

FINAL PROGRAMME



37th EPOS Annual Meeting
11-14 April 2018, Oslo, Norway



European Paediatric Orthopaedic Society

EPOS IS GRATEFUL FOR THE SUPPORT FROM THE INDUSTRY



DIAMOND SPONSOR

ORTHOPEDIATRICS



GOLD SPONSORS

K2M



JUNIORTHO



MEDTRONIC



BRONZE SPONSORS

ARTHREX



NUVASIVE



SMITH & NEPHEW

TABLE OF CONTENTS

| | |
|---|----|
| Patron | 05 |
| President's Welcome Message | 06 |
| Welcome from the Local Organising Committee | 07 |
| What is EPOS? | 08 |
| POSNA to EPOS Fellows | 11 |
| Meet the Mentor | 11 |
| EPOS Executive Board | 12 |
| Past and Future EPOS Meetings | 13 |
| Programme at a Glance | 14 |
| 37 th EPOS Scientific Programme, Short Version | 17 |
| Speaker Information | 22 |
| Social Programme | 23 |
| General Information | 24 |
| Tourist Information | 25 |
| Sponsors and Exhibitors | 27 |
| Sponsor and Exhibition Area Map | 34 |
| Map of Venue | 36 |
| Map of Oslo | 37 |

Technical Organiser/PCO



Congress-Conference AS

Frederik Stangs gate 14 C, 0272 Oslo, Norway

Tel: +47 22 56 19 30 • mail@ccnorway.no • www.ccnorway.no



Photo: Solve Sundsbo

*Welcome to Oslo and the EPOS Meeting under
the patronage of His Majesty King Harald V.*

Welcome to Oslo



Darko Anticevic
EPOS President

Dear Colleagues and Friends,

On behalf of the EPOS, Executive Committee and myself it is a great privilege to welcome you to Oslo and to the 37th Annual Meeting of our Society.

Oslo is a capital that lies between Oslofjord and surrounding hills and has a specific Nordic charm. EPOS Annual Meeting is for the first time in Norway, and I am sure that you will take this opportunity to visit a lot of attractions in Oslo such as museums and art venues, as well as in excursions to natural beauties of Norway. Our Society is well-known as being able to perfectly mix business and pleasure. I believe that this tradition will continue again over the next few days here in Oslo, where our local hosts have helped to arrange a social programme that complements our scientific programme: new ideas and historic venues.

Terje Terjesen has arranged a Pre-Meeting course on Developmental Dysplasia of the Hip (DDH) on Wednesday 11th April that will introduce you to the main scientific programme with more than 110 podium presentations. EPOS Reading Committee under direction of Antonio Andreacchio with the help of the Scientific Committee put together very attractive scientific programme which will highlight the best of recent research and provoke sparkling discussions during the meeting and give you plenty of ideas to take home with you. Besides podium presentations in the main scientific programme, paper- and e-posters will be available to attendees to see which could be the candidate for the Best Poster Award.

During this meeting, for the first time, there will be four EPOS Study Group sessions led by Study Group chairs and coordinated by Education Committee chair Hakan Ömeroglu.

Our industry partners have also contributed in many ways to make this meeting educational and enjoyable: we hope you will support both the industry exhibition and traditional lunch time symposia.

I would like to thank to our local hosts Terje Terjesen and Ivan Hvid and their team, local PCO team of Congress-Conference AS led by Mr. Øivind R. Lie and the EPOS Central Office in Rolle, Switzerland featuring Mrs. Elenida Shkarpa for all their help in arranging this meeting: all their hard work has been much appreciated.

I do hope that you will find the science stimulating and the meeting enjoyable!

With best wishes,

Darko Anticevic
EPOS President

Welcome to Oslo



Terje Terjesen
Chairman of LOC



Vera Halvorsen
LOC member



Joachim Horn
LOC member



Stefan Huhnstock
LOC member



Ivan Hvid
LOC member



Ola Wiig
LOC member

Dear Colleagues and Friends,

It is a great pleasure to welcome you to the 37th EPOS Annual Meeting in Oslo, April 11 – 14th, 2018. This is the first time the EPOS Meeting is being arranged in Norway and we are honoured and pleased to have the opportunity to host this event which has become so important to pediatric orthopedic specialists and residents, not only in Europe, but also in other parts of the world.

For the scientific programme, we received more than 500 abstracts which have been reviewed by members of EPOS Reading Committee. Under the leadership of Antonio Andreacchio, they have done a great job in selecting abstracts for podium presentations, posters, and e-posters. Furthermore, on Friday afternoon we will have 4 EPOS Study Group Symposia in 2 parallel sessions, and there will be industry-sponsored symposia. In addition, there will be the Pre-meeting Course on Wednesday with various of controversial topics in DDH presented by well-known speakers from Europe and USA. All these contributions provide an excellent scientific programme which you should not miss.

Oslo lies between the Oslofjord and surrounding hills and has more than 600.000 inhabitants. The combination of modern city life, world-known museums and attractions, and easy access to outdoor activities makes Oslo a unique destination. As meeting venue we have selected Oslo Congress Centre, which is ideally located in the heart of the city, within walking distance from all city hotels, the City Hall and the harbor area.

We would propose, especially if you have not been to Norway before, that you set aside a few days before or after the Meeting to see more of our beautiful country. Mid-April is spring-time in Norway usually with pleasant temperature, but it can still be perfect conditions for skiing in the mountains.

On behalf of the Local Organising Committee, we are looking forward to seeing you in Oslo!

Terje Terjesen
Chairman of LOC

LOC members:

Vera Halvorsen, Joachim Horn, Stefan Huhnstock, Ivan Hvid, Ola Wiig

What is EPOS?

EPOS was founded in 1981, in Paris, by a group of five paediatric orthopaedic surgeons. The first EPOS meeting was held in Paris and was attended by 13 surgeons. Nowadays the society has more than 450 surgeons spread around the world. Our last meeting was held in Barcelona, Spain with 1700 attendees, out of this were 1200 medical professionals.

Our Mission

Our mission is to increase the quality of care of children with orthopaedic conditions. This goal is helped by increasing the communication between professionals dealing with the child, improving the education of those interested in child care and sharing and spreading the advances of the knowledge.



Pierre Lascombes
Presidential Guest
Lecture

PRESIDENTIAL GUEST LECTURE

Pierre Lascombes, Switzerland

Prof. Pierre Lascombes is a paediatric orthopaedic surgeon. He has published more than 140 papers in peer-review journals and many book chapters. Currently, he is chairman of the Division of paediatric orthopaedic surgery and Professor of Orthopaedics in Geneva, Switzerland. He was chief of the Department of paediatric orthopaedic and Professor of Anatomy for 18 years at the University of Nancy, France.

Prof. P. Lascombes has a large experience of scoliosis in children and adolescents, bone deformities correction and lengthening as well as neuromuscular diseases. He has also extensively published on Traumatology in children with the flexible intramedullary nailing technique also known as the Nancy nailing technique. He is a past President of the European Paediatric Orthopaedic Society (EPOS) as well as of the French Paediatric Orthopaedic Society (SOFOP). He is member of many scientific societies. Prof. P. Lascombes' hobbies are skiing, sailing, golf and music. Professor P. Lascombes is the Presidential speaker for the year 2018.



Jaroslaw Czubak
Incoming President

INCOMING PRESIDENT

Jaroslaw Czubak, Poland

Jaroslaw Czubak will be the next EPOS President. Professor Jaroslaw Czubak is the head of the Department of Orthopaedics, Pediatric Orthopaedics and Traumatology at Gruca Teaching Hospital in Otwock. He was the President of the Polish Pediatric Orthopaedic Society 2007-2008. Currently he is the national consultant in orthopaedic surgery in Poland.

Prof. Jaroslaw Czubak was born in Ostrow Wlkp and graduated from Medical University in Poznan in 1986, he got his expertise in Dega Hospital in Poznan 1987-2003, and then moved to Gruca Teaching Hospital. He was the Dean and Director of the Postgraduate Medical Education Centre in Warsaw.

His main field of interest is osteotomy in children, adolescents and adults and joint preservation surgery of the hip. He is also an expert in elbow fractures and pelvic fractures. Prof. Czubak has organized several Otwock Tutorials in Pelvic Osteotomies which has been attended by more than 150 participants. He is the author of 40 publications, 18 chapters and 4 coursebooks.

Prof. Jaroslaw Czubak became a member of EPOS in 1996, and was chosen by the EPOS Board Member as a Counsellor for 2004-2008. He was a member of the Reading Committee, and active lecturer in Educational Committee. During the Marseille EPOS Meeting he was elected Second Vice President by GA.



N. M. P. Clarke
Pro Maximis Meritis

PRO MAXIMIS MERITIS 2018

N. M. P. Clarke, UK

Professor Clarke was Consultant Orthopaedic Surgeon and Professor at Southampton University Hospitals Trust from 1996 to his retirement in 2017. During his professional career as orthopaedic surgeon he published more than 140 papers in peer-review academic journals. He was recipient of twenty-two research grants and he published twelve chapters in textbooks.

Professor Clarke was research fellow in paediatric orthopaedics at DuPont Institute, Wilmington, Delaware, USA (1982/3) and research fellow at Kyushu University, Fukuoka, Japan (1985). As visiting professor he lectured in numerous universities and hospitals. He was invited speaker across the Globe: Portugal, Spain, Australia and New Zealand, Argentina, Egypt, Dubai-UAE, Turkey, to mention only a few. He was Hunterian Professor – Royal College of Surgeons of England with “A scientific approach to the staged investigation and treatment of congenital displacement of the hip”.

Professor Clarke is member of many professional societies and also member of faculty by invitation of International Paediatric Orthopaedic Symposium, Florida, USA, December 2008/9/10/11/12/. He was founding member of the International Hip Dysplasia Institute, Florida USA, (founded 2009) and member of International Perthes' Study Group, (inaugural meeting Texas 2012).

Professor Clarke is awarded with EPOS Pro Maximis Meritis Award for 2018.



Astrup Fearnley
Museum

World
Made

POSNA to EPOS Fellows



Aristides I. Cruz
Jr., MD, MBA

Aristides I. Cruz, Jr., MD, MBA

The Warren Alpert Medical School at Brown University Rhode Island Hospital/
Hasbro Children's Hospital, Providence RI (USA).



Rachel Yvonne
Goldstein
MD, MPH

Rachel Yvonne Goldstein, MD, MPH

Department of Medicine, University of Southern California (USA).



Jennifer C. Laine
MD

Jennifer C. Laine, MD

Gillette Children's Specialty Healthcare, Saint Paul MN (USA).

Meet the Mentor

“**Meet the Mentor**” is an exciting new concept, giving young colleagues the unique opportunity to meet extraordinary experts in the field of paediatric orthopaedic surgery. This year we have the great pleasure that Prof. Ernesto Ippolito is sharing his vast experience in an interactive format with all participants. How to combine clinical experience with relevant research is a challenging question for all of us and Prof. Ippolito might have some answers and suggestions in how to find a fruitful way to succeed. Welcome!

Chair: Stefan Huhnstock (Norway)

EPOS Executive Board

OFFICERS

Darko Anticevic, Croatia
President (2017-2018)

Jaroslav Czubak, Poland
Vice-President

Thomas Wirth, Germany
2nd Vice-President

Manuel Cassiano Neves, Portugal
Past-President

Elke Viehweger, France
General Secretary (2017-2020)

Dror Ovadia, Israel
Treasurer (2016-2019)

COUNCILLORS

Hakan Ömeroğlu, Turkey
Councillor (2016-2019)

Manoj Ramachandran, UK
Councillor (2016-2019)

Stephanie Böhm, Sweden
Councillor (2015-2018)

Renaud Rossillon, Belgium
Councillor (2015-2018)

Stefan Huhnstock, Norway
Councillor (Junior, 2017-2020)

SCIENTIFIC COMMITTEE

Cristina Alves, Portugal
Chair (2015-2018)

EDUCATIONAL COMMITTEE

Hakan Ömeroğlu, Turkey
Chair (2014-2018)

NOMINATION COMMITTEE

Pierre Lascombes, Switzerland
Chair (2017-2018)

READING COMMITTEE

Antonio Andreacchio, Italy
Chair (2017-2021)

WEBSITE COMMITTEE

Federico Canavese, France
Chair (2015-2018)

HISTORIAN

Klaus Parsch, Germany

EPOS NEWS

Stephanie Böhm, Sweden

JCO

Fritz Hefti, Switzerland
Editor

Shlomo Wientroub, Israel
Editor

Deborah Eastwood, UK
EPOS representative at JCO

EFORT REPRESENTATIVE

Thomas Wirth, Germany
2016-2018

UEMS REPRESENTATIVE

Rüdiger Krauspe, Germany

IFPOS REPRESENTATIVE

Darko Anticevic, Croatia

EPOS FOUNDATION BOARD

Pierre Lascombes, Switzerland
President (2015-2019)

Past and Future EPOS Meetings

| | | |
|-------------|-----------------------|-----------------|
| 1982 | Paris | France |
| 1983 | Paris | France |
| 1984 | Basel | Switzerland |
| 1985 | Bologna | Italy |
| 1986 | London | United Kingdom |
| 1987 | Budapest | Hungary |
| 1988 | Amsterdam | The Netherlands |
| 1989 | Helsinki | Finland |
| 1990 | Athens | Greece |
| 1991 | Paris | France |
| 1992 | Jerusalem | Israel |
| 1993 | Vienna | Austria |
| 1994 | Porto | Portugal |
| 1995 | Brussels | Belgium |
| 1996 | Prague | Czech Republic |
| 1997 | Heidelberg - Mannheim | Germany |
| 1998 | Madrid | Spain |
| 1999 | Gothenburg | Sweden |
| 2000 | Milan | Italy |
| 2001 | Montpellier | France |
| 2002 | Istanbul | Turkey |
| 2003 | London | United Kingdom |
| 2004 | Geneva | Switzerland |
| 2005 | Palma de Mallorca | Spain |
| 2006 | Dresden | Germany |
| 2007 | Sorrento | Italy |
| 2008 | Warsaw | Poland |
| 2009 | Lisbon | Portugal |
| 2010 | Zagreb | Croatia |
| 2011 | Basel | Switzerland |
| 2012 | Helsinki | Finland |
| 2013 | Athens | Greece |
| 2014 | Bruges | Belgium |
| 2015 | Marseille | France |
| 2016 | Rome | Italy |
| 2017 | Barcelona | Spain |
| 2018 | Oslo | Norway |
| 2019 | Tel Aviv | Israel |



**WE LOOK
FORWARD
TO SEEING
YOU AGAIN
NEXT YEAR!**

Programme at a Glance

| Wed, 11 April | | Thursday, 12 April | | |
|---------------|--|--------------------|--|---|
| Sal A | | Sal A | Sal B | Sal C |
| | | 08:00 – 09:05 | Basic Science | |
| | | 09:05 – 09:55 | Sports Medicine | |
| | | 09:55 – 10:25 | Coffee Break | |
| | | 10:25 – 10:45 | Opening Ceremony | |
| | | 10:46 – 11:36 | DDH 1 | |
| | | 11:36 – 12:25 | DDH 2 | |
| | | 12:25 – 13:30 | Lunch | |
| | | 12:30 – 13:30 | Auditorium General Assembly Part I | |
| 12:00 – 14:35 | DDH Symposium | 13:35 – 14:35 | Industrial Symposium K2M | Industrial Symposium JUNIORTHO Industrial Symposium NUVASIVE |
| 14:35 – 15:05 | Coffee Break | 14:40 – 16:11 | Trauma | 14:30 – 15:37 Knee |
| 15:05 – 17:00 | DDH Symposium continued | | | 15:38 – 16:11 Foot 1 |
| | | 16:12 – 16:40 | Coffee Break | |
| | | 16:40 – 17:45 | Infection & Tumours | 16:40 – 17:29 Foot 2 |
| 18:00 – 19:30 | Oslo City Hall Welcome Reception | | | 17:30 – 18:30 Meet the Mentor |

| Friday, 13 April | | |
|------------------|--|---|
| | Sal A | Sal B |
| 07:00 – 08:00 | Auditorium General Assembly Part II | |
| 08:00 – 08:50 | Hip 1 | |
| 08:50 – 09:40 | Hip 2 | |
| 09:40 – 10:29 | Spine 1 | |
| 10:30 – 11:00 | Coffee Break | |
| 11:00 – 12:22 | Spine 2 | |
| 12:25 – 13:30 | Lunch | |
| 12:30 – 13:30 | Industrial Symposium ORTHOPEDIATRICS | Industrial Symposium MEDTRONIC |
| 13:30 – 15:30 | EPOS Study Group: Genetics and Metabolic Group & Spine | EPOS Study Group: Upper Limb Group |
| 15:30 – 16:00 | Coffee Break | |
| 16:00 – 18:00 | EPOS Study Group: Neuromuscular Group | EPOS Study Group: Musculoskeletal Tumours, Infections & Arthritis Group |
| | | |
| 20:00 – 24:00 | Mathallen Conference Dinner | |

| Saturday, 14 April | |
|--------------------|-----------------------------------|
| | Sal A |
| | |
| 08:00 – 08:50 | Upper Limb |
| 08:50 – 09:47 | Neuromuscular |
| | |
| 09:48 – 10:13 | Presidential Guest Lecture |
| 10:13 – 10:18 | Awards 2018 |
| 10:18 – 10:28 | Pro Maximis Meritis |
| 10:28 – 10:53 | Transfer Presidency |
| 10:53 – 11:30 | Coffee Break |
| 11:30 – 12:53 | Congenital |
| | |
| 12:53 – 13:00 | Closing Remarks |



Photo: VisitOSLO/Rod Costa

37th EPOS Scientific Programme

SHORT VERSION

Please find the full programme in the
Journal of Children's Orthopaedics
Volume 12, supplement 1.

Wednesday, 11 April

| | | |
|---------------|-----------------|--|
| 12:00 – 14:35 | Sal A | Pre-Meeting course: DDH Symposium <u>Moderators:</u> M. B. Millis (USA) and T. Terjesen (Norway) |
| 14:35 – 15:05 | Exhibition Area | Coffee Break |
| 15:05 – 17:00 | Sal A | Pre-Meeting course continues <u>Moderators:</u> H. Ömeroğlu (Turkey) and K. Parsch (Germany) |
| 18:00 – 19:30 | Oslo City Hall | Welcome Reception at Oslo City Hall, hosted by the City of Oslo |

Thursday, 12 April

| | | |
|---------------|-----------------|---|
| 08:00 – 09:05 | Sal A | Basic Science <u>Chairs:</u> C. Alves (Portugal) and I. Hvid (Norway) <u>E-Moderator:</u> I. Ghanem (Lebanon) |
| 09:05 – 09:55 | Sal A | Sports Medicine <u>Chairs:</u> F. Accadbled (France) and A. M. Weinberg (Austria) <u>E-Moderator:</u> T. S. Kaastad (Norway) |
| 09:55 – 10:25 | Exhibition Area | Coffee Break |
| 10:25 – 10:45 | Sal A | Opening of the 37 th EPOS Annual Meeting |
| 10:46 – 11:36 | Sal A | DDH 1 <u>Chairs:</u> H. Ömeroğlu (Turkey) and T. Terjesen (Norway) <u>E-Moderator:</u> M. De Pellegrin (Italy) |
| 11:36 – 12:25 | Sal A | DDH 2 <u>Chairs:</u> P. Farsetti (Italy) and A. Roposch (UK) <u>E-Moderator:</u> O. Eberhardt (Germany) |
| 12:25 – 13:30 | Exhibition Area | Lunch |

> [Thursday, 12 April continues](#) >

Thursday, 12 April

| | | |
|---|--|--|
| 12:30 – 13:30 | Auditorium | General Assembly Part I |
| <p>13:35 – 14:35 Sal A Industrial Symposium by K2M The Importance of Restoring Balance. <u>Speaker:</u> Prof. Rene Castelein (Netherlands)</p> | <p>13:35 – 14:35 Sal B Industrial Symposium by JUNIORTHO Postoperative Management: How technology can improve outcomes – the experience of some centres in Europe and USA. <u>Chair:</u> Pierre Lascombes (Switzerland) <u>Speakers:</u> Alex Cherkashin (USA), Dmitry Popkov (Russia) and Yasser Jabbar (UK)</p> | <p>13:35 – 14:35 Sal C Industrial Symposium by NUVASIVE Limb Lengthening vs. Growth Arrest: Has technology improved enough to rethink the indications? <u>Faculty:</u> Prof. Dr. Thomas Dreher (Germany), Dr. Micha Langendörfer (Germany) and Dr. Björn Vogt (Germany) and Christof Rodler (Austria)</p> |
| <p>14:40 – 16:11 Sal A Trauma <u>Chairs:</u> A. Andreacchio (Italy) and P. Journeau (France) <u>E-Moderator:</u> J. Knorr (Spain)</p> | <p>14:40 – 15:37 Sal B Knee <u>Chairs:</u> D. Cosma (Romania) and B. Møller-Madsen (Denmark) <u>E-Moderator:</u> D. Popkov (Russian Fed)</p> <hr/> <p>15:38 – 16:11 Sal B Foot 1 <u>Chairs:</u> S. Böhm (Sweden) and S. L. Frick (USA) <u>E-Moderator:</u> A. Ey Batlle (Spain)</p> | |
| 16:11 – 16:40 | Exhibition Area | Coffee Break |
| <p>16:40 – 17:45 Sal A Infection & Tumours <u>Chairs:</u> M. C. Neves (Portugal) and P. Lascombes (Switzerland) <u>E-Moderator:</u> S. Marangoz (Turkey)</p> | <p>16:40 – 17:29 Sal B Foot 2 <u>Chairs:</u> M. Ramachandran (UK) and J. Chomiak (Czech Rep) <u>E-Moderator:</u> C. Bytyqi (Kosovo)</p> <hr/> <p>17:30 – 18:30 Sal B Meet the Mentor <u>Chair:</u> S. Huhnstock (Norway) <u>Mentor:</u> E. Ippolito (Italy)</p> | |

Friday, 13 April

| | | |
|---------------|-------------------|--|
| 07:00 – 08:00 | Auditorium | General Assembly Part II |
| 08:00 – 08:50 | Sal A | Hip 1 <u>Chairs:</u> J. Duart (Spain) and J. Czubak (Poland) <u>E-Moderator:</u> V. Pavone (Italy) |
| 08:50 – 09:40 | Sal A | Hip 2 <u>Chairs:</u> G. Hosny (Egypt) and J. Horn (Norway) <u>E-Moderator:</u> V. Pollet (Netherlands) |
| 09:40 – 10:30 | Sal A | Spine 1 <u>Chairs:</u> R. M. Schwend (USA) and M. Yazici (Turkey) <u>E-Moderator:</u> I. Helenius (Finland) |
| 10:30 – 11:00 | Exhibition Area | Coffee Break |
| 11:00 – 12:22 | Sal A | Spine 2 <u>Chairs:</u> D. Ovadia (Israel) and F. Canavese (France) <u>E-Moderator:</u> R. Castelein (Netherlands) |
| 12:25 – 13:30 | Exhibition Area | Lunch |

| | |
|---|--|
| 12:30 – 13:30 Sal A Industrial Symposium by ORTHOPEDIATRICS Management of Open Fractures in Children. <u>Opening Comments:</u> Dr. Peter F. Armstrong (USA), Chief Medical Officer – OrthoPediatrics <u>Moderator:</u> Dr. Pierre Journeau (France) Dr. Annelie Weinberg (Austria), Dr. Pierre Journeau (France), Mr. Manoj Ramachandran (UK) and Dr. Manon Bachy (France) | 12:30 – 13:30 Sal B Industrial Symposium by MEDTRONIC Latest trends in Pediatric Deformity Management – from new correction techniques to enhancing the recovery pathway. <u>Faculty:</u> I. Helenius (Finland) |
|---|--|

| | |
|---|--|
| 13:30 – 15:30 Sal A EPOS Study Group: Genetics and Metabolic Group & Spine <u>Chairs:</u> R. Sakkers (Netherlands) and C. C. Hasler (Switzerland) | 13:30 – 15:30 Sal B EPOS Study Group: Upper Limb Group <u>Chair:</u> S. Farr (Austria) |
|---|--|

| | | |
|---------------|-----------------|--------------|
| 15:30 – 16:00 | Exhibition Area | Coffee Break |
|---------------|-----------------|--------------|

| | |
|--|--|
| 16:00 – 18:00 Sal A EPOS Study Group: Neuromuscular Group <u>Chair:</u> R. Brunner (Switzerland) | 16:00 – 18:00 Sal B EPOS Study Group: Musculoskeletal Tumours, Infections & Arthritis Group <u>Chairs:</u> I. Balaco (Portugal) and M. S. Taverner (Spain) |
|--|--|

| | | |
|---------------|-----------|-------------------|
| 20:00 – 24:00 | Mathallen | Conference Dinner |
|---------------|-----------|-------------------|

Saturday, 14 April

| | | |
|---------------|-----------------|---|
| 08:00 – 08:50 | Sal A | Upper Limb <u>Chairs:</u> R. Rossillon (Belgium) and D. Eastwood (UK) <u>E-Moderator:</u> J. Charvat (Czech Rep) |
| 08:50 – 09:47 | Sal A | Neuromuscular <u>Chairs:</u> M. Jozwiak (Poland) and E. Viehweger (France) <u>E-Moderator:</u> D. Farrington (Spain) |
| 09:48 – 10:13 | Sal A | Presidential Guest Lecture P. Lascombes (Switzerland) |
| 10:13 – 10:18 | Sal A | Awards 2018 |
| 10:18 – 10:28 | Sal A | Pro Maximis Meritis N. M. P. Clarke (UK) |
| 10:28 – 10:53 | Sal A | Transfer Presidency J. Czubak (Poland) |
| 10:53 – 11:30 | Exhibition Area | Coffee Break |
| 11:30 – 12:53 | Sal A | Congenital <u>Chairs:</u> D. Anticevic (Croatia) and T. Wirth (Germany) <u>E-Moderator:</u> I. Sanpera (Spain) |
| 12:53 – 13:00 | Sal A | Closing Remarks |

Speaker Information

SPEAKER SERVICE CENTRE OPENING HOURS

Located next to Sal A

| | |
|---------------------|---------------|
| Wednesday, 11 April | 10:00 – 18:00 |
| Thursday, 12 April | 07:00 – 18:00 |
| Friday, 13 April | 07:00 – 18:30 |
| Saturday, 14 April | 07:00 – 12:00 |



GUIDELINES FOR SPEAKERS

All presentations must be brought to the Speaker Service Centre at least two hours before the presentation time, or the day before if your session is scheduled for the first session of the day.

After you have uploaded your presentation, it will be checked and tested, and then distributed to the correct session room. A qualified technician will be of assistance in the room and make sure that your presentation is ready. We urge all speakers to make themselves acquainted with the technical equipment in the room before the session starts.

Please note the following:

- Only computer projection will be available.
- Presentations cannot be uploaded directly in the session rooms.
- Personal laptops cannot be used for presentations.

E-Poster Presenters

E-Posters will be displayed in the Exhibition Area.

Poster Presenters

All posters should be put up on Wednesday afternoon (12:00 – 17:00).

We anticipate that they will remain in place until the end of the Meeting.

The poster boards are located in the Exhibition Area.

Social Programme



Photo: Shutterstock

OFFICIAL WELCOME RECEPTION **Wednesday 11th April, 18:00 – 19:30**

The Mayor of Oslo invites you to an official welcome reception at Oslo City Hall. The celebration will take place in the hall that also hosts the Nobel Peace Prize ceremony. In addition to being one of Oslo's most recognisable landmarks due to its unique style, the City Hall is also famous for the frescos and paintings by Henrik Sørensen. Canapés and drinks will be served and you will also have the opportunity to join an exclusive guided tour of the City Hall. This is a unique opportunity to get a glimpse of Oslo's millennial history.

Included in the Registration Fee for all participants and accompanying persons.

ACCOMPANYING PERSONS **SIGHTSEEING TOUR** **Thursday 12th April, 11:00 – 14:00**

The Oslo Highlights Sightseeing Tour will depart from the meeting venue, Oslo Congress Centre, at 11:00 hrs.

Included in the Accompanying Persons fee.



Photo: VisitOslo/Susanne A. Finnes

CONFERENCE DINNER – TASTE **OF SCANDINAVIA – EAT & GREET** **Friday 13th April, 20:00 – 24:00**

The Norwegian hosts would like to welcome all EPOS participants to an unforgettable get-together on Friday evening. Meet and greet your international peers in an exciting and informal atmosphere while enjoying a delicious Nordic signature buffet made by some of Norway's best chefs. We are convinced that our modern and inspiring event concept within a charming location will enrich the EPOS Meeting and your stay in Norway.

Location

The Conference Dinner will take place at Mathallen at Vulkan. Mathallen is Norway's first and largest food hall, recently named as the third best food hall in Europe by Cushman & Wakefield.

The Concept

The central area of the hall has been exclusively reserved for EPOS participants, while the adjacent areas will remain open for other guests. The majority of the area will be equipped with standing bar tables, allowing participants to mingle while enjoying their food and drinks.

Price per person: NOK 960,-. Check with the Secretariat for available tickets.

General Information

THE MEETING VENUE

Oslo Congress Centre

Youngs gate 21, 0181, Oslo

Tel: +47 90 70 99 99

REGISTRATION DESK/SECRETARIAT OPENING HOURS

| | |
|---------------------|---------------|
| Wednesday, 11 April | 10:00 – 18:00 |
|---------------------|---------------|

| | |
|--------------------|---------------|
| Thursday, 12 April | 07:00 – 18:30 |
|--------------------|---------------|

| | |
|------------------|---------------|
| Friday, 13 April | 06:30 – 18:00 |
|------------------|---------------|

| | |
|--------------------|---------------|
| Saturday, 14 April | 07:30 – 13:00 |
|--------------------|---------------|

CERTIFICATE OF ATTENDANCE

Certificate of Attendance will be provided to all delegates. Please enquire at the Secretariat.

USEFUL TELEPHONE NUMBERS

| | |
|--------|-----|
| Police | 112 |
|--------|-----|

| | |
|--------------------|-----|
| Medical Assistance | 113 |
|--------------------|-----|

| | |
|------|-----|
| Fire | 110 |
|------|-----|

PUBLIC TRANSPORTATION IN OSLO

Oslo's public transportation system makes it easy to get around in the city. All the public transport in Oslo and the surrounding county Akershus is part of the same ticket and price system, operated by Ruter. Ruter's tickets are valid for buses, trams, subways, ferries (not the Bygdøy ferry) and local trains.

Where to Buy Tickets

- Kiosks such as Narvesen, 7-Eleven, Deli De Luca and Mix, as well as some selected shops.
- Ruter's Customer Service Centre and Service Points.
- Ticket machines at the metro stations.

LANGUAGE

English is the official language of EPOS.

NO SMOKING POLICY

For the comfort and health of all attendees, smoking is not allowed on the Meeting premises.

PHOTOGRAPHS

Registration and attendance at EPOS activities constitute an agreement by the registrant to allow EPOS to use and distribute (both now and in the future) the registrant's or attendee's image in EPOS member communication and/or promotional materials.

INSURANCE/LIABILITY

EPOS cannot be held liable for any personal injuries or for the loss or damage to property incurred by participants or guests to the Pre-course or Meeting, including those participating in tours and/or at social events. Participants and guests are encouraged to take out insurance to cover losses incurred in the event of cancellation, medical expenses or damages to or loss of personal effects when traveling outside of their own country.

EPOS cannot be held liable for any hindrance or disruptions of the Meeting arising from natural, political, social or economic events or other unforeseen incidents beyond its control. Registration of a participant implies acceptance of this condition.

Tourist Information

OSLO TOP ATTRACTIONS

Holmenkollen Ski Museum & Tower

The ski museum at Holmenkollen, located underneath the famous ski jump, is the oldest of its kind in the world. The museum presents more than 4.000 years of skiing history, Norwegian polar exploration artefacts, and an exhibition on snowboarding and modern skiing.

The observation deck on top of the ski jump tower offers a panoramic view of Oslo. Perhaps the best view of the city?



Photo: VisitOSLO/Tord Baklund



Photo: VisitOSLO/Andreas Bache-Wiig

The Norwegian National Opera & Ballet

Oslo's Opera House is located right at the harbour, with an angled, white exterior that appears to rise from the water. It invites its visitors to climb its roof and enjoy panoramic views of Oslo and the fjord, all year round.

Large-scale windows at street level provide the public with glimpses of rehearsals and workshop activities. The building's interior is mainly oak, and the main hall is shaped like a horseshoe, reminiscent of classical theatres of the past. The opera is designed by the Norwegian architecture firm Snøhetta, and has received several prestigious design awards.



Photo: VisitOSLO/Sabine Zoller



Photo: VisitOSLO/Nancy Bundt

Vigeland Sculpture Park

The Vigeland Sculpture Park is located in the middle of the Frogner Park. It has more than 200 sculptures by Gustav Vigeland (1869–1943) in bronze, granite, and cast iron. Some of his most famous pieces include *The Angry Boy (Sinnataggen)*, *The Monolith (Monolitten)*, and *The Wheel of Life (Livshjulet)*.

Gustav Vigeland was also responsible for the design and architectural outline of the park. The park is one of Norway's top tourist attractions and attracts annually more than one million visitors.

The park is free to enter at all times, all year round.



Photo: VisitOSLO/Nancy Bundt



Photo: VisitOSLO/Thomas Johannessen



Photo: VisitOSLO

The Polar Ship Fram

Fram is the strongest wooden ship ever built and still holds the records for sailing farthest north and farthest south.

At the Fram Museum you can board the famous ship and see how the crew and their dogs managed to survive in the coldest and most dangerous places on earth – the Arctic and the Antarctic. The exhibition is translated into ten languages: English, French, German, Italian, Spanish, Russian, Japanese, Chinese, Korean and Norwegian.

The museum has also a “polar simulator” where you can experience the extreme weather conditions and dangers that the polar explorers had to endure over 100 years ago. Next to the main building is the Gjøa building with exhibitions on the Arctic and the Northwest Passage.

The Viking Ship Museum

The Viking Ship Museum, located on the Bygdøy peninsula, has the world's best-preserved Viking ships and findings from Viking tombs around the Oslo Fjord.

The museum also displays discoveries from the Gokstad, Oseberg and Tune ships, as well as small boats, sledges, carts, tools, textiles and household utensils.



Photo: VisitOSLO/
Dietrick Stenersen

Learn more about the Vikings' adventures through the short film *Vikings Alive* – which is screened throughout the day on the ceilings and walls inside of the museum.

Sponsors and Exhibitors

We are grateful for the support of the industry for this meeting. Without the participation of the industry EPOS would not be able to host this meeting here in Oslo, or engage in the training of youngsters to become doctors in the future.

DIAMOND SPONSOR

ORTHOPEDIATRICS



GOLD SPONSORS

**K2M
JUNIORTHO
MEDTRONIC**



BRONZE SPONSORS

**ARTHREX
NUVASIVE
SMITH & NEPHEW**

Please find on the next pages
the complete list in alphabetical order.

Sponsors and Exhibitors



Arthrex | Bronze Sponsor | Stand 12

Arthrex is one of the leading global medical device companies in sports medicine and less invasive orthopedics. Dedicated to our mission of Helping Surgeons Treat Their Patients Better we offer state-of-the-art products and surgical procedures, such as a wide variety of implants which can be used to repair and reconstruct joints and ligaments, to correct leg axis deformations and to restore other tissue like meniscus and cartilage by also biologically enhancing the patient's own healing abilities.



AXS Medical | Stand 13

The technology BIOMOD™3S combines optic information about back morphology with a radiographic image of the spine (stitching) to yield a 3D model of the vertebral column. The 3D model gives the practitioner a complete view of the spine for a thorough and accurate evaluation of spine deformities in pathologies such as: scoliosis, kyphosis, vertebral compression, posture and balance anomalies, and dorsopathy, to name a few. This technology is an easy add-on to any R/F or RAD suite equipped with digital full spine and long leg imaging.



BioMarin | Stand 6

At BioMarin, we focus on developing first-in-class and best-in-class therapeutics that provide meaningful advances to patients who live with serious and life-threatening rare genetic diseases. BioMarin remains steadfast to its original mission – to bring new treatments to market that will make a big impact on small patient populations. These populations are mostly children, suffering from diseases so rare, that the entire patient population can number as few as 1,000 people worldwide. These conditions are often difficult to diagnose, progressively debilitating, have few, if any, treatment options.



DePuy Synthes | Stand 25

DePuy Synthes Companies of Johnson & Johnson provides one of the most comprehensive portfolios of orthopedic and neurological solutions in the world. DePuy Synthes Companies solutions, in specialties including joint reconstruction, trauma, neurological, craniomaxillofacial, spinal surgery and sports medicine, are designed to advance patient care while delivering clinical and economic value to health care systems worldwide. For more information, visit www.depuyssynthes.com.



EOS | Stand 18

The EOS solution is a unique combination of low dose 2D/3D imaging technology, software and services that add value to each step of the musculoskeletal patient care pathway. From diagnosis to long term follow-up, an EOS exam provides full body, 2D/3D images and patient-specific data sets to plan and control surgeries based on 3D anatomical models of the patient in a weight-bearing position.



Implanet | Stand 28

IMPLANET is an innovative company specialized in the design and manufacturing of premium Spine solutions based in Bordeaux. IMPLANET is the pioneer in Band technologies. With its technological JAZZ™ Platform, IMPLANET offers the most advanced and comprehensive range of Band-based implants available in the market. The JAZZ™ solutions are designed to improve spinal treatments and outcomes for a wide range of indications from complex deformities to one level degenerative diseases, even if the bone quality is compromised.



International Hip Dysplasia Institute | Stand 24

The International Hip Dysplasia Institute (IHDI) is a not-for-profit effort to improve the health and quality of life for those afflicted with hip dysplasia. The IHDI is supported by the Arnold Palmer Hospital Foundation in Orlando, Florida with major sponsorship from Dan Whitney (“Larry the Cable Guy”) and his wife, Cara. With this combined effort, we have joined forces with several noted medical centers around the world to promote prevention, diagnosis, and treatment of hip dysplasia.

Sponsors and Exhibitors



K2M | Gold Sponsor | Stand 10

K2M Group Holdings, Inc. is a global leader of complex spine and minimally invasive solutions focused on achieving three-dimensional Total Body Balance™. Since its inception, K2M has designed, developed and commercialized innovative complex spine and minimally invasive spine technologies and techniques used by spine surgeons to treat some of the most complicated spinal pathologies. K2M has leveraged these core competencies into Balance ACS™, a platform of products, services, and research to help surgeons achieve three-dimensional spinal balance across the axial, coronal and sagittal planes, with the goal of supporting the full continuum of care to facilitate quality patient outcomes. The Balance ACS platform, in combination with the Company's technologies, techniques and leadership in the 3D-printing of spinal devices, enable K2M to compete favorably in the global spinal surgery market.



LifeBridge Health | Stand 23

The Rubin Institute for Advanced Orthopedics (RIO) is home to some of the world's most renowned orthopedic surgeons and offers state-of-the-art treatment in a variety of orthopedic services for children and adults. The Institute hosts a CME-accredited course in limb deformity correction and lengthening. Clinical and research fellowship opportunities are available. The Multiplier and Bone Ninja apps were developed here. The RIO is located in Baltimore, Maryland.



Medtronic | Gold Sponsor

As a global leader in medical technology, services and solutions, Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together. Learn more at [Medtronic.com](https://www.Medtronic.com).



Merete | Stand 14

PediatrOS™ FlexTack™ und RigidTack™ – the new generation of epiphysiodesis implants, specifically approved for modern growth guidance in children's legs. With the further development of conventional epiphysiodesis implants, Merete establishes a new, successful and safer generation of staple implants for the uncomplicated correction of leg length differences or axis malalignments. Merete is an owner-managed German company with business operations in more than 33 countries.



NuVasive | Bronze Sponsor | Stand 11

NuVasive is transforming spine surgery and beyond with minimally invasive, procedurally integrated solutions designed to deliver reproducible and clinically-proven surgical outcomes. The NuVasive MAGEC® System features magnetically controlled growing rods designed to eliminate planned distraction surgeries from the treatment for early-onset scoliosis (EOS). The PRECICE® Intramedullary Limb Lengthening System is an adjustable state-of-the-art device that utilizes a remote control to non-invasively lengthen the femur or tibia.



Orthofix Srl | Gold Sponsor | Stand 4

JuniOrtho™ is a range of products and resources created by Orthofix®, dedicated to children and young adults with bone fractures and deformities. With a long history of developing innovative and leading-edge solutions, Orthofix has now brought all of its paediatric expertise and products together under the JuniOrtho banner. Orthofix is a diversified medical device company focused on improving patients' lives, by providing superior reconstructive and regenerative orthopaedic and spine solutions to physicians worldwide. The JuniOrtho team, and range of products and services, is devoted to helping children with trauma and deformity be the very best that they can be.



OrthoPediatrics | Diamond Sponsor | Stand 5

Founded in 2006, OrthoPediatrics is an orthopedic company focused exclusively on providing a comprehensive product offering to the pediatric orthopedic market to improve the lives of children with orthopedic conditions. OrthoPediatrics currently markets 24 surgical systems that serve three of the largest categories within the pediatric orthopedic market. This offering spans trauma & deformity, scoliosis, and sports medicine/other procedures. OrthoPediatrics' global sales organization is focused exclusively on pediatric orthopedics and distributes its products in the United States and 37 countries outside the United States.

Sponsors and Exhibitors



Pega Medical | Stand 9

For more than two decades, Pega Medical has been offering innovative deformity correction solutions. Pega's family of IM Nails (Fassier-Duval Telescopic Rod, SLIM and GAP Endo-Exo Medullary Systems) are specifically designed for small bones, often seen with metabolic and genetic disease. Additional products such as the Hinge Plate and the Free-Gliding SCFE Screw complete our portfolio of growth modulating orthopedic devices. Our latest innovation: The LolliPOP modular hip plating system, completes a portfolio of forward thinking technologies developed in collaboration with expert orthopedic surgeons from around the world.



Sameda | Stand 21

The company Sameda has been specialised in ground-breaking medical devices and accessories for conservative clubfoot therapy for over 15 years guaranteeing worldwide delivery. The solutions are always particularly practical and user-friendly thanks to our close collaboration with high-calibre partners from every area of the medical and technology sectors. Furthermore Sameda has special experience in product development of orthopaedic devices and in orthopaedic shoe technology.



Smith & Nephew | Bronze Sponsor | Stand 19

Smith & Nephew is a global medical technology business dedicated to supporting healthcare professionals in their daily efforts to improve the lives of their patients. With leadership positions in Orthopaedic Reconstruction, Advanced Wound Management, Sports Medicine and Trauma & Extremities, Smith & Nephew has more than 15.000 employees and a presence in more than 100 countries. Annual sales in 2016 were almost \$4.7 billion. Smith & Nephew is a member of the FTSE100 (LSE:SN, NYSE:SNN).



Sophies Minde | Stand 15

Sophies Minde is one of Norway's largest orthopedic workshops. We provide individual fitted orthopedic appliances to patients all over the country, everything manufactured in-house. We are a fully owned by Oslo University Hospital and have clinics in all the local hospitals in Oslo. Our headquarters are situated at Aker Hospital. Our long tradition with designing orthopedic appliances, combined with high skilled personnel brings new ideas and designs to life.



S.T.O / Iowa Brace | Stand 29

The Iowa Brace is designed to comfortably and effectively prevent recurrence of clubfoot deformity following treatment with the Ponseti method. It consists of a pair of specially designed shoes, fastened to a platform, attached to a detachable positioning bar. Platforms and bar are made of fiber-reinforced nylon, resulting lightweight, safe for children, nearly indestructible, potentially reusable and relatively low-cost. It was developed at the University of Iowa to be affordable for all families, following Dr. Ponseti's efforts to ensure that children across the world can successfully complete clubfoot treatment and lead normal, disability-free lives, regardless of their economic or social circumstances. Exclusive distributor for Iowa Brace in Europe is Ortopedia S.T.O. in Turin, Italy www.iowabraces.eu.



TST | Stand 16

TST has a strong place in the market with an extensive production located in Istanbul, Turkey. It's reputation for production and sales excellence has been acquired since 1997, our company started producing high quality orthopedic products and instruments under TST brand for all over the world. TST Medical Devices provides a wide range of innovative products. Furthermore, products are conveniently produced under CE mark and ready to deliver as and when required.



WITTENSTEIN intens – the FITBONE® company | Stand 27

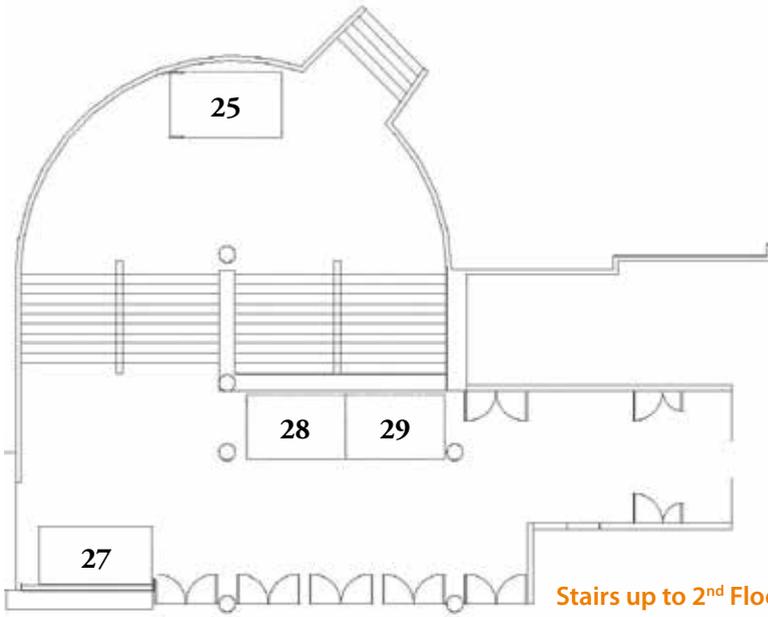
Our main activities are the development, production, sales and marketing of innovative implants for use in orthopedics and traumatology. FITBONE® is an intramedullary lengthening system intended for limb lengthening of the femur and tibia. With appropriate preoperative planning, it is possible to make axial and torsional corrections as part of limb lengthening in only one surgery. This unique system facilitates an economical treatment concept characterized by a high level of patient comfort as well as short hospitalization and therapy periods. Contact us via email: info@wittenstein-intens.de or visit our website at www.wittenstein-intens.com.

Sponsor and Exhibition Area Map

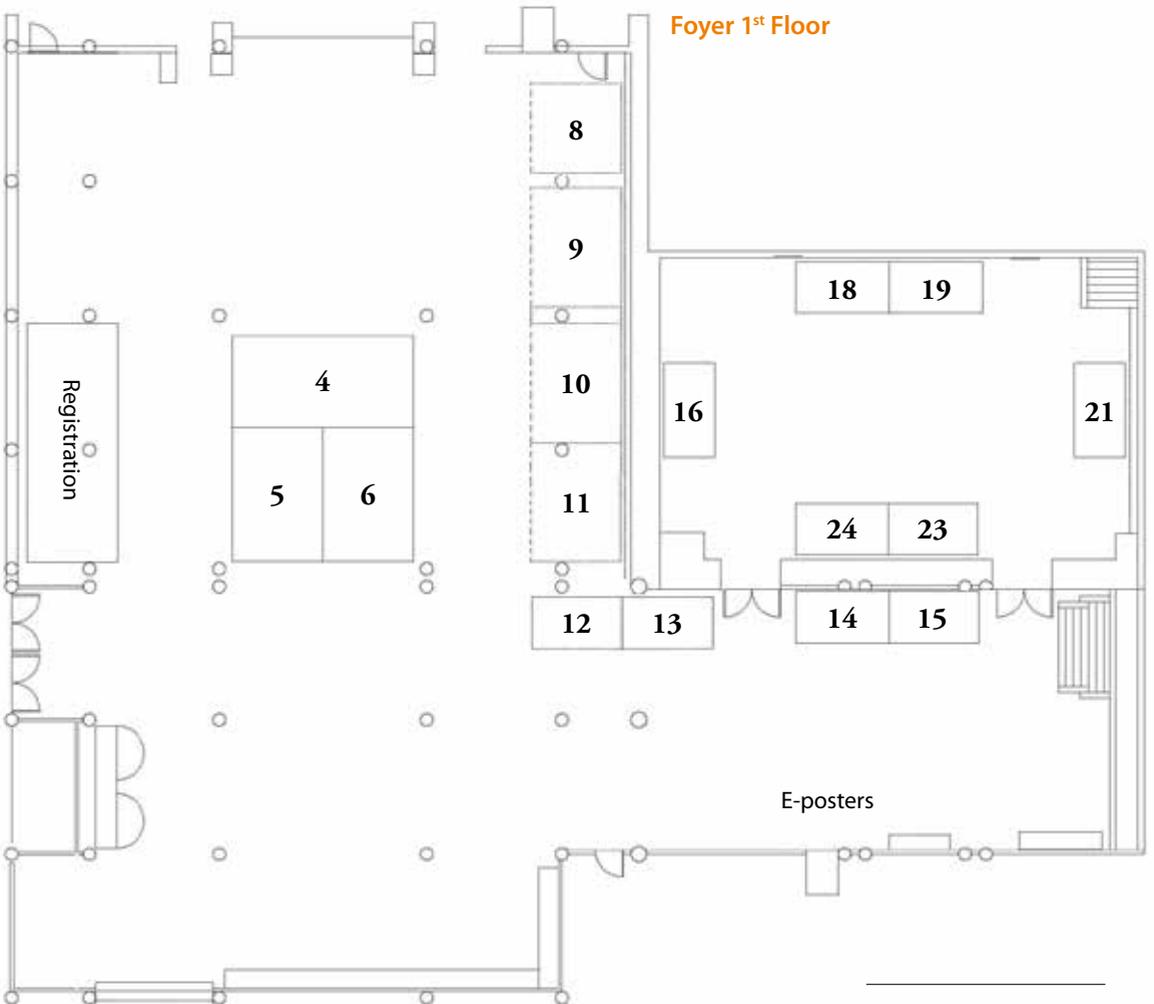


| Stand | Foyer 1 st Floor | |
|-------|---------------------------------------|-----------------|
| 4 | JuniOrtho | Gold Sponsor |
| 5 | OrthoPediatrics | Diamond Sponsor |
| 6 | BioMarin | |
| 8 | Medicalex | |
| 9 | Pega Medical | |
| 10 | K2M | Gold Sponsor |
| 11 | NuVasive | Bronze Sponsor |
| 12 | Arthrex | Bronze Sponsor |
| 13 | AXS Medical | |
| 14 | Merete | |
| 15 | Sophies Minde | |
| 16 | TST | |
| 18 | EOS imaging | |
| 19 | Smith & Nephew | Bronze Sponsor |
| 21 | Sameda | |
| 23 | LifeBridge Health | |
| 24 | International Hip Dysplasia Institute | |

| Stand | Foyer 2 nd Floor | |
|-------|-----------------------------|--|
| 25 | DePuy Synthes | |
| 27 | WITTENSTEIN intens | |
| 28 | Implanet | |
| 29 | S.T.O. / Iowa Brace | |

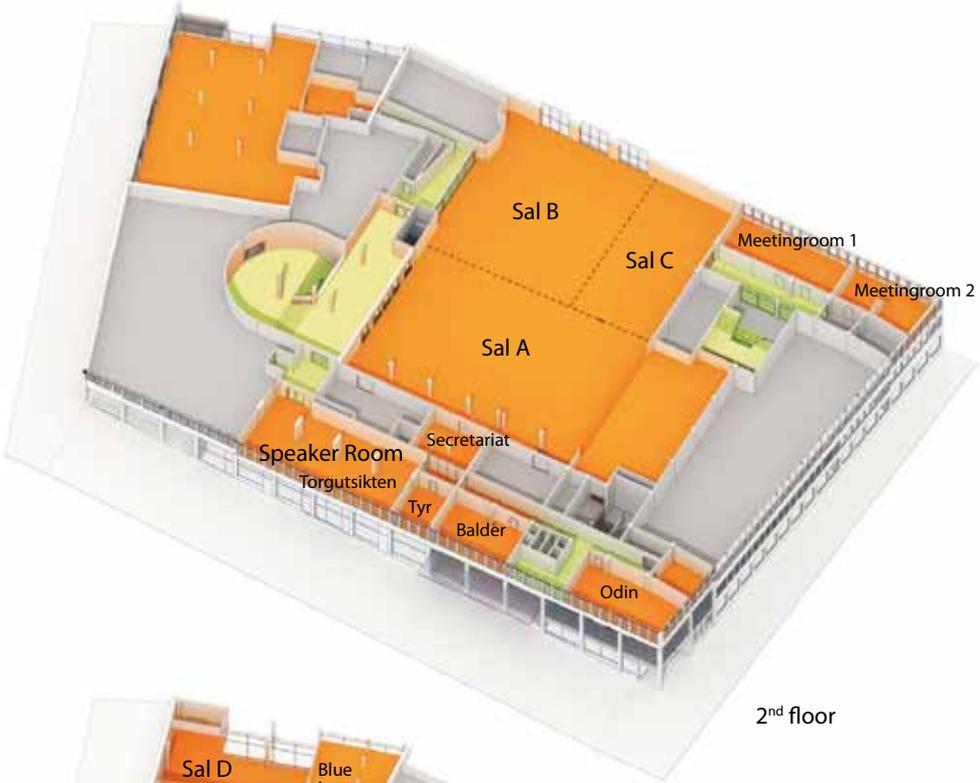


Stairs up to 2nd Floor outside of Sal A

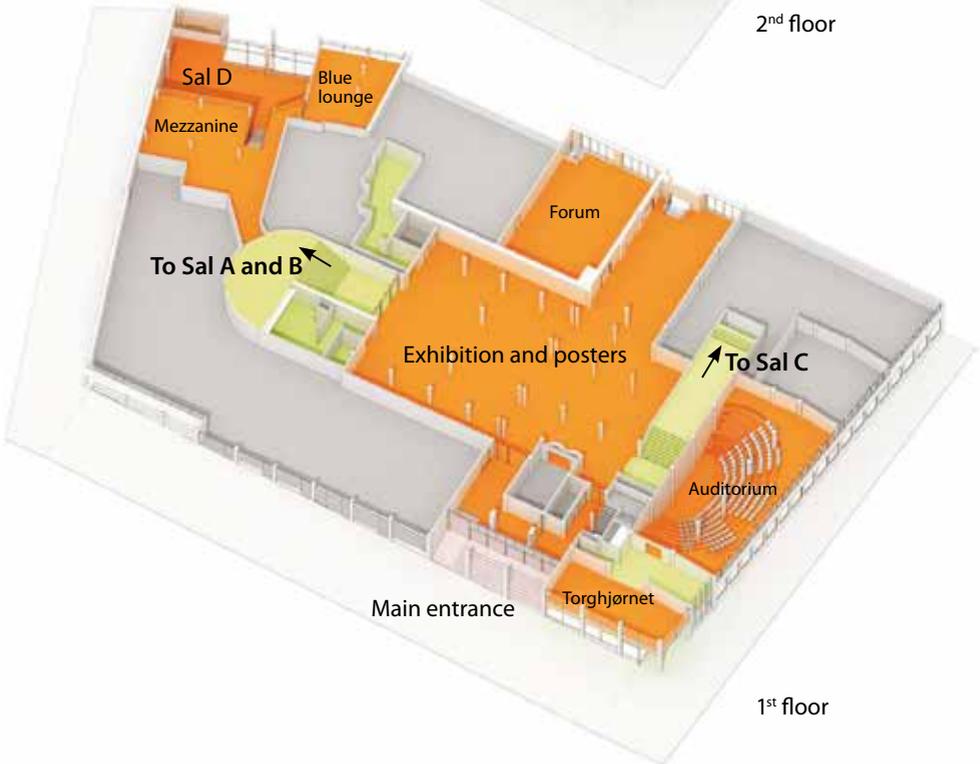


Foyer 1st Floor

Map of Venue

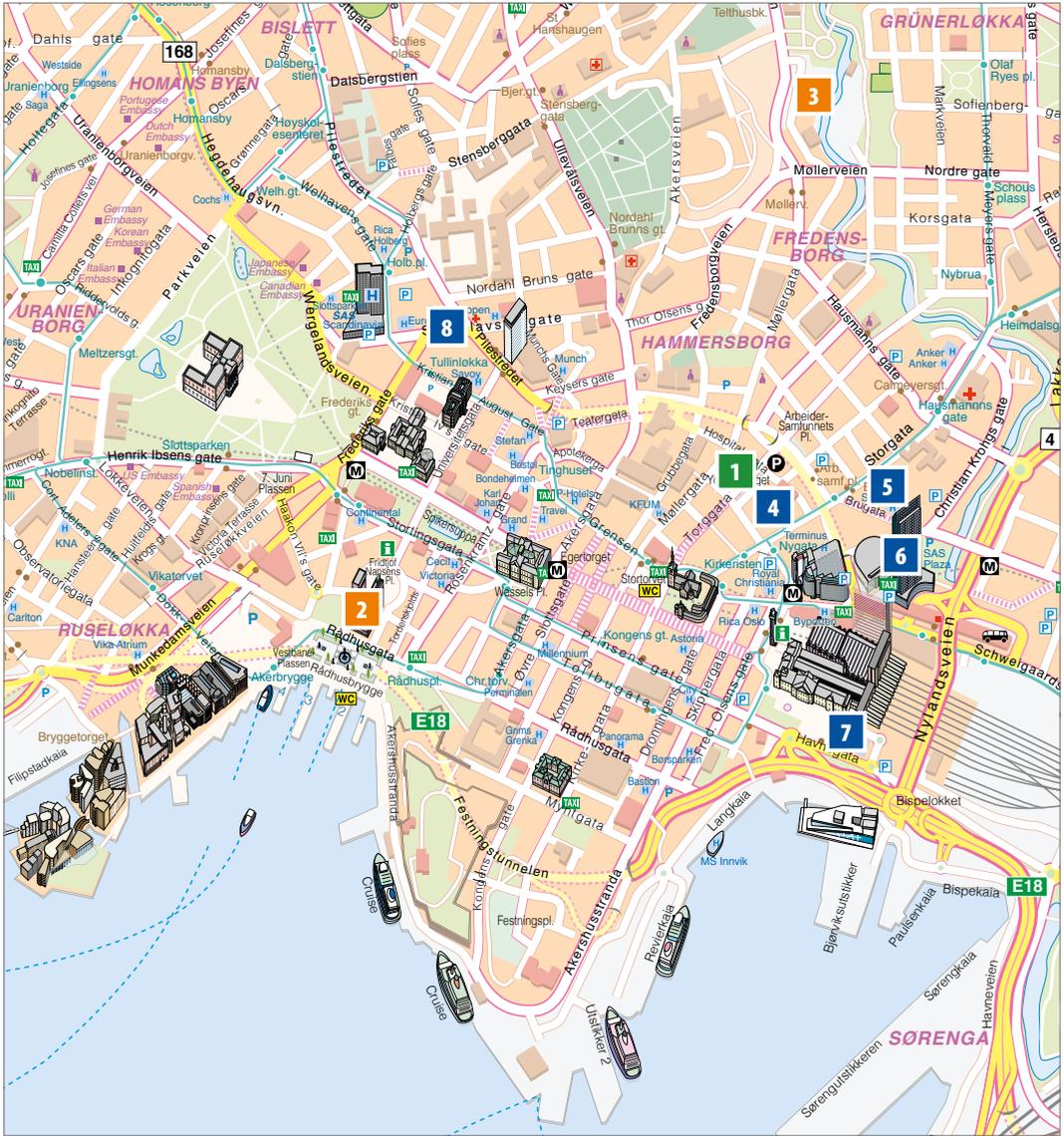


2nd floor



1st floor

Map of Oslo



| Place | Walk from the Venue | Conference Hotels | Walk from the Venue |
|-------------------------------------|---------------------|--------------------------------------|---------------------|
| 1 Venue Oslo Congress Centre | | 4 Clarion Hotel Folketeateret | 3 min / 250 m |
| 2 Oslo City Hall | 14 min / 1100 m | 5 Thon Hotel Spectrum | 5 min / 400 m |
| 3 Mathallen | 12 min / 900 m | 6 Radisson Blu Hotel Plaza | 7 min / 600 m |
| | | 7 Thon Hotel Opera | 14 min / 1100 m |
| | | 8 Smart Hotel | 13 min / 950 m |

EPOS Educational Committee has set up “EPOS BAT Educational Programme”.

The programme meets the demands required by the European Board of Orthopaedics and Traumatology (EBOT). The syllabus should contribute to knowledge-sharing and a further understanding of Children’s Orthopaedics.

The eponym BAT arises from Basic Courses, Advanced Courses and Traumatology Courses. These courses together constitute “EPOS BAT Educational Programme” and aim to facilitate a problem-solving approach in the diagnosis and management of orthopaedic conditions in children informed by relevant research evidence.

The following courses are planned:

**5th EPOS-EFORT BAT Instructional Course Trilogy;
Part III.**

17-19 October 2018, Vienna

**EPOS BAT Advanced Course;
Management of multi trauma and mass injuries in children.**

22-23 November 2018, Vienna

**EPOS BAT Advanced Course;
Hip surgery from infancy to young adulthood.**

17-18 January 2019, Geneva

For more information please visit www.epos.org.



European Paediatric Orthopaedic Society