



The ESO's first ever Focused Workshop was organised by the Bergen Stroke Research Group (BSRG) in cooperation with the Norwegian Stroke Organisation (NSO) and with the support of the European Stroke Organisation (ESO).

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The ESO Focused Workshop on Stroke in the Young was supported by:



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### **1 Introduction**

Stroke in the young is different, complex and challenging. There is an increased prevalence of traditional risk factors already at a young age, but also special risk factors and factors that are either unique or more prevalent in women. In many young stroke patients, aetiology remains unclear.

This workshop gave a comprehensive overview on the topic, including an update on newly gathered knowledge obtained from network-based international research.

### **2 Organisation timeline**

The proposal for the ESO Focused Workshop was sent to the ESO Educational Committee in May 2020. Due to the COVID-19 pandemic, the workshop had to be postponed to spring 2022. The ESO Timeline for organising the Summer School was followed.

### **3 Invited faculty & Scientific programme**

The faculty of 21 lecturers was chosen among leading European stroke physicians and scientists in the field of Young stroke. Most faculty members have been cooperating in a Young Stroke network for years, and published the book "Ischemic Stroke in the Young" in 2018. The network projects GOAL and SECRETO were highlighted in the NSO Symposium.

Lectures were organised on Monday and Tuesday in the Lecture Hall at Grand Hotel Terminus. All applicants were invited to provide a Young Stroke case beforehand. Four cases were chosen by the LOC, in order to be presented and discussed during the Workshop.

A Certificate of Attendance has been sent out to the participants.

## Monday April 25.

0845	Welcome and opening	Annette Fromm, NSO Petter Sanaker, Dept. Neurology.
<b>1</b>	<b>Epidemiology and Risk factors</b>	Chair: Annette Fromm, Bergen
0900	Epidemiology	Frank-Erik de Leeuw, Nijmegen
0920	Risk factors	Jukka Putaala, Helsinki
0940	Case 1	Ahmed Nehme, Caen/ France
1020	Break	
<b>2</b>	<b>Etiologies</b>	Chair: Ulrike Waje-Andreassen, Bergen
1100	Vascular etiology	Annette Fromm, Bergen
1120	Cardiac etiology	Guillaume Turc, Paris
1140	Special etiologies	Katarina Jood, Göteborg
1200	Vascular imaging (ultrasound)	Ulrike Waje-Andreassen, Bergen
1220	Lunch	
<b>3</b>	<b>Thrombosis</b>	Chair: Beenish Nawaz
1350	Thrombophilia	Ann Helen Kristoffersen, Bergen
1410	Venous sinus thrombosis	Diana Aguiar de Sousa, Lisboa
1430	Case 2	Michal Horáňý, Brno/ Czech Rep.
1510	Break	
<b>4</b>	<b>Haemorrhage</b>	Chair: Vojtech Novotny, Bergen
1540	Intracerebral haemorrhage	Turgut Tatlisumak, Göteborg
1600	Subarachnoid haemorrhage	Gabriel Rinkel, Utrecht
1620	Break	
<b>5</b>	<b>NSO Symposium: Networking</b>	Chair: Andrej Khanevski, Bergen
1640	GOAL	Merel Sanne Ekker, Nijmegen
1655	SECRETO	Nicolas Martinez Majander, Helsinki
1710	Discussion	
1740	Adjourn	

## Tuesday April 26.

<b>6</b>	<b>Children and women</b>	Chair: Ulrike Waje-Andreassen, Bergen
0900	Stroke in children	Gabriela Oesch Nemeth, Bern
0920	Stroke in women	Kirsi Rantanen, Helsinki (digital)
0940	In pregnancy and puerperium	Svetlana Lorenzano, Roma (digital)
1000	Case 3	Karl Jõgi, Tartu/ Estonia
1040	Break	
<b>7</b>	<b>Mimics and imaging</b>	Chair: Annette Fromm, Bergen
1110	Stroke Mimics	Patrik Michel, Lausanne (digital)
1130	Vascular imaging (CTA/MRA)	Thomas Gatteringer, Graz (digital)
1150	Genetics	Alessandro Pezzini, Brescia
1210	Lunch	
<b>8</b>	<b>Imaging</b>	Chair: Sander Aarli, Bergen
1320	Brain imaging (CT/MR)	Thomas Gatteringer, Graz (digital)
1340	Cardiac imaging	Sahrai Saeed, Bergen
1400	Case 4	Kirsty Ward, Salford/UK
1440	Break	
<b>9</b>	<b>Treatment and prognosis</b>	Chair: Halvor Næss, Bergen
1510	Acute treatment	Svetlana Lorenzano, Roma (digital)
1530	Secondary prevention	Catarina Fonseca, Lisboa
1550	Prognosis	Halvor Næss, Bergen
1610	General discussion	
1630	End	Annette Fromm

## 5 Applicants & participants

### Target group

The ESO Focused Workshop aimed at European early career stroke physicians and researchers. The Workshop was planned for forty international participants.

### Application time and rules

By the application deadline on January 15<sup>th</sup>, 2022, the LOC had received 48 applications, providing the required application form, CV, letter of recommendation, and letter of motivation. Following the ESO requirement of broad geographical distribution, the LOC accepted early career participants from Belgium, Spain, Hungary, Portugal, France, Italy, Poland, Estonia, Romania, Bosnia and Herzegovina, The Netherlands, Sweden, Armenia, Czech, Uzbekistan, UK, Serbia and Norway. The professional background of the participants were Neurology, Internal Medicine, Radiology, Stroke Medicine, and some participants were PhD candidates. Due to current travel restrictions, some withdrawals occurred and a waiting list was operated to some extend.

Expenses for accommodation, meals, coffee breaks, and social programme were covered by the LOC and cooperating organisations. Travel expenses were covered by the participants themselves.

## 6 Accommodation and workshop venue

Participants and faculty were accommodated at Grand Hotel Terminus Bergen, the Workshop venue.





## 7 Social programme

All participants and faculty members were invited to a Get-together with Tapas the evening before the Workshop. They were welcomed to the city by the LOC and introduced to the history of the workshop venue. Patricia Michlits, a local music teacher and performer, underlined the welcome event with traditional Norwegian and Scandinavian music, played on three different flutes.

The Workshop dinner was organized at Fløyen Folkerestaurant, offering local food in the atmosphere of the historical restaurant on top of Bergen's most visited mountain, with an amazing view over the city, the fjords and the sunset.











## 8 Acknowledgements

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