



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES



EANS Annual Report 2022

Shaping the future of Neurosurgery through
training, education and research



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The EANS Annual Report 2022 was compiled, proofread and creatively structured by the EANS Communications Manager, Maria Kantziari, in collaboration with the EANS President, Andreas Demetriades, and the EANS office team.

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President's Message

Dear friends and colleagues,

It is with great pleasure that we present, for the very first time, the annual report of the European Association of Neurosurgical Societies (EANS) for the year 2022.

Following two pandemic years, 2022 signalled the return to normality. During this year the EANS educational portfolio grew larger and more diverse, as we organised more educational events than ever before while covering a range of new topics that were taught by elite scientists in European Neurosurgery.

The EANS Training Courses & Exams, Hands-on Courses, Accredited Events, and Webinars make up the backbone of the Society's educational portfolio, while the annual EANS Congress remains the highlight of our activities. The EANS 2022 Belgrade Congress will remain in the EANS history as a legacy event, with a rich scientific programme including lectures of outstanding quality and interest.

As we reflect on the challenges and opportunities of the past year, we are reminded of the resilience of the neurosurgical community, our Office Holders, and the Executive Office of the EANS.

Despite the unprecedented circumstances of the COVID-19 pandemic, we have continued to provide exceptional learning opportunities to the neurosurgical community, funding for young neurosurgeons conducting groundbreaking research, and advancing the field of neurosurgery through innovation and collaborations.

I am grateful to all the faculty members of our numerous courses and the volunteers in the Sections, Committees and Task Forces, for their dedication and contributions. I would also like to express my gratitude to our ambassadors who have represented us in recent joint efforts for EANS sessions with related societies, including among others EUROSPINE, the European Academy of Neurology (EAN), AOSpine, the European Society of Paediatric Neurosurgery (ESPN), the European Association of Neuro-oncology (EANO), the European Society of Stereotactic and Functional Neurosurgery (ESSFN), the Global Spine Congress, the World Federation of Neurosurgical Societies (WFNS), the International Society of Intraoperative Neurophysiology (ISIN); and the American Association of Neurological Surgeons (AANS), the Asian Australasian Society of Neurological Surgeons (AASNS), the Asian Congress of Neurological Surgeons (ACNS), the Continental Association of African Neurosurgical Societies (CAANS), the Hydrocephalus Society and the Federation of Latin American Neurosurgical Societies (FLANC). This is evidence of the great collaborative spirit within our membership and the esteem that our contributions hold.

Furthermore, I extend my appreciation to our members for their engagement, energy, and active participation in our events, as well as to our industry partners for their unwavering support.

I am proud of the progress we have achieved as an association and I encourage you all to actively engage in our activities, participate in our courses, and submit your research to our very own journal, Brain & Spine.

Wishing you happy reading!

Sincerely,

Andreas Demetriades,
EANS President

Executive Director's Message

The very much anticipated EANS2022 Congress in Belgrade marked the return of the EANS to in-person congresses, after two challenging pandemic years. During the COVID-19 period, the EANS worked as the main channel of European neurosurgical activities, by keeping the community engaged, offering hundreds of hours of virtual training, and evolving new technologies to adapt to the challenging needs of the time.

As we returned to normality in 2022, the EANS remained on the same path, but now the stakes are higher. Serving our primary principles, we aim for more engagement, better education, and more accessibility to neurosurgery training from the wealthiest to the least wealthy places in the world. Towards this direction, the EANS Office assists the Association in embarking on new, promising projects that will take European -and global- neurosurgery to the next level.

From our very own 2-year old Journal, Brain and Spine, that got indexed and accepted in PubMed and Scopus, to our extremely successful webinar series that started during the pandemic and is here to stay for many years to come, our rebranded academy, and of course our full-of-opportunities educational programme, we serve the motto of our 2023 Congress in Barcelona: Neurosurgery in the Service of Humanity. The EANS team constantly supports our neurosurgeons' difficult tasks: Educate, Train, Research, Meet, Network and Collaborate.

EANS is an open organisation, accepting all those that wish to engage in one of our many projects. We greatly value our Young Neurosurgeons' many initiatives, such as the "E-webinar Series" and the 1-year old Young Neurosurgeons Network, as we believe that there should always be enough room for the future of European Neurosurgery, and we also welcome everyone that wishes to become part of our organisation.

I would like to personally invite you to engage with us, join our expanding community and become a member of our family. The EANS has a lot to achieve, and we can only do this together.

Sincerely,

Valentini Amarantidou
EANS Executive Director

EANS Mission

The **European Association of Neurosurgical Societies (EANS)** is both an independent federation of European national neurosurgical societies and a fast-developing association of individual neurosurgeons from Europe and around the world.

Founded in 1971, by delegates from 18 national societies, today the EANS counts more than **38 national society members and 2500+ individual members**. The organisation's objective is to enable its members to enhance the care they deliver to their patients by facilitating the exchange of scientific information at the highest level. In pursuit of this goal, the EANS arranges a wide range of meetings, symposia and educational courses, including the **European Congress of Neurosurgery** and the highly regarded **European Training Courses in Neurosurgery**.

The EANS mission is to:

- > enhance the exchange of neurosurgical knowledge and experiences amongst its members;
- > promote the interests of the neurosurgical discipline, as well as the interests of neurosurgeons and of their patients both within and outwith the European geographical region;
- > facilitate the training of specialist neurosurgeons and surgeons-in-training;
- > bring together national and international neurosurgical associations.

To that end, the association undertakes the following activities, among others:

- > the organization of neurosurgical congresses, among which the European Congress of Neurosurgery;
- > the organization of programmes of clinical research and educational importance relating to neurosurgery and associated sciences;
- > advises its members on training programmes in order to establish a uniform standard in Europe;
- > acts as advisory body on topical issues submitted to the Association by its members.

The EANS Office Holders

The EANS Board



Andreas Demetriades
President



Torstein Meling
President Elect



Karl Schaller
Past President



Johannes van Loon
Secretary



Francesco Sala
Treasurer



Miroslav Vukic
*Board Member:
Audit Governance*



Nikolay Konovalov
*Board Member:
CME & Guidelines*



Marike Broekman
*Board Member: Individual
Membership Committee Chair*



Claudius Thomé
*Board Member:
Scientific Liaison*



Vakis Papanastassiou
*Board Member:
Training Committee Chair*



Marcel Ivanov
*Board Member:
Historian*



Peter Whitfield
*Board Member: Chair of the
Examination Committee*



André Grotenhuis
*Board Member:
President of the EANS Foundation*



Martin Lehecka
*Board Member: Chair Elect of the
EANS Training Committee*



Wilco Peul
*Board Member: Editor of the official
EANS Journal, "Brain&Spine" &
President of the UEMS Section of
Neurosurgery*



Asgeir Jakola
Board Member: Research Fund

EANS Section Chairs



Mansoor Foroughi
Section of CerebroSpinal Fluid (CSF)



Olaf Schijns
Section of Functional Neurosurgery



Matthias Simon
*Section of Neuro-oncology
(Tumour)*



Bart Depreitere
*Section of Neurotrauma and
Critical Care*



Sergey Gorelyshev
Section of Pediatric Neurosurgery



Christian Heinen
Section of Peripheral Nerve Surgery



Piero Picozzi
Section of Radiosurgery



Michaël Bruneau
Section of Skull Base Surgery



Florian Ringel
Section of Spinal Neurosurgery



Andreas Raabe
Section of Vascular Neurosurgery



EANS Committee Chairs



Silvia Hernández-Durán
*Diversity in Neurosurgery
Committee*



Peter Whitfield
EBNS Exam



Ciaran Bolger
Ethico-legal Committee



Jean Regis
Frontiers in Neurosurgery



Lukas Rasulic
*Global and Humanitarian
Neurosurgery Committee*



Marike Broekman
Individual Membership Committee



Eberhard Uhl
JRAAC Committee



Aki Laakso
Research Committee



Vakis Papanastassiou
Training Committee



Marisa Gandia
Young Neurosurgeons' Committee

EANS Task Forces



Sandro Krieg
Academy



Andreas Demetriades
Guidelines Development



Nikolay Gabrovsky
*Emerging Technologies and
Innovations in Neurosurgery*

Other Positions



Nikolay Velinov
Director, Hands On Courses

The EANS Office Staff



Valentini Amarantidou
Executive Director



Martina De Gregorio
Events Manager - Education



Thierry Hoppe
Office & Finance Manager



Maria Kantziari
Communications Manager



Visi Navarro
*Events Manager - Training Courses
& Exams*



Nikolaos Nikolaidis
Web & IT Systems Manager



Prodromos Nikolaidis
Projects & Operations Manager



Anna Rek
*Development & Corporate
Relations Manager*



Maria Thomaidou
Projects Assistant

Congress Team



Despoina Amarantidou
Director of Projects and Operations



Kelly Angelaki
Scientific Programme Coordinator



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EANS

Annual Report 2022

Sections Yearly Reports



EANS ACADEMY



EANS
Foundation



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EANS2022
Belgrade

Section of Cerebrospinal Fluid (CSF)



The EANS CSF Section is actively participating in a wide variety of activities, events, and outputs. It involves not only adult and pediatric neurosurgeons and neurologists, but also aspiring neurosurgeons from all stages, including medical students and neurosurgical trainees.

Following its formation in October 2020 as a Task Force, it set up numerous initiatives in the following years, with the overarching mission to set higher standards of excellence in care for patients suffering from CSF disorders.

The CSF Task Force was upgraded to a Section during the EANS2022 Congress in October in Belgrade. In the past year, over 15 high-quality webinars were hosted, covering topics such as Chiari 1 Malformation, Normal Pressure Hydrocephalus, Post-traumatic CSF Disorders, and Spontaneous Intracranial Hypotension.

The CSF Section has a dedicated working group developing a new classification system for hydrocephalus, called "ASPECT". This builds on six parallel clinical key factors providing a systematic, nuanced, and applicable description of patients with hydrocephalus, with the potential to resolve the major issues of previous classifications, thus providing new opportunities for standardised treatment and research.

In November 2022, the Hydrocephalus ASPECT team (Ahmed Ammar, Marianne Juhler, Harold Rekate and Andre Grotenhuis) achieved a major milestone with their excellent work on a new classification of hydrocephalus with the publication of "The ASPECT Hydrocephalus System: a Non-Hierarchical Descriptive System for Clinical Use".

Furthermore, the CSF Section is committed to the development of the Neuroendoscopy sub-specialty with the support of several members. Additionally, more than 10 successful webinars were delivered.

Furthermore, the EANS CSF Section is working towards developing EANS-approved guidelines related to CSF disorders.

With outstanding engagements from EANS members thus far, the Section aims to include and involve as many EANS members as possible and, of course, welcome everyone. The Section developed its own logo, created a dedicated Twitter account (@EANS CSF), and regularly updates its webpage with news and updates.

Section of Functional Neurosurgery



After three years of virtual gatherings, the annual EANS Congress got back to its physical format and that was an excellent opportunity for the Functional Section to connect and learn from the other EANS Sections.

The EANS Section of Functional Neurosurgery has many active and enthusiastic members. Each year the Section's Congress Committee carefully prepares the scientific agenda with different topics within the diverse field of Functional Neurosurgery presented by distinguished European neurosurgeons. In Belgrade, the Section delivered an attractive program of lectures on a diverse range of topics of Functional Neurosurgery. The lectures were spread over several parallel sessions and masterclasses counting for a full congress day.

Furthermore, one of the aims of the Section the last year was to build up good cooperation with the ESSFN. The first common goal of this cooperation was to prepare a joint Pre-Congress Satellite Symposium with the themes "Electrophysiology in Functional Neurosurgery (both in DBS and Epilepsy Surgery)" and "Innovational research in Functional Neurosurgery". The Symposium, the second in a row, took place on 16 October 2022, just before the EANS2022 congress, and was accessible to all EANS congress participants.

The Section's Publication Committee is active and currently preparing four guideline and consensus papers in the fields of Epilepsy Surgery and DBS, which will be submitted to the Brain & Spine Journal:

- > Minimal Invasive Epilepsy Surgery Techniques Paper (Karl Rössler and team)
- > Hemispheric Disconnection Procedures. Consensus Paper (Olaf Schijns and team)

Furthermore, the Section supported the Functional Neurosurgery Training Courses and the ESSFN-EANS Epilepsy Surgery Hands-on Courses. Three Section Members (Tom Theys, Karl Rössler and Daniel Delev) taught at the Functional Neurosurgery Training Course that took place on 15-18 May 2022 in Tirana, Albania, while three Section Members (Olaf Schijns, Dirk van Roost and Kostas Fountas) participated as teaching faculty at the ESSFN Epilepsy Surgery Hands-On-Course (6-10 April 2022, Lisbon).

In 2022 a webinar titled "Brainsurgery for Pain" was held with Tom Theys serving as the moderator and T. Aziz, P. De Vloo and A. Machado as the speakers.

On an international level, the Functional Section was represented by two members (Kostas Fountas and Karl Rössler) at the American Association of Neurological Surgeons (AANS) Meeting (29 April-2 May 2022, Philadelphia), while a lecture titled "Repeated MRgLITT for Refractory Epilepsy in TS children" was delivered (Karl Rössler). Furthermore, Kostas Fountas and Karl Rössler represented the Section also at the XVII WFNS World Congress of Neurosurgery (13-18 March, 2022, Bogota), where two presentations were given on "Lesional Extratemporal Epilepsies near or in Eloquent Areas: pre-resection Evaluation & Postsurgical Outcome" and "Non-invasive vs Invasive Protocol for Surgical Treatment of Focal Epilepsies (Karl Rössler). The Section collaborated also with the European Academy of Neurology (EAN). Kostas Fountas and Karl Rössler presented lectures at the EAN Annual Congress (25-28 June 2022, Vienna).

Finally, with an outlook to the near future, the Section intends to build up a European network with distinguished (University) hospitals in which senior trainees and young neurosurgeons will be able to do an observership in Functional neurosurgery.

Section of Neuro-Oncology

The EANS Neuro-Oncology Section Panel obtained approval from the EANS Board in January 2022. Its main goals included conducting guideline work, organising meetings, engaging in research activities and establishing a webinar series and a Section newsletter.

In the past year, a significant accomplishment was the establishment of a joint EANS/EANO working group, tasked with developing joint neuro-oncology guidelines. Collaboration began with the drafting of a Memorandum of Understanding between EANS and EANO. The first guideline topic to be addressed is the Extent of Resection in Glioma Surgery. Additionally, a second topic regarding Adjuncts for the Surgical Management of Gliomas is currently being discussed.

The Section has played a crucial role in shaping the scientific programme of the EANS2022 Annual Congress in Belgrade, including a Tumour Section Pre-Congress event (Management of Recurrent Gliomas – Challenges and Perspectives). Another important achievement was the integration of joint EANS/EANO session in the annual EANO conference (Relevance of Tumor-Brain Crosstalk from a Surgical Perspective). Furthermore, initial steps have also been taken to establish regular joint sessions with the AANS/CNS Tumor Section during the respective societies' annual meetings.

The Section Panel has initiated several research projects, including the following ongoing activities:

- > Surgery of insular gliomas: a systematic review and meta-analysis (work in progress)
- > Survey: Expertise in surgical neuro-oncology. What constitutes an expert? (work in progress)
- > Repeat surgery for brain metastases (pending ethics vote)
- > Surgery for distant glioblastoma recurrence (pending ethics vote)

The Section Panel has established a task force dedicated to webinars and newsletters. The first webinar was on Gliomas (8 June 2022), followed by another one on Brain Metastases (30 November 2022). The webinar series will continue with more topics. Additionally, the first edition of the newly launched Section Newsletter was distributed in October 2022.

Significant progress was made in 2022, and the Neuro-Oncology Section eagerly anticipates carrying forward this momentum into 2023.

Section of Pediatric Neurosurgery

The EANS Pediatric Section hosted five scientific events during the EANS2022 Annual Congress which included a Joint EANS/ESPN Pre-Congress Symposium, a parallel Joint Pediatric & Functional Section on "Epilepsy and Tumor", a Joint Oncology & Pediatric Masterclass on "Same Brain Tumor, Different Approaches in Adult and Children", a Joint CSF & Pediatric Masterclass entitled "Does CSF Circulation Differ in Children and Adults?" and a Joint Trauma & Pediatric Masterclass on "Severe TBI: from Infant to Adult".

In 2022, the Pediatric Section was rebranded while its web page was rebuilt and filled with useful content.

A variety of events took place such as the jointly EANS/ESPN online Course on Neurosurgical Emergencies in Children (Part II "What a General Neurosurgeon needs to know on Brain Tumors in Children: Differences in Strategies", 29 September 2022), the 7th edition of the Journées Lyonnaises de Neurochirurgie Pédiatrique (International Symposium on Hydrocephalus under the auspices of the EANS Pediatric Section, 28-30 January, Lyon) and the EANS webinar on "Five Ages of Hydrocephalus", devoted to the peculiarities of Pathophysiology, diagnostics and treatment of Hydrocephalus in different periods of life. Additionally, "cross-linked" webinars created awareness that pediatric conditions are not identical to adult conditions even with the "same disease".

Furthermore, guidelines on "Transition Medical Care in Hydrocephalus" were developed and are being finalised.

For the year ahead, many interesting activities are already under discussion. Among others, the Section intends to activate the work with the national pediatric neurosurgical societies and groups, the Part III of the EANS/ESPN Course on Emergencies in Pediatric Neurosurgery, the set of the Guidelines on "Emergencies in Pediatric Neurosurgery" and a series of EANS Webinars joined with other EANS Sections.

Section of Peripheral Nerve Neurosurgery (PNS)

After the pandemic restrictions were lifted, the EANS PNS Section was finally able to resume traveling and organising scientific and educational activities. We continued hosting a series of business meetings and webinars. Additionally, we completed a special issue on PNS for publication in "Neurological Research".

Moreover, the German members significantly contributed to the guidelines on PN tumors.

On an international level, the Section was represented at the following congresses: ASPN Annual Meeting (11-18 January 2022, California), XVII WFNS World Congress of Neurosurgery (13-18 March 2022, Bogota), Adrenaline & Repair – Complication Management in Neurosurgery (23-25 June 2022, Klagfurt), 2022 AANS Annual Scientific Meeting (29 April – 2 May 2022, Philadelphia), Copenhagen Peripheral Nerve Surgery Course 2022 (September 2022, Copenhagen), 2022 CNS Annual Meeting (8-12 October 2022, San Francisco), 3rd MANS Congress (27-30 October 2022, Cairo), Neurorepair (5-6 July, Berlin).

As a PNS Section, the following was published in Neurosurgery:

Thoracic Outlet Syndrome Part I: Systematic Review of the Literature and Consensus on Anatomy, Diagnosis, and Classification of Thoracic Outlet Syndrome by the European Association of Neurosurgical Societies' Section of Peripheral Nerve Surgery.

Dengler NF, Ferraresi S, Rochkind S, Denisova N, Garozzo D, Heinen C, Alimehmeti R, Capone C, Barone DG, Zdunczyk A, Pedro MT, Antoniadis G, Kaiser R, Dubuisson A, Kretschmer T, Rasulic L.

Neurosurgery. 2022 Jun 1;90(6):653-667. doi: 10.1227/neu.0000000000001908. Epub 2022 Mar 25. PMID: 35319532; PMCID: PMC9514726.

Thoracic Outlet Syndrome Part II: Consensus on the Management of Neurogenic Thoracic Outlet Syndrome by the European Association of Neurosurgical Societies' Section of Peripheral Nerve Surgery.

Rochkind S, Ferraresi S, Denisova N, Garozzo D, Heinen C, Alimehmeti R, Capone C, Barone DG, Zdunczyk A, Pedro MT, Antoniadis G, Kaiser R, Dubuisson A, Pondaag W, Kretschmer T, Rasulic L, Dengler NF.

Neurosurgery. 2023 Feb 1;92(2):251-257. doi: 10.1227/neu.0000000000002232. Epub 2022 Dec 6. PMID: 36542350.

In the future, we have plans to organise webinars, publish papers, and participate in congresses and related events. In this context, the first joint EANS/FLANC Theoretical and Practical Course on Peripheral Nerves and Brachial Plexus was scheduled for March 2023 in Rio de Janeiro.

Section of Radiosurgery

In 2022, the EANS Radiosurgery Section actively engaged in training, certification, and collaborative efforts.

During the EANS2019 Dublin Congress, the Radiosurgery Section proposed the establishment of a specialised clinical and theoretical training program for stereotactic radiosurgery. The main objective was to designate the EANS as the certifying body for competence in this field, in collaboration with related societies. The formalisation of the certification process was a topic of discussion at the EANS2022 Annual Congress held in Belgrade.

In 2022, the Section organised a joint EANS/ESSFN Course in Neuro-Radiosurgery as part of the EANS/ESSFN European Diploma of Radiosurgery. Neurosurgeons intending to practise Neuro-radiosurgery, will be required to complete a theoretical course and practical activities at accredited centers. Upon completion of the course, a Diploma will be awarded by both societies.

The Radiosurgery Section prepared a manuscript summarising the training concept and certification objectives in collaboration with ESSFN. This joint effort aimed to outline the prerequisites and rules for obtaining the certification. The manuscript was submitted to the Brain and Spine Journal.

The Radiosurgery Section has outlined several plans for the upcoming year. These include organising webinars with distinguished speakers and moderators. In collaboration with the Functional Section, the Section plans to establish a guideline on the treatment of trigeminal neuralgia. Additionally, discussions are underway to hold joint sessions with other subspecialties (Vascular, Skull Base, Functional, Oncology), to determine the role of radiosurgery as an adjuvant or alternative therapy for relevant pathologies.

With future plans for webinars, joint sessions, and participation in educational courses, the Section aims to foster interdisciplinary knowledge exchange and advancements in radiosurgery.

Section of Skull Base Neurosurgery

The EANS Skull Base Section comprises internationally recognised experts dedicated to promoting the teaching of the discipline through various means. Over the past year, the Section has provided a platform for education and research on skull base pathologies through a range of activities.

As each year, the Section participated actively to the elaboration of the EANS Annual Congress.

Well-attended monthly webinars covered various encountered pathologies and the multiple available surgical approaches, offering detailed insights into anatomy, technical aspects, and the management of potential complications. In specific, the webinars that were held were on the pterional approach, anterior clinoidectomy, orbitozygomatic approach, anterior petrosectomy, orbito-zygomatic, surgeries around the anterior petrous apex, posterior petrosectomy, craniocervical junction, access to Meckel's cave and endoscopic-assisted microsurgical approaches.

Seven consensus papers and meta-analyses were published in the EANS official journal in 2022 focusing on the management of numerous skull base pathologies.

Several other articles have been initiated to be published in 2023.

In addition to these different activities, the Section initiates the coordination of several multicenter studies at the European level, focusing on the invasive character of meningiomas (INVADER study coordinated by Marcos Tatagiba, Tübingen), craniopharyngiomas (coordinated by Emmanuel Jouanneau, Lyon) and anterior midline meningiomas (coordinated by Michaël Bruneau, Brussels).

Furthermore, 2 cadaveric courses were organized in Lyon by Emmanuel Jouanneau and Düsseldorf by Jan Frederic Cornelius to complement theoretical teaching with practical instruction.

Section of Spinal Neurosurgery

Over the last few years, the EANS Section of Spinal Neurosurgery has successfully organised educational courses aimed at enhancing knowledge and skills in spinal surgery. The EANS Advanced Spine Course Part 1 focused on extended indications and advanced operative techniques (27-29 November 2022, Edinburgh). Looking ahead to 2023, plans are underway for the EANS Advanced Spine Course Part 2, which will explore complications in spinal surgery.

In addition to the educational courses, the Spine Section hosted a series of informative webinars featuring renowned experts in the field. Topics covered a wide range of important subjects such as Intradural Spinal Tumors, Degenerative Spondylolisthesis, Enhanced Recovery after spine surgery, Craniocervical Junction Trauma, and the Management of Lumbar Degenerative Spondylolisthesis. The webinars provided valuable insights and updates to spine surgeons and researchers.

Furthermore, the Spine Section actively participated in joint sessions at various congresses. Notable examples include the EANS/Neurospine Joint session on Sacro-Iliac Joint Surgery at the Neurospine Meeting (Berne) and the EANS/AOSpine Joint Session on AI and Computer Guidance in Spine Surgery at the Global Spine Congress (Las Vegas).

Additionally, the Spine Section has undertaken the development of guidelines to provide standardised approaches to various aspects of spine surgery, which will serve as valuable resources for spine surgeons. Work is underway on guidelines for "Endoscopy in Spine Surgery," "Treatment of Spinal Infections," "Treatment of Odontoid Fractures in the Elderly" and "Treatment of Lumbar Disc Herniations."

In a joint effort between the EANS and EUROSPINE, an application for UEMS certification for the subspecialty of spine surgery was prepared. The European Training Requirements were defined by a group of EUROSPINE and EANS representatives. The application was circulated within the participating societies prior to delivering the documents to the UEMS.

The Spine Section's Push Initiative was also designed to enhance the treatment of various spinal conditions, including Discitis, Spondylitis, Spondylodiscitis, and Spinal Epidural Empyema. The results of a survey assessing the variability of treatment for spinal infections were presented at the EANS Congress in Belgrade.

Moreover, the Spine Section has launched a project to enhance the visibility of spine research on the EANS website. The aim has been to facilitate interaction among colleagues and foster collaborations between research groups. The initiative serves as a platform for colleagues to find researchers with common interests and pave the way for joined projects. Those interested may fill out the web form available on the EANS website under the Section of Spinal Neurosurgery.

Section of Trauma and Critical Care (TCC) Neurosurgery

The EANS TCC Section was involved in several significant activities over the year 2022. It played a crucial role in curating the well-attended Trauma program at the successful EANS2022 Annual Congress in Belgrade. A notable addition was the Sunday Pre-Congress Joint Symposium on Challenges in Severe Traumatic Brain Injury (TBI), which was conducted by the TCC Section and the Neurointensive Care Group from ESICM. The Symposium is planned to be repeated in future EANS Congresses.

Moreover, the TCC Section successfully relaunched its own meeting, the 3rd Neurotrauma Update Meeting (13-14 September 2022, Leuven). This meeting attracted over 100 participants and focused on the latest evidence and emerging strategies in the field. The Update Meeting was preceded by a new one-day Neurotrauma Crash Course, which was highly successful and has led the TCC Section to include it as a regular component of the future Neurotrauma Update Meetings, with the next one scheduled for early 2024 in Madrid.

Furthermore, the TCC Section organised four webinars covering a range of topics such as Animal Lab Trauma research, Mild TBI, TBI in the Elderly, and the current State-of-the-Art Management of Chronic Subdural Hematomas.

Additionally, the TCC Section undertook several larger projects in 2022. One project involved the development of a guideline on the optimal timing to (re)start antithrombotic drugs following traumatic events. Another project aimed to establish an international consensus document on the best management practices for TBI in the elderly.

Furthermore, the TCC Section has been actively involved in the development of a guide with key learning points and supporting evidence on head injury. This guide aims to assist the organisers of EANS Training Courses in delivering the best possible knowledge transfer to future European neurosurgeons.

Lastly, the TCC Section is preparing a pan-European registry in collaboration with the industry to enable the collection of prospective, high-quality data (including physiological monitoring data) for quality benchmarking, Medical Device Regulation (MDR) purposes, and research in the field.

Section of Vascular Neurosurgery

The year 2022 was still a major online activity year, although face-to-face meetings increased during summer and autumn. One of the main activities of the EANS Vascular Section was to organise and hold its own Section Meeting in Nice, coinciding with the ESMINT meeting. The EANS Section Meeting preceded the Endovascular Meeting by two days and consisted of two days of scientific and clinical presentations. For the first time, the audience exceeded 100 participants, and unfortunately, we had limited slots available to accommodate all the presentations. The scientific level was excellent, and we had fruitful discussions and an open exchange with colleagues from the Congress of Neurological Surgeons.

Another focus of the Vascular Section was organising educational meetings and courses aimed at enhancing endovascular competence among neurosurgeons. Our newsletter covered important aspects of recent publications and trends, as well as facilitating discussions on controversial topics. Additionally, the section continued to organise webinars on relevant subjects.

Furthermore, we successfully launched the first specialty covered by a new activity of the EANS called the "PeerforPeers" project. This project was initiated by EANS members to assist their peers in identifying the most impactful articles, including practice changers, educational highlights, and other publications contributing to future textbook knowledge in their field. In the vascular domain of PeerforPeers, around 30 experts in vascular topics reviewed all articles published from January 2022 onwards, identifying two potential practice changers and rating 51 articles as highly influential. The PeerforPeers project is planned to expand to other topics and sections throughout 2023.



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EANS2022
Belgrade

The Diversity in Neurosurgery Committee

The Diversity in Neurosurgery Committee was established in September 2019 as a Task Force to address the glass ceiling and promote inclusivity in European Neurosurgery. Its aim is to create an environment where neurosurgeons of all genders, religions, sexual orientations, and backgrounds can thrive. The Committee's primary goal is to identify the barriers holding individuals back in their career advancement and tackle them systematically.

Neurosurgery has traditionally been a male-dominated field. Despite advances in access to training positions and an increase in the number of women entering the field, there is still a significant underrepresentation of women in leadership roles. This lack of progress in female careers is often attributed to male-oriented organisational cultures that exclude women from networking and mentoring opportunities necessary for career advancement.

During the EANS 2022 Annual General Meeting in Belgrade, the Diversity Task Force was upgraded to a Committee. As per the EANS Bylaws, after completing its 3-year term, the Task Force's progress was evaluated by the EANS Board, which acknowledged its outstanding performance and upgraded it to a Section.

The Committee manages an online repository on the EANS website called "Diverse Leaders in Neurosurgery – Inspiring Europe", featuring selected biographies of trailblazers who have changed the face of European Neurosurgery. The repository is regularly updated, and the Committee announces a Diversity Leader of the Month in the EANS monthly newsletter.

Additionally, the EANS Diversity Task Force, in collaboration with the European School of Management and Technology (ESMT) in Berlin and an industry partner, jointly awarded "The EANS Leadership in Neurosurgery Scholarship for Diverse Leaders" to two young neurosurgeons from diverse backgrounds. One of the recipients was able to attend the course, benefiting from the opportunity. All parties involved expressed satisfaction with the collaboration.

The Diversity Committee has its doors open to all individuals who wish to join and contribute to the progress of the neurosurgeon's challenging profession in an equitable way.



The EBNS - Exam Committee

The European Board of Neurological Surgery (formerly the Joint Examination Committee of the EANS and UEMS), is responsible for running both Part I (written) and Part II (oral) of the European Board Examination in Neurological Surgery. In 2022, the Committee conducted face-to-face Exam Part I at all EANS Training Courses (Limassol, Tirana, Maastricht) and Exam Part II in Barcelona.

Furthermore, the Committee developed a curriculum called "European Training Record, ETR" - to provide a framework for member countries and trainees to use, to guide the delivery of neurosurgical training. Description of the European Neurosurgical Curriculum follows:

Trainees are required to demonstrate consistently high professional standards in the areas of ethical practice; personal integrity; communication with patients, families, and colleagues; commitment to continuing medical education, and multidisciplinary working. Training should incorporate experiential learning, self-directed learning, simulation training, and formal courses. Regular evaluations with an Educational Supervisor and a satisfactory Annual Performance Review are mandatory.

Training is divided into 3 stages:

Stage 1- development of diagnostic and ward-based skills in specialties relevant to neurosurgical practice. Acquire basic surgical skills (Indicative duration 1-2 years).

Stage 2- acquisition of emergency operative skills and development of technical skills required for elective neurosurgery in adults and children. Consolidation of clinical skills including managing uncertainty. (Indicative duration 3-5 years).

Stage 3- development of advanced transferable microsurgical and specialty interest skills. (Indicative duration 1-2 years). Evidence of ability to seek support and assistance from colleagues, particularly in relation to complex decision-making.

At the end of the training, the trainer should be confident to entrust the trainee to undertake

5 Entrustable Professional Activities (EPAs) that are embedded in the curriculum:

- > Inpatient care
- > Outpatient care
- > Emergency on-call neurosurgery
- > Elective operative neurosurgery (including advanced skills in one or two special interest areas)
- > Participate in multidisciplinary team working

By the end of the training, the trainee should be developing leadership skills and conducting work to improve the quality of care.

The Committee encourages all surgeons to continue learning and working collaboratively after the completion of training.

The Ethico-Legal Committee

In 2022, the Ethico-Legal Committee undertook various activities to address ethical issues and provide guidance within the field of neurosurgery.

The Committee collaborated with the Global and Humanitarian Committee and the Executive Board of the EANS to draft and publish a response addressing the invasion of Ukraine by Russia. As the pan-European medical association of Neurosurgeons, the EANS firmly stood against the violence and expressed its support and solidarity with the affected Ukrainian members and friends.

Throughout the year, the Committee organised breakout sessions at various educational courses, focusing on ethical and legal issues, including complex ethical cases. These sessions provided a platform for participants to engage in discussions and enhance their understanding of ethical practices in neurosurgery.

A significant achievement of the Ethico-Legal Committee in 2022 was the publication of the study titled "Ethico-Legal Regional Differences in European Neurosurgical Practice: Part 1-pre-COVID-19" in the *Brain and Spine Journal*. This study aimed to examine the implementation of ethical guidelines and regional differences in neurosurgical practice across 29 European countries or regions. The survey-based research highlighted shortcomings in policies and resources, emphasising the need for national discussions to improve professional ethics within the field.

During the EANS2022 Annual Congress in Belgrade, the Committee organised and successfully delivered a Masterclass on "Publication Ethics." Looking ahead, the Committee is excited about this year's topic, which will focus on the "Ethics of Waiting List Management and Resource Allocation."

The Committee also made significant contributions by delivering presentations at international events. These included discussions on the "Ethics of Interaction with Industry, Product Development, and Marketing" at the South African Spine Congress, the "Ethics of Royalties and Device Development in Spine" at BISS, and the "Ethics in New Technology Adaptation" at the ArabSpine Course Diploma in Dubai.

The Frontiers in Neurosurgery Committee

The EANS Frontiers in Neurosurgery Committee was established in 2021 to address the perception of a decline in the role of neurosurgeons in certain areas of the field. The Committee's goal is to identify, foster, and create opportunities for neurosurgeons in Europe in the frontier areas of Pain and Spasticity Management, Peripheral Nerve Surgery, Orbital Surgery, Radiosurgery, High-Intensity Focused Ultrasound, and Endovascular and Carotid Surgery.

In 2022, the Committee took its first steps and established an online presence to promote our mission. An action plan of activities was conceived, with the first phase of the Frontiers initiative focussing on early-career neurosurgeons. This is an essential step to ensure that new professionals in the field have access to relevant information, resources, and support they need across the entire specialty.

Moreover, the Committee has engaged with the EANS sections to maximise the benefits of their collective work. Through collaboration with other EANS sections and the Young Neurosurgeons Network of the EANS, the Committee hopes to create a comprehensive plan that addresses the needs of early-career neurosurgeons while also benefiting more experienced professionals in the field.

The Committee has also begun to conduct electronic surveys of centres and experts from across Europe to build an online, searchable database of learning, training, fellowship, and research opportunities in each of the frontiers. This database will be hosted on the EANS website and will serve as a resource for early-career neurosurgeons to access information about training and fellowship opportunities in their specific area of interest.

The Committee's efforts will strengthen the field of neurosurgery as a whole and ensure its ongoing success and growth.

The Global and Humanitarian Neurosurgery Committee

In 2015 surgery became a global health priority. The Lancet Commission released its Global Surgery 2030 instrumental report on the lack of surgical care globally and the need for a focus on addressing this issue.

The presented facts were devastating:

- > 5 billion people cannot access safe and affordable surgical and anesthetic care
- > 143 million additional surgeries are needed each year
- > 33 million people face catastrophic health expenditures yearly due to such care payments

In neurosurgery, access to care goes from being a disparity to a complete absence in some cases. Large areas of the world, especially low and middle-income countries (LMICs), suffer ratios of one neurosurgeon for every 10 million people. In this case, access to neurosurgical care is no longer a right but a luxury. Due to a tremendous need worldwide for neurosurgical services, training, and equipment, global and humanitarian neurosurgery has become critical to every significant neurosurgical society. The establishment of the EANS Global and Humanitarian Neurosurgery Committee was proposed by the then incoming President Andreas Demetriades and officially confirmed at the EANS General Assembly in Hamburg in October 2021. Members of the EANS Global and Humanitarian Neurosurgery Committee gathered in 2021 around the idea they could benefit humanity, collectively or individually, aiming to achieve and safeguard fair and equitable access to high standards of clinical care, with safety, professionalism, and working towards quality improvement for neurosurgery worldwide. EANS GHC held 15 business meetings from its establishment and initiated numerous activities and projects. The most important things adopted from the beginning in the functioning of the Committee members are communication, collaboration, coordination with national and continental societies, and an interdisciplinary approach. The EANS Global and Humanitarian Neurosurgery Committee members were active despite the current global situation.

In less than two years, this Committee raised several initiatives that could help improve the education, timeliness, safety, and affordability of neurosurgical care to all who need it. Some of the activities have been:

- > Development of the pre-congress, plenary, masterclass, and parallel sessions for the EANS 2022 Belgrade
- > Creation of the inaugural Special Topic Issue for our journal Brain and Spine, entitled Global and Humanitarian Neurosurgery; and numerous manuscript publications
- > Two free full-tuition scholarships for the Master's degree course in Rome, Italy were awarded
- > A survey resulting in a Network of Visiting Fellowships across Europe
- > A survey and a Flowchart of EANS GHC-supported and coordinated activities relating to the Ukrainian crisis
- > A survey on Global Neurosurgery interest, opportunities, and barriers: the LMIC's point of view; with two free EANS memberships awarded to selected LMIC respondents
- > Participation in the COSECSA exams in Namibia
- > Participation at the CAANS Congress in Nairobi
- > Participation in working groups within the European collaboration of people interested in Global Surgery
- > Participation in the 9th course on Global neurosurgery in Tanzania
- > Participation in the Global Neurosurgery Workforce study and the European collaboration in global neurosurgery
- > The foundation of the EANS hands-on lab for the training of young neurosurgeons in western Ukraine
- > Participation in neurosurgical missions in Africa and numerous European and worldwide events and activities

For the period ahead, numerous activities are already foreseen, including the creation of a database of Global neurosurgery initiatives, the EANS/CAANS Collaboration initiative, the Identification of centers willing to ship the equipment to LMICs, the Identification of centers ready to enter twinning programs between EANS and LMICs departments while giving them affordable conditions for observerships/fellowships, creating educational contents, organising surgical missions, and many more.

We do believe that what we do today not only influences neurosurgery now but will also resonate in the future worldwide!

The Individual Membership Committee

This Committee has been set up to develop Individual Membership of the EANS. Its members are those elected by the body of current Individual Members of the EANS and act as its representatives in the Executive Committee of the EANS. The Individual Members Committee is a group of 40 Individual Member Delegates who work together to best represent and support all individual neurosurgeons within the EANS.

The Committee is proud to consider itself a vivid team of neurosurgeons, acting straightforward for improvements, and respecting the diversity of ideas, origin, background, and gender.

The IMC has been responsible for the growth and development of the EANS Community, running projects like webinars, Dura, and the EANS Podcast on What keeps neurosurgeons up at night. These are some of the activities that the team has worked on during the past year and is also running several working groups such as Membership Benefits, Case Platform, Guidelines & Publications or Social Media.

76 webinars have been organised, featuring contributions from the majority of Sections and Committees. These webinars, held on Wednesday afternoons/evenings gathered significant attendance and can be watched again on YouTube. Due to their remarkable success, the webinars were expanded to Thursdays as well. The first season of "Dura", the EANS Podcast on "What keeps neurosurgeons up at night" was also met with success, with listeners from all over the world on platforms like Spotify and Google Podcast. A second season is in the making!

The social media working group has been working on enhancing communication among individual neurosurgeons through Facebook, Instagram, Twitter, and LinkedIn. The IMC working group dedicated to the Case platform is helping to build a platform for individual neurosurgeons to share interesting cases for educational purposes. To support the guidelines task force, the guidelines working group prepared to engage individual neurosurgeons in the creation and maintenance of the future EANS guidelines. In conclusion, the IM committee has worked hard to create a positive community for individual neurosurgeons. The IM Committee hopes to make the EANS individual membership attractive and appealing for both current and new members.

The JRAAC Committee

The Joint Residency Advisory and Accreditation Committee (JRAAC) is a joint committee of the EANS and the UEMS, whose primary aim is to improve the quality of neurosurgical training programmes throughout Europe by acting as a pan-European accreditation and monitoring body.

The work of JRAAC is based on the guidelines set out in the European Neurosurgical Training Charter.

European Accreditation of Neurosurgical Training Programmes and Units

Visiting and evaluating training institutions and the provision of constructive feedback offers an important opportunity to enhance training standards, and most of JRAAC's activities, therefore, focus on these areas.

The accreditation procedure is based on the UEMS Training Charter in Neurosurgery, and those considering application should refer to this document in order to better understand the criteria against which their unit and training programme will be assessed.

If a training institution demonstrates that it complies with the standards for residency programmes in neurosurgery as set down in the UEMS Training Charter, it will receive JRAAC accreditation -certification by the UEMS and EANS as a Center of Excellence in Neurosurgical Training.

European Monitoring of Neurosurgical Training Programmes and Units

National professional bodies (responsible for the recognition of medical specialists in individual countries) can monitor and recognise neurosurgical training programmes using UEMS standards based on the Training Charter. In the interest of developing common standards, cooperation with JRAAC is recommended.

The JRAAC Committee consists of 11 members: 5 from the UEMS and 5 from the EANS plus Past-Chairman of JRAAC.

The Research Committee

The EANS Research Committee currently consists of 12 members from 11 countries.

In April 2022, the EANS Research Course was held in conjunction with the EANS Young Neurosurgeons Meeting in Florence, Italy. The event saw 28 registered participants and received highly positive evaluations. Of the respondents, 53% considered the course extremely useful, 47% found it useful, 53% rated the programme as excellent, and 47% rated it as good. The organisation of the event was regarded as excellent by 65% and good by 35% of the participants.

The Aesculap EANS Research Prize received an impressive 40 papers/applications in 2022. The submissions were divided into two categories: Laboratory and Clinical. Each category had a winner who received a prize of €5000 and an invitation to present their work at the EANS2022 Annual Congress in Belgrade during the Award Ceremony session.

The winners were:

Best Clinical Paper

Rene Post (Netherlands): Ultra-early tranexamic acid after subarachnoid haemorrhage (ULTRA): a randomised controlled trial

Best Laboratory Paper

Nicolas Neidert (Germany): T-Cell Dysfunction in the Glioblastoma Microenvironment is Mediated by Myeloid Cells Releasing Interleukin-10

Members of the Research Committee also actively participated in evaluating applications for the EANS Research Fund awards and abstracts for the congress.

During the EANS2022 Annual Congress, the Research Committee organised a dedicated Research parallel session (19 October).

In addition, the Chair of the Research Committee was nominated as the EANS delegate to the Board of the European Brain Council (EBC) in early 2022 and will continue to serve as an EBC Board member throughout 2023.

These achievements reflect the Research Committee's dedication to advancing neurosurgical research and promoting excellence in the field.

The Training Committee

The last three years have been very challenging for the whole world and the EANS Training Courses could not escape. The last course, pre-pandemic, was held in February 2020 in Sarajevo, Bosnia Herzegovina. The next three planned courses had to be cancelled, as holding them in a virtual environment or online would detract from the fundamental ethos of the Training Course, where personal interaction between trainees and faculty is an integral part of the experience.

Thankfully, and due to the efforts of Claudius Thomé, the rest of the Training Committee and the indefatigable team at the office (Visi, Anna and Maria), three courses were held (two of them double) at the second half of 2021 in Valencia (June/November) and Thessaloniki (August), clearing most of the backlog from the year before.

In 2022, the Committee gradually got back on a normal footing, organising three Courses:

<u>Dates</u>	<u>Location - Topic</u>	<u>Trainees</u>
March 27-31	Limassol, Cyprus – Spine	223
May 15-18	Tirana, Albania – Functional, Trauma and PNS	178
August 21-24	Maastricht, The Netherlands – Tumour	200

All the courses were highly successful, well received by the trainees, with high ratings and returning positive financial balances, thus allowing us to consider venues for upcoming courses that would be otherwise prohibitive in terms of cost. The courses for 2023 are scheduled with Winter (Vascular) in Istanbul at the end of January, Spring (Tumour) in Thessaloniki in May, and Summer (Functional, Head injury and PNS) in Porto in August.

The course content and delivery are constantly evolving with a closer collaboration with and input from the relevant EANS Sections. In addition, there is a gradual renewal of the Faculty with new TC national delegates, contributors from the Board and the Young Neurosurgeons Committee, as well as the EANS Sections.

The Young Neurosurgeons Committee (YNC)

The Young Neurosurgeons Committee (YNC) supports European young neurosurgeons to develop leadership, research, communication and neurosurgical skills. It promotes early involvement of young neurosurgeons in EANS events and projects within the Committee structure but also in all other EANS activities. Working closely with the Board, it develops projects of interest for the youngest EANS members and recruits young neurosurgeons to participate in EANS annual scientific program, EANS Young Neurosurgeons Meeting program and other key committee activities.

In 2022, the YN Committee was more active than ever, with new endeavors throughout the year – and even more on the horizon. To begin with, its online presence was extensive, developing multiple webinars with a focus on the engagement of the younger in neurosurgery while improving and empowering education. Further, its presence on social media was enhanced with a content calendar for relevant platforms (Facebook, Instagram, and Twitter), while social channels were filled with information on scholarship opportunities, helpful educational resources, etc. allowing interaction with Neurosurgeons from all over the world.

Also, as a token of the Committee's invaluable input, two Young Neurosurgeons Committee members have the role of Social Media Editors of the Brain & Spine Journal.

The Committee's contribution to the list of EANS events the past year counted a successful YN annual meeting in Florence, the first-ever joint meetings with EANO (Youngsters) and SINCh (Italian Young Neurosurgeons), and the organisation of several sessions at the EANS2022 Annual Congress in Belgrade - including a pre-congress course for medical students.

Its scientific contribution included three already published editorials as well as three surveys. The Committee continues its work with different guidelines and with the production of pocket cards to aid in the everyday clinical life of a young neurosurgeon.

Finally, this year at the EANS2022 Annual Congress in Belgrade, the Young Neurosurgeons Network was launched, a community where people from all levels of training, ranging from medical students and up to board-certified neurosurgeons, can have their base for sharing ideas, questions, experiences and ultimately - their common passion for Neurosurgery.

The Committee will continue to work for successful engagement for the years to come.





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Task Forces



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Academy Task Force

Being one of the main digital transformation projects of the organisation, the EANS Academy offers the opportunity to the EANS members, but also members of the community via the open-source content, to receive original high-quality neurosurgical education and training.

Being completely remodelled in 2021, the EANS Academy is now a modern and practical web portal for digital education. The users can now search by topic, with keywords, and use several filters to find the exact content they need, in a user-friendly digital environment.

Including recordings from EANS past congresses and events, the EANS Academy consists of one of the EANS membership's main advantages.

The current workflow effectively brings new content into the academy, involving active participation from all Task Force members. This indicates the success of the Task Force guidelines in generating original Academy content.

A significant point of discussion has revolved around determining the content that should be included in the academy. The decision was made that webinars, due to their presence on YouTube, will not be uploaded to the Academy. However, this decision might be subject to change, as we continually explore new incentives to encourage our members to engage with the association.

Furthermore, communication has taken place with the editors of the Brain & Spine Journal to arrange for the Academy to host video submissions for the B&S journal. This arrangement would provide the Academy with increased visibility and offer the journal innovative, high-quality teaching content accompanied by citable text.

Emerging Technologies and Innovations in Neurosurgery Task Force

In October 2022, EANS established a new Task Force for Emerging Technologies and Innovations in Neurosurgery (ETIN Task Force).

The mission of ETIN Task Force is to investigate, promote and stimulate the advancement and implementation of new, emerging technologies and innovations in neurosurgery.

ETIN will bring together the different stakeholders – neurosurgeons, engineers, scientists, AI and VR specialists, and entrepreneurs with the objective to spread state-of-the-art achievements, accelerating innovations, assessing the advantages and disadvantages of different technologies and innovative devices with the objective to improve the care we give to our patients.

ETIN will organise interdisciplinary meetings, discussion groups, round tables, seminars, webinars, and any other form of exchange of knowledge regarding the emerging and new technologies in neurosurgery, bringing to the same table experts in different fields of knowledge.

EANS Guidelines Task Force

Clinical practice guidelines are a powerful tool in the hands of healthcare practitioners, professional societies, and public health organisations all around the world. Their purpose is to guide medical decision-making through explicitly formulated recommendations and suggestions.

Traditionally, clinical guidelines were created as consensus-based statements based on expert opinion. Often laden with opinion bias, consensus-based recommendations are currently arguably being viewed as lacking proper substance and are reserved for cases where data is limited or conflicting.

Modern clinical guidelines represent a fusion of evidence-based data, transparent multi-stage development process, methods of bias minimisation and adequate data visualisation with a focus on collecting clinically relevant recommendations on a single topic.

The EANS Task Force in Guidelines Development (the EANS Guidelines Development Project) was formulated by Andreas Demetriades and Nikolay Konovalov at the end of 2021. Its main aims are to:

- Develop a unified methodology for guidelines development in EANS
- Promote and govern the development of guidelines from all EANS Sections, Committees and Taskforces
- Promote collaboration between EANS and other professional associations and organisations

The main goal of the guideline development process is to objectively evaluate all the data available on the topic of choice and keep the development process as transparent as possible. To this end, we decided to divide the development process into five general steps: Identification of Clinical Questions, Identification of Work Groups, Literature Search and Evidence Analysis, Formulation of Evidence-based Recommendations and Review, Revision & Submission.

Development Process General Steps



All Sections, Committees and Task Forces have been invited to select topics of interest. The process will be enhanced by partnering with an outside reputable partner (McMaster University), who will oversee the training of our volunteer members through the process as well as its methodology.



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EANS Membership



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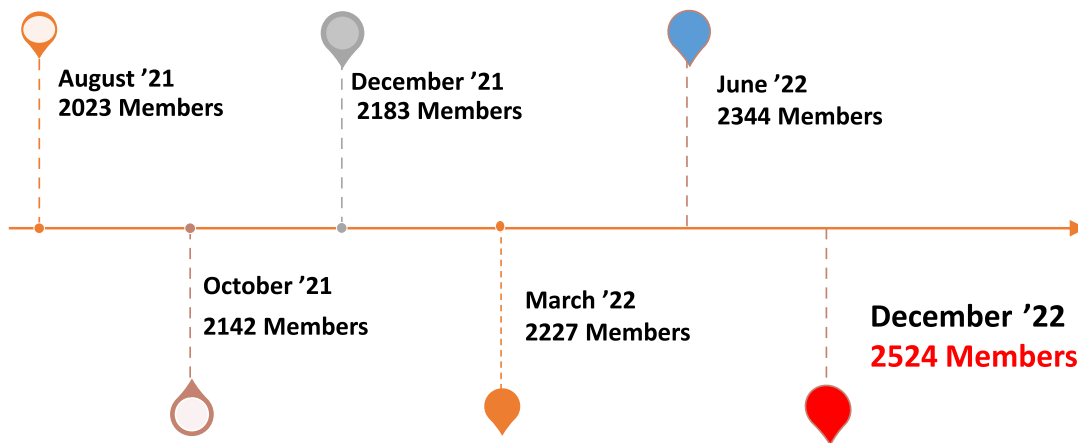


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Our Members

EANS Individual Membership lays at the heart of the EANS Community and 2022 was the year the association reached the awaited number of 2500 Members. In 2021 its membership types were re-formatted, increasing the membership benefits and creating even more value in individual membership.

Trainees	998
Full European Neurosurgeons	847
World Bank Low & Lower Middle Income Countries	241
International Neurosurgeons	153
Medical Students	125
International Trainees	71
Neurosurgery Related Professionals	49
Lifetime Senior	16
International Medical Students	16
Honorary	8
TOTAL:	2,524
excluding suspended members*	
*those who are late with membership dues payment more than 3 months	



All Active Members

Germany	441	Turkey	77	Egypt	36
Italy	217	Romania	77	Saudi Arabia	28
United Kingdom	163	Poland	67	Czech Republic	28
Switzerland	134	India	66	Finland	25
Belgium	92	Portugal	57	Denmark	22
Netherlands	91	Serbia	54	Pakistan	22
Austria	90	Ukraine	48	Bulgaria	21
Greece	85	United States	48	Mexico	20
Spain	82	France	38	Sweden	19

All Active Members

Croatia	19	Tunisia	4	Nigeria	2
Hungary	17	Bahrain	4	Trinidad and Tobago	2
Israel	16	Macedonia	4	Korea, South	2
Norway	16	Panama	4	Algeria	1
Lithuania	14	Belarus	4	Cuba	1
Russia	13	Nepal	4	Ghana	1
Ireland	12	Estonia	4	Chile	1
Slovak Republic	11	Cyprus	4	Oman	1
UK	10	Luxembourg	4	Zambia	1
Japan	10	Malaysia	3	Cameroon	1
United Arab Emirates	9	Armenia	3	Aruba	1
Brazil	9	Lebanon	3	Benin	1
Jordan	9	Sri Lanka	3	Namibia	1
Singapore	8	Argentina	3	Thailand	1
Hong Kong	7	Moldova	3	Nederland	1
Indonesia	7	Ecuador	3	Curaçao	1
Australia	7	Iran	3	England	1
Latvia	7	China	3	Paraguay	1
Georgia	7	Kuwait	3	Botswana	1
Morocco	6	Peru	2	Madagascar	1
Canada	6	Ethiopia	2	New Zealand	1
Libya	6	Slovenia	2	Maldives	1
Montenegro	5	Colombia	2	Nicaragua	1
South Africa	5	Afghanistan	2	Guyana	1
Iraq	5	Kazakhstan	2	Azerbaijan	1
Malta	5	Albania	2	Kosovo	1
Bangladesh	5	Taiwan	2	TOTAL	2524
Qatar	5	Jamaica	2		
Bosnia and Herzegovina	5	The Netherlands	2		

Registered in 2022

Germany	84	Saudi Arabia	9	South Africa	3
Italy	63	United States	9	Sweden	3
United Kingdom	45	Croatia	8	Australia	2
India	25	Denmark	7	Bosnia and Herzegovina	2
Turkey	24	Mexico	7	Bulgaria	2
Romania	21	Finland	6	Czech Republic	2
Netherlands	20	Norway	6	Hong Kong	2
Serbia	19	Pakistan	6	Hungary	2
Belgium	18	Slovak Republic	6	Indonesia	2
Poland	18	Brazil	5	Kuwait	2
Switzerland	18	Israel	5	Latvia	2
Greece	16	Ukraine	5	Morocco	2
Spain	15	Lithuania	4	Russia	2
Austria	14	Singapore	4	Tunisia	2
Portugal	14	Jordan	3	Algeria	1
Egypt	11	Libya	3	Armenia	1
France	10	Macedonia	3	Azerbaijan	1

Registered in 2022

Bahrain	1	Ethiopia	1	Namibia	1
Belarus	1	Ghana	1	Nepal	1
Botswana	1	Iran	1	New Zealand	1
Cameroon	1	Japan	1	Nigeria	1
Canada	1	Kazakhstan	1	Panama	1
Cuba	1	Korea, South	1	Qatar	1
Cyprus	1	Lebanon	1	Taiwan	1
Ecuador	1	Madagascar	1	United Arab Emirates	1
Estonia	1	Malta	1	TOTAL	590



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BRAIN & SPINE Journal



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Brain & Spine: Our Journal



On 10 April 2021 EANS, EUROSPINE and Elsevier signed a contract to establish **Brain and Spine**. Brain and Spine is **the official online, open-access, scientific journal of EANS and EUROSPINE** and is exclusively owned by the two scientific societies (50/50).

2021 was a very successful year for Brain and Spine. After the election of the two Editors-in-Chief (Wilco Peul and Frank Kandziora) by the Executive Committees of EANS and EUROSPINE, an outstanding editorial board consisting of 36 well-known scientists covering multiple disciplines was established.

The first Editorial was published on 19 July and the first original scientific article was online on 6 August 2021. Further, the abstracts of the annual meeting of EUROSPINE and EANS were published on 30 September. Out of the 94 submissions received till the end of the first year, 30 papers were accepted for publication, 2 editorials were published and 14 original articles online. As a result, the Journal was indexed in the "Directory of Open Access Journals" on 3 December 2021, after existing for only 4 months.

List of achievements in 2022

The greatest achievement in 2022 was the Journal's indexation in PubMed Central (PMC). After we applied for indexation on 10 March (7 months after the first paper was published online), we received PMC acceptance on 4 October. Further, we had been **indexed in Google Scholar** on 10 May.

A Reviewer of the Year Award was established because we strongly believe that reviewers are of extreme importance to a high-class scientific journal. Our first Reviewers of the (academic) Year 2021/2022 were Jörg Franke, Magdeburg, Germany for EUROSPINE and Michael Bruneau, Brussels, Belgium for EANS. The Reviewer of the Year will be awarded in the future on a yearly basis.

Additionally, we established a concept for Special Topic Issues (STI). Our first STI focused on "Global and Humanitarian Neurosurgery" and achieved significant success, attracting 15 original papers. The 3 supplements we published included the abstracts of EUROSPINE and EANS Annual Meetings as well as the abstract highlights of the Swiss Spine Society meeting.

In 2022, Brain and Spine received 271 submissions of scientific papers: 146 related to brain and 125 related to spine topics. We were able to accept 102 high-quality papers (59 brain/ 43 spine) but also had to reject 104 (46 brain/ 58 spine). Further, we published 8 editorials. One of them dealing with “Putin’s Ukraine war” is atypical for a scientific journal, but worth reading.

Updates regarding the Journal indexation up to now may be found here <https://www.sciencedirect.com/journal/brain-and-spine>.

All Article-Processing Charges (APC) for all EUROSPINE and EANS members are waived until further notice.

We encourage you to submit your excellent scientific papers to the Brain & Spine journal. Stay tuned as we are ready to proceed to the next milestones of our scientific journey in the coming months!



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EANS Foundation



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EANS Foundation: Creating a fountain of possibilities!



***Fundraising is the noble art of teaching people
the pleasure of giving" (Henry Rosso)***

The EANS Foundation for Research in Neurological Surgery was officially introduced to the global neurosurgical community in a positive and cheerful atmosphere, during the EANS 2022 Congress in Belgrade.

The new EANS initiative was announced during a special "EANS Foundation Event" hosted in the context of the congress proceedings. The president of the Foundation Prof. Dr. Andre Grotenhuis explained the aims and scope of the Foundation and issued an open call to the global community of neurological surgery, to embrace the foundation, aiming to create new ground-breaking research, in the service of humanity.

The EANS Foundation aims to help release the untapped potential of philanthropy for research funding in neurosurgery. It started as an idea of the former EANS president Carlo Schaller and was first discussed during the summer of 2020. Because of the COVID pandemic, it took a longer time than initially anticipated to officially register the EANS Foundation for Research in Neurological Surgery, first in 2021 by the Geneva Registry of Commerce and in 2022 by the Swiss Federal Registry of Foundations. This new foundation has the strict goal to provide a legally viable and transparent way for potential donors to support research activities in any neurosurgical domain, to support specific educational activities, and to fund initiatives for the improvement of care in a pre-defined context.

Obviously, the Foundation has strong links with the EANS, but it represents a separate legal body to fulfill the requirements of the federal organ regulating Swiss foundations.

So why a foundation for neurosurgery? The answer is that a foundation creates a direct and by far more personal link between the potential donor and the researcher than any official organ such as a national scientific fund or i.e., the European Research Council (ERC) might do. It is often that personal link between the patient or the patient's family to the neurosurgeon or to a neurosurgical department, which forms the basis for funding a specific person or a specific project. But the regulations to deal with personal donations are very complex for an individual neurosurgeon and too often the money then may go to more anonymous hospital or university accounts, where large institutional committees decide for which purpose the money might be used. This common practice does not recognise the intimate and personal relationship between the neurosurgeon and the patient, and it deprives the donor from assuring that the money will be used for the envisioned field of research. To keep that privileged and trustful relationship between the donor and the neurosurgeon is the essence of this foundation.

The growing awareness of the public for the increasing incidence of pathologies in the neurosurgical domain – from traumatic brain injury to stroke to other brain diseases and to back pain and spinal disease and pathologies of peripheral nerves – has triggered our initiative to create the EANS Foundation: Many more people than one might expect are affected by problems which might benefit from neurosurgical care. These pathologies of the brain or the spine or of peripheral nerves are no longer stigmatised by modern society. And private persons with a personal neurosurgical history, be it through being affected by a neurosurgically relevant problem themselves or be it by caring for someone from their family frequently want to give something back to society or to their caretakers. For such persons or other legal bodies, such as companies or other foundations, the EANS Foundation serves as the docking station to donate funds for specific purposes in a transparent and fully tax-deductible way. From smaller amounts of money to bigger sums, regular financial contributions, or the donation of objects, the EANS Foundation will provide an adequate channel to fund or stimulate scientific or educational progress and projects. The Board of Trustees, the Scientific Committee, and the administrative personnel of the foundation were selected to be free of any conflict of interest, and they will be happy to help to select the right project for the potential donor. The scope of research and clinics in neurosurgery ranges from traumatic brain and spine injury, may it be through sports or road accidents e.g., on the way to school or to work through all kinds of diseases of the brain or the spine and spinal cord and the peripheral nerve system. The projects are as diverse as neurosurgery itself! And thus, we create a fountain of possibilities.



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES

EANS

Annual Report 2022

Our Projects



EANS ACADEMY



EANS
Foundation



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES



EANS2022
Belgrade

The Congress

EANS2022 Belgrade Congress

The best possible return to in-person congresses!



EANS2022 Belgrade

In October of 2022, after two turbulent pandemic years, the **EANS2022 Annual Congress** in Belgrade represented the regathering of European and world experts in neurosurgery. The long-awaited Congress gave the EANS family the opportunity to meet old friends and make new ones, exchange scientific information, and share experiences for the benefit of the patients. The return to in-person meetings could not have been better. The **EANS2022 Annual Congress** will remain in the EANS history as a legacy post-covid event with a rich scientific programme including lectures of outstanding quality and interest, with 11 plenary and 13 parallel sessions, 20 masterclasses, and 10 pre-congress symposia. Offering a unique blend between West and East, North and South, past and future, Belgrade, the “White City”, welcomed 1400 delegates from 83 countries, who came together to exchange valuable knowledge, experiences and insights in the field of Neurosurgery. The Congress theme “Trends, Insights, Innovations: Neurosurgery beyond Technology – addressed the complex relationship between technological advances and human ingenuity in the field of neurosurgery. The age of rapid technological progress, artificial intelligence, machine learning and virtual reality in the 21st century brought many benefits to neurosurgery, but also many challenges.

The EANS family would like to express its sincere gratitude to the:

1400 delegates from 83 countries who attended the congress,

42 exhibitors who participated in the EANS2022 industry exhibition,

423 faculty speakers and oral abstract presenters and **658 e-Poster presenters** who delivered lectures of outstanding quality and interest.

It was also a momentous occasion, as the EANS proudly awarded **Prof. Dr. André Grotenhuis**, Emeritus Professor and former Chair of the Department of Neurosurgery at Radboud University Medical Center, Nijmegen, The Netherlands, with the **Medal of Honour** of the Association, for his lifetime dedication and contribution to the EANS and to the global neurosurgical community.

Elite scientists were honored for their longstanding contribution to Neurosurgery.

The **Lifetime Achievement Award** was awarded to **Prof. Dr. Miroslav Samardzic** Faculty of Medicine, University of Belgrade, for his outstanding contribution and achievements in the field of Peripheral Nerve Surgery.

The **European Lecture**, entitled “**Translational research in neurotrauma: the Biomarker Avenue (and some dead ends...)**” was delivered by **Andras Buki**, Professor at Örebro University, Sweden, and former Chair of the Department of Neurosurgery at the University of Pecs, Hungary.

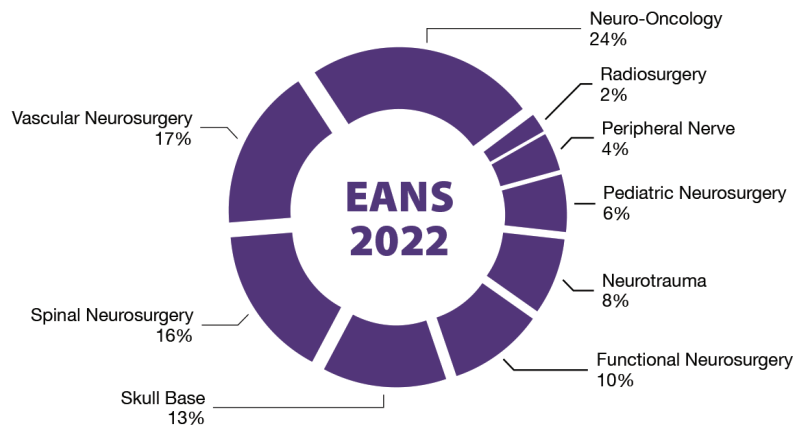
Three more awards were given for **Exceptional Service to European Neurosurgery:**

Prof. Dr. Mustafa Necmettin Pamir, Professor and Chairman of the Department of Neurosurgery, Acibadem University, Istanbul, Turkey.

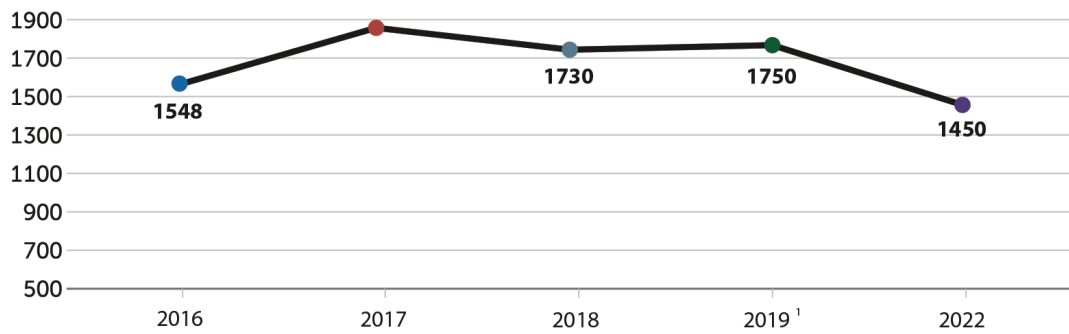
Prof. Dr. Vinko Dolenc, Emeritus Professor of Neurosurgery, Department of Neurosurgery, University Medical Center Ljubljana, Slovenia.

Prof. Dr. Panagiotis Selviaridis, Emeritus Professor of Neurosurgery, Aristotle University of Thessaloniki, Greece.

During the Opening Ceremony, **Novak Djokovic**, the world-class Serbian Tennis star honored our delegates with an amazing speech on human values, mental health, personal development, resilience, self-confidence, and universal challenges that we encounter in our daily lives. The local host and Congress President Lukas Rasulic and the EANS President Andreas Demetriades delivered a memorable experience during the EANS2022 Belgrade Congress. The bar is now set high for the EANS2023 Annual Congress in Barcelona.

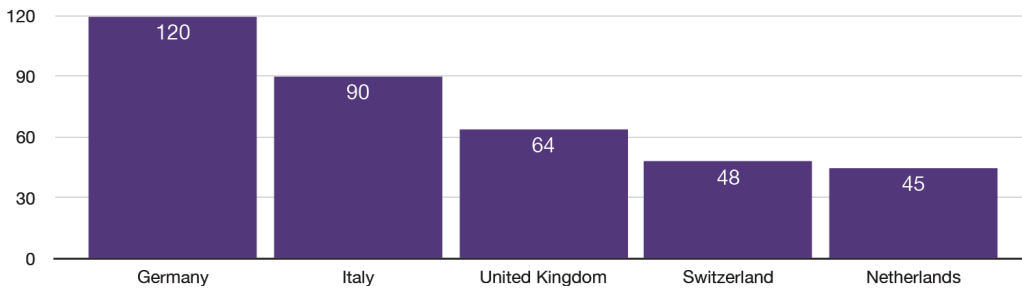
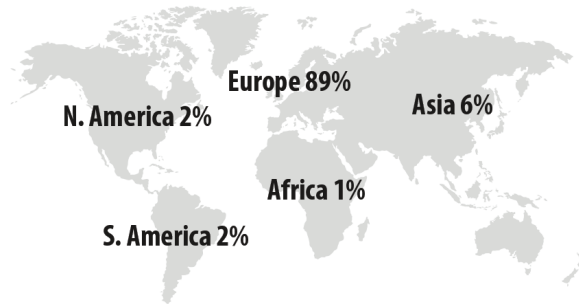


PARTICIPANTS**



*Excluding exhibitors
**Including exhibitors

Where did the EANS2022 delegates come from.



EANS2023 Barcelona Congress: A new approach



**EANS2023
Barcelona**

The desire to internalise the organisation of the EANS Annual Congress was present for some time before it materialised.

The EANS2023 Barcelona Congress marks the first instance where the entire congress is organised by the EANS Office, as part of the EANS team’s many educational activities. After undertaking the scientific programme management in 2019, the EANS Office took over all congress organisation aspects in 2022; Sponsorship, Technologies, Project Management, Registrations, On-Site Management, Social Events, and all other congress parts are now under the EANS Office management.

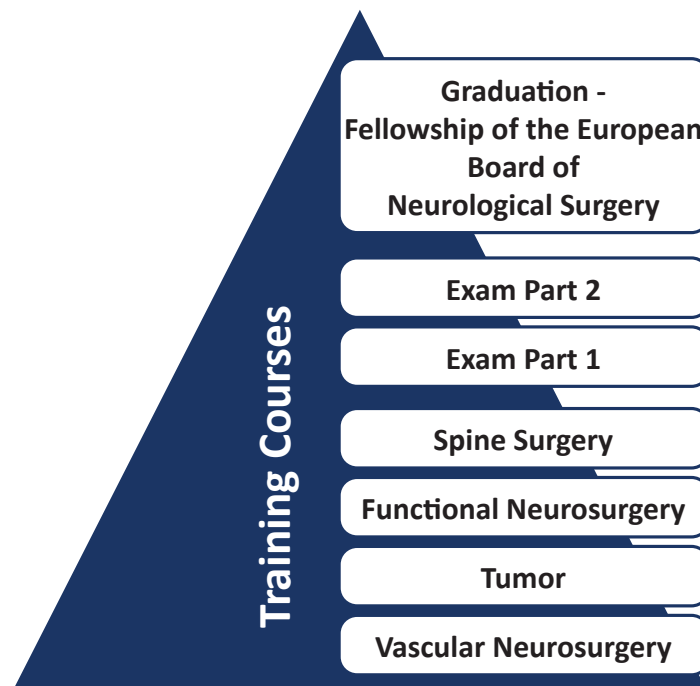
Within 2022, the EANS Executive Director and members of the office conducted two inspection visits in Barcelona to prepare for the congress and set the foundations of the 2023 Organisation. While in Belgrade for the 2022 Congress, the EANS Office and Executive Committee met with the industry partners of the 2022 Congress and presented the new congress concept: An internalised project with more personal attention, now unified and connected with the rest of the EANS educational portfolio.

Training Courses

The EANS is involved in all aspects of neurosurgical training both at the pre-board certification level and at the special interest training level. We are constantly trying to find new ways to contribute to the improvement of neurosurgical education in Europe and beyond.

The European Training Courses in Neurosurgery, known also as EANS Training Courses, have long been one of the core activities and a major integrative force of the EANS, renowned for their excellence and long tradition. Founded in the 1970s by Professors Brihaye, Pia and Vigoroux, the courses aim to serve the needs of neurosurgical trainees in the latter half of their training in neurosurgery.

The European Training Courses in Neurosurgery Programme is one of the most esteemed specialisation neurosurgical courses globally. They consist of 4 cycles:



Completed by more than 3.000 neurosurgeons until today, the EANS Training Courses are one of the true training highlights of the organisation.

	Course Title	City, Country	Participants
March 27-31	EANS Training Course - Spine	Limassol, Cyprus	223
May 15-18	EANS Training Course - Head Injury	Tirana, Albania	178
August 21-24	EANS Training Course - Tumour	Maastricht, The Netherlands	200

In 2022, three Training Courses took place:

EANS Training Courses 2022

Participants/ Country	Spine Limassol, Cyprus 27 - 31 March	Functional, Head Injury, PNS Tirana, Albania 15 - 18 May	Tumour Maastricht, The Netherlands 21 - 24 August
Albania		1	2
Austria	6	7	4
Belgium	11	7	10
Bosnia	2		
Bulgaria	3	2	1
Coatia	1	2	4
Cyprus		1	1
Czech Republic	8	4	10
Denmark	1	2	1
Estonia	1	1	1
Finland	3	4	6
France	8	4	9
Germany	60	33	29
Greece	2	1	5
Hungary	5	6	3
Ireland		1	
Israel	7	9	5
Italy	10	7	16
Latvia	1	1	
Lithuania	3	3	2
Luxembourg	1		
Montenegro	1	1	
The Netherlands	9	6	9
Nigeria		0	1
Norway			1
Poland	4	10	5
Portugal	7	9	4
Qatar		1	
Romania	6	3	5
Russia	2		
Saudi Arabia		1	1
Serbia	1	2	
Slovakia	5		2
Slovenia		2	3
South Africa		1	1
South Korea	1		
Spain	21	4	27
Sweden	4	5	8
Switzerland	15	15	10
Turkey	1	8	4
Ukraine			2
UK	13	14	8
TOTAL	223	178	200

Exams

Fellow of the European Board of Neurological Surgery (FEBNS)

The European Board Examination in Neurological Surgery consists of two parts: Part I (electronic multiple-choice questions) and Part II (oral examination).

Oral assessments following the completion of the EANS training course were first introduced in 1983 (Ljubljana). The concern for a more formal approach to an examination led in 1992 to the creation of the Joint EANS/UEMS Examination Committee and the introduction of the European Examination in Neurosurgery.

Candidates who successfully passed both parts I and II of this examination received the European Diploma in Neurosurgery.

In October 2015 the EANS and UEMS Section of Neurosurgery decided to form the European Board of Neurological Surgery (EBNS) and transform the existing exam into the European Board Examination in Neurological Surgery to further increase its importance and general recognition. One of the key functions of the EANS is to oversee the European Board of Neurological Surgery (EBNS). The EBNS is responsible for Part I (written) and Part II (oral) of the European Board Examination in Neurological Surgery. Candidates who pass both parts are appointed as Fellows of the European Board of Neurological Surgery (FEBNS). The FEBNS is a highly respected and recognised qualification that demonstrates a neurosurgeon's knowledge and skills in the field.

In 2022, three Exams Part I and one Exam Part II took place:

EANS Exams 2022

Exam Part I	No of candidates	Passed	Pass rate	Pass mark
26 March - Limassol, Cyprus	47	31	66,0%	55,79%
14 May - Tirana, Albania	25	16	64,0%	59,30%
20 August - Maastricht, The Netherlands	64	44	68,8%	56,18%
Exam Part II	No of candidates	Passed	Pass rate	Pass mark
3-5 March - Barcelona, Spain	39	28	71,8%	80/120

Participants/ Country	Exam part I Limassol	Exam part I Tirana	Exam part I Maastricht	Exam part II
Arabia Saudi		1	1	
Albania			1	
Austria	1			
Australia				
Bahrain				
Belarus				
Belgium	5		2	
Bosnia	1			
Bulgaria	1		1	
Canada				1
Croatia				
Czech Republic	1		3	
Cyprus		1		
Denmark			1	
Egypt	1		1	2
Estonia				
Finland	1	1	1	
France	2	4	4	1
Germany	13	3	14	10
Greece		1		
Hungary	1		1	1
India			1	2
Iran				
Iraq				
Ireland	1			
Israel	1		3	
Italy		1	3	
Jordan	3			1
Kuwait				
Lebanon				1
Libya				
Lithuania			1	
Luxembourg	1			
Malta				
Montenegro				
Nepal				
Netherlands			1	
Pakistan				
Poland	2	1		
Portugal		1		2
Qatar				1
Romania	2		2	
Russia	1			

Participants/ Country	Exam part I Limassol	Exam part I Tirana	Exam part I Maastricht	Exam part II
Saudi Arabia				3
Serbia				
Singapur			1	
Slovenia			1	1
Slovakia	1			
South Africa			1	
Spain	2		6	2
Sweden		2	3	
Switzerland	2	6	5	2
Tonga				
Turkey		1	1	3
UK	2	2	5	5
USA				1
Zambia				
TOTAL	45	25	64	39

Specialised and Hands-On Courses

Founded in 2012 the EANS Hands-on Courses have become a stable part of the EANS' training activities allowing participants to get to grips with neurosurgical equipment and techniques. These are aimed specifically at participants in the third year of the EANS Training Course cycle, but others are also very welcome to apply. The CME Accredited Courses allow participants to sharpen their neurosurgical knowledge, discuss and debate with their peers, and at the same time collect CME points.

SPECIALISED COURSES

	Event title	City, Country	Participants
April 7	EANS Research Committee Course	Florence, Italy	27
April 8-9	11th Annual EANS Young Neurosurgeons' Meeting	Florence, Italy	48
September 5-6	Annual EANS Vascular Section Meeting	Nice, France	90
October 16	EANS Peripheral Nerve Surgery Pre-Congress Course	Belgrade, Serbia	33
November 27-29	EANS Advanced Course in Spinal Surgery Part I	Edinburg, UK	40

STUDENT COURSE

	Event title	City, Country	Participants
October 15	EANS Students' Pre-Congress Course	Belgrade, Serbia	68

HANDS-ON COURSES

	Event title	City, Country	Participants
January 10-14	EANS Lyon Hands-On Course	Lyon, France	20
January 18-19	EANS Spinal Step II Hands-On Course	Lyon, France	20
May 23-24	EANS Spinal Step I Hands-On Course	Geneva, Switzerland	16
June 21-22	EANS Basic Endovascular Course	Amsterdam, The Netherlands	45
June 27 - July 1	EANS Lyon Hands-On Course	Lyon, France	20
November 10-13	EANS Microneurosurgery Course	Rotterdam, The Netherlands	22
November 22-25	EANS Cranial Step I Hands-On Course	Brno, Czech Republic	20
December 8-9	EANS White Matter Dissection Course	Tours, France	24

● EANS Lyon Hands-On Course

10-14 January 2022, Lyon, France

The Hands-On Course in Lyon was the first of a long list of practical courses that took place in 2022. 20 participants and 12 faculty members attended the course. The course was again a big success and highly rated. This is one of the classic and most popular EANS Hands-On Courses with almost around 200 trainees on the waiting list every year.

● EANS Spinal Step II Hands-On Course

18-19 January 2022, Lyon, France

This was the 4th edition of the EANS Spinal Step II Hands-On Course that took place again at the Laboratoire d'Anatomie de la Faculté de Médecine de Lyon. 20 participants and 14 faculty members attended the course. The 20 delegates from all over Europe and beyond had the opportunity to learn the essential neurosurgical anatomy, planning of surgical procedures, handling of neurosurgical equipment, and advanced neurosurgical spinal approaches. The emphasis was very much on practical skills, but with an excellent foundation of theory to support this. The course was highly rated and recommended.

● EANS Research Committee Course

7 April 2022, Florence, Italy

CME Accreditation: 6 European CME Credits (ECMEC®s)

The EANS Research Committee Course took place in presence again after two years of Covid in beautiful Florence. A total of 33 participants and faculty from 17 different countries attended the course. The Course received lots of positive reviews: great faculty, very interactive workshops, good networking, and great oral presentations. The EANS Research Course is a successful event and the conjunction with the EANS Young Neurosurgeons' Meeting works very well. The one-day interactive format seems to be well received by the participants and will be used for the following courses as well.

A special feature of the course is also the session dedicated to the abstracts presentations of the shortlisted candidates of the Aesculap EANS Research Prize Award that ended the course with the voting and announcement of the 2 winners of the Aesculap EANS Research Prize 2022:

Best Clinical Paper

Dr Rene Post (Netherlands): "Ultra-early tranexamic acid after subarachnoid haemorrhage (ULTRA): a randomised controlled trial"

Best Laboratory Paper

Dr Nicolas Neidert (Germany): "T-Cell dysfunction in the glioblastoma microenvironment is mediated by myeloid cells releasing interleukin-10"

11th Annual EANS Young Neurosurgeons' Meeting

8-9 April 2022, Florence, Italy

CME Accreditation: 11 European CME Credits (ECMEC®s)

The 11th Annual EANS Young Neurosurgeons' Meeting took place in Florence after the Research Course on 8-9 April 2022. The Annual EANS Young Neurosurgeons' Meeting is a well-established event and the conjunction with the EANS Research Course works very well. A total of 85 participants and faculty members from 23 countries attended the meeting. The Meeting's industry partners were also involved in short workshops/demos that were organised during the breaks for the delegates. The Meeting received positive feedback: "Great way of learning future trends of spine and vascular surgery", "Rich networking opportunities", "Excellent faculty", "Great topics", "Good balance between lectures and discussions", "Excellent organisation", "Wealth of Global Neurosurgery speakers".

EANS Spinal Step I Hands-On Course

23-24 May 2022, Geneva, Switzerland

This two-day course is intended to be the basis for all young neurosurgeons who are interested in developing surgical skills and techniques necessary for operating with confidence and improving patient care in degenerative spine surgery.

It is a spine surgery course allowing beginner residents (1st to 3rd year) to learn through theoretical sessions, simulation, and cadaver workshops, the basis of spine surgery in a safe and ultra-modern environment (SFITS).

In May 2022, 16 participants and 8 faculty members attended the course. By the end of the course, participants were able to perform the following procedures: Cervical disc and plating, Cervical posterior foraminotomy, Lumbar disc herniation, Lumbar stenosis, Lumbar instrumentation, and Vertebroplasty. Most of the trainees enjoyed the course and congratulated the team on the quality of the course. The waiting list for this course is also very long and this will likely lead EANS to organise the course twice a year in order to accommodate as many requests as possible.

EANS Basic Endovascular Course

21-22 June 2022, Amsterdam, The Netherlands

After the first successful EANS Endovascular Course in January 2020, the second course was held in Amsterdam, The Netherlands. In June 2022, the third course took place with 45 participants and 8 faculty members. The international faculty consisted of dual-trained neurosurgeons as well as neurointerventional specialists that were happy to provide insights into their endovascular activities and experiences.

The increasing endovascular treatment options and practice force neurosurgeons to be informed about these treatment strategies since they take part in the decision process of whether their patients should undergo endovascular or open surgical treatment. Only a small part of the neurosurgical community in Europe has practical experience in neuroendovascular treatment strategies. Young Neurosurgeons especially lack insights into the chances and challenges of endovascular therapies, which hampers their objective assessment skills for neurovascular diseases. This course aims at young neurosurgeons that wish to achieve a basic understanding of endovascular treatment, including their strengths and pitfalls. The course was successful receiving lots of good reviews: "Rich programme not only scientific but also social", "Perfect food", "Wonderful Organising Committee". The course will take place again in June 2023 in Amsterdam.

● EANS Lyon Hands-On Course

27 June - 1 July 2022, Lyon, France

The summer edition of this very popular Hands-On Course was held at the end of June in Lyon. The course was again a big success and highly appreciated by the doctors who had the opportunity to reserve a place. 20 participants and 12 faculty members attended the course. For the summer edition, over 100 doctors were reported on the waiting list.

● Annual EANS Vascular Section Meeting

5-6 September 2022, Nice, France

CME Accreditation: 9 European CME Credits (ECMEC®s)

The 9th Annual EANS Vascular Section Meeting took place for the first time in presence after two years of virtual editions. Once again, the meeting was run in conjunction with the ESMINT Congress in Nice. 90 participants from all over Europe and beyond attended the Meeting.

The registration fee granted access to the Wednesday EANS-ESMINT Joint sessions to all the Meeting's participants. Like in previous years, the programme comprised keynote lectures (with a good number of renowned names from the US) and talks selected based on the 67 submitted abstracts.

The aim of this meeting follows the tradition of providing a platform for as many as possible of the members to present their own work and devote the majority of the programme to oral presentations of submitted abstracts and to plenary discussions. Also, this year we were glad to receive very positive evaluations about the scientific level of the programme, its faculty, and the general organisation.

● EANS Students' Pre-Congress Course

15 October 2022, Belgrade, Serbia

This was the first-ever medical students' event organised by the EANS with the Young Neurosurgeons' Committee taking the lead. 68 participants from all over Europe and beyond attended the course. The course took place just before the EANS Annual Congress in Belgrade and was divided into three parts: basic research, training, and mentorship in neurosurgery. It was the first step towards founding an international student network supported and guided by the EANS, the Young Neurosurgeons Network. At the conclusion of the course, two students were honored with the Best Student Abstract Award:

Olga Ciobanu (Austria): "The site of origin of medulloblastoma: does the neurosurgical perspective support the current concept from molecular data?"

Thor Loewe Busse (Denmark): "Perfusion computed tomography as a screening tool for pending delayed cerebral ischemia in comatose patients after aneurysmal subarachnoid haemorrhage: a retrospective cohort study".

The two students were also awarded complimentary registration for the EANS Annual Congress in Barcelona.

● EANS Peripheral Nerve Surgery Pre-Congress Course

16 October 2022, Belgrade, Serbia

CME Accreditation: 8 European CME Credits (ECMEC®s)

The EANS Peripheral Nerve Surgery Pre-Congress Course aims at giving a 360° perspective and insight into one of the most challenging and rewarding fields in neurosurgery – peripheral nerve surgery. The programme was tailored to cover all important issues: Nerve Trauma – Tumor – Compression. This, of course, includes physical examination, imaging and electrophysiology, as well as detailed information on every pathology, treatment strategy, pitfalls, and new developments.

Experts from all over the world shared their knowledge and experience with the 33 delegates.

A major key to the deeper understanding of this prosperous neurosurgical field was the discussions.

The course was a great success and received very high remarks and positive reviews from the delegates.

● EANS Microneurosurgery Hands-On Course

10-13 November 2022, Rotterdam, The Netherlands

22 Participants

The third edition of the EANS Microneurosurgery Hands-On Course successfully took place in Rotterdam, offering a complete microvascular experience, including teaching on all types of anastomoses as well as experimental microsurgery at the Karolinska Institute, by those involved in microsurgical research and the sterling EANS faculty. This course took place at the Microsurgical Excellence Center in the Erasmus MC in Rotterdam and is part of an ongoing collaboration on experimental microsurgery between the Erasmus MC and “Iuliu Hatieganu” University Cluj-Napoca.

Participants left with highly positive reviews regarding the scientific level of the course and the overall organisation.

● EANS Cranial Step I Hands-On Course

22-25 November 2022, Brno, Czech Republic

The 5th EANS Basic Course in Cranial Surgery took place at Masaryk University Brno, Czech Republic. This dissection course is most suitable for neurosurgical residents in their first years of training as it focuses on the essential neurosurgical anatomy, the planning of surgical procedures, the handling of basic neurosurgical equipment, and the basic neurosurgical cranial approaches.

This is yet another one of the most popular courses at EANS with over 200 doctors on the waiting list.

The course was again highly rated and appreciated by its 20 delegates.

● **EANS Advanced Course in Spinal Surgery Part I: Extended Indications & Advanced Operative Techniques**

27-29 November 2022, Edinburgh

CME Accreditation: 19 European CME Credits (ECMEC®s)

40 delegates and 13 faculty members attended the EANS Advanced Course in Spinal Surgery, Part I, which took place in Edinburgh and focused on advanced surgical techniques and extended indications.

The EANS Advanced Course in Spinal Surgery has become an annual event, following the success of the inaugural EANS courses in Spine Surgery held in Opatija, Croatia in 2007 and 2008. Since 2015 the course has been organised in cooperation with EUROSPINE and is part of the EUROSPINE Equivalence Advanced Programme.

During this course, the delegates had the opportunity to hear from renowned surgeons about their surgical pearls, notions, and future trends in spine surgery. Besides the various overview lectures on key topics of advanced spine care, there were many interactive sessions with concrete and challenging case discussions. Furthermore, delegates gained hands-on skills training with the latest technologies during the cadaver lab workshops that took place at the Old Medical School (Anatomy) of the University of Edinburgh.

The target audience was recently qualified neurosurgeons and neurosurgeons specialised in spinal neurosurgery as well as orthopedic surgeons interested in spinal procedures; last year residents were also welcome to attend. The course received high evaluations, especially for the quality of the lectures and the practical sessions in the cadaver lab.

The EANS Advanced Course in Spinal Surgery Part II will involve complications and management and will take place again in Edinburgh.

● **EANS White Matter Dissection Course**

8-9 December, Tours, France

The 4th EANS White Matter Dissection Course took place at the Laboratoire d'Anatomie de la Faculté de Médecine of Tours on 8-9 December 2022.

The course was limited to 24 participants and focused on the anatomy and function of white matter tracts and their implications in Neurosurgery.

This is another very successful EANS hands-on course with over 100 doctors in the waiting list. The reviews were once again highly positive especially regarding the practical sessions.

EANS Endorsed Courses



The EANS receives every year a high number of endorsement requests from other Institutions/Hospitals/Scientific Committees.

The EANS endorsement process follows the below eight strict criteria:

- > The scientific program should be submitted for review and must be approved by the EANS Board Member for Scientific Matters
- > At least 25% of the faculty should be EANS members
- > Hands-on courses will be considered according to the number of participants per station
- > The official Language should be English
- > Discount of at least 10% on the standard registration fee should be offered to EANS Individual Members
- > The organisers should agree to display/ distribute EANS promotional materials
- > One-page report should be submitted after the event to the EANS President and the EANS Board Member for Scientific Matter (possibly specifying also how many EANS members attended the event)
- > It is highly recommended that the national neurosurgical society auspices be obtained before requesting the EANS endorsement

In 2022, EANS has endorsed the below list of courses:

Ultrasound Training in Neurosurgery

25/03/2022, Barcelona

Lyon's International Multidisciplinary Pituitary Course

30/03/2022 - 01/04/2022, Lyon

Advanced Hands-on Course in Skull Base Surgery

5-7/05/2022, Duesseldorf

Athens White Matter Dissection & Neurosurgical Anatomy Course

16-20/05/2022, Athens

From the Mountains to the Sea, from Geneva to Naples, from Occiput to Ilium

06-10/09/2022, Geneva

5th Mapping Course

15-18/11/2022, Barcelona



Research Fund



The EANS Research Fund aims to nurture young researchers who are developing a research career. Applicants should be either neurosurgical trainees, research fellows or junior consultants (5 years or less). The awards are available to neurosurgeons in all member countries of the European Association of Neurosurgical Societies to encourage European cooperation and collaboration. This fund provides seed grants across the various neurosurgical specialties addressing operative neurosurgery (microsurgery), brain injury, vascular neurosurgery, oncology, spine surgery, functional neurosurgery, peripheral nerve surgery, cerebrospinal fluid disorders, paediatric neurosurgery and pre-clinical neuroscience.

Both laboratory and clinical research projects are eligible for funding. There is a maximum of one submission per applicant, to be submitted by a principal-named applicant, plus a maximum of five co-applicants. Each award of €10,000 should be spent within 12 months of receipt.

In 2022, 80 abstracts were submitted and accepted for review. The winners were 8; 5 of them were sponsored by Zeiss, Olympus, Integra, Elekta and the JEAN BRIHAYE Fund.

EANS2022 Research Grants

Nagesh Shanbhag (Sweden): Fate of the glymphatic system and its implications for cognitive dysfunction in mild traumatic brain injury (GLYCO-TBI)

Anto Abramovic (Austria): Biomechanical validation of CT-measured bone mineral density in the lumbar spine

Stefan Wanderer (Switzerland): The role of the vasoprotectant losartan in prevention of delayed cerebral vasospasm and neuronal injury after experimentally-induced subarachnoid hemorrhage in rabbits

INTEGRA 2022 Research Grant

Hugo Layard Horsfall (UK): First-in-human experience using novel ultraflexible low-impedance electrode arrays: an IDEAL Stage 1 study

JEAN BRIHAYE 2022 Research Grant

Lucia Darie (UK): Understanding hydrocephalus in subarachnoid haemorrhage

ELEKTA 2022 Research Grant

Matthias Tomschik (Austria): Assessing functional outcome after epilepsy surgery - A connectomics approach

ZEISS 2022 Research Grant

Francesco Restelli (Italy): Utilization of a new miniature confocal microscope (CONVIVO system) to identify tumor tissue during CNS tumors resection – a preliminary prospective observational in-vivo study

OLYMPUS 2022 Research Grant

Toma Spiriev (Bulgaria): Three-dimensional photorealistic atlas of neurological surgery

Webinars



Throughout 2022, the EANS organised 76 webinars with the purpose of educating the global neurosurgical community. The EANS involved all its Sections and Task Forces to contribute and become part of the continuous efforts to deliver top-quality education to physicians, trainees, and medical personnel worldwide.

Announcements of the upcoming webinars are usually launched on Wednesdays or Thursdays at 5 pm CET/CEST and can be found on the EANS website.

The booking and preparation process for each webinar are handled by the assigned coordinator and overseen by the respective Section/Committee/Task Force Chair.

To maximise participation, each webinar is widely promoted through various EANS communication channels, including the website, newsletter, and social media platforms. These efforts result in gathering a range of 50 to 300 participants per webinar.

Furthermore, every webinar is recorded and subsequently uploaded to both the EANS website and the Academy. Notably, the best-performing webinars receive approximately 1000 hits on the EANS YouTube channel within one year after the live event.

EANS Webinars

Section of Skull Base Neurosurgery – **19 webinars**

Section of Cerebrospinal Fluid (CSF) – **16 webinars**

Section of Peripheral Nerve Neurosurgery – **10 webinars**

Section of Spinal Neurosurgery – **9 webinars**

Section of Vascular Neurosurgery – **8 webinars**

Section of Trauma and Critical Care (TCC) Neurosurgery – **7 webinars**

The Young Neurosurgeons Committee – **3 webinars**

Section of Functional Neurosurgery – **2 webinars**

Section of Pediatric Neurosurgery – **2 webinar**

- > The booking and preparation are managed by the assigned coordinator & supervised by the Section/Committee/Task Force Chair.
- > Each webinar is widely promoted via all EANS communication channels and attracts an audience of around 50 to 300 participants
- > All webinars are recorded for subsequent upload to the EANS website & Academy
- > Best performing webinars have gathered approximately 1000 views on the EANS YouTube channel within roughly one year following the live event

Podcasts



The EANS DURA podcast project was launched in 2021. Neurosurgeon Marike Broekman picked the brains of neurosurgeons and interviewed them about what keeps them up at night. This podcast for neurosurgeons, fellows, residents and medical students was sponsored by the European Association of Neurosurgical Societies.

In the first episode, Marike Broekman interviewed Philippe Schucht, a neurosurgeon from Bern, Switzerland, discussing his global neurosurgery work in Myanmar.

The second episode of DURA featured an interview with Faith Robertson, who talked about the impact of Covid-19 on neurosurgery training and her work on Task Shifting and Sharing.

Another episode featured Marike Broekman’s interview with Karl Schaller, the past president of the European Association for Neurosurgical Societies (EANS). They explored topics such as neurosurgical connections, the EANS, and the new foundation.

Gail Rosseau joined the podcast to discuss diversity in neurosurgery and her contributions to global neurosurgery, shedding light on the pressing issues in the field.

Silvia Hernandez Duran, the president of the EANS Diversity Committee, engaged in a conversation with host Marike Broekman, discussing the importance of diversity in neurosurgery.

Wilco Peul discussed various topics, including the role of neurosurgeons during the Covid-19 pandemic, traumatic brain injury, the new EANS journal, and the significance of being proactive with courage and curiosity.

Jane Rasmussen shared insights on caring for brain tumor patients, emphasising the importance of courage and empathy.

Nicolas Sampron provided insights into the future of neurosurgery, the role of social media, and the broader landscape of neurosurgical practices.

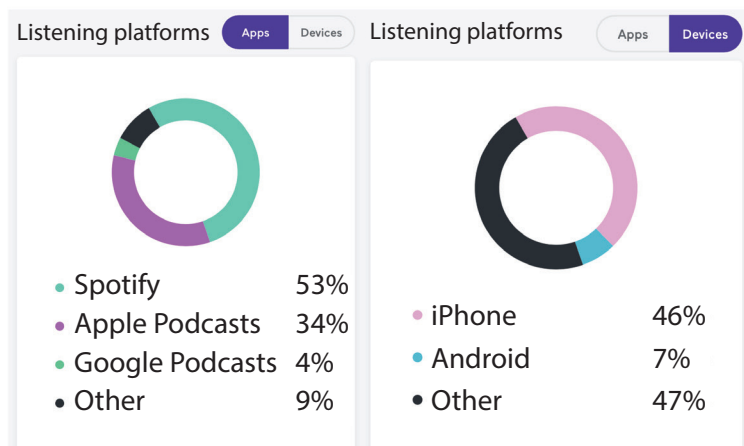
Host Marike Broekman and Saskia Peerdeman engaged in a discussion about training in neurosurgery. They explored topics such as the transition to online education, building resilience, and forging successful careers in neurosurgery.

The tenth episode featured an interview with Andreas Demetriades, the current President of the EANS. They discussed the future of the EANS, including the role of online meetings and new opportunities within the association.

Season 1: Episodes

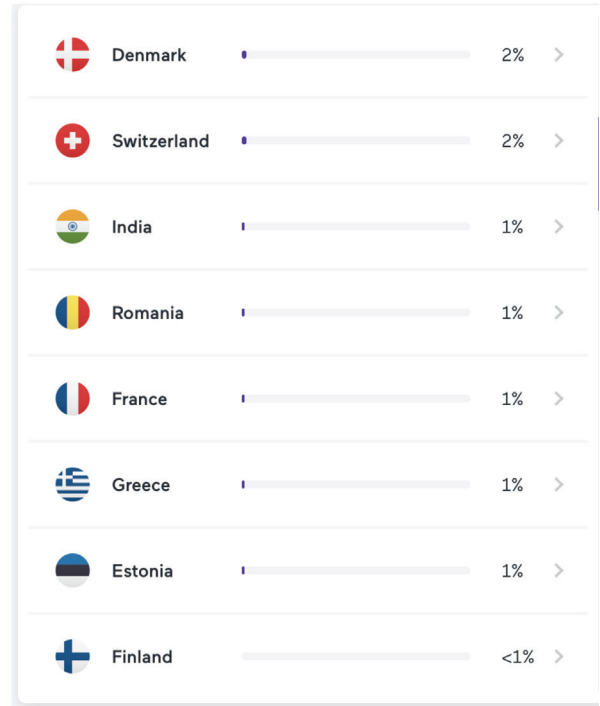
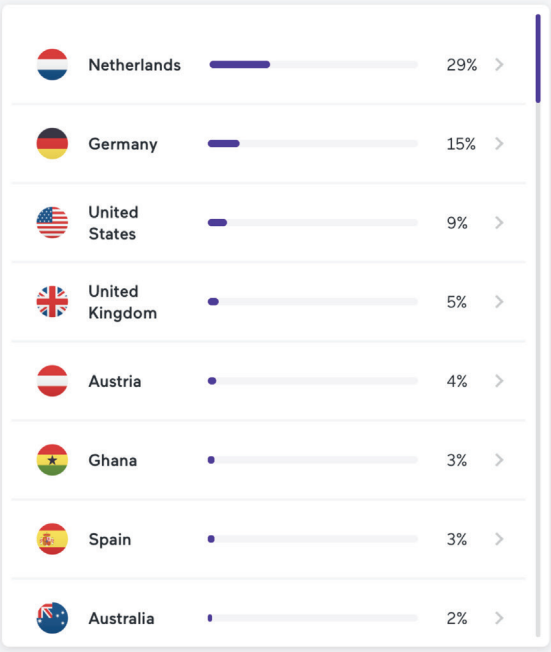
- 8 episodes online, 2 will follow shortly
- 1-6-2021: 1186 listeners

WHERE TO LISTEN

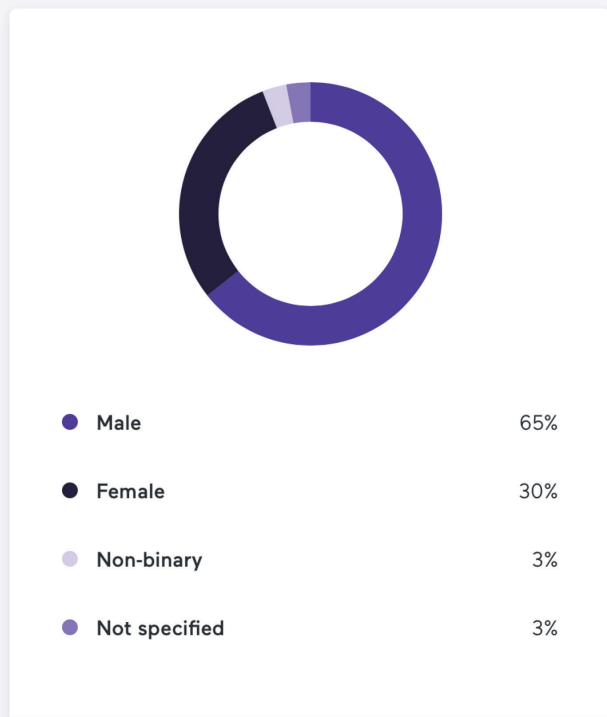


Webinars

Geographic location

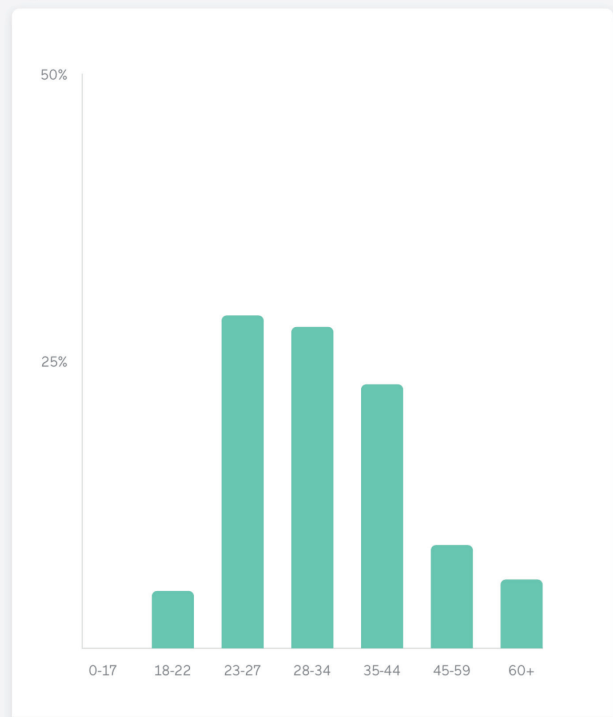


Gender



Source: Spotify.

Age



Source: Spotify.

The EANS Academy



The Academy was visited by more than 500 unique users in 2022.

The most recent uploaded content in the Academy is the EANS2022 Belgrade Congress, as well as the “Copenhagen Video Atlas” and the “Craniotomy Atlas”.

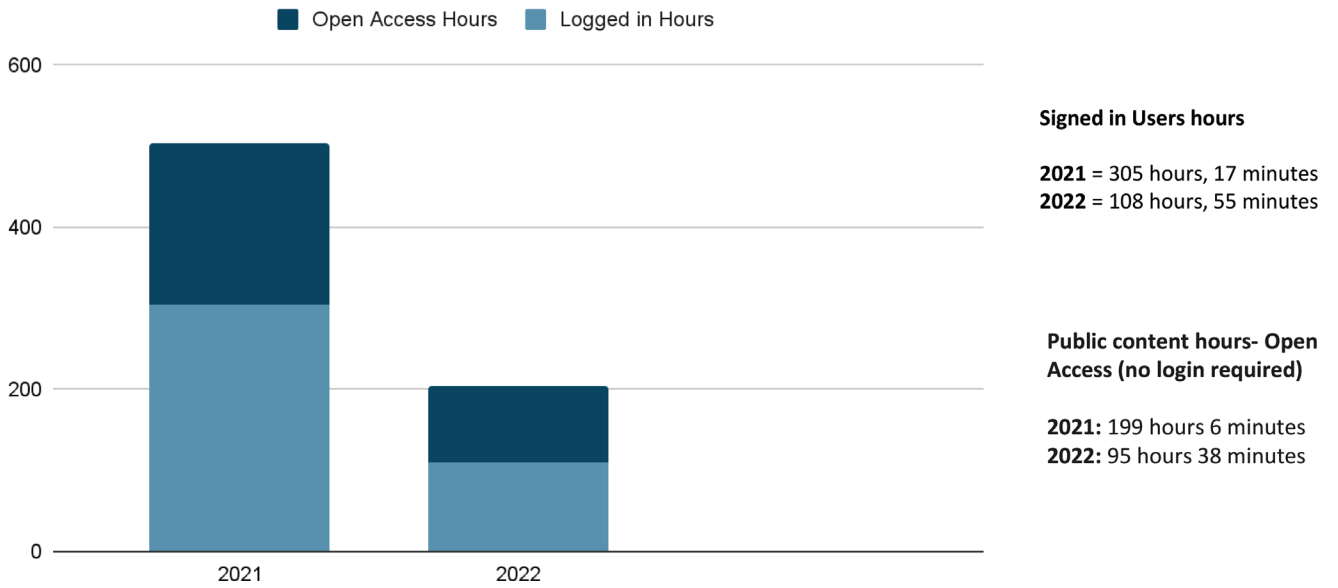
You can visit the EANS Academy via the official EANS website www.eans.org

Signed in Visitors and their Visits

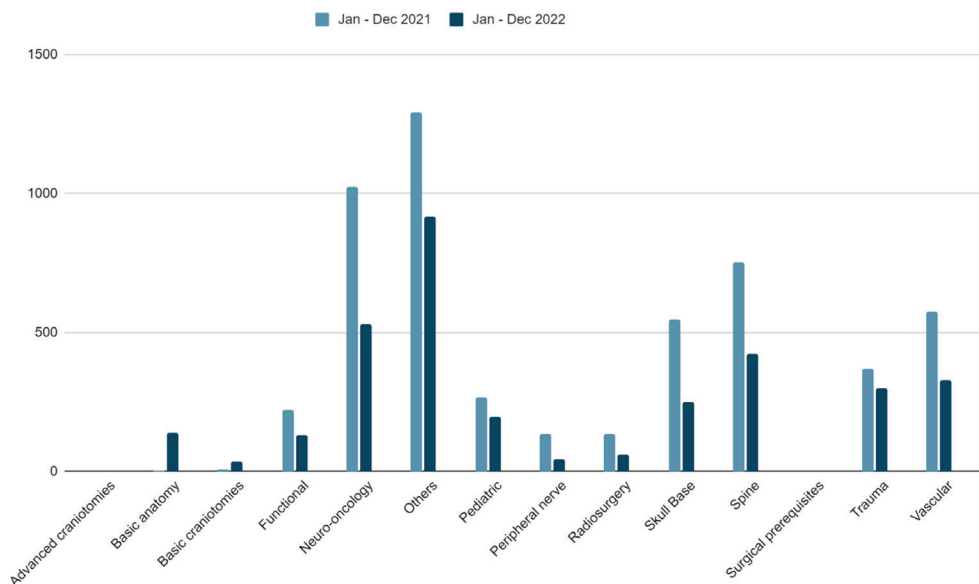


	Signed in Visitors	Signed in Visits
January 1, 2021	35	59
February 1, 2021	39	61
March 1, 2021	49	91
April 1, 2021	46	77
May 1, 2021	43	85
June 1, 2021	43	67
July 1, 2021	30	51
August 1, 2021	39	61
September 1, 2021	97	276
October 1, 2021	96	200
November 1, 2021	50	105
December 1, 2021	26	53
January 1, 2022	32	58
February 1, 2022	30	40
March 1, 2022	26	39
April 1, 2022	24	31
May 1, 2022	34	41
June 1, 2022	19	47
July 1, 2022	19	25
August 1, 2022	19	42
September 1, 2022	80	323
October 1, 2022	73	150
November 1, 2022	30	46
December 1, 2022	32	138

Hours of content watched per year



Topic Visits from 2021 - December 2022



Academy for European Neurosurgical Excellence through Innovation and Diversity



AENEID



Co-funded by the
Erasmus+ Programme
of the European Union

The idea behind the Academy for European Neurosurgical Excellence through Innovation and Diversity (AENEID) project came from the awareness that neurosurgery is one of the most demanding healthcare disciplines and that there was by that time no programme at the European level to provide neurosurgery residents with a standardised training pathway.

AENEID aimed to create a new educational paradigm that would revolutionise the field by improving the way residents were selected, trained and assessed, creating a new generation of excellent physicians who would work as talented and compassionate neurosurgeons, utilising the most innovative technologies. This would be achieved by involving six first-year residents in an innovative training programme, which would prepare candidates in such a way that they would have the highest chances of achieving excellence in this profession.

Therefore, the AENEID project was set to build a European network among neurosurgery residents and staff from European centres of excellence (under EANS guidance), leading simulation companies and university experts in psychology, ethics, clinical empathy and communication. Thanks to this unprecedented training pathway, European neurosurgeons would excel in terms of performance, clinical empathy and self-confidence, fostering the 'patient safety first' concept.

The main target groups of the project were young citizens and professionals of the higher education system, in particular students at the university and especially those students who were willing to go on a mobility, as well as staff employed at the university (both academic and administrative) mainly from the International Relations Units and IT units within the university.

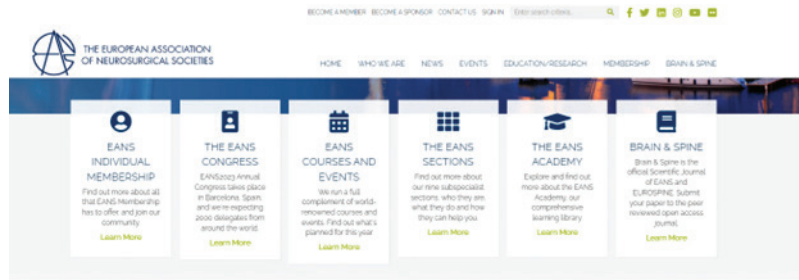
The AENEID Project officially started with the enrollment of all the participants from the Aeneid Neurosurgery Centers of Excellence, with the first active training activity taking place on the 4th and 5th of July in Milan and from the 6th to the 8th in Geneva.

AENEID coordinator: Fondazione IRCCS Istituto Neurologico Carlo Besta (FINCB)

Project partners: Universiteit Leiden, European Association of Neurosurgical Societies (EANS), Les Hôpitaux Universitaires de Genève, CAE Healthcare GmbH, Aegis Srl, University of Pecs, Medizinische Universität Innsbruck, Humboldt-Universität zu Berlin, Universiteit Maastricht, Universitätsmedizin Greifswald, Univerzitet u Beogradu, BBZ Srl.

More information can be found on the official webpage: <https://neurostream.academy/about/aeneid-info>.

Our website (eans.org)



NEWS AUGUST 2023 PRESIDENT'S MESSAGE

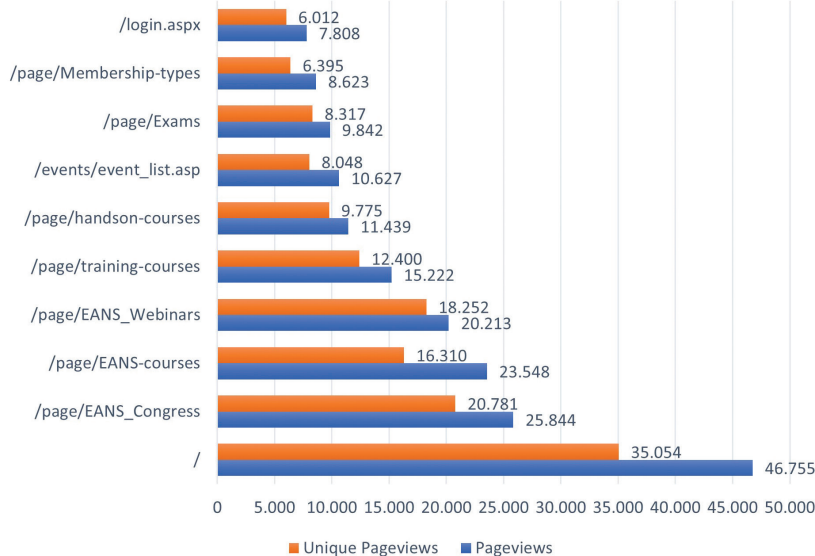
August is the month of holidays and relaxation and I do hope that you are taking this opportunity for a well earned rest. Later this month we are all set to host the third ever popular Training Course of the year in the beautiful city of Porto. Furthermore, preparations are well underway for our annual flagship event in September (24-28th). Read more:

EANS FOR UKRAINIAN WAR



Total Visitors	156644
Average	429,16

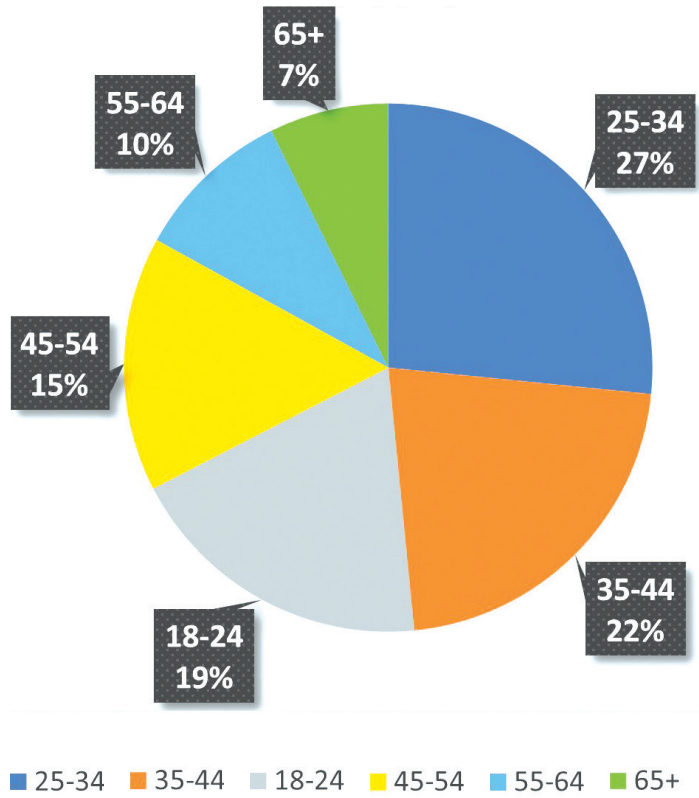
PAGE PREVIEWS



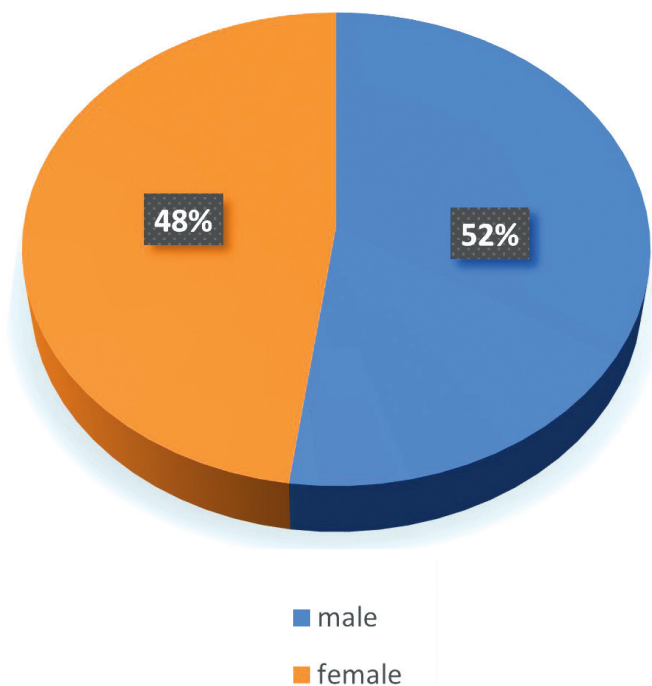
Visitors by Country

Germany	12.429	11,97%
United Kingdom	8.295	7,99%
Italy	7.434	7,16%
United States	6.059	5,84%
Spain	3.967	3,82%
Switzerland	3.742	3,60%
India	3.312	3,19%
Netherlands	3.063	2,95%
Türkiye	3.051	2,94%
France	2.851	2,75%
Greece	2.730	2,63%
Belgium	2.573	2,48%
Serbia	2.369	2,28%
Austria	2.363	2,28%
Poland	2.120	2,04%
Romania	1.987	1,91%
Portugal	1.713	1,65%
Russia	1.505	1,45%
Ukraine	1.389	1,34%
Sweden	1.344	1,29%
Brazil	1.334	1,28%
Saudi Arabia	1.168	1,13%
Finland	1.039	1,00%
Croatia	961	0,93%
Czechia	943	0,91%
Others	24.075	23,19%

Visitors by Age



Visitors by Gender



Social Media

EANSonline
Active Social Media

THE EUROPEAN ASSOCIATION OF NEUROSURGICAL SOCIETIES
Get Social with #EANSonline!

Platform	Followers/Subscribers	Description
Facebook	6.4K Followers	Facebook is preferred from people for fun and entertainment activities
Twitter	1.2K Followers	Offering instant and short updates, and initiating discussions over case studies
LinkedIn	7.6K Followers	Social media tool for professionals. Our neurosurgical community is highly engaged in this platform
Instagram	2.2K Followers	More popular to youngsters. Images are the main tool and stories are a powerful promotional tool
Youtube	2.8K Subscribers	We get a lot attention and traffic to our channel through our successful webinars.

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Membership & Affiliations



European Brain Council



Health Technology Assessment
Stakeholder Network (HTA)



World Federation of Neurosurgical
Societies



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OF NEUROSURGICAL SOCIETIES

BRAIN
& SPINE



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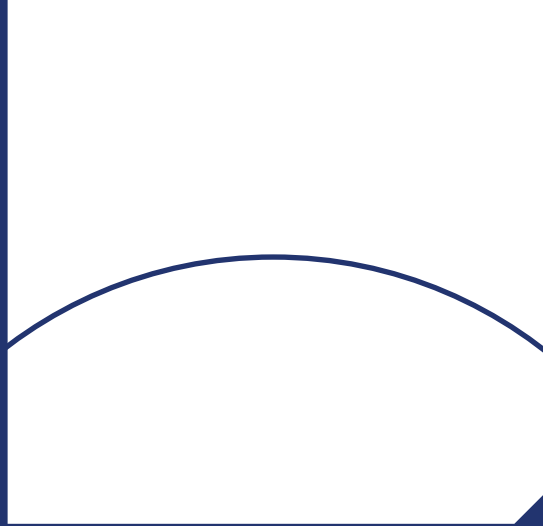


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