



Global Spine Congress Report Toronto, Canada | May 15–18, 2019



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Global Spine Congress 2019— **another successful year for the GSC**

The 2019 Global Spine Congress (GSC) held in Toronto welcomed just under **1800 participants**, representing **84 countries**. AOSpine's annual meeting was a chance for participants to enjoy four full days of an outstanding scientific program, exchange knowledge, showcase the very latest research, innovative techniques and cutting-edge technologies in spine surgery to a worldwide audience.

210 expert speakers from 84 countries participated in a ground-breaking scientific program for the only leading spine congress of its kind. **A record 1,501 abstract**s were submitted for poster presentation providing submitters the opportunity to present their research to hundreds of global spine specialists.

The Scientific Program included pre-courses, AOSpine Symposia, Society Symposia, and peer reviewed abstracts, scheduled to be presented as oral or ePoster presentations. The GSC also provided **exclusive AOSpine members-only sessions** on a variety of exciting topics, including 'how to brand yourself' and 'how to be a good leader'.

Toronto marked the GSC's **10-year anniversary** and included many new additions. For the first time, the GSC featured a **theater** in the exhibition hall where innovative sessions took place, such as augmented reality in spine care and virtual reality in medicine. A new AOSpine initiative took place at the GSC featuring inspirational discussions from the session: **Women in Spine**. Robert McGuire, AO Foundation's current president, attended the congress as well.

The GSC also offered symposia from **nine guest spine societies** from different countries: NASS (North American Spine Society), CSRS (Cervical Spine Research Society), AANS/CNS, ISSLS (International Society for the Study of the Lumbar Spine, SRS (Scoliosis Research Society), EUROSPINE, Russian Association of Spine Surgeons, CSS (Canadian Spine Society), and the World Federation of Neurological Societies.

The GSC was supported by **65 sponsoring companies**. Raising the bar again this year, the GSC held several additional pre-course workshops that hope to set the standard for up and coming GSC editions. These workshops were well supported by industry and societies providing participants with a taste of the worthwhile collaborations on the horizon.



All accepted abstracts can be read online in the Global Spine Journal Special Issue Global Spine Congress 2019 Abstracts.



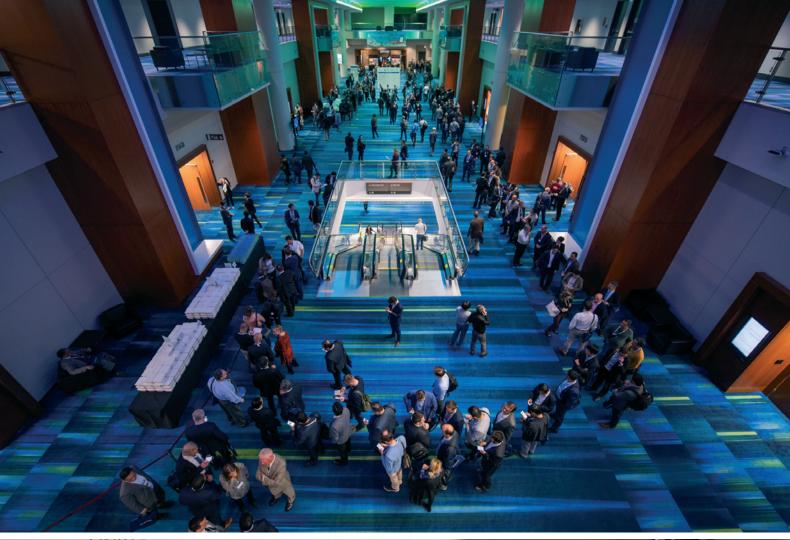
Mark your calendars!



The GSC 2020 will take place in Rio de Janeiro, Brazil, May 20–23, 2020.
Abstracts can be submitted from June 1 to September 16, 2020.







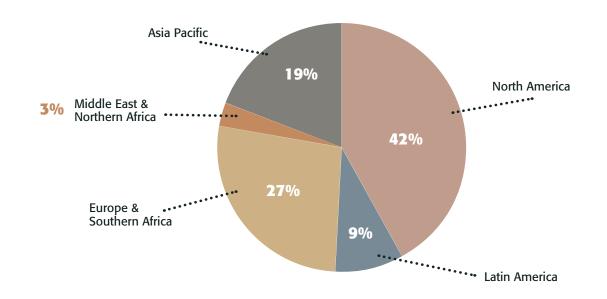


Global Spine Congress in figures

GSC growth to date

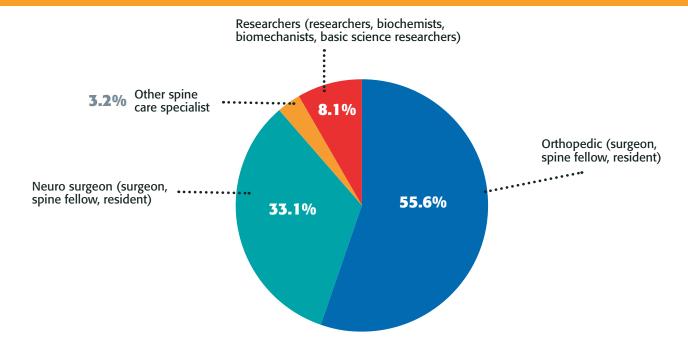


Regional representation 2019

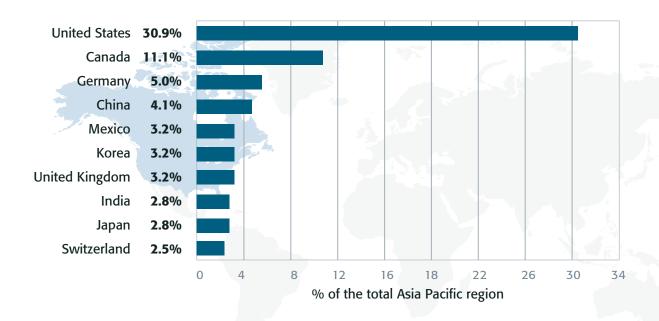


Global Spine Congress in figures

GSC participant specialty 2019



Top 10 countries



Membership breakdown

60% AOSpine members

40% Non-members

Scientific program statistics

Abstract topics and symposia, scientific sessions, E-posters, and oral presentation figures



The Global Spine Congress (GSC) exposes me to the possibilities we can have in our country that we currently don't have. The GSC exposes me to not only the present but to the future in the field of spine care.

GSC participant, Diekramabo Ikenna, Nigeria

Abstract statistics

Submissions by topic

Total number of abstracts: 1501



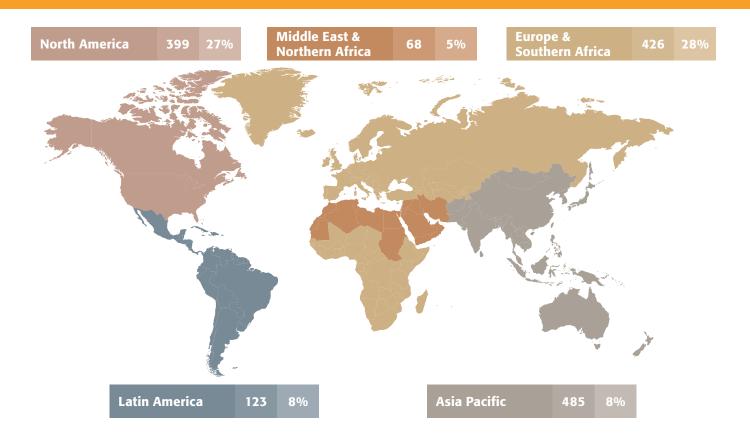
As a new participant to the GSC, they will have the opportunity to meet global leaders, get tips and trips that will be useful in their day-to-day practice, and finally they can look into the newer technologies which are both demonstrated at the booths in the exhibition hall as well through speaker presentations.

GSC 2019 participant

Abstract statistics

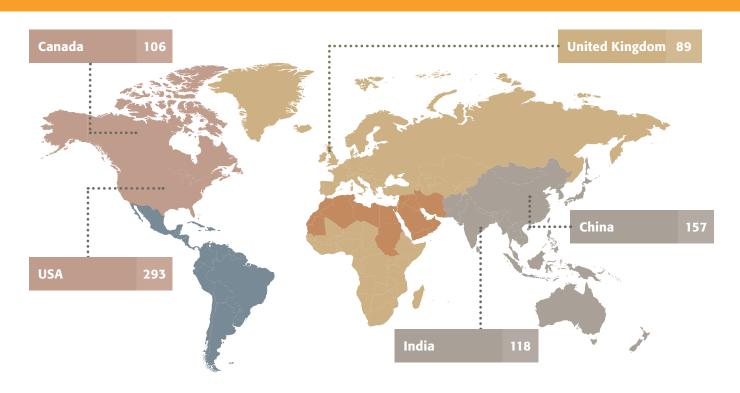
Submissions per region

Total number of abstracts: 1501



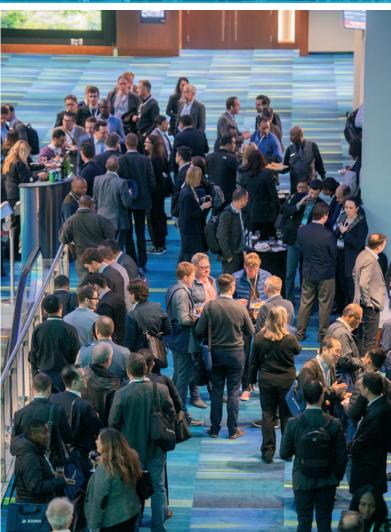
Top 5 countries

Total: **763**



Gallery







NASS Pre-courses

Location: Didactic: Room 501, Metro Toronto Convention Centre Lab: Surgical Training Institute parked at 306 Front St W, Toronto ON M5V 0E9 (3 minute walk)

| Tuesday, May 14, 2019 07:30–12:30 13:30–18:30 | Endoscopic Solutions for Lumbar Disc Herniation and Basic Endoscopic Techniques Endoscopic Solutions for Lumbar Disc Herniation and Advanced Endoscopic Technique |
|---|---|
| Wednesday, May 15, 2019 07:30–13:30 13:30–18:30 | Present and Future of Intraoperative Navigation, Robotics and Minimally Invasive Spine Surgery Present and Future of Intraoperative Navigation, Robotics and Minimally Invasive Spine Surgery |
| Thursday, May 16, 2019 09:00–17:00 | Advanced Techniques in Complex Spine Surgery |

| Wednes | day, May 15, 201 | 9 | | | | | |
|---------------------------|--|---|---------------------------|---|---|--|--|
| | | | | | | | |
| | Room 716 | Room 714 | | Room 706 | Room 712 | | |
| 10:00-11:00 | | | | | | | |
| 11:00-12:00 | | | | | | | |
| 13:30-16:00 | | | | Pre-course: Update on Navigation, Robotics and Emerging Technologies | Pre-course: Optimised Spine Surgery—Lumbar | | |
| 16:00-17:00 | | | | | | | |
| 17:00-17:45 | Members-only session: How to Evaluate New Technologies | Members- session: How to Brand Your | | | | | |
| 17:45-18:30 | Members-only session: How to be a Good Leader | Members-c session: The Good, T The Ugly. The taught me th | he Bad and e case that | | | | |
| 18:45-19:30 | AOSpine Member Assembly | | | | | | |
| KEY Paper sessions | Breaks and industry lunch sy | mposia | AOSpine M | embers-only sessions. These sessions | are for members only. | | |
| Symposia | Precourses (pre-registration | required) | Join AOSpir | ne today at: www.aospine.org/membe | rship | | |
| Live streaming | | | | | | | |

Program at a Glance Thursday, May 16, 2019

| 07:50-09:00 | | Opening symposium: (| Cutting Edge Updates in Spir | ne Surgery (Room 801) | | |
|-------------|--|--|--|---|--|--|
| 09:00-09:15 | | c | ongress opening (Room 801 |) LIVE | | |
| 09:15-10:00 | | Leaders | ship in the Spine World (Roo | om 801) LIVE | | |
| 10:00-10:30 | | | Break | | | |
| | Room 716 Room 714 | | Room 715 | Room 717 | Room 713 | |
| 10:30-11:15 | Degenerative— Cervical 1 | Trauma—Cervical 1 | Deformity— Thoracolumbar (Adult) 1 | Biomechanics 1 | | |
| 11:15-12:00 | Arthroplasty—Cervical | Trauma—Cervical 2 | Infections 1 | Biomechanics 2 | | |
| 12:00-13:30 | Industry Lunch Symposia | Industry Lunch Symposia | Lunch Break | Lunch Break | Industry Lunch Symposia | |
| 13:30-14:30 | Symposium: Cervical Arthroplasty: Current Status and Expansion of Indications | Symposium: Robotics in Spine Surgery | Symposium: Role of Sacrolliac Joint in Low Back Pain: the Myth, the Truth, and the Solutions | Symposium hosted by: AOSPINE MIDDLE RAST and NORTHERN AFRICA How to Achieve with Limited Resources | Symposium hosted by: AOSPINE Getting to Know the AOSpine Knowledge Forums: Latest Advances, Clinical Impact, and Future Directions | |
| 14:30-15:00 | Surgical Complications | Trauma— Thoracolumbar 1 | Degenerative— Cervical 2 | Tumor 1 | | |
| 15:00-15:30 | Break | | | | | |
| 15:30-16:15 | Minimally Invasive Spine Surgery 1 | Degenerative— Lumbar 1 | Deformity— Thoracolumbar (Adolescent) 1 | Tumor 2 | Symposium hosted by: Global Spine Journal GLOBAL | |
| 16:15-17:00 | Minimally Invasive Spine Surgery 2 | Degenerative— Lumbar 2 | Deformity— Thoracolumbar (Adolescent) 2 | Degenerative— Cervical 3 | SPINE JOURNAL Part A: Creating a Successful Spine Research Program | |
| 17:00-18:00 | Symposium hosted by: North American Spine Society Current Innovation and Future Trends in Spine Care: From Stem Cell, Robotic Assisted Spine Surgery to Neuromodulation | Symposium hosted by: Cervical Spine Research Society FOUNDED 1973 Cervical Deformity | Symposium hosted by: AANS/CNS Section on Disorders of the Spine and Peripheral Nerves Congress of Neurological Surgeons Association of Neurological Surgeons AMMINISTRATION OF HOLOGREGATE THE UTILA L MARKETS ERAS and Reduction of Opioid Usage | Symposium hosted by: International Society for the Study of the Lumbar Spine Spine Spine Degeneration and Phenotyping—Clinical Impact and Future Directions | Symposium hosted by: AOSpine Knowledge Forum Trauma AOSpine Osteoporotic Fracture Classification & Outcome in Spinal Trauma | |
| 18:00-19:30 | Welcome Reception in exhibition area and Awards Ceremony | | | | | |

Program at a Glance Friday, May 17, 2019

| ••••• | | | | | | |
|-------------|--|--|--|--|--|--|
| | Room 716 | Room 714 | Room 715 | Room 717 | Room 713 | |
| 07:00-08:30 | "Women In Spine" event (Room 802A) | | | | | |
| 08:00-09:00 | Symposium: Navigation in Spine Surgery—The Essentials | Symposium: Implants Failure in Patients Operated on with Pedicle Screw Fixation—Prevention and Revision Strategies | Symposium hosted by: AOSpine Knowledge Forum Tumor 7 Rules to Treat Metastatic Spine Disease: an Antidote to Failure | Symposium hosted by: AOSpine Knowledge Forum Degenerative Controversies on the Treatment of Degenerative Spondylolisthesis with Stenosis | Symposium: Bone Biologics for Spine: Facts vs Fiction | |
| 09:00-10:00 | Novel Technologies 1 | Trauma— Thoracolumbar 2 | Degenerative— Cervical 4 | Pain and Clinical Evaluation | | |
| 10:00-10:30 | | | Break | | | |
| 10:30-11:30 | Deformity— Thoracolumar (Adult) 2 | Tumor 3 | Degenerative— Cervical 5 | Basic Science | Symposium hosted by: Global Spine Journal GLOBAL | |
| 11:30-12:30 | Deformity— Thoracolumbar (Adolescent) 3 | Tumor 4 | Infections 2 | Epidemiology | SPINE JOURNAL Part B: Getting Published | |
| 12:30-14:00 | Industry Lunch Symposia | Industry Lunch Symposia | Industry Lunch Symposia | Lunch Break | Lunch Break | |
| 14:00-15:00 | Appropriate Use of Surgery in the Elderly Patient with Spinal Deformity | Symposium hosted by: AOSPINE ASIA PACIFIC Cervico-Thoracic Junction Pathologies | Symposium: Quality and Safety: Why is it Important in Spine Surgery? | Symposium: Management of The Aging Spine: Less Invasive Surgical Considerations and Medical Treatment Options | AOSpine North America Fellowship: Research Award Winners | |
| 15:00-15:30 | Deformity— Thoracolumbar (Adult) 3 | Trauma— Cervical 3 | Degenerative— Lumbar 3 | Imaging 1 | | |
| 15:30-16:00 | | | Break | | | |
| 16:00-17:00 | Deformity— Cervical | Novel Technologies 2 | Minimally Invasive Spine Surgery 3 | Imaging 2 | | |
| 17:00-18:00 | Symposium hosted by: Scoliosis Research Society State of the Art Review of Spinal Deformity | EURO SPINE How to Prevent and Treat Complications in Degenerative Lumbar Spine Surgery | Symposium hosted by: Russian Association of Spine Surgeons Spine Surgery in Russia: Achievements & Outstanding Issues | CANADIAN SPINE SOCIETY The Creation, Output and Impact of a National Spine Outcomes Research Network; How it Changes your Practice | Symposium hosted by: World Federation of Neurological Societies Surgical Options for the Management of Degenerative Cervical Myelopathy | |

Program at a Glance Saturday, May 18, 2019

| •••••••••• | Room 716 | Room 714 | Room 715 | Room 717 | Room 713 | | |
|-------------|--|--|--|--|--|--|--|
| 07:30 | | | | | | | |
| 08:00-09:00 | Symposium hosted by: AOSpine Knowledge Forum Trauma Classification and Treatment of Traumatic Spine Fractures | Symposium hosted by: AOSPINE NORTH AMERICA Current Concepts in Cervical Spine Trauma | Symposium: How to Incorporate Spinal Endoscopy into your Practice | Symposium: Treatment Considerations for Pyogenic Spinal Infection | Symposium hosted by AOSpine Knowledge Forum Tumor Primary Spine Tumor Round Table | | |
| 09:00-10:00 | Trauma | Minimally Invasive Spine Surgery 4 | Surgical Complications 2 | Novel Technologies 3 | | | |
| 10:00-10:30 | Break | | | | | | |
| 10:30-11:15 | Degenerative—Cervical 6 | Minimally Invasive Spine Surgery 5 | Deformity—Thoracolumbar (Adult) 4 | Novel Technologies 4 | | | |
| 11:15-12:15 | Symposium: Biomaterials and Biotechnologies for Spine Fusions and Disc Regeneration | Symposium: Advances in Spine Tumor Treatment—a Worldwide Multi-Disciplinary Approach | Symposium: Sagittal Balance and Minimally Invasive Surgery | Symposium hosted by: AOSpine Knowledge Forum Spinal Cord Injury Guidelines for the Management of Degenerative Cervical Myelopathy and Traumatic Spinal Cord Injury: What Do We Know? What Should We Do? | Symposium: Video Surgical Technique | | |
| 12:15-13:00 | Best Paper Session (Room 716) | | | | | | |
| 13:00-13:15 | Awards and Closing Ceremony (Room 716) | | | | | | |
| 13:15-14:00 | Closing Symposium (Room 716) Minimally Invasive Spine Surgery: Techniques, Opportunities, Frontiers | | | | | | |

Many meetings have some people attending from all over the world, but the Global Spine Congress is truly international in regards to both speakers and participants.

Jeffrey C Wang, Global Spine Congress Chairperson

Gallery











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