NEWSLETTER | DECEMBER 2022 | N° 52

BELGIAN BRAIN COUNCIL



IN THIS EDITION

ALZHEIMER'S AND MAGNETO-ENCEPHALOGRAPHY

BRAIN AWARENESS WEEK 2023

EUROPEAN LEAGUE OF RESEARCH UNIVERSITIES' ANNIVERSARY

NEWS FROM OUR MEMBERS

Alzheimer's disease and magnetoencephalography

Magnetoencephalography (MEG) is a technique used to measure the magnetic fields generated by neural activity in the brain. MEG allows the measurement of variations in this activity in milliseconds and is therefore more direct than other methods such as magnetic resonance imaging (MRI) and positron emission tomography (PET).

In Alzheimer's disease, the damage and loss of synapses is fundamental and the basis for the decline in cognitive abilities (memory loss). Stopping or reducing the loss of synapses by different compounds is a future treatment for Alzheimer's disease.



By assessing the synchronised oscillatory activity of thousands of neurons that depend on the integrity of neuronal connections (synapses), MEG technology can detect these disturbances and provide a neurophysiological biomarker for predicting which patients with mild cognitive impairment will develop dementia. MEG is therefore useful as a non-invasive biomarker for the early detection of Alzheimer's disease.

At the University Hospital of Brussels (HUB), the team of Prof. Xavier De Tiège has brought an innovation that improves the use of MEG in the clinic.



Its innovative aspect is that it has been able to develop new types of sensors that can no longer be placed in a rigid helmet, but directly on the patient's head. Recently interviewed by RTBF, Prof. Xavier De Tiège said: "The sensors, in this innovative version, are no longer placed in a helmet, but on a thin cap in direct contact with the scalp. Placing them in this way allows us to be much closer to the brain, and therefore much more sensitive to brain activity and more precise in locating the area of the brain that generated the recorded activity. These new sensors should allow us to detect brain disorders associated with Alzheimer's disease earlier."

BBC and Brain Awareness WEEK: 13-19 March 2023



In the 27 years since its inception, International Brain Week has grown into a global educational initiative involving over 8,000 partners in 120 countries. During the 2022 campaign, partner events took place in 45 countries and 33 states.

For Belgium, in 2022, six universities (KULeuven, UClouvain, ULB, ULiège, UMons and UNamur), one grande école (Hennalux), one scientific society (EpIC) and one patient association (Caregivers) participated in the International Brain Week.

BBC topic for BAW 2023 is "The Societal impact of Basic and Clinical Neurosciences"

Join our campaign in raising awareness for the general public, but also other stakeholders like policy makers, politicians, industry to invest more money and time in these delicate matters.

The BBC supports this initiative and grants associations a budget (maximum €1,000) to facilitate its organisation. Contact: Ann Van der Jeugd (ann.vanderjeugd@kuleuven.be) or Laurence Ris (laurence.Ris@UMons.ac.be)

European Brain Foundation



The European Brain Foundation (EBF) was officially established on 11 October 2022, at the initiative of Prof. Monica Di Lucas, Honorary President of the European Brain Council (EBC) with which we are closely linked. The mission of the Foundation is to support research aimed at reducing the burden of brain diseases and improving the quality of life of citizens affected by them.

To find out more about the European Brain Foundation, please visit: <u>brainfoundation.eu</u>

20th anniversary of the European League of Research Universities (LERU)

On the occasion of its 20th anniversary, the league, which brings together 23 universities from 12 European countries, organised a conference on 10 November in Brussels:

Science as a global public good

"If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas." - George Bernard Shaw

The conference was attended by 140 participants.

The programme included a panel to present Policy Reflections on Science as a Global Public Good. Read more here



From left to right:

Jennifer Baker, moderator, journalist, EU expert for the BBC Christina Russo, Director for Global Approach and International Cooperation, DG Research and Innovation, European Commission Angela Liberatone, Head of the Scientific Department at the European Research Council (ERC) Marja Macarow, President of the Academia Europaea Veronika Hunt Safrankova, Head of the Brussels Office of the United Nations **Environment Programme** Radka Wildova, Czech Deputy Minister of Higher Education, Science and Research.

Composition of the Executive Committee for the period 2021-2022

President: Professeur Laurence RIS

Secretary General: Professeur Roland Pochet

Vice-President: Professeur Chris Bervoets, Docteur Gianni Franco,

Baron Charles van der Straten-Waillet

Treasurer: Baron Charles van der Straten -Waillet

Secretary: Madame Lia Le Roy

News from our members

BREINWIJZER

<u>Breinwijzer</u> informs and raises awareness of brain diseases and brain science by bringing experts and the general public together to research and provide guidance on socially responsible development and the impact of neuroscience.





Save the dates:

STUDIO BREIN INTELLIGENTIE 24/10 - 24/12 2022

FESTIVAL OVER HET BREIN 14/03 2022



UGent Center of Cognitive Neuroscience (CCN)

The CCN is organizing on **December 8, at 3:00 pm** a lecture: "Towards a mechanistic understanding of the human subcortex" by Prof Birte Forstmann, current ERC laureate
Registration at conference followed by reception here or to ruth.krebs@ugent.be

Calls for research projects





CALL FOR PROJECTS

RESEARCH ON RARE GENETIC NEUROMUSCULAR DISEASES

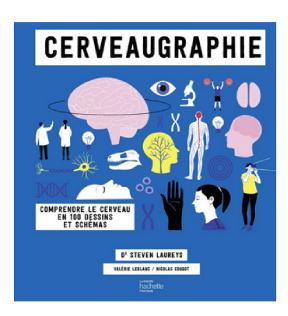
UNTIL 01 12 2022

HEALTH

 $Funds\ Cremers-Opdebeeck\ \&\ Walter\ Pyleman: support\ to\ research\ on\ rare\ genetic\ neuromus cular\ diseases$

Braingraphy

Our neurologist and neuroscientist colleague, Prof. Steven Laureys (in French Edition Hachette; in Dutch Borgerhoff & Lamberigts) explains the functioning of our brain through **100 illustrations**: its composition, our senses, the relationship with other organs, memory, consciousness, genetics, sleep and dreams, pain, language, emotions, artificial intelligence, telepathy, stress, drugs, meditation... - everything you can and should know about the brain. Thanks to the rich illustrations, the mysterious world of the brain opens up to everyone!



Belgian National Multiple Sclerosis League



Nationale Belgische Multiple Sclerose Liga Ligue Nationale Belge de la Sclérose en Plaques

Gala concert on Friday, March 17, 2023 at 8 pm at the Palais des Beaux-Arts in Brussels. More info here





Belgian College of Neuropsychopharmacology and Biological Ps

BCNBP 08 Dec '22 8 pm. Virtual National Evening

20:00 Belgium's Got Funding

- * Changing Tactics? Optimizing ECT in difficult-to-treat depression.
- * Opioid detoxification for patients with Persistent Spinal Pain Syndrome Type II, treated with Spinal Cord Stimulation.
- * INSTA-MD: Inflammation-based Stratification for immune-Targeted Augmentation in Major Depressive disorder.

21:30 Belgium's Got Talent

The Zoom link to the meeting will be send by mail the day before.

Sign up by contacting: lieve.rousseau@me.com

Become a member Devenez membre Lid worden

Support our actions and become a personal member by paying 30€ on the account BE87 7512 0194 0094 by indicating your name and email.

Soutenez nos actions et devenez membre à titre personnel en versant 30€ sur le compte BE87 7512 0194 0094 en indiquant votre nom et email.

Steun onze acties en word persoonlijk lid door €30 over te maken op rekeningnummer BE87 7512 0194 0094, met vermelding van uw naam en e-mail.



The BBC is present on these following social medias:











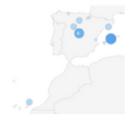
Web page statistics

Between the 2/7 2021 to the 4/11 2022 (17 months)

- 2010 views with an average duration of 4min 31 seconds
- 1653 views in Belgium (82%) spread over 220 cities,
- 33 other countries beared an interest for our activities : 59 cities in France, 14 in Spain, 11 in Italy, 14 in the Netherlands



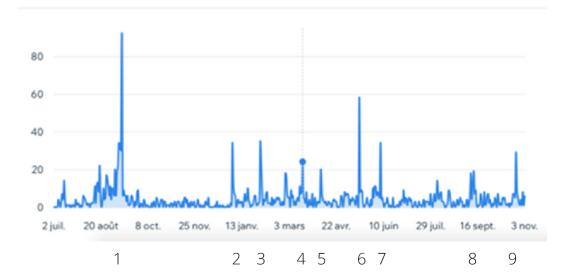








Sessions au fil du temps



- Peak 1 corresponds to the COVID LONG webinar on 11 September 2021
- peaks 2-5 and 7-9 to the publication of the newsletters (from n° 46 to 51)
- Peak 6 is the AGM on 18 May 2022

Feel free to send us information about your upcoming key events so that we can share them!

