received a full vaccination regimen (two doses) and all people over 50 are covered.



VISITORS FROM ALL OVER THE GLOBE

Italy is preparing itself to accept visitors from all over the Globe for the upcoming touristic season, that thanks to its wonderfully mild climate stretches from April to late October. Italy is preparing itself to accept visitors from all over the Globe for the upcoming touristic season, that thanks to its wonderfully mild climate stretches from April to late October. The offer in terms of hospitality, recreation, arts, culture and nature has simply no equal on Earth.

And why not? Undoubtedly the fundamental posture of the traveler in Rome is therefore that of the stranger – *viator*, *hospes*, *pilgrim* – who interrogates the city and scrutinizes the words of its stone.

HISTORIA MAGISTRA VITAE

The prestige of a city is not just about its history, its monuments, its institutions, its inhabitants, and the beauty of the nature that surrounds it. The prestige of a city also depends on those that it has been able to attract to itself, to hold them and send them back to their native country passionate about it and penetrated by its nostalgic.

Everyone should be given the opportunity to visit Rome in their lifetime. The blend of different cultures through the endless historical layers of the place is a testimony of our existence on this Planet as human beings and an invigorating break from our busy professional lives.

An ancient Latin motto recites ‘Historia Magistra Vitae’ and that is what Rome will give you, a teaching for your own life.





Scientific Program

Scientific Program

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

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

The six symposia are as follow:

SPINE20 - ROME Symposia

SYMPOSIUM	CHAIRPERSONS		
Spine Care; Luxury or Necessity	<i>B. Darwono</i>	<i>E. Truumees</i>	<i>F. Kandziora</i>
Spine Rehabilitation Means Prosperity	<i>H. Alsobayel</i>	<i>Pierre Côté</i>	<i>M. Campello</i>
Spine Health And Aging	<i>Markus Arand</i>	<i>M. Brayda Bruno</i>	<i>R. Mulukutla</i>
Burden Underserved Communities	<i>Jamiu Busari</i>	<i>H. Chhabra</i>	<i>F. Ciro Tamburrelli</i>
Achieving Effectiveness	<i>M. Balsano</i>	<i>F. Alhelal</i>	<i>W. Sullivan</i>
Future Perspective Global	<i>D. Rothenfluh</i>	<i>S. Rajasekaran</i>	<i>Y. Alqahtani</i>

Program at a Glance

FRIDAY SEPTEMBER 17, 2021

07.30 – 08.30	Live (in-person) Registration and Working Coffee	
07.30 – 08.30	Virtual Registration	
08.30 – 08.45	Opening Statement	<i>Giuseppe Costanzo</i>
08.45 – 09.00	Welcome and Meeting Presentation	<i>Bernardo Misaggi</i>
Opening address by the President of the Senate <i>Maria Elisabetta Alberti Casellati</i>		
09.00 – 09.15	Inaugural SPINE20 2020 and collaboration with G20 and G20 Civil Engagement Groups Chairs: <i>Giuseppe Costanzo, Bernardo Misaggi</i>	
	SPINE20 Inaugural Meeting in Riyadh; a turning point in raising the awareness in spine care.	<i>Sami AIEissa, Thomas Blatter</i>
09.15 – 09.30	SPINE20 purpose and projects overview 2020-202 Chair: <i>Frank Kandziora</i>	
	SPINE20: how and why it came to be!	<i>Eric Muehlbauer</i>
	Introduction of the SPINE20 Education Committee: Mission and goals for the future	<i>Jörg Franke Michael Piccirillo</i>
09.30 – 09.45	SPINE20 Recommendations and publication 2020-2021 Chair: <i>Sami AIEissa</i>	
	Why it is important to publish and to be recognized	<i>Margareta Nordin</i>
	The process of SPINE20 recommendations and publications	<i>Koji Tamai</i>
09.45 – 10.00	Why SPINE20 is important to new societies? Chairs: <i>Thomas Blatter, Eric Muehlbauer</i>	
	SPINE20 bridging the New Societies to the Government by recommendations	<i>Bambang Darwono</i>
	SPINE20 The affable catalyst and think tank resource which can help empower your Society for accomplishing strategic objectives	<i>Harvinder S. Chhabra</i>
10.00 – 10.30	Keynote lecture Chair: <i>Giuseppe Costanzo</i>	
	Crucial issues in University teaching and medical education in pandemic emergencies	<i>Eugenio Gaudio</i>
10.30 – 10.45	Break	
10.45 – 11.00	Introduction to Symposia: The international collaboration in SPINE20 symposia and defining recommendations	<i>Luca Ricciardi Andrea La Maida</i>
11.00 – 12.30	Symposium 1: SPINE CARE: LUXURY OR NECESSITY Chairs: <i>Eeric Truumees Bambang Darwono Frank Kandziora</i>	
12.30 – 13.00	Keynote lecture Chair: <i>Bernardo Misaggi</i>	
	New policies in the Healthcare system after COVID pandemic	<i>Letizia Moratti</i>

Program at a Glance

FRIDAY SEPTEMBER 17, 2021

13.00 - 14.00	Lunch Break	
14.00 - 15.30	Symposium 2: SPINE REHABILITATION MEANS PROSPERITY Chairs: <i>Pierre Côté Hana Alsobayel Marco Campello</i>	
15.30 - 17.00	Symposium 3: SPINE HEALTH AND AGING Chairs: <i>Marco Brayda-Bruno Markus Arand Raghava D. Mulukutla</i>	

SATURDAY SEPTEMBER 18, 2021

08.00 – 08.15	Welcome Day 2 of SPINE20	<i>Giuseppe Costanzo Bernardo Misaggi</i>
08.15 – 09.45	Symposium 4: BURDEN UNDERSERVED COMMUNITIES Chairs: <i>Jamiu Busari Harvinder S. Chhabra Francesco Ciro Tamburrelli</i>	
09.45-10.15	Break	
10.15 – 11.45	Symposium 5: ACHIEVING EFFECTIVENESS Chairs: <i>Massimo Balsano William Sullivan Fahad Alhelal</i>	
11.45 – 12.15	Keynote lecture Chair: Carlo Ruosi Order of Malta worldwide commitment for a fair and sustainable Healthcare	<i>Dominique Prince de la Rochefoucauld-Montbel</i>
12.15 – 13.30	Lunch Break	
13.30 – 15.00	Symposium 6: FUTURE PERSPECTIVE GLOBAL Chairs: <i>Yahya Alqahtani Shanmuganathan Rajasekaran Dominique Rothenfluh</i>	
15.00 – 15.15	Break	
15.15 – 16.30	Discussion recommendations and voting SPINE20 2021 Chairs: <i>Giuseppe Costanzo Sami AlEissa Eric Muehlbauer</i> Discussion: <i>Margareta Nordin Paulo Pereira</i> Recorder: <i>Koji Tamai</i>	
16.30 – 16.45	Welcome to Indonesia Chair: <i>Giuseppe Costanzo</i> Speaker: <i>Bambang Darwono</i>	
16.45 – 17.00	Closing Ceremony SPINE20 2021 <i>Giuseppe Costanzo Bernardo Misaggi</i>	



**DOMINIQUE PRINCE DE
LA ROCHEFOUCAULD-
MONTBEL**

From 1997 to 2014: President of the French Association of the Sovereign Order of Malta and Vice-President of French Hospitaller Works.

Since 2014: Grand Hospitaller and President of the Holy Family Hospital in Bethlehem. The Grand Hospitaller's responsibilities include the offices of Minister of Health and of Social Affairs and for Humanitarian Action and for International Cooperation.

He coordinates and supervises the initiatives of the Grand Priories, National Associations and other Order institutions worldwide, all of which are involved in charitable and humanitarian actions and ensures that Christian principles of care and human dignity are respected.

Keynote Speakers



EUGENIO GAUDIO

Eugenio Gaudio was Rector of Sapienza University of Rome (2014-2020). Today he's President of Rome Sapienza Foundation and President of Italian Higher Education with Africa Foundation. From 2019 to 2020, he was President of Civis-A European Civic University, the new European university that brings together 400,000 students and 55,000 faculty and technical-administrative personnel.

He was born in Cosenza, Italy on September 15, 1956. He is married and has two children. He has a degree in Medicine and surgery obtained from Sapienza (1980) and a master's degree in Internal Medicine (1985).

From 2000, he is full Professor of Human Anatomy in Sapienza, coordinating the PhD program in Experimental and Clinical Hepatology.

He has been President of the Faculty of Pharmacy and Medicine and President of the Permanent Conference of Italian Faculties and Schools of Medicine and Surgery.

He is author of over 500 scientific publications on issues addressing liver structure and ultrastructure, experimental and clinical hepatology and microcirculation.

Keynote Speakers



LETIZIA MORATTI

Letizia Moratti is an Italian politician and manager. She has two degrees in Political Sciences and one in Educational and Training Sciences. She co-founded the San Patrignano Foundation.

From 1994 to 1996 She has been President of RAI- Radio Televisione Italiana. From 2001 to 2006 she has been Minister for Education, University and Scientific Research in the Italian Government. From 2006 to 2011 she has been Mayor of Milan.

Letizia Moratti founded and chairs the E4Impact Foundation, created to train a new generation of impact entrepreneurs in Africa.

From 2016 to 2020 she has been Chairwoman of Management Board of UBI Bank and Chairwoman of the Board of Directors of UBI Bank. and since January 2021 has been vice president and councilor for Welfare of the Lombardy Region

Keynote Speakers

SPINE20 - Rome | Team Members

Multi nationalities committees and taskforces are working around the year to prepare for the SPINE20 2nd Annual Meeting in Rome



Giuseppe Costanzo, Italy
Chair SPINE20 Rome, Italy 2021,
Chair Scientific Committee



Bernardo Misaggi, Italy
Chair SPINE20 Rome, Italy 2021,



Margareta Nordin, France
Speaker SPINE20



Luca Ricciardi, Italy
Co-Chair Scientific Committee



Sami AlEissa, SA
Chair PRC Committee



Koji Tami, Japan
Co-Chair PRC Committee



Thomas Blattert, Germany
Chair Strategic Planning



Eric Muehlbauer, USA
Chair, Global Engagement



Jörg Franke, Germany
Co-Chair Education Committee



M. Piccirillo, Switzerland
Co-Chair Education Committee



Marco Teli, Italy
Co-Chair Media Committee



Hana Alsobayel
(Saudi Arabia)



Ahmed Alturkistany
Saudi Arabia)



Markus Arand
(Germany)



Saiful Asmiragani
(Indonesia)



Massimo Balsano
(Italy)



Marco Brayda Bruno
(Italy)



Kinga Bugara
(USA)



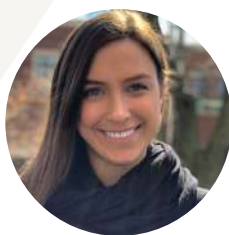
Jamiu Busari
(Netherlands)



Marco Campello
(USA)



Harvinder S. Chhabra
(India)



Sabina Choinski
(USA)



Pierre Côté
(Canada)



Bambang Darwono
(Indonesia)



Edward Dohring
(USA)



Agus Hadian Rahim
(Indonesia)



Frank Kandziora
(Germany)



Faisal Konbaz
(Saudi Arabia)



Fahad Alhelal
(Saudi Arabia)



Giovanni Andrea La Maida
(Italy)



ULF Liljenquist
(Germany)



Giorgio Lofrese
(Italy)



Raghava D. Mulukutla
(India)



Paulo Pereira
(Portugal)



Tim Pigott
(United Kingdom)



S. Rajasekaran
(India)



Alessandro Ramieri
(Italy)



Yahya Alqahtani
(Saudi Arabia)



Dominique Rothenfluh
(Great Britain)



Ajoy Prasad Shetty
(India)



William Sullivan
(USA)



Francesco Ciro Tamburelli
(Italy)



Eeric Truumees
(USA)



Jeffrey Wang
(USA)



Symposia

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Symposium #1

Spine Care: Luxury or Necessity

Subject overview

Spine disorders affects up to 90% of men and women; children, adults, and seniors; and citizens of both developed and emerging nations. Whether a deforming condition such as scoliosis, a degenerative problem or spine trauma, early, aggressive management can improve function, and restore the patient's ability to function fully in society. These efforts improve family and national prosperity. As a result, spine care is clearly not a luxury, but a necessity.

Symposium Objective

The symposium will demonstrate the value of investment in spine care to global leaders by identifying the current burden of spine disease on the physical and financial health of the individuals affected, the overall costs to society, by demonstrating ways in which investments in spine care are economically sound strategy and policy from a national level.

DAY ONE (September 17) - Symposium 1

Topics Highlights

- » Neck and Back Problems are more common and expensive than most of us realize
- » These issues can be addressed with prevention and rehabilitation
- » Surgery, when indicated, is an effective means of returning individuals to function
- » Return to function allows the individual to prosper to their family and their society

Spine Care: Luxury or Necessity

- | | |
|---------------|---|
| 11.00 – 11.05 | Introduction and purpose of symposium
<i>Eric Truumees</i> |
| 11.05 – 11.15 | Summary of the global burden of Spine Disease including fiscal and disability related matters
<i>Frank Kandziora</i> |
| 11.15 – 11.25 | Summary and findings of global burden of low back and neck pain studies
<i>Pierre Côté</i> |
| 11.25 – 11.35 | Impact of spine disease in developing world
<i>Scott Haldeman</i> |
| 11.35 – 11.50 | The importance of improved management of spinal trauma and deformity; The role of early/aggressive spine care as less expensive from a society-wide perspective than a laissez faire approach
<i>Eric Truumees</i> |
| 11.50 – 12.00 | MISS solving the Burden of Spine Problems during Pandemic. It is not a luxury
<i>Bambang Darwono</i> |
| 12.00 – 12.10 | Effect of spine problems on prosperity
<i>Scott Haldeman</i> |
| 12.10 – 12.30 | Panel discussion / Q&A |

Faculty



Bambang Darwono - Chair
Indonesia



Frank Kandziora - Chair
Germany



Eric Truumees - Chair
USA



Pierre Côté - Speaker
Canada



Scott Haldeman - Speaker
USA





Symposium #2

Spine Rehabilitation Means Prosperity

Subject overview

Individuals experiencing spine-related disorders are at high risk of years of life lived with disability and this puts great burden on healthcare systems and economic welfare of our societies. Therefore, to improve the productivity and wellbeing globally, it is crucial to give more attention and focus on providing value-based and evidence-based rehabilitation strategies at all levels, in the community, primary, secondary, and tertiary care. Our efforts should target timely delivery of quality rehabilitation so individuals and the population at large can prosper.

Symposium Objective

This symposium will demonstrate the importance of timely access to spine rehabilitation to improve the health and economic welfare of societies globally. It will also illustrate how rehabilitation is applied effectively at all levels and the impact of this on keeping people with spine disorders at work or reintegrating them at work for the individual and the society prosperity.

DAY ONE (September 17) - Symposium 2

Topics Highlights

- » Evidence-based rehabilitation
- » Work reinsertion
- » Work as a health stability proxy
- » Timely access to quality spine rehabilitation

Spine Rehabilitation means Prosperity

- | | |
|---------------|---|
| 14.00 – 14.06 | Introduction and purpose of symposium
<i>Pierre Côté</i> |
| 14.06 – 14.18 | Evidence-based rehabilitation is necessary to promote prosperity in our communities
<i>Stefano Negrini</i> |
| 14.18 – 14.30 | The need for spine rehabilitation in low- and middle-income countries <i>Rajani Mullerpatan</i> |
| 14.30 – 14.42 | How evidence-based occupational rehabilitation of spine disorders can improve the economic welfare of our societies? <i>Han Anema</i> |
| 14.42 – 14.54 | Implementation of return-to-work strategies to health and economic welfare of workers with spinal disorders <i>Doug Gross</i> |
| 14.54 – 15.30 | Panel discussion / Q&A |



Faculty



Hana AlSobayel - Chair
Saudi Arabia



Marco Campello - Chair
USA



Pierre Côté - Chair
Canada



Stefano Negrini - Speaker
Italy



Rajani Mullerpatan - Speaker
India



Han Anema - Speaker
Netherlands



Doug Gross - Speaker
Canada



Symposium #3

Spine Health and Aging

Subject overview

The demographic situation, the changes of expectation and activity in the lifestyle of elderly and the position/integration in the family as well as local economic factors will have a significant impact on the number and the therapy of osteoporotic fractures and the degenerative changes of spine disorders in the growing elderly population.

Symposium Objective

This symposium will consist of two panel discussions with international global spine leaders. The first panel will discuss "*The osteoporosis challenge*" and the second panel "*The degenerative and ageing challenge*". Both panel discussion will address the most urgent needs for screening, early access to care, rehabilitation and surgery to improve function, quality of life and participation in society for the elderly population. The objectives for both panels are to answer the questions how, when, what care and with what strategy and at what cost for society. Every effort should be made to educate and inculcate healthy food habits and exercise in the Elderly Population for a fine SPINE!

DAY ONE (September 17) - Symposium 3

Topics Highlights

- » Prevention and screening
- » Osteoporotic fractures
- » Non-surgical rehabilitation
- » Surgical options

Spine Health and Aging

15.30 – 15.38	The Osteoporosis Challenge – Screening strategies in a global perspective <i>Salmi Rachid</i>
15.38 – 15.46	The Osteoporosis Challenge – Therapy and prevention <i>Salvatore Minisola</i>
15.46 – 15.54	The Osteoporosis Challenge – Surgical options in different economical settings <i>Markus Arand</i>
15.54 – 16.07	The Osteoporosis Challenge – Discussion <i>Raghava D. Mulukutla</i>
16.07 – 16.15	The Degenerative and ageing challenge – When and what activity/exercises vs when and how to get stability <i>Fabio Zaina</i>
16.15 – 16.23	The Degenerative and ageing challenge – When less is more and when to be aggressive <i>Marco Brayda-Bruno</i>
16.23 – 16.31	The Degenerative and ageing challenge – Evidence of complications and frailty assessment in elderly <i>Raghava D. Mulukutla</i>
16.31 – 16.44	The Degenerative and ageing challenge – Discussion <i>Markus Arand</i>
16.44 – 17.00	Panel discussion / Q&A



Faculty



Markus Arand - Chair
Germany



Marco Brayda-Bruno - Chair
Italy



Raghava D. Mulukutla - Chair
India



Salmi Rachid- Speaker
France



Salvatore Minisola - Speaker
Italy



Fabio Zaina - Speaker
Italy



Symposium #4

Burden Underserved Communities

Subject overview

This symposium is focused on the potential advancements which could improve spine care in underserved communities. In developed countries spine disorders is considered a burden expressed as cost to the health system and lost working days/disability. In emerging countries, the level of care is very low or non-existent, and one of the causes of loss of quality of life leading to poverty. Ignorance, cultural and financial problems as well as geographical and political aspects are reasons that limit people's access to care which deserve serious attention.

Symposium Objective

The aims are to highlight the disparity in access to spine care and how the lack of spine care in underserved communities contribute to poverty and ineffective workforce, to identify and highlight how the quality of spine care can be improved and to discuss strategies improved access to basic (and advancements) spine care in these communities.

DAY TWO (September 18) - Symposium 4

Topics Highlights

- » Problem definition and associated burden
- » Challenges uncovered in underdeveloped regions
- » Viable options and strategies and what we learned from the world
- » Developing long term region specific realistic goals

Burden Underserved Communities

08.15 – 08.21	Welcome and purpose of symposium <i>Francesco Ciro Tamburrelli</i>
08.21 – 08.31	Defining the Problem <i>Ian Vlok</i>
08.31 – 08.41	Challenges uncovered <i>Kwadwo Poku Yankey</i>
08.41 – 08.51	Is it a viable option for poor countries? What can we learn from the world? <i>Margareta Nordin</i>
08.51 – 09.01	Developing long term region specific realistic goals <i>Anand Bang</i>
09.01 – 09.45	Panel discussion / Q&A



Faculty



Jamiu Busari - Chair
Netherlands



Harvinder S. Chhabra - Chair
India



Francesco Ciro Tamburrelli - Chair
Italy



Ian Vlok - Speaker
South Africa



Kwadwo Poku Yankey - Speaker
Ghana



Margareta Nordin - Speaker
France



Anand Bang - Speaker
India



Symposium #5

Achieving Effectiveness

Subject overview

Achieving effectiveness in spine care is a complicated effort. Optimal spine care occurs when there are multiple specialties working together to find the most effective and efficient care for any given patient. By utilizing the various training and experience of multiple professionals, patients and the society are the ultimate benefactors.

Symposium Objective

This symposium aims to demonstrate the value of bringing an interdisciplinary workforce for spine patients. The objectives are to: understand how screening can identify at risk individuals so that potential spine problems can be prevented or minimized; how the workplace can be assessed to recommend changes that will lead to healthier workers; and examine how the team approach to spine care can lead to optimal outcomes for patients while lowering costs.

DAY TWO (September 18) - Symposium 5

Topics Highlights

- » Screening can be used to identify deformities (Scoliosis, Kyphosis) in pediatric populations
- » Workplace interventions and recommendations
- » Team-based approach can provide cost-effective and evidence-based care
- » How to sustain quality spine care in limited resource countries

Achieving effectiveness

10.15 – 10.20	Introduction and purpose of symposium <i>Massimo Balsano</i>
10.20 – 10.30	International screening for Spine deformity <i>Massimo Balsano</i>
10.30 – 10.40	Spine care in workplaces <i>Fahad AlHelal</i>
10.40 – 10.50	Achieving effectiveness through a multidisciplinary approach to Spine care <i>Edward J. Dohring</i>
10.50 – 11.00	Teaching non-surgical spine care in limited resource countries <i>William Sullivan</i>
11.00 – 11.45	Panel discussion / Q&A



Faculty



William Sullivan - Chair
USA



Massimo Balsano - Chair
Italy



Fahad AlHelal - Chair
Saudi Arabia



Edward J. Dohring - Speaker
USA



Symposium #6

Future Perspective Global

Subject overview

Spine Surgery has rapidly changed in the last few decades and is bound to change more due to influx of various advanced technologies like navigation, robotics, simulation, artificial intelligence, and telehealth. While many of these changes are for the good, they also pose the challenge of making these advances available and affordable globally to every spine patient across the world. This symposium will not only delve on cutting-edge technologies like artificial intelligence, disc regeneration, advanced surgical navigation but will also look at practical issues like closing the gender gap in spine surgery and how to extend the benefits of modern spine surgery to one and all.

Symposium Objective

This symposium aims to prioritize most urgent aspects of future developments in spine care for the attention of global leaders. The specific objectives would be: To identify and understand the various advances in spine care that can lead to the prosperity of spine care and to discuss strategies on how to improve global access to these advancements in spine care.

DAY TWO (September 18) - Symposium 6

Topics Highlights

- » Artificial intelligence
- » Disc regeneration
- » Navigation
- » Telehealth



Future perspective global

- | | |
|---------------|--|
| 13.30 – 13.36 | Introduction and purpose of symposium
<i>Dominique Rothenfluh</i> |
| 13.36 – 13.46 | Artificial Intelligence vs Human Intelligence – Will there be a winner? <i>Chris Ames</i> |
| 13.46 – 13.56 | Disc regeneration and biological research – Is the future promising? <i>Kenneth Cheung</i> |
| 13.56 – 14.06 | Surgical navigation system and the future
<i>Shanmuganathan Rajasekaran</i> |
| 14.06 – 14.16 | Breaking down barriers with telehealth-Care delivery is changing <i>Yahya AlQahtani</i> |
| 14.16 – 14.26 | Closing the gender gap in Ortho and Spine surgeons: challenges and perspectives
<i>M. Chiara Spinelli</i> |
| 14.26 – 15.00 | Panel discussion / Q&A |

Faculty



Yahya AlQahtani - Chair
Saudi Arabia



Shanmuganathan Rajasekaran - Chair
India



Dominique Rothenfluh - Chair
Great Britain



Chris Ames - Speaker
USA



Kenneth Cheung - Speaker
Hong Kong



M. Chiara Spinelli - Speaker
Italy



Appendix:

SPINE20 Team & Speakers

Biographies



Giuseppe Costanzo (Italy)

Chair SPINE20 Rome, Italy 2021 and Chair Scientific Committee

Giuseppe Costanzo is born in Roma, Italy October 18, 1950. He became MD at Sapienza Rome University in 1975 specialising in Orthopaedics and in Rehabilitation; a pupil of professor Giorgio Monicelli, second President of European Spine Deformities Society. Dr. Costanzo became Secretary of this Society till 1989, Vice president Italian Spine Society (SICV&GIS) since 2016 and 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 he was called to Rome University Sapienza. He has been Director of Orthopaedics in Policlinico Umberto I in Rome.



Bernardo Misaggi (Italy)

Chair SPINE20 Rome, Italy 2021, Member Scientific Committee

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. 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 the European Spine Group and Italian Society of Orthopaedics and Traumatology, Italy.



Margareta Nordin (France)

Speaker SPINE20, Member Executive Committee

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.



Thomas Blattert (Germany)

Chair Strategic Planning Committee, Member Executive Committee

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



Sami AlEissa (Saudi Arabia)

Chair Publication & Recommendation Committee, Member Exe. Committee

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.



Eric Muehlbauer (USA)

Chair Global Engagement Committee, Member Executive Committee

Eric J. Muehlbauer, MJ, CAE has been Executive Director for North American Spine Society (NASS) 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 a Master of Jurisprudence in Health Law & Policy from Loyola University Chicago Law School. He has done additional coursework on Strategic Perspectives in Non-profit Management at the Harvard University School of Business. NASS has become a well-respected voice in the health policy field and a leader in the areas of Ethics and Hands-on Education through use of its Spine Education and Research Center. He is a member of the American Society of Law, Medicine and Ethics (ASLME) and the American Association of Medical Society Executives (AAMSE).



Jörg Franke (Germany)

Co-Chair 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 EUROSPINE, 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 the major spine organisations of the world.



Michael Piccirillo (Switzerland)

Co-Chair Education Committee

Michael Piccirillo qualified in Microbiology but has spent last 40 years in the business of healthcare acquiring professional qualifications in Marketing and Business Administration. He has built extensive practical experience and notable achievements in a range of jobs in both the commercial (pharmaceuticals, diagnostics, biotechnology, and medical devices) and non-profit medical sectors (academic societies, patient organizations and charities) across five continents. Since his pioneering work as Executive Director of AO Spine and later AO Trauma, he has consulted on a number of game-changing projects ranging from building multi-disciplinary spine centers to designing novel learning experiences and customer engagement programs for academic societies and for-profit entities. Michael joined North American Spine Society (NASS) in 2019 to support the creation of NASS International to design and guide global programs. The goal being to evolve NASS into the world's first and most valued global multi-professional community.



Marco Teli (Italy)

Co-chair Media Committee

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, United Kingdom. He teaches at the Milan Bicocca, Milan, Italy and Liverpool Schools of Medicine, Liverpool, United Kingdom. Dr. Teli is currently chair of the EUROSPINE Spine Tango Registry Taskforce and President elect of EUROSPINE, the Spine Society of Europe.



Koji Tamai (Japan)

Member Scientific, Publication and Recommendation Committees

Koji Tamai MD, PhD is Japanese board-certified spine surgeon, currently a lecturer at Osaka City University, Osaka, Japan. He is working with SPINE20 as an ambassador for Japanese Society for Spine Surgery and Related Research (JSSR) and was a member of the SPINE20 Publication and Recommendation committee in 2020. 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 (QOL), large scale cohort studies detecting the effect of COVID-19, artificial intelligence in spinal diagnosis and surgery, as well as basic science concerning tobacco use.



Fahad Alhelal (Saudi Arabia)
Member Scientific Committee

Fahad Alhelal, MBBS, MSc, MBA successfully completed his orthopedic certified surgeon and then joined Western University as a clinical spine fellow in London, ON, Canada. His training focused on adult and pediatric spine pathologies. He acquired his Master of Surgery with thesis title "Design, development, manufacturing and biomechanical testing of Stand-alone cage for posterior lumbar interbody fusion" from Western University London, Ontario 2018. Currently, he is the director of spine surgery fellowship program at National Guard Hospital Riyadh, Saudi Arabia, and associate professor at KSAU-HS. He is the Vice president of Saudi Spine Society (SSS) since 2019.



Yahya Alqahtani (Saudi Arabia)
Member Scientific Committee

Dr. Alqahtani is a spine and orthopedic consultant working in the medical services on the presidency of state security in Riyadh, Saudi Arabia. He is an executive board member and the treasurer of Saudi Spine Society. He is a member of the Spine20 founding team. Dr. Alqahtani's 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 the impact on the quality of patients' life.



Hana Alsobayel (Saudi Arabia)
Member Scientific Committee

Hana Alsobayel is an Associate Professor and consultant in physical therapy at King Saud University in Riyadh, Saudi Arabia. She obtained her MSc. from Queen's University in Canada, followed by a PhD from King's College London, United Kingdom. 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.



Ahmed Alturkistany (Saudi Arabia)
Member Executive Committee

Alturkistany is the current president of the Saudi Spine Society as well as full time orthopedic & spine surgeon at King Faisal Specialist Hospital and Research Center-Jeddah, Saudi Arabia, it is a tertiary Care hospital that receives patient from all over the kingdom. He earned his medical degree from King Khalid University in Abha, Saudi Arabia, then completed the orthopedic residency program at McMaster University in Hamilton, Canada. 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's degree in management from McGill university to help to achieve his goals in the health care sector in Saudi Arabia. He is proud to be in the Executive Committee of SPINE20.



Markus Arand (Germany)
Member Scientific Committee

Markus Arand MD, PhD, Associate Professor at the 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 Society (DWG) and the German Trauma Association since > 10 years, President elect for DWG in 2023.



Saiful Asmiragani (Indonesia)
Member Scientific Committee

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.



Massimo Balsano (Italy)
Member Scientific Committee

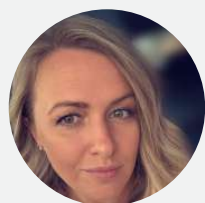
Massimo Balsano, MD, is an orthopedic spine surgeon. He's the Director of Regional Spinal Department of University Hospital of Verona. He is Professor of Spinal Surgery at the Universities of Verona and Sassari, Italy. He's also Visiting Professor at NYU Langone, NYC, USA, and Istinye University, Istanbul, Turkey. A medical graduate from the University of Padova, Italy (one of the oldest and most well-known Italian University for medical studies). Dr. Balsano has completed his orthopedic residency in Padova, and he served a spine fellowship at Twin Cities Spine Center in Minneapolis in 1994. Reviewer of several spinal journals and member of the most important spinal societies, he is the President Elect of The International Society for Advancement of Spine Surgery (ISASS). He is a leader surgeon in spine deformities, and in the past 15 years has approached the world of MISS, performing hundreds of operations, especially on adult deformities. Up to now he has performed about 5000 spinal operations as first operator, mainly including adult and pediatric deformities, adult degenerative conditions, cervical pathologies, traumatology, and tumors



Marco Brayda Bruno (Italy)
Member Scientific Committee

BRAYDA-BRUNO Marco, MD, orthopedic spine surgeon, born in Torino, since 2000 is Director of Spine Surg 3 Scoliosis Dept and since 2018 Spine Research Director of IRCCS Galeazzi Orthopaedic Institute-Milan, Italy. Since 2011, Co-Founder of no-profit Italian Scoliosis Foundation. Professor of Spinal Surgery-Bicocca University-Milan, and actually Spine Resident Tutor-Statale University-Milan, Italy.

Member of GIS (Scoliosis Italian Society), now SICV-GIS; Member of SRS, serving in several Committees, and Member of EUROSPINE, serving as Chairman of EduCom to implement the European Spine Surgery Curriculum. Reviewer of ESJO (European Spine Journal), Spine Deformity and Scientific Reports Journal. Author of 5 Book Chapters, and 140 peer-reviewed papers on Italian and International Journals.



Kinga Bugara (USA)
Member Steering Committee

Kinga Bugara has been executive assistant and project manager for North American Spine Society (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.



Jamiu Busari (Netherlands)
Member Scientific Committee

Jamiu Busari is an associate professor of medical education at Maastricht University, a consultant pediatrician and Dean of Health Professions Education at the Horacio Oduber Hospital, Aruba. Prior to that, he was the Department Chair and Program Director of Pediatrics, at Zuyderland Medical Center, 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, and a faculty member of EDISC (EUROSPINE Diploma in Interprofessional Spine Care). He was a former executive member of the Netherlands Association for Medical Education (NVMO) and former advisor to the European Respiratory Society (HERMES projects).



Marco Campello (USA)
Member Scientific Committee

Marco Campello is a Clinical Associate Professor at the Department Orthopedic Surgery, New York University Grossman School of Medicine. He received his doctoral degree in Ergonomics and Biomechanics from the Graduate School of Arts and Science at New York University. He completed his physical therapy studies at the Methodist University-IPA in southern Brazil. 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.


Harvinder S. Chhabra (India)
Member Executive, Scientific and Steering Committees

Dr. Chhabra is Chief of Spine Service and Medical Director at Indian Spinal Injuries Centre, New Delhi, India. He is the Immediate Past President of International Spinal Cord Society and Association of Spine Surgeons of India. His expertise is grounded by more than 25 years of clinical and academic experience as an orthopedic surgeon. He is the Editor-in-chief of "ISCOs on Comprehensive Management of Spinal Cord Injuries" and elearnSCI.org, an ISCoS online learning web-based portal. Dr Chhabra has 123 publications and 24 papers and full-length chapters in the leading textbooks to his credit. In last few years, Dr Chhabra has been a recipient of some of the major prestigious awards by TP Jhunjhunwala Foundation, ISCoS, India News, Asian Spinal Cord Network and IMA. He has also been honored with ASSI Research Awards for Six consecutive years from 2013 to 2018.


Sabina Choinski (USA)
Member Steering Committee

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.

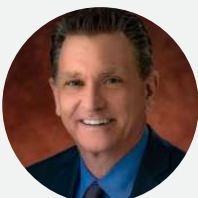

Pierre Côté (Canada)
Member Scientific Committee

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 Centre for the Study of Disability Prevention and Rehabilitation at Ontario Tech University and CMCC 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 musculoskeletal pain and mental health. Professor Côté has published more than 285 scientific papers in peer-reviewed journals. His current Scopus h-index is 56.


Bambang Darwono (Indonesia)
Member Executive and Scientific Committees

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 PASMIS, he is currently a member of many international society such as APOA, APASTAB, AAOS, SICOT, IDI, SAS, NASS, APSAS.


Edward Dohring (USA)
Member Executive and Scientific committees

Member Executive and Scientific committees President- Elect of the North American Spine Society, Dr. Dohring trained at Yale Medical School, Spine Institute of New England, & Harborview Hospital. Founder & director of the multidisciplinary Spine Institute of Arizona, he has trained over 25 spine surgery fellows, and has participated in artificial disc replacement and minimally invasive surgery IDE research. Clinical Professor of Arizona College of Medicine, he is dedicated to education, active on the ACGME, ABOS, AAOS, & NASS Spine Surgery Residency/Fellowship Guidelines Committees. Editorial Board member of The Spine Journal, he is corresponding author of "Lumbar Disc Nomenclature: Version 2.0", published simultaneously in SPINE & The Spine Journal. He has volunteered his surgical skills in Ghana, Kenya, Tanzania, Haiti, Cambodia and Nepal.


Agus Hadian Rahim (Indonesia)
Member Scientific Committee

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 write and publish journal about spinal diseases and management.



Frank Kandziora (Germany)
Member Executive and Scientific Committees

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, specializing in trauma surgery. After also finishing 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.



Faisal Konbaz (Saudi Arabia)
Member Scientific Committees

Dr. Konbaz is an orthopedics spine surgeon practicing at King Abdulaziz medical city, Riyadh, Saudi Arabia. He completed his clinical fellowship training in the USA at Johns Hopkins University and Duke University, USA in the years 2014-2016. He is currently an Assistant Professor at King Saud Bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia. Dr. Konbaz had the honor and pleasure of being the chairman of the scientific committee of the Inaugural SPINE20 Riyadh, Saudi Arabia meeting in 2020.



Giovanni Andrea La Maida (Italy)
Member Scientific Committee

Born in 1970 in Milan Italy, Dr. Giovanni Andrea La Maida graduated as medical doctor in 1995 at the Public University of Milan, Milan, Italy. 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, Quebec, Canada in 2002 he went back to 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 Orthopaedic Institute G. Pini in Milan. He is active member of the Italian Spine Society (SICV-GIS) and of AOSpine, Italy.



ULF Liljenquist (Germany)
Member Executive Committee

Dr. Liljenquist is full Professor of Orthopaedics, Medical School University of Münster, and Head of the Spine Department, Franziskus Hospital Muenster, Germany (Level 1 Spine Center of the German Spine Society-DWG). Author of 108 peer reviewed and medline listed scientific articles on spinal pathologies and former travelling fellow of the Scoliosis Research Society and the EUROSPINE, Spine Society of Europe (SSE). Winner of the Grammer Award 2007 (SSE) and the Georg Schmorl Award 2017 (DWG) and accredited by the DWG (Certificate of excellence). He is the Former Secretary and current President of the DWG.



Giorgio Lofrese (Italy)
Member Scientific Committee

Dr. Lofrese is a neurosurgeon specialized in cranio-cervical junction diseases and minimally invasive spine surgery. 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 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 is in his final year as a PhD student in Neuroscience and Neurotechnologies at the University of Ferrara, Italy.



Raghava D. Mulukutla (India)
Member Scientific Committee

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 (ASSI) (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 a member of the Editorial Board of Indian Spine Journal and Asian Spine Journal. Has publications in International Journals, wrote Chapters in Spine textbooks and was one of the Editors in Chief for 8 Monographs in Spine.



Paulo Pereira (Portugal)
Member Scientific Committee

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, Porto, Portugal. He is the 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), co-chair in EUROSPINE Education Week and Chairman of the Young Neurosurgeons Award Committee of the World Federation of Neurosurgical Societies (WFNS).



Tim Pigott (United Kingdom)
Member Scientific Committee

Tim Pigott, MD - I am the current Past President of EUROSPINE. I work as a spinal neurosurgeon in Liverpool. My main clinical interest is in intradural surgery, especially intramedullary tumours and syringomyelia. My research interest centers around patient outcome and the use of Spine Tango registry.



Shanmuganathan Rajasekaran (India)
Member Scientific and Steering Committees

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.



Alessandro Ramieri (Italy)
Member Scientific Committee

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.



Luca Ricciardi (Italy)
Co-Chair Scientific Committee

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.



Dominique Rothenfluh (Great Britain)
Member Scientific Committee

Dominique A. Rothenfluh, MD, PhD is a Spinal Surgeon at Oxford University Hospitals NHS Foundation Trust. He has a special interest in complex spinal surgery, particularly adult and adolescent spinal deformities, revision, and tumour surgery of the spine. He is the current chair of the Education and Fellowship Council of EUROSPINE, the Spine Society of Europe.



Ajoy Prasad Shetty (India)
Member Scientific Committee

Dr. Ajoy Prasad Shetty, M.S, DNB is an Orthopaedic spine surgeon and Senior Consultant at Ganga Medical Centre and Hospitals Pvt. Limited, Coimbatore, India. He has undergone his spine training and fellowships at Ganga hospital and Queen Elizabeth Hospital Adelaide, Adelaide, Australia. He is past secretary of the Associations of Spine Surgeons of India (ASSI), AOSpine India delegate, Board member of Asia Pacific Spine Society (IASA) and he is an editorial board member of the Indian Spine Journal (ISJ), the Aesthetic Surgery Journal (ASJ) and BMC Musculoskeletal Journal.



William Sullivan (USA)
Member Scientific Committee

William Sullivan, MD received his medical degree from Emory University School of Medicine, Atlanta, GA, USA 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, Nashville, TEN, USA. 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 Committees. He was also Co-Chair of the Medical program for the Emerging Technology Spine Education Summit for 10 years.



Francesco Ciro Tamburelli (Italy)

Prof. Francesco Ciro 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



Eeric Truumees (USA)
Member Executive and Scientific Committees

Dr. Eeric Truumees is a fellowship trained, board certified orthopaedic spine surgeon with a special focus on complex, cervical spine reconstruction and spinal trauma surgery. His research interests include interdisciplinary spine care programs, outcomes analysis, and spinal biomechanics. He is Professor of Orthopaedic Surgery and, by courtesy, Professor of Neurosurgery, at the Dell Medical School, University of Texas, Austin, TX. He is the current President of the North American Spine Society (NASS). Dr. Truumees was a Bowman Scholar at the University of Virginia, School of Medicine. His orthopaedic surgery residency was undertaken at the Cleveland Clinic. He completed a fellowship in Spine Surgery under Dr. Harry Herkowitz at the William Beaumont Hospital Spine Center.



Jeffrey Wang (USA)
Member Steering Committee

Dr. Jeffrey Wang is Professor of Orthopaedic Surgery and Neurosurgery Chief, Orthopaedic Spine Service Co-Director USC Spine Center Professor of Orthopaedic Surgery and Neurosurgery USC Spine Center, Los Angeles, CA, USA. He is currently 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. 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.



Chris Ames (USA)
Speaker

Dr. Christopher Ames is the director of spinal deformity and spine tumor surgery and co-director of the combined high risk spine service, the Neurospinal Disorders Program, and the UCSF Spine Center. His tumor practice focuses on en bloc tumor resection for chordoma, chondrosarcoma, giant cell tumor, soft tissue sarcoma, sacral tumors, and other primary and metastatic tumors. Dr. Ames also directs the neurosurgical spinal deformity service, which performs over 200 cases per year for correction of scoliosis, kyphosis, flat back, and chin-on-chest deformity in ankylosing spondylitis. He developed and published the first ever classification for cervical spine deformity and cervical osteotomy with the international spine study group.



Han Anema (Netherlands)
Speaker

Prof. J.R. ANEMA, PhD MD is BIG-registered occupational and insurance physician. He is appointed as professor of Social/Occupational Medicine at the Department of Public and Occupational Health, Amsterdam University Medical Center. Main research topics are: 1. Occupational healthcare and clinical occupational medicine. 2. Insurance Medicine & effects of insurance policies on work disability. 3. Implementation science. He is editor of the first international Handbook Work disability(2014; >70 authors & downloaded >120K). He published over 200 scientific papers, including 3 papers in British Medical Journal and 4 papers published in Lancet in 2018 (Low Back Pain Series Working Group).



Anand Bang (India)
Speaker

Dr. Anand Bang is a physician and public health practitioner trained from Johns Hopkins University. He is the Joint Director of Society for Education, Action & Research in Community Health (SEARCH), an NGO working for tribal and rural health care over 35 years in the remote, left wing extremism Gadchiroli district of India. He is also Advisor to the Tata Trusts, the oldest philanthropist trust in India, guiding strategy, establishing partnerships with NGOs, other philanthropists and governments and implementing large scale health programs. He was also the Advisor to the Chief Minister of Maharashtra, the second largest state of India, for public health policies.



Kenneth Cheung (Hong Kong)
Speaker

Kenneth M.C. Cheung is the Jessie Ho Professor in Spine Surgery and the Head of the Department of Orthopedics and Traumatology, The University of Hong Kong.

His research interests are in the genetics of intervertebral disc degeneration and scoliosis, stem cell regeneration of the disc, and the development of novel surgical technologies for the treatment of spinal deformities. He has published 300 publications in top scientific and spine journals.

He is the past President of the Scoliosis Research Society, as well as the Editor-in-Chief for Journal of Orthopaedic Surgery. He is also the past President of the Hong Kong College of Orthopaedic Surgeons.



Doug Gross (Canada)
Speaker

Douglas Gross is a Professor in the Department of Physical Therapy at the University of Alberta in Edmonton, Canada. His research focuses on preventing disability in people with physical and mental health conditions, including back pain. This includes studying clinical and public health interventions, work disability prevention strategies, and rehabilitation outcome measures and assessment techniques. He also serves as Editor-in-Chief of the Journal of Occupational Rehabilitation.



Scott Haldeman (USA) Speaker

Scott Haldeman DC, MD, PhD, FRCP(C), FCCS(C), FAAN holds faculty positions in the Department of Neurology, University of California, Irvine, the Faculty of Health Sciences, Ontario Tech University, and the Southern California University of Health Sciences. He is Past President of the North American Spine Society and the American Back Society, an International Ambassador for the Decade of the Bone and Joint and Chairman Emeritus of the Research Council of the World Federation of Chiropractic. He is the founder and currently serves as President of World Spine Care and chairs the Global Spine Care Initiative, to develop evidence-informed, practical, and sustainable, spine health care models for communities around the world.



Salvatore Minisola (Italy) Speaker

Full Professor of Internal Medicine, University of Rome "Sapienza" •

- President of the Italian Society of Osteoporosis, Mineral Metabolism and Skeletal Diseases (2009-2011)
- Member of the Professional Practice Committee of American Society of Bone and Mineral Research (2009-2011)
- Member of the Executive Committee of the Italian Society of Internal Medicine (2014-2018)
- At present: Associated Editor of Journal of Endocrinological Investigation and Aging Clinical and Experimental Research; Member of Editorial Board of Calcified Tissue International, Bone Research, Journal of Bone and Mineral Research Plus; Osteoporosis International
- Author of 340 articles in international peer-reviewed journals and book chapters. H-index: 57



Rajani Mullerpatan (India) Speaker

Dr. Rajani Mullerpatan M.Sc., PhD, is a Human Movement Scientist and Physiotherapist, exploring movement forms of Yoga, traditional Indian sports, dance, and daily activity for their evidence-based integration in culturally palatable health promotion strategies for attenuation of the burden of non-communicable diseases. She is engaged in delivering evidence-based sustainable spine-care to the underprivileged people of the Raigad District in Maharashtra State of India. She is a Member of the Development Group for Low Back Pain- part of WHO Rehabilitation Programme, Package of Interventions for Rehabilitation (2020-2021). She has been an Executive Council Member of the International Society of Biomechanics (2017-2019). Dr. Mullerpatan is Professor in Physiotherapy, Director of MGM School of Physiotherapy and MGM Centre of Human Movement Science at MGM Institute of Health Sciences, Navi Mumbai, India.



Stefano Negrini (Italy) Speaker

Stefano Negrini is: Physical and Rehabilitation Medicine (PRM) full Professor, University "La Statale", Milan - IRCCS Istituto Ortopedico Galeazzi; Cochrane Rehabilitation Director and founder, "European Journal PRM" Chief-Editor, ISICO (Italian Scientific Spine Institute) Scientific Director; Cochrane Council Co-Chair, European Academy Rehabilitation Medicine academician; European Union Medical Specialists-PRM Section Italian delegate, coordinating the 3rd PRM White Book in Europe. He was International Society On Scoliosis Orthopaedic and Rehabilitation Treatment (SOSORT) founder and President, now in the Advisory Board; president of National and International Meetings; Spinal Deformities Masters Director. He won 18 Awards, published >400 PubMed/Medline papers and gave >120 Lectures.



Carlo Ruosi (Italy) Chair

Graduated in Medicine in 1985 ;Specialized in Orthopedics and Traumatology in 1990; Specialized in Physical Medicine and Rehabilitation 1994 . He is at the Federico II University in Naples:

- Associate Professor of Orthopaedics and Traumatology
- Director of Specialization School of Physical Medicine and Rehabilitation
- Coordinator of Orthopaedic Techniques Degree
- Responsible of Spine Deformities Therapeutic Program.

He has been National Secretary of the Italian Society of Spine Surgery and Scoliosis Group, from 1998 to 2005, and from 2021 he is Vice President of the same society.

Now he is President of the Italian Society of Geriatric Orthopaedics and Traumatology from 2017



Rachid Salmi (France)
Speaker

L. Rachid Salmi, MD, PhD, trained in medicine in Lyon (France) and in epidemiology at McGill University (Montreal, Canada) and at the Centers for Disease Control (Atlanta, USA). He is currently Professor of Public Health at Université de Bordeaux (France), at the School of Medicine and at Bordeaux School of Public Health (ISPED); he was the Director of ISPED from 2005 to 2017. His research is carried in INSERM U-1219 Bordeaux Population Health Research Center (Injury Epidemiology, Transportation, Occupation Team),. He is currently the Research Council of EUROSPINE, and the General Secretary of the Association of French-Speaking Epidemiologists.



M. Silvia Spinelli (Italy)
Speaker

Dr. Maria Silvia Spinelli is a consultant orthopaedic surgeon qualified in Orthopaedic Oncology, dealing with bone and soft tissue sarcoma with a special interest in bone metastasis. She is based in Gaetano Pini Institute in Milan, Italy.

She is the Executive Researcher at the Superior Institute of Health in Rome for national database on bone metastasis. She is the President of the Equal Opportunities and Gender Medicine for the Italian Society of Orthopaedic and Traumatology (SIOT).

She is the Vice President of WOW Italia.



Ian Vlok (South Africa)
Speaker

Prof Vlok holds the postgraduate degrees MMed (Neurosurgery) and PhD (Neurosurgery) from the University of Stellenbosch and is a fellow of the College of Neurosurgeons in South Africa (FC Neurosurgery). He is currently the Chief Specialist at Tygerberg Academic Hospital. His practice involves all aspects of spinal surgery with a special interest in craniocervical junction pathologies and surgery. He is the president of the College of Neurosurgeons of SA, and actively involved in neurosurgical and spinal training nationally and internationally. He serves on the executive committees of both the South African Neurosurgical Society and the South African Spine Society. He is the current clinical director of the Sunskill post-graduate skills training facility at Stellenbosch University.



Kwadwo Poku Yankee (Ghana)
Speaker

KWADWO POKU YANKEY, MD is a consultant Neuro Surgeon. He completed his Neurosurgery fellowship with the West African College and Surgeons (WACS) in 2014 and undertook Fellowship training in Spine and Spine Deformity Surgery in 2015 under Prof. Oheneba Boachie-Adjei. He is a member of the FOCOS Spine Research Study Group and is involved in numerous ongoing spine deformity studies. He has research interest in sagittal alignment and neurological outcomes following complex spine surgeries. Dr. Yankee is an ardent supporter of locally based Sekondi Hasacas Football club in Ghana. He is a candidate member of the Scoliosis Research Society.



Fabio Zaina (Italy)
Speaker

Fabio Zaina MD, Physiatrist, DO. Since 2006 Medical Doctor in ISICO (Italian Scientific Spine Institute) in Milan, working in the field of spinal deformities and low back pain treatment. Since 2006 Member of the Scientific Secretary Board of the Italian Study Group on Scoliosis and spinal diseases (GSS) Since 2010 member of ISSLS Since 2017 Member of Eurospine Past President of SOSORT (Society on Scoliosis Orthopaedic and Rehabilitation Treatment). Author and co-author of more than 130 scientific papers about spinal rehabilitation, back pain and scoliosis Author of 3 Cochrane reviews.

ACCREDITATION

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 10 *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 Saturday, September 18, 2021 at 5:30 p.m. Rome time (UTC+2).

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.



The background is a solid dark green color. Overlaid on this are several large, abstract, organic shapes in a gold or tan color. These shapes are irregular and flowing, resembling stylized leaves or petals. They are positioned in the upper right and lower right areas, with some extending towards the center. The overall composition is modern and minimalist.

DISCLOSURE

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

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Commercial Support Statement

No commercial support, financial or in-kind, was provided for this activity.

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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.

Disclaimer: SPINE20 follows the North American Spine Society's disclosure and commercial support policies for providing credit.

NASS DISCLOSURE POLICY INFORMATION

Conflict of Interest Disclosure Index

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- 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 2021 Program Disclosures - current as of 09/02/2021

**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.

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Asmiragani, Syaifullah: Disclosure not available at time of publication.

Blatter, Thomas R.: Board of Directors: EUROSPINE (None, Vice President); Scientific Advisory Board: Medtronic (A); Speaking and/or Teaching Arrangements: Medtronic (B), Safe Orthopaedics (B).

Boachie-Adjei, Oheneba: Disclosure not available at time of publication.

Brayda-Bruno, Marco: Disclosure not available at time of publication.

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

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

Cheung, Kenneth M.: Board of Directors: Scoliosis Research Society (Travel Expense Reimbursement); Grants: NuVasive (H, Outside 12-Month Requirement, Paid directly to institution/employer); Other: Journal Of Orthopaedic Surgery (Nonfinancial); Speaking and/or Teaching Arrangements: Globus Medical (B, Paid directly to institution/employer), ISICO Italian Scientific Spine Institute (A, Paid directly to institution/employer), Medtronic (B, Paid directly to institution/employer); Trips/Travel: AOSpine (D, Outside 12-Month Requirement, Paid directly to institution/employer).

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

Darwono, Aloysius Bambang: Disclosure not available at time of publication.

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