



# Newsletter

Leading headache science, education and management globally

## Letter from the President

### Contents

**Update from the  
Honorary Secretary**  
Patricia Pozo-Rosich

**The role of  
international scientific  
societies today**  
Cristina Tassorelli and  
Arne May

**Cephalalgia  
Highlights 2021**  
Kuan-Po Peng and  
Arne May

**IHS Membership  
Committee**  
Mario Peres

**IHS Awareness  
Campaigns**  
Henrik Schytz, Anna  
Andreou and Arão  
Belitardo de Oliveira

**Meeting report –  
GMPS/MENA**  
Aynur Özge

**Spotlight on IHS  
Affiliate Societies**  
Egypt, USA

**Best of IHC 2021 –  
educational  
programme in China**  
Shengyuan Yu

**IHS grant  
opportunities 2022**

**Calendar of events**

### Editorial board

Cristina Tassorelli  
Patricia Pozo-  
Rosich  
Mario Peres  
Henrik Schytz  
Carol Taylor



## Cristina Tassorelli

Dear Colleagues

The first quarter of 2022 has brought about some disruption of in-person activities due to the enduring pandemic. In this context, we were forced to postpone the IHS Strategic Meeting planned for March to May. Even more disturbing has been for all of us the shocking news about the 'special military operation' launched by Putin against Ukraine, which has caused thousands of deaths among civilians, without sparing children.

IHS has received poignant messages from several Russian members in support of their Ukrainian colleagues. This happened in the early days of the conflict, now our Russian members are silent, possibly silenced by internet disconnection or by fear of punishments. We have also received messages demanding sanctions against Russian members and beautiful testimonies of colleagues from Ukraine neighbouring countries that are tirelessly and heroically helping and supporting the refugees in many ways.

The use of force against a Nation, be it Ukraine, Sudan, Syria or Myanmar – just to mention military operations conducted in this century that caused unacceptable deaths among civilians – deserves to be strongly and resolutely condemned at the political and human level. Though international scientific societies must remain apolitical in order to realise their mission at its highest level, as discussed and underscored in an Editorial published recently in Cephalalgia (see later), the IHS Board has decided to pause its activities in Russia, and we are discussing specific initiatives in favour of Ukrainian doctors to be put in place as soon as possible.

The worrying political landscape and the persistence of the pandemic have not prevented IHS in moving forward with its planned projects. The elected Board has been enriched with Co-opted members from different areas of the world to reflect the consideration of IHS for inclusivity and geographical representation: Amr Hassan from Cairo (Egypt), Augustina Charway-Felli from Accra (Ghana), Min Kyung Chu from Seoul (Korea), Maria Teresa Goicochea from Buenos Aires (Argentina), and Teshamae Monteith from Miami (USA).



A ragged horse on the walkway in front of the railway station after a bomb was dropped in Kramatorsk (Ukraine) on April 8 2022 (from La Repubblica Newspaper, 9 April 2022)



**ROPE-IHS will foster dissemination and uptake of headache science and medicine in countries with limited resources**

**IHS-GPAC will hold a 2nd Education in Headache to Healthcare Practitioners in Africa**

**OneNeurology initiative aims to unite and strengthen neurology-related groups**

The **ROPE-IHS programme** (Regional Outreach Programme of the IHS), launched for fostering dissemination and uptake of headache science and medicine in countries with limited resources for the benefit of patients, is up and running. The first country where the programme is being rolled out is Malawi in Africa. In collaboration with the charity *DREAM project for Africa* (Disease Relief through Excellent and Advanced Means), we have gathered the necessary background regarding the level of headache medicine in the country by means of a survey conducted on a representative number of clinical officers working in 13 healthcare centres in Malawi. Building on the knowledge derived from this survey, IHS is now customising a training initiative to be delivered locally for uptake, implementation and diffusion.

IHS is also contributing to the initiative **2022 Education in Headache to Healthcare Practitioners in Africa** organised in collaboration with the African Academy of Neurology (AFAN), the International Headache Society Global Patient Advocacy Coalition (IHS-GPAC), and the World Federation of Neurology (WFN). The virtual event will take place in May.

Along the lines of reducing the impact of headache globally, IHS has participated in the **OneNeurology initiative**, a multi-stakeholder, patient-focused partnership initiated by the European Federation of Neurological Associations and the European Academy of Neurology, which aims to unite and strengthen neurology-related groups to stimulate collaborative advocacy, action and accountability for the prevention, treatment and management of neurological disorders worldwide. OneNeurology has contributed multiple comments to consultation of the World Health Organization on the 10-year intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders (GAP), to be adopted by the World Health Assembly in May 2022 and subsequently implemented at country level. Migraine and headaches have a primary focus in GAP, a plan that represents an integrated approach to neurology and to neurological conditions throughout the life-course and envisions a world in which "brain health is valued, promoted, and protected across the life course; neurological disorders are prevented, diagnosed and treated, and premature mortality and morbidity are avoided; and people affected by neurological disorders and their carers attain the highest possible level of health, with equal rights, opportunities, respect and autonomy".

A priority area for IHS is represented by its **Membership**, because the larger the constituency, the stronger and more influential is the society. In this context Mario Peres has put together an impressive and energetic multi-continental group in the Membership Committee (see report later in this newsletter). They are working to achieve worldwide member representation, at least one member from all countries. To this end they have developed density maps, language barriers and cultural peculiarities in order to tailor programmes according to local needs and better focus our communication. Campaigns highlighting membership benefits will be delivered to the regions less represented by members and headache societies.

As regards the positioning of Headache in research funding, this seems highly unsatisfactory in many countries, including the USA and the EU. To this end, IHS is sponsoring with the American Headache Society the **Headache Research Priorities**, a multi-stakeholder initiative that involves headache experts from different areas of the world, the US National Institute of Neurological Disorders and Stroke and patient representatives. The aim of the initiative is the identification of the top three research priorities in the areas of animal and human models, pathophysiology, diagnosis and management, treatment, access and disparity, research workforce and quality of life. The output of this collaborative effort will be used for increasing the awareness on the need to fund headache-targeted projects via manuscripts/white papers and other modalities of dissemination.

**Cristina Tassorelli, MD, PhD**  
[cristina4IHS@gmail.com](mailto:cristina4IHS@gmail.com)

## Update from the Honorary Secretary



**Patricia Pozo-Rosich**

It is my pleasure to be able to share with you an Update on IHS activities since the last Newsletter distributed in December 2021.

### **IHC 2021**

Recordings from the 20th International Headache Congress are now available for members through the **IHS website**. You can watch the Presidential Symposium, presentations on the use of new therapies, joint IHS-EHF-IASP session, migraine and the vascular system, migraine aura, medication-overuse and post-traumatic headache, brain localisation and mechanisms of migraine symptoms, headache and COVID-19, idiopathic intracranial hypertension, TACs, new treatment targets for headache, and more!

The presentations will be online until the end of May.

### **Membership**

In 2021 we had the largest ever number of members, and I am pleased to report excellent membership numbers so far this year. If you have not yet renewed, or wish to join and take advantage of our membership benefits, please visit the **IHS website**.

### **Grants and fellowships**

We are delighted that, as worldwide travel is now possible, we can re-open our grant programmes.

Grants are available for Junior and Secondary Headache Research Grants and Headache Science Awards. Please see page 16 of this newsletter for more information and application deadlines, some of which are very soon!

IHS also offers the Visiting Professors programme which sends headache specialists as representatives of IHS to attend regional meetings, or teach at a headache centre, in countries that might need or want increased headache education and motivation and where, without financial support, attendance of an international specialist would not be possible. Usually, two key opinion leaders in headache visit to teach at a national or regional meeting/congress with the host country selecting the topics. This programme is open to lower-income countries – you can find more information and an application form on the **IHS website**.

### **IHS Regional Headache Conference**

With the rapid advancement of science in headache medicine in recent years, IHS has decided to hold a smaller conference (Regional Headache Conference – RHC) in non-IHC years to ensure the international headache community is kept updated. The aim is to hold the conference in a region that is different from where the previous or the next IHC has been or will be held to ensure worldwide diversity of IHS activities.

The first RHC will be held in Buenos Aires, Argentina, in September/October 2022. The Chairs will be IHS Past-President, Messoud Ashina, and a local Chair, Maria Teresa Goicochea. The Scientific Programme Committee will be a mix of experts from the IHS Board and Committees and local experts.

**IHC 2021  
recorded  
presentations  
available online  
for IHS  
members**

**Grant  
opportunities  
available –  
see page 16**

**1st IHS Regional Headache Conference will take place in Buenos Aires – first IHS conference held in Latin America**

The meeting will be held over 2 days and will welcome delegates from the wider Latin American region, and also from around the world. There will be a variety of scientific sessions and courses covering international scientific data and practices, but also sessions based on local needs, and practical courses for young delegates to guide them in their future careers, e.g. how to write a grant proposal, run a clinical trial, find funding opportunities.

We are very excited about this first RHC as it will also be the first time IHS has held a conference in Latin America.

**IHS Guidelines**

IHS Guidelines for Controlled Clinical Trials in Cluster Headache and also Guidelines on Clinic-Based Headache Registries have been completed and submitted for publication in Cephalalgia. Guidelines on post-traumatic headache and idiopathic intracranial hypertension are ongoing and hopefully will be published later in 2022.

A Working Group is reviewing the scientific evidence for acute and preventive treatments. The results will be compiled into GRADE tables with a grade for each drug, and will be published on the IHS website. The first tables will be for the monoclonal antibodies and will be published in the next few months.

**IHS Governance**

In May the IHS Trustees and Committee Chairs will meet to discuss the future of the society. During the meeting short- and long-term goals will be discussed and we welcome any suggestions from our members. Please **contact me** if you would like to share your views on how IHS can have more impact in the world of headache medicine. We are particularly interested in how IHS can be effective in lower-income countries where headache medicine and science is not as accessible.

**Patricia Pozo-Rosich**  
[ppozo@vhebron.net](mailto:ppozo@vhebron.net)

## The role of international scientific societies today

**Nationality does not play a role in scientific exchange – science and the rules of science are inherently supra-national**



**Cephalalgia Editorial  
30 March 2022  
Professor Cristina Tassorelli  
and Professor Arne May**

The abrupt change in the geopolitical landscape that we are all facing at this moment has originated a wave of reactions in scientific societies from all regions of the world including the International Headache Society. We notice that the consistent response is the stigmatization of national aggression and, at the same time, the acknowledgment of personal and professional ties to colleagues, who, more often than not, have become friends regardless of boundaries and political landscapes. Politics do not define people and most of us have not chosen which nationality we have. Indeed, nationality does not play a role in scientific exchange since science and the rules of science are inherently supra-national.

In this panorama, besides and beyond the personal and humane urge to participate or activate initiatives aimed at helping those who are in great need, it is of the utmost importance to continue and even intensify international collaborations and exchanges in the scientific field.





**International scientific societies with an international constituency bear the responsibility to disseminate science and foster the uptake of scientific advances in as many countries in the world as possible**

Science is not a marginal activity, it is not an ornament.

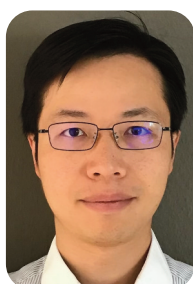
Scientific societies are non-governmental organizations with altruistic objectives that have been working selflessly to promote the public understanding of science, to raise the status of scientific disciplines and professions, to ultimately improve the lives of patients. Scientific societies that, like the IHS, have an international constituency do bear the responsibility to disseminate science and foster the uptake of scientific advances in as many countries in the world as possible. It is not an easy task, the barriers are multifold (limited funding of the Society, economic situation of the countries, local political barriers, cultural issues), in some cases they are enormous, in others insurmountable. But this should be no excuse to avoid trying together by pooling expertise and resources, by cultivating our commitment and enthusiasm, and by liaising with relevant stakeholders.

Good science improves the lives of many people and contributes to creating better nations.

Headache science has taken a tremendous leap forward since the creation of the IHS in Germany exactly 40 years ago. Millions of patients have benefitted from these advances and will do so even more in the future. Though this may be perceived as not relevant when unwise politicians are shaking the spectre of nuclear war, it is a mission that goes beyond headache science and shall be pursued, even more so in dangerous times, when priorities are being reshaped.

The IHS will intensify efforts to accomplish its mission, to bring science where it is most needed, to reduce disparities, to foster inclusion and ultimately to peacefully, but strongly oppose the consequences of violence, obscurantism, and propaganda.

## Cephalalgia Highlights 2021



**Kuan-Po Peng and Arne May**

**The Editor-in-Chief thanks all our reviewers who, despite the pandemic, continued to help with their expertise and excellent advice**

It is with great pleasure we highlight some important scientific gems published in *Cephalalgia* in 2021. *Cephalalgia* continues to be the leading source for clinical, basic, and imaging science produced by the world's leading clinicians and scientists in the field of headache. We trust the reader appreciates that we can, for practical reasons, only highlight a portion of the most recent advances in headache science.

The year of 2021 was still under the shadow of the current pandemic. A search of "COVID-19" and "headache" in PubMed yielded 2,079 results, 103 of which specifically concerned headache and its association with COVID-19. We have learned from the studies in 2020 that headache is one of the leading clinical symptoms in COVID-19, however, the phenotype is unspecific, and the mechanism possibly resembles a physiological response to acute infectious disease. In this newsletter, we will introduce some articles investigating the mechanism of the association between COVID-19 and headache, and the impact of COVID-19 in patients with headache disorders.

An in-depth Viewpoint/Perspective by Messlinger et al. summarised the mechanism of the activation of the trigeminal system, which accounted for both headache and anosmia in COVID-19. Clinically, patients with headache versus those without are more likely to have anosmia. The association between headache and anosmia may originate from the



## How COVID-19 infection/vaccination may elicit headache

inflammatory responses in the nasal mucosa, which subsequently activates the meningeal nociceptors. The viewpoint highlights the hypothesis that the coronavirus may enter the brain de-facto through the trigeminal nerve as this would explain the loss of function (anosmia) and the gain of function (headache). Calcitonin gene-related peptide (CGRP) released from the activated trigeminal afferents may further suppress the olfactory function and contribute to headaches. This also explains why patients with pre-existing headache disorders are more vulnerable to headache as a symptom after COVID-19 infection. Patients with primary headache disorders, such as migraine, have an altered sensitivity of the trigeminovascular system at baseline, which renders them vulnerable to fluctuating CGRP levels and external stress secondary to an infection.

Karl Messlinger, Winfried Neuhuber and Arne May  
Activation of the trigeminal system as a likely target of SARS-CoV-2 may contribute to anosmia in COVID-19. *Cephalalgia* 2021;42:176–180.

The vulnerability of the development of headache in migraine patients in association with COVID-19 is not restricted to an infection. In a case-control study, research from Japan explored whether pre-existing headache diagnosis influences the incidence of headache development after COVID-19 vaccination. Headache incidence after vaccination was significantly higher in patients with migraine, but also in those with non-migrainous headaches, compared to the control group. Using mRNA-based vaccines, the incidence of headaches was in all cases higher after the second dose compared to the first dose.

Koji Sekiguchi, Narumi Watanabe, Naoki Miyazaki, Kei Ishizuchi, Chisato Iba, Yu Tagashira, Shunsuke Uno, Mamoru Shibata, Naoki Hasegawa, Ryo Takemura, Jin Nakahara and Tsubasa Takizawa  
Incidence of headache after COVID-19 vaccination in patients with history of headache: a cross-sectional study. *Cephalalgia* 2021; doi 10.1177/03331024211038654.

## The stress of lockdown is not by default detrimental to headache patients

Despite the general belief, this well-done study from the Netherlands showed that the lockdown led to a decrease in monthly migraine days or acute medication uses after 1 and 4 months, despite anxiety and uncertainty at that time and despite other potential adverse effects of lockdown. The authors suggested that this improvement is a combined result of working at home, reduced demands on social lives and the increased flexibility of time organisation. However, this ostensible beneficial effect of lockdown cannot be generalised to all migraine patients. In Italy, migraine patients reported higher general loneliness and decreased social support, especially for the patients with higher disease activity. Long-lasting interruption of social interactions may still be detrimental, especially in fragile patients with a higher pain load. For these patients, structured support and interventions are even more needed to maintain their psycho-physical wellbeing.

Iris E Verhagen, Daphne S van Casteren, Simone de Vries Lentsch and Gisela M Terwindt  
Effect of lockdown during COVID-19 on migraine: a longitudinal cohort study. *Cephalalgia* 2021;41:865–870.

Chiara Cerami, Chiara Crespi, Sara Bottiroli, Gaia Chiara Santi, Grazia Sances, Marta Allena, Tomaso Vecchi and Cristina Tassorelli  
High perceived isolation and reduced social support affect headache impact levels in migraine after the Covid-19 outbreak: a cross sectional survey on chronic and episodic patients. *Cephalalgia* 2021;41:1437–1446.

## Various pharmacological triggers link to CGRP pathways

Various pharmacological triggers to migraine attacks have been reported over the last years. For example, levocromakalim triggers migraine-like headaches in patients with migraine with a very high and robust provocation rate. Different pharmacological triggers may involve the same pathway in headache provocation. Colleagues from Denmark and France examined three pharmacological triggers (glyceryl trinitrate, cilostazol and levocromakalim) in an animal model of migraine. All of them activated CGRP signalling pathways, and importantly both receptor antagonism and antibody neutralisation of CGRP were effective inhibitors of pharmacologically induced hypersensitivity from all three triggers. On the other hand, stimulation of trigeminal ganglia and brain stem tissue samples with cilostazol and levocromakalim did not result in release of CGRP, and vasodilation following levocromakalim stimulation was independent of CGRP receptor antagonism. There is certainly still a lot to learn and these models may be very useful in the study of migraine mechanisms.

Sarah L Christensen, Rikke H Rasmussen, Charlotte Ernsten, Sanne La Cour, Arthur David, Jade Chaker, Kristian A Haanes, Søren T Christensen, Jes Olesen and David M Kristensen  
CGRP-dependent signalling pathways involved in mouse models of GTN- cilostazol- and levocromakalim-induced migraine. *Cephalalgia* 2021;41:1413–1426.



## Ways to improve CGRP as a biomarker for migraine (attacks)

Even though the role of CGRP is undoubtedly critical in migraine, the use of CGRP as a biomarker has been inconsistent among different studies. To solve this problem, colleagues from Germany and Austria proposed a new method to measure plasma CGRP levels in humans with higher reliability. With the assistance of peptidase inhibitors and deep-freezing, the plasma CGRP levels remained stable after 12-hour exposure to normobaric hypoxia. This new method should be validated in future longitudinal studies. Colleagues from Spain raised another issue of why CGRP can be sometimes unreliable as a biomarker. In a case-controlled longitudinal design, salivary levels of CGRP were compared between migraineurs versus healthy controls and across different migraine phases. Migraine patients had a higher CGRP level in the interictal phase, and the levels further increased towards the migraine attacks. CGRP levels are therefore elevated in the preictal, ictal, and post-ictal phases, respectively, compared to the baseline (interictal phase). However, 79.6% of the patients in the study had the attack-dependent fluctuation of CGRP levels, whereas 20.4% did not. This study suggests the existence of both CGRP-dependent and CGRP-independent attacks in spontaneous migraine attacks. Whether the pathophysiology and response to treatment may differ in these two groups of patients will be highly interesting in the future.

Karl Messlinger, Birgit Vogler, Annette Kuhn, Julika Sertel-Nakajima, Florian Frank and Gregor Broessner  
CGRP measurements in human plasma – a methodological study. *Cephalalgia* 2021;41:1359–1373.

Alicia Alpuente, Victor J Gallardo, Laila Asskour, Edoardo Caronna, Marta Torres-Ferrus and Patricia Pozo-Rosich  
Salivary CGRP can monitor the different migraine phases: CGRP (in)dependent attacks. *Cephalalgia* 2021; doi: 10.1177/03331024211040467.

## The role of other peptides than CGRP

Neuropeptides released by an activated trigeminal nerve have always been considered potential biomarkers of migraine. CGRP remains under the spotlight in 2021; however, the role of other neuropeptides was also explored. Colleagues from Turkey measured the plasma levels of neuropeptides in 20 paediatric migraine patients versus 20 healthy controls across different migraine phases. The plasma levels of both vasoactive intestinal peptide (VIP) and pituitary adenylate cyclase-activating polypeptide-38 (PACAP-38) were significantly higher in migraine patients compared to healthy controls in both the ictal and interictal phases, whereas those of CGRP or substance P did not differ. The authors also found the plasma level of PACAP-38 was negatively associated with the attack frequency of migraine. Another group from Spain investigated amylin and CGRP levels in interictal migraine patients versus healthy controls. Amylin is another member of the calcitonin peptide family and is structurally related to CGRP. In the study, 58 patients with episodic migraine, 191 with chronic migraine and 68 healthy controls were recruited. The authors could show that the plasma levels of amylin were exclusively higher in chronic migraine patients than in episodic migraine patients and healthy controls, whereas the level of CGRP was higher in both episodic and chronic migraine patients than in healthy controls. They hence suggest amylin levels may serve as a diagnostic biomarker for chronic migraine. However, both studies together further raise the issue of interstudy differences in neuropeptide measurement. Both studies are highly valuable to stimulate discussions and there is no question that we need more reliable methods and further replication studies to validate the use of neuropeptides as biomarkers.

Fatma Hanci, Yasemin Baranoglu Kilinc, Erkan Kilinc, Sevim Turay, Mustafa Dilek and Nimet Kabakus  
Plasma levels of vasoactive neuropeptides in pediatric patients with migraine during attack and attack-free periods. *Cephalalgia* 2021;41:166–175.

Pablo Irimia, Iván Martínez-Valbuena, Ane Mínguez-Olaondo, Clara Domínguez-Vivero, Juan-Antonio Sánchez-Arias, Eduardo Martínez-Vila, María-Rosario Luquin and Rogelio Leira  
Interictal amylin levels in chronic migraine patients: a case-control study. *Cephalalgia* 2021;41:604–612.

In clinical practice, a high number of different medications is used for migraine prevention and also migraine abortion. The research group around Marina de Tommaso from Italy investigated the effects of erenumab (a CGRP-receptor monoclonal antibody). The authors stimulated the trigeminal and extracephalic dermatome and measured laser-invoked potential. A single dose of erenumab specifically inhibited the laser-invoked potential from trigeminal, but not extracephalic stimulation. This study is highly relevant and probably suggests a different representation of CGRP-receptors on trigeminal afferents. Another collaborative study from the UK and Italy used deep phenotyping to investigate potential predictors for triptan responses. Certain features, such as unilateral pain, the presence of phonophobia, the presence of cranial autonomic symptoms and the presence of



## Mechanisms of anti-CGRP treatment and triptans revisited

premonitory symptoms were associated with a favourable clinical response. These data support the idea that clinical efficacy of a triptan may be associated with the activation not only of the nociceptive, but also other associated physiological systems (for example, the trigemino-autonomic reflex as in patients who experience cranial autonomic symptoms). For researchers looking into the possibility of individualised treatment in migraine these contributions are highly interesting and should be further explored.

Marina de Tommaso, Marianna Delussi, Eleonora Gentile, Katia Ricci, Silvia Giovanna Quitadamo and Giuseppe Libro  
Effect of single dose erenumab on cortical responses evoked by cutaneous a-delta fibers: a pilot study in migraine patients. *Cephalalgia* 2021;41:1004–1014.

Michele Viana, Grazia Sances, Salvatore Terrazzino, Chiara Zecca, Peter J Goadsby and Cristina Tassorelli  
Predicting the response to a triptan in migraine using deep attack phenotyping: a feasibility study. *Cephalalgia* 2021;41:197–202.

Some of the primary headache disorders, such as migraine and cluster headache, are particular also as they feature specific and delimitable preictal/postictal phases. These phases suggest a specific brain activation which has started before the beginning of headache and outlasts the active pain phase. Several studies published in 2021 focussed on headache cycles beyond the ictal phase. Colleagues from Denmark reported pre-cluster symptoms in 86% of patients preceding a cluster bout, suggesting a specific non-migraine underlying pathophysiology even before the headache starts. A multiclinic study from Chinese colleagues looked into nearly 5,000 patients with migraine, 21.5% of whom reported some premonitory symptoms. The proportion is relatively low and may reflect the difference in study design and regional differences or, and this needs examination, a further difference between Asian and Caucasian populations regarding cluster headache phenotype, proposed earlier by Peng and colleagues also in *Cephalalgia*. The headache group from King's College London investigated the migraine postdrome and compared the differences of postdrome in both triggered and spontaneous attacks. Their data suggest postdromes are common and symptomatically similar to the prodromes. Besides, there was good agreement between triggered and spontaneous migraine postdromes, which renders the provocation model an ideal setting to study the postdrome experimentally.

Adam Sebastian Pedersen, Agneta Snoer, Mads Barloese, Anja Petersen and Rigmor Højland Jensen  
Prevalence of pre-cluster symptoms in episodic cluster headache: is it possible to predict an upcoming bout? *Cephalalgia* 2021;41:799–809.

Xiaolin Wang, Ziming Yin, Yajun Lian, Yanmei Xu, Yajie Li, Jiale Liu, Qun Gu, Fanhong Yan, Zhaoli Ge, Yu Lian, Dongmei Hu, Sufen Chen, Rongfei Wang, Xiaoyan Chen, Jing Liu, Mingjie Zhang, Ye Ran, Ping Zhou, Jingyi Ma, Xudong Lv, Zhao Dong and Shengyuan Yu  
Premonitory symptoms in migraine from China: a multi-clinic study of 4821 patients. *Cephalalgia* 2021;41:991–1003.

Kuan-Po Peng, Tsubasa Takizawa and Mi Ji Lee  
Cluster headache in Asian populations: similarities, disparities, and a narrative review of the mechanisms of the chronic subtype. *Cephalalgia* 2020;40:1104–1112.

Nazia Karsan, Abigail Pérez-Rodríguez, Karthik Nagaraj, Pyari R Bose and Peter J Goadsby  
The migraine postdrome: spontaneous and triggered phenotypes. *Cephalalgia* 2021;41:721–730.

*Cephalalgia* published in 2021 many other highly cited reviews and original papers ranging from bench and animal work to clinical case series, genetic and neuroimaging and epidemiological and pharmacological studies. There is unfortunately not enough space here to highlight them all. We are indebted to our Associate Editors and all our reviewers who worked hard and helped with excellence, experience and professionalism in pandemic times. They really ensure that the journal content reflects recent advances in headache research, and at the same time raised and retained the reputation of the journal amongst other neurological publications. We are proud that the time from submission to first decision is stable and indeed continues to slightly decrease. We hope that you, the reviewers and readers of *Cephalalgia*, will continue to help us in the future.

## More than just headaches: prodromes and postdromes in migraine and cluster headache



## IHS Membership Committee



**Mario F P Peres**

**The members of the Committee are a truly international, multi-continental group**

**Our aim is to achieve worldwide member representation, at least one member from all countries**

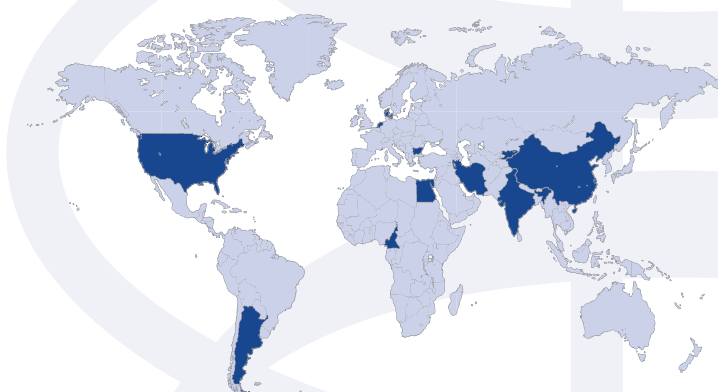
It has been an honour to lead the efforts of the IHS Membership Committee. A truly international, multi-continental group has joined this task; Marco Lisicki from Argentina representing Latin America, Todd Schwedt from the United States representing North America and Oceania, Amr Hassan from Egypt representing North Africa and the liaison member for the IHS Board of Trustees, Henrik Schytz from Denmark representing Europe and the Education Committee, Irene de Boer from the Netherlands and also representing Europe, Debashish Chowdhury from India representing South and Southeast Asia, Min Su and Zhao Dong from China representing East Asia, Kunduza Karbozova from Kyrgyzstan representing Central Europe and Central Asia, Vesselina Groseva from Bulgaria representing Eastern Europe, Nooshin Yamani from Iran representing the Middle East, and Calixte Kuate from Cameroon representing Western, Central, Eastern and South Africa. For the geographical distribution, we adopted the **Global Burden of Disease** classification of regions and subregions.

IHS members are now more than 3,000, considering both paid and free-of-charge members. Current national headache societies affiliated to IHS are 54. Our objectives are to increase our number of members in all categories and the number of affiliated national societies. We aim to achieve worldwide member representation, at least one member from all countries – if not possible, at least from GBD subregions; and to achieve worldwide national headache society or headache chapters from neurological societies representation in all GBD subregions. Density maps have been developed by Irene de Boer; more data is on its way so we can further understand the needs and develop actions.

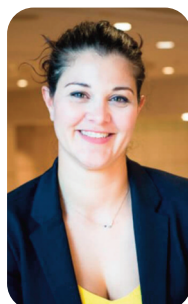
The Membership and Education Committees work hand in hand so all efforts are reinforced. Currently we are searching the language barriers for each region so we can tailor the programmes according to local needs and better focus our communication. Campaigns highlighting membership benefits will be delivered to the regions less represented by members and headache societies.

If you have ideas on how IHS membership can be enhanced, or suggestions on how to increase our membership representation worldwide, **please do get in touch!**

### IHS Membership Committee Members



# Raising awareness about primary headaches – the Tension-Type Headache and Cluster Headache Awareness Campaigns



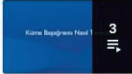

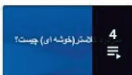
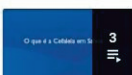


**Henrik Schytz,  
Anna Andreou  
and Arão  
Belitardo de  
Oliveira**

**IHS Awareness  
Campaigns offer  
essential  
information to  
assist  
diagnosing and  
managing  
specific  
headache  
disorders**

The Education and Electronic Media Committees have once again joined forces to launch campaigns on tension-type headache (TTH) and cluster headache (CH).

The IHS Tension-Type Headache Awareness Campaign focused on educating healthcare professionals, offering the essential information to assist them in managing patients with TTH. In this campaign IHS members presented short videos in their own languages on 'What is tension-type headache', 'How to diagnose tension-type headache' and 'How to treat tension-type headache'. The content behind these videos was developed to raise awareness and promote education amongst clinicians and healthcare

professionals worldwide on TTH and its treatment. The core message was developed in collaboration with Drs Francesca Puledda, Jessica Ailani and Sait Ashina, and with the IHS Education Committee. We greatly appreciate all IHS members who have been involved, and who have worked so hard to make this project possible. These were IHS members from all around the world: Francesca Puledda, Yen-Feng Wang, Abdul Malik, Marco Lisicki, Michele Viana, Kirill Skorobogatykh, Arife Çimen Atalar, Marcio Nattan, Mark Obermann, Mohammad Al-Karaghali, Cedric Gollion, Min Kyung Chu, Ryotaro Ishii, Jessica Ailani, Yessika Milena Rojas Villegas, Gianluca Coppola, Nina Latysheva, Doğa Vurallı, Renato Arruda, Amr Hassan, Somayyeh Baghizadeh, Kyungmi Oh, Daisuke Danno, David García Azorín, Roberta Messina, Julia Azimova, Harika Ertem, Joao Jose Carvalho, Olivia Begasse de Dhaem, Faraidoon Haghdoost, Kyung Min Kim and Tsubasa Takizawa.

	<b>Turkish/Cluster Headache</b> Add description
	<b>Greek/Cluster Headache</b> Add description
	<b>Farsi/Cluster Headache</b> Add description
	<b>Portuguese/Cluster Headache</b> Add description
	<b>Korean/Cluster Headache</b> Add description
	<b>Japanese/Cluster Headache</b> Add description

The 21st of March was 'Cluster Headache Awareness Day', a prominent event to promote CH on scientific and public levels. The spring equinox represents the perfect choice for a disease with such a great circadian and circannual rhythmicity. Indeed, a vast majority of CH subjects experience a CH reactivation during the seasonal shift in spring and autumn; in some cases, the circannual timing becomes so scheduled that patients do not plan activities and slowly slide towards social withdrawal just for the fear of a novel cluster period. The 21st of March is well remembered by CH patients, because starting from this date when the daylight increases there are positive effects for patients with night attacks. We truly believe that expanding knowledge and awareness about CH features, comorbidities and quality of life burden will have a huge positive impact for CH

**We truly believe that expanding knowledge and awareness about CH features, comorbidities and QoL will have a huge positive impact for CH patients as well as for society**

patients as well as for society. The concept behind this campaign was similar to the TTH campaign, where the core message was developed in collaboration with Drs Matthew Robbins, Manjit Matharu and Todd Schwedt, and with the IHS Education Committee. There are still more videos to be released in this campaign, and we again thank all the great IHS members for their time and efforts in the campaign.

What is next? The Education and Electronic Media Committees plan a new campaign, which will be about the most frequent secondary headache, medication-overuse headache, which we look forward bringing to you soon.

The IHS Awareness Campaigns can be accessed through the **IHS website**.



## Meeting report – Global Migraine and Pain Summit, 5th MENA and the 2nd Turkish African Headache and Pain Management Meeting Antalya, Turkey, and online, October 2021



**Aynur Özge**

**The congress reached over 700 online participants in 43 countries**

The Global Migraine and Pain Summit, 5th MENA (Middle East and North Africa) and the 2nd Turkish African Headache and Pain Management Meeting was held in Antalya, Turkey, and as a hybrid conference from 27–30 October 2021, with simultaneous translation into English and Turkish.

The congress reached over 700 online participants in 43 countries, plus over 60 delegates in person, and enjoyed presentations from 76 speakers, Chairs and Discussion Panellists. There were 41 oral presentations, 15 poster presentations and two in-person workshops.

Headache experts from all over the world contributed to the meeting with their valuable lectures and discussions. The first day of the meeting was exclusively devoted to two hot topics: COVID-19 and headache, and the changing nature of headache



**Over 50  
clinicians were  
able to present  
their work as  
oral or poster  
presentations**



practice with telemedicine. Diagnostic and management gaps in migraine, as well as strategies to improve quality of life in migraine, were also discussed.

On the second day there were lectures on headaches related to changes in intracranial pressure, the clinical and therapeutic management of trigeminal autonomic cephalalgias, novel therapies in both the paediatric population and adults, such as anti-CGRP medications, and persistent idiopathic facial pain.

The final day highlighted important points of the management of headache in special groups such as in children, the elderly and pregnant women. Interventional therapies in pain management were also discussed in detail. Training workshops dedicated to the application of these type of therapies for onsite participants were also found to be very instructive. These sessions could also be viewed by online participants.

Besides these scientific lectures drawing great interest, the meeting gave over 50 clinicians the opportunity to present their work as oral or poster presentations.

## Spotlight on IHS Affiliate Member Societies

### Egyptian Headache Society



**Amr Hassan**

**Egypt is  
suffering from a  
huge shortage  
of headache  
specialists to  
meet the  
increasing  
national  
demands**

The Egyptian Headache Chapter is one of the chapters of the parent organisation 'the Egyptian Society of Neurology, Psychiatry and Neurosurgery'. The chapter is currently chaired by Professor Dr Osama AbdulGhani with six board members.

Egypt, which is one of the most heavily populated countries worldwide with a population of >100 million, is suffering from a huge shortage of headache specialists to meet the increasing national demands. The lack of adequate time and resources devoted to headache medicine in Egyptian medical schools and residency curriculum, in addition to



Egyptian Headache Chapter Board members: Dr Osama AbdulGhani (President), Dr Hatem Samir, Dr Mohamed Hamdy, Dr Mona Nada, Dr Nevin Mohiedin, Dr Amr Hassan, Dr Ramez Reda





**The Egyptian society is creating a large-scale national headache registry to rationalise the allocation of economic resources and to help future research**



the lack of specialised headache centres and clinics, are the main causes for this problem. Therefore over the past years the Egyptian Headache Chapter activities have been focusing on three main strategies to fill this gap.

Firstly, we are trying to motivate university hospitals in different Egyptian governorates to establish headache clinics, supporting them with the designs, documents and materials needed. Secondly, we are running a series of educational programmes/courses/workshops to increase the awareness and knowledge of neurologists and primary care doctors about headache medicine, and we are organising an annual headache workshop in parallel to the international Cairo Neurology Conference. In 2022 we hosted some of the world leaders in headache medicine, including Messoud Ashina, Cristina Tassorelli and Paolo Martelletti. Thirdly, we are supporting younger generations of Egyptian neurologists to

attend international headache conferences and providing them with opportunities of clinical and research fellowships to leverage their interest in the field.

On another level, the Egyptian Headache Chapter is currently working on creation of a large-scale national headache registry to rationalise the allocation of economic resources and to help future research. Moreover, we are working on establishment of the local Egyptian headache management guidelines in order to standardise treatment protocols across the country, taking into consideration the economic status and the limited access to some of the therapeutic options. We have worked hard over the past years on raising public awareness about headache through TV programmes and different social media platforms. We are trying to provide very simple yet scientifically sound information about headache through our official Facebook page which is followed now by around 390,000 followers from different Arabic countries.

Headache medicine in Egypt is a growing field. Our mission for the future is to establish headache medicine as a well-recognised subspecialty of neurology in Egypt, and to ensure the best healthcare for our headache patients

## American Headache Society



**Howard Rosen**

The mission of the American Headache Society (AHS) is to improve the lives of people with migraine and other headache disorders. Our organization is comprised of a diverse group of clinicians, scientists, and educators dedicated to the study and treatment of headache and face pain. The society's objective is to promote the exchange of information and ideas concerning the causes and treatments of headache and related painful disorders. Educating physicians, health professionals, and the public and promoting scientific research are the primary functions of our society.

**Our members strive to engage and promote the field of headache medicine, and includes a Diversity, Equity, and Inclusion Task Force collaborating on leadership, inclusivity, and health equity initiatives**



Established in 1958, the AHS has a rich heritage of creating educational programs and leadership opportunities for our members. Dr Peter Goadsby is the current AHS president and will finish his term in June – passing the reigns to Dr Andrew Charles. Currently, the society has more than 20 active Committees and an additional 17 Special Interest Groups which can be found within the **AHS website Board & Committees | American Headache Society**

The society exited 2021 with more than 2,000

healthcare professional members from across the world – including neurologists, scientists, primary care physicians, behavioral health clinicians, dentists, advanced practice providers, trainees, and others. AHS activities include our Annual Scientific Meeting, Scottsdale Headache Symposium, Migraine NextGen, Resident Education Programs, the International Headache Academy, regional symposia, publication of the journal *Headache* and sponsorship of advocacy organizations in the field.

Our members continue to look for ways to engage and promote the field of headache medicine, which includes a Diversity, Equity, and Inclusion Task Force collaborating on leadership, inclusivity, and health equity initiatives. We have built a range of educational program opportunities to meet the needs of a broad audience of healthcare professionals. While our **Annual Scientific Meeting** (June 9–12, 2022) and **Scottsdale Headache Symposium** (November 17–20, 2022) represent our largest gatherings, the society also conducts many educational programs throughout the year that appeal to a broad range of audiences.



The AHS is optimistic about the progress in the field and values our longstanding partnership with the International Headache Society.

## “Best of The International Headache Congress 2021” – educational programme in China



**Shengyuan Yu**

The "Best of The International Headache Congress 2021" educational programme in China was held online on 6 November 2021, hosted by Professor Shengyuan Yu at the Department of Neurology of the Chinese PLA General Hospital, Beijing. The programme was authorised by IHS and hosted by Wiley in China. It was simultaneously broadcast on

**Over 5,700 physicians (around 80% neurologists) watched the live broadcast online, with a total of nearly 30,000 views**

**The meeting was an excellent educational opportunity and there will be more collaborative opportunities in the future**

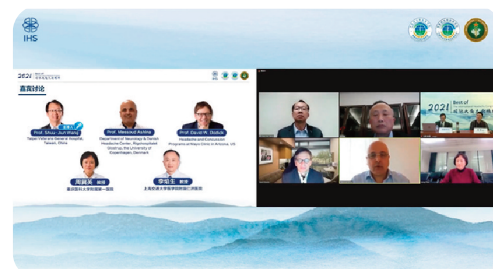
multiple local platforms, including Yimaitong Neurology, Dingxiangyuan, Neurotemporal Information and ImmuneForum, realising face-to-face communication with speakers of the IHC through network technology. Over 5,700 physicians (around 80% neurologists) watched the live broadcast online, with a total of nearly 30,000 views.

In his opening speech Professor Yu expressed his gratitude to all the experts who participated online, especially Professor Cristina Tassorelli, the current IHS President, Professor Messoud Ashina and Professor David Dodick, IHS Past Presidents, and Professor Shuu-Jiun Wang, Chair of the Asian Regional Consortium of Headache (ARCH).

There were two sessions in the programme: Session A: Cutting edge of migraine management and Session B: Management of primary and secondary headaches, which were chaired by Professor Wang and Professor Yu, respectively.

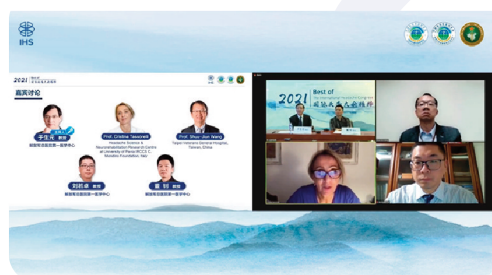
In Session A international speakers Professors Messoud Ashina and David Dodick and local speakers Professors Jiying Zhou and Yansheng Li from China gave presentations on the pathogenesis and diagnosis, new therapies, variants and imaging of migraine.

In the subsequent panel Professor Wang and the four speakers answered and discussed the relevant questions raised by online participating physicians. As for targeted  $K_{ATP}$  channel and  $BK_{Ca}$  channel for the treatment of migraine, which received high attention, Professor Ashina stressed that given the ubiquity of these channels in the human body, the development of future targeted inhibitors needs to be highly selective.



In Session B the international presenters were Professors Cristina Tassorelli and Shuu-Jiun Wang and the local presenters Professors Ruozhuo Liu and Zhao Dong who presented on the trigeminal autonomic cephalalgias, secondary headaches, post traumatic headache, and medication overuse headache.

These presentations were also followed by a panel discussion to discuss and answer questions raised by online physicians. They agreed that the findings of periodic characteristics of cluster headaches are of great significance for further understanding its physiological mechanisms. In addition, Professor Tassorelli expressed recognition to the contribution of Chinese scholars in the field of headache.



To end the meeting Professor Yu thanked the presenters, authoritative experts in the field of headache, for bringing the latest research progress in headache medicine to China – for their rich and comprehensive presentations

which covered many aspects from basic research to clinical treatment in the field of headache. He acknowledged that the meeting was an excellent educational opportunity and expressed a wish that there will be more collaborative opportunities in the future.

## **IHS Grant Opportunities 2022**

### **IHS Junior Headache Research Grants**

The IHS Junior Research Grant aims to support innovative and impactful research from young investigators, promote the career of young investigators in the field of headache, and increase the knowledge base of headache disorders. Applications for basic or clinical headache research, or a combination of basic and clinical research, will be considered.

Applicants must be Junior members of IHS, the Primary Investigator of the research project, and the research project must be completed within 24 months.

**Deadline for applications: 12 May 2022**

### **Secondary Headache Research Grant**

The IHS Secondary Headache Research Grant aims to promote and support research related to secondary headache disorders, including preclinical and clinical aspects, from epidemiology, pathophysiology, clinical presentation to diagnosis and treatment. Applications for basic or clinical headache research, or a combination of basic and clinical research, will be considered.

Applicants must be Junior members of IHS, the Primary Investigator of the research project, and the research project must be completed within 24 months.

**Deadline for applications: 1 June 2022**

### **Visiting Professor Programme**

The Visiting Professors Programme sends headache specialists as representatives of IHS to attend regional meetings, or teach at a headache centre, in countries that might need or want increased headache education and motivation and where, without financial support, attendance of an international specialist would not be possible.

IHS will fund two headache specialists to teach at a national or regional meeting/congress. The engagement should comprise at least two lectures and one course/workshop by each specialist.

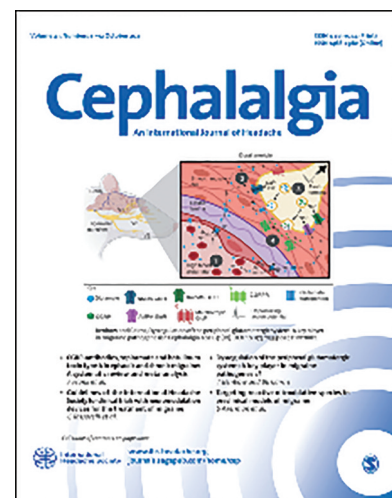
**For more information please visit the [Grants page](#) of the IHS website**



## Registered Reports of studies of trigeminal pain

*Cephalalgia* is now inviting researchers to submit study protocols of planned studies including hypotheses, aims, methods, and expected outcomes of studies they are planning to conduct to *Cephalalgia Reports*. If accepted after peer review, the completed study will be published in *Cephalalgia*.

If the manuscript is accepted, the study protocols will be published in *Cephalalgia Reports* (Stage 1), together with the promise to publish the completed study, independent of the outcome, in *Cephalalgia* (Stage 2). The only requirement is that the Stage 2 study follows in all details the methods outlined in Stage 1. This will incentivise quality and rigour during the Stage 1 preregistration over novelty and statistical significance of the actual Stage 2 findings – allowing negative results to be published at equal level with positive results.



## For papers to be considered for the special issue they must adhere to the following criteria:

1. The study examines relevant aspects of the trigeminovascular system and trigeminal pain.
2. The study is adequately powered for relevant statistical tests of all hypotheses and an appropriate power analysis is reported in detail. This is important to allow for the estimation of a plausible range of true effect sizes with reasonable precision.
3. Data collection has not started. Analyses of existing data will not be considered. The collection of pilot data to determine feasibility is allowed. If pilot data are collected, these data should be described in the initial Stage 1 manuscript.
4. Replications: Direct (close) replications of earlier published studies are interesting, if the planned study implements the same methodology (i.e. data collection, processing, analysis) as the original research within a new sample of participants. Authors must provide a compelling case to justify the value of a direct replication by outlining why the to-be-replicated result is empirically and/or theoretically important to be replicated and why replicability cannot be considered well established for this specific finding.

## Timeline

Stage 1 Registered Report *Cephalalgia Reports* submission deadline: December 2022

Stage 2 Registered Report *Cephalalgia* submission deadline: December 2024

Note: Stage 1 Article processing charge (APC) fee waived to publish the Registered Report article in *Cephalalgia Reports*

For more information please visit the [Cephalalgia website](https://www.cephalgia.org)

## 2ND ANNUAL EDUCATION IN HEADACHE TO HEALTHCARE PROVIDERS IN AFRICA 2022



### WHEN

Saturday, May 14, 2022  
10:00 AM – 5:10 PM

*All times are in Central Africa Time (CAT)*

Education in Headache to Healthcare Providers in Africa (EHHPA). EHHPA is a free virtual program that provides world-class headache and migraine training to providers in Africa.

Don't wait, register [here!](#)

[View Complete Agenda](#)

### DELIVERED IN PARTNERSHIP BY:



International  
Headache Society

### EXCITING TOPICS

Distinguishing Primary & Secondary Headaches:  
Overview of Types, Red Flags Not to Miss

Migraine: Overview of Pathophysiology and Clinical Characteristics

Management of Migraine: Acute and Prophylactic Therapies

Case Based Approach-Acute Treatment 1: Acute Management Options for Migraine in the ER

Case Based Approach-Acute Treatment 2: Criteria for Prophylactic Therapy, Treatment Options

Primary Headache Disorders in Children

Tension-Type Headache: The State of Art

Medication-Overuse Headache: The State of Art

Nonpharmacologic Management of Headache

Strategies for Advocacy in Headache: Professional & Patient Perspectives

Live Panel Discussion with EHHPA Leadership from AFAN, WFN, GPAC and IHS

# Calendar of events

Date	Event	Country	Contact/information
<b>2022</b>			
<b>14 May</b>	2nd Annual Education in Headache to Healthcare Providers in Africa	Virtual	Visit website
<b>4–5 June</b>	Leiden Headache Center into a new era	Leiden, Netherlands	Visit website
<b>9–12 June</b>	64th Annual Scientific Meeting of the American Headache Society	Denver, CO, USA	Visit website
<b>25–28 June</b>	8th Congress of the European Academy of Neurology	Vienna, Austria	Visit website
<b>27–30 July</b>	TOXINS 2022: Basic Science & Clinical Aspects of Botulinum and other Neurotoxins 6th International Conference	New Orleans, LO, USA	Visit website
<b>25–26 August</b>	1st IHS/EHF Headache Research Academy	Baku, Azerbaijan	Visit website
<b>8–11 September</b>	Migraine Trust International Symposium	London, UK	Visit website
<b>19–23 September</b>	IASP 2022 World Congress on Pain	Toronto, Canada	Visit website
<b>29 September to 1 October</b>	<b>IHS Regional Headache Conference</b>	<b>Buenos Aires, Argentina</b>	Visit website
<b>10–12 October</b>	International Conference on Spreading Depolarizations	Salt Lake City, UT, USA	Visit website
<b>21–23 October</b>	3rd Cameroon Academy of Neurology Meeting/African Academy of Neurology Congress 2022	Douala, Cameroon	Visit website
<b>7–10 December</b>	European Headache Federation Annual Congress	Vienna, Austria	Visit website
<b>2023</b>			
<b>14–17 September</b>	<b>21st International Headache Congress (IHC 2023)</b>	<b>Seoul, Korea</b>	Visit website

**Important note:** Events may be cancelled, postponed or go virtual due to the COVID-19 pandemic. Please check each event website for updated information.

If you would like IHS to include your meeting on the IHS website and newsletter please contact **Carol Taylor** with the details.



## New Open Access companion journal for Cephalalgia

### Cephalalgia Reports: A fully Open Access Journal

Published on behalf of the International Headache Society, *Cephalalgia Reports* is a peer-reviewed, open access publication providing an international forum for original research papers, review articles, clinical perspectives, technical reports and short communications.

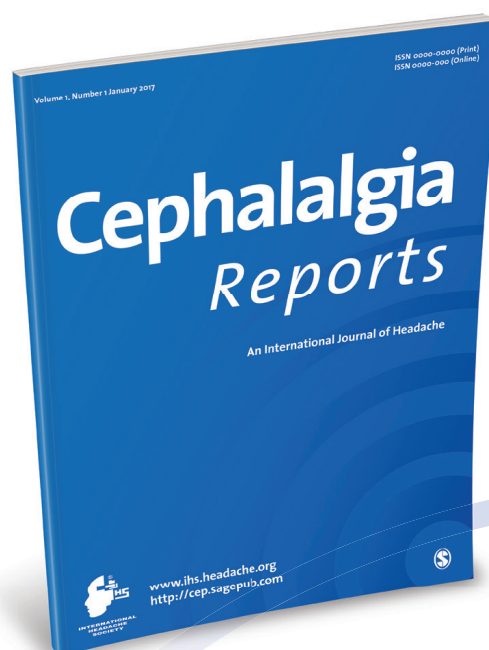
It actively encourages high quality papers in the following areas:

- Emerging observations with translational potential not yet realised
- Reports limited to regional relevance which may validate and add to existing studies
- Negative outcomes
- Technical reports
- Articles with a more clinical emphasis
- Pilot trials which may stimulate therapeutic innovation
- Confirmatory studies

All articles are freely available online immediately upon publication. All articles are rigorously peer-reviewed, and brought to publication as rapidly as possible.

**Now accepting submissions!**

**<https://mc.manuscriptcentral.com/reports>**



For more information including Author Processing Charges, visit [journals.sagepub.com/rep](https://journals.sagepub.com/rep) and click on Submission Guidelines





International  
Headache Society

To advance headache science, education and  
management and promote headache awareness  
worldwide

# Join the IHS

Subscription and online access to *Cephalalgia*  
and *The Neuroscientist*

Free access to the IHS Online Learning Centre

Early access to IHS International Guidelines

Eligibility to apply for IHS Fellowships and  
other awards

Reduced registration to the bi-ennial International  
Headache Congress

Free download of the *Cephalalgia* app



To learn more about our different membership categories and related  
benefits please visit us at

[www.ihs-headache.org](http://www.ihs-headache.org)