



A Growing Neurosurgical Educational Resource

S. THOMSON¹, A. WILLS², P. SMITH³

1. Leeds General Infirmary, Leeds. 2. Queens Medical Centre, Nottingham, 3. University Hospital of Wales



INTRODUCTION

ebrain is a very large, professionally owned, charitable online e-learning programme that supports the CPD and post-graduate education needs of clinical neuroscience doctors in UK, Europe and Worldwide.

The programme was established in 2011 and is strongly supported by the UK, European and Worldwide Neuroscience specialty associations. There are four staff members and more than 10,000 users with access to over 600 interactive sessions including annual formative questions, webinars, virtual patients and other content.

Since March 2017 the ebrain website has used Google analytics so that an accurate record of activity can be recorded. This poster presents the results of the activity analysis.

OBJECTIVE(S)

The aims of this study are to define:

1. How much ebrain is used
2. Where users are
3. Which parts of ebrain are most visited

METHOD(S)

ebrain uses a free source virtual learning environment called Moodle. As with all virtual learning environments users are required to log into the site and their activity is then recorded in an audit log. IP address is also recorded. This audit trail data is held securely within Moodle and used to support activities such as the rewarding of certificates.

Since March 2017 Google analytics has been used to analyse ebrain activity. Personal data is not transferred, only metadata is available from analytics. The data presented in this poster has been taken from the Google analytics and ebrain Moodle sites. Administrator logins are not included in the data that Moodle sends to Google analytics. Data from users that visit the login page but fail to login are not included.

ebrain is owned by the Joint Neurosciences Council (a registered charity). European General Data Protection Regulations govern how data may be used lawfully. The Joint Neurosciences Council privacy and data security policy may be found here: <https://www.jointneurosciencescouncil.org/>

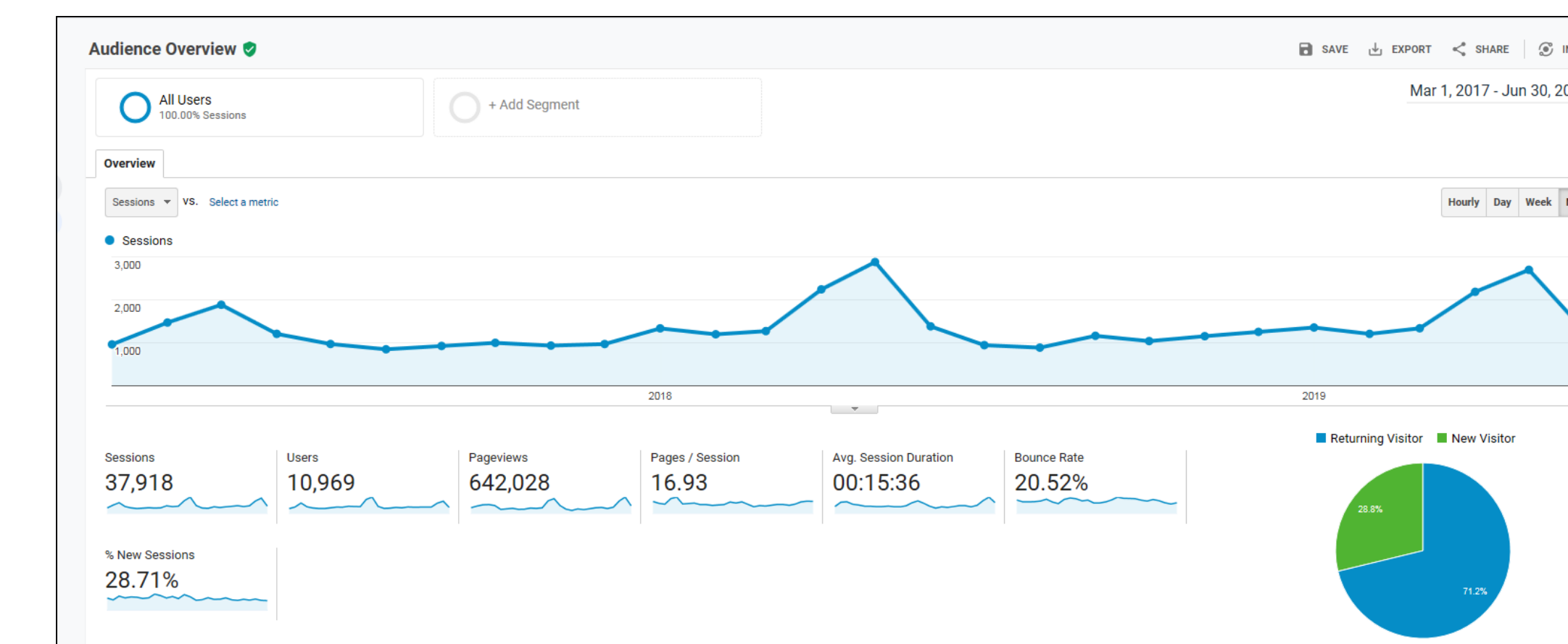
The data presented was last accessed on 16/9/2019.

RESULTS

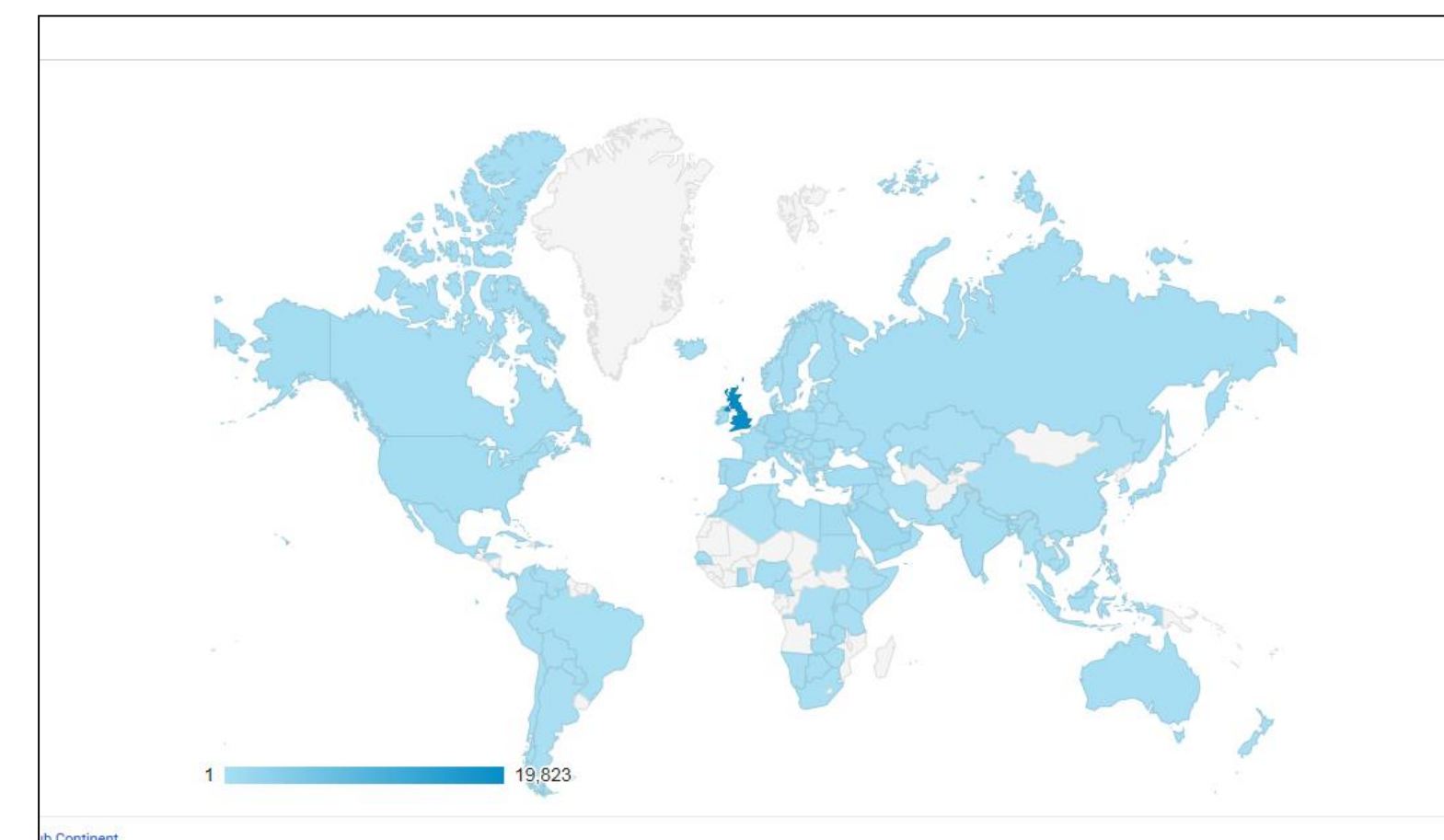
ebrain usage

In the period Mar 1st 2017 – Jun 30th 2019 ebrain has been accessed by 10,969 unique users. A total of 642,028 pages have been opened. There have been 37,918 logins. 71.2% of logins are from returning visitors.

User activity peaks in May (>2,500 logins per month) when the annual formative Neurology and Neurosurgery tests of knowledge are available. Logins increased by 22% between Mar 2017 – Feb 2018 (13,678 logins) and Mar 2018 – Feb 2019 (16,749 logins).



Total Number of users per month



Geographic location of users (from IP address)

Geographic location of users

In the period Mar 1st 2017 – Jun 30th 2019 ebrain has been accessed by at least one user from 139 (71.3%) countries. 52.3% of users are from UK. 78.8% are from Europe and 12.7% from Asia.

Most popular pages on ebrain

ebrain has over 600 different sessions. The most popular sessions are the formative examination sessions

Session name	% of activity
Neurology Test Questions	26.64
Other Questions	12.90
Neurosurgery Test Questions May 2019	5.26
An Introduction to Neurological Assessment	2.18
Neurological History: General Approach and Common Pitfalls	1.46
Preparing the Operative Site	1.35
ST3 boot camp 2018	1.35
FORVAD trial	1.02
Performing a Convexity Craniotomy	1.01
Use of Standard Neurosurgical Equipment	1.01
Acute Symptomatic Seizures v2	0.85
Management Principles of Hydrocephalus	0.83
Clinical Introduction to Neuromuscular Diseases	0.81
Assessment of Patients Presenting with Blackouts	0.76
Virtual patient case: A Relapsing Myelitis	0.76

Most popular pages on ebrain

CONCLUSIONS

ebrain usage remains very high and has grown by 22% in the last year, the formative tests of knowledge in May are the most popular activity, users are mostly from Europe but at least one user has come from 139 countries worldwide. We are exploring whether there is more we can do to support the “Global Neurosurgery” initiative.

The programme is widely supported by a very broad range of organisations including for example the European Neurology Association, Barrow Foundation UK, Neurological Alliance, the Society of British Neurosurgeons and Royal College of Psychiatrists.

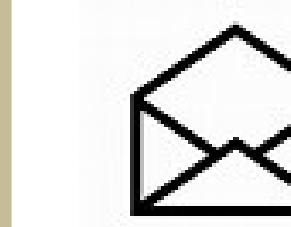
We look forward to seeing how successful the new “MSc like” ST3 course will be. All new ideas are welcomed especially if they come with the offer of help.



An e-learning resource supporting training in the clinical neurosciences



www.ebrain.net



admin@ebrain.net