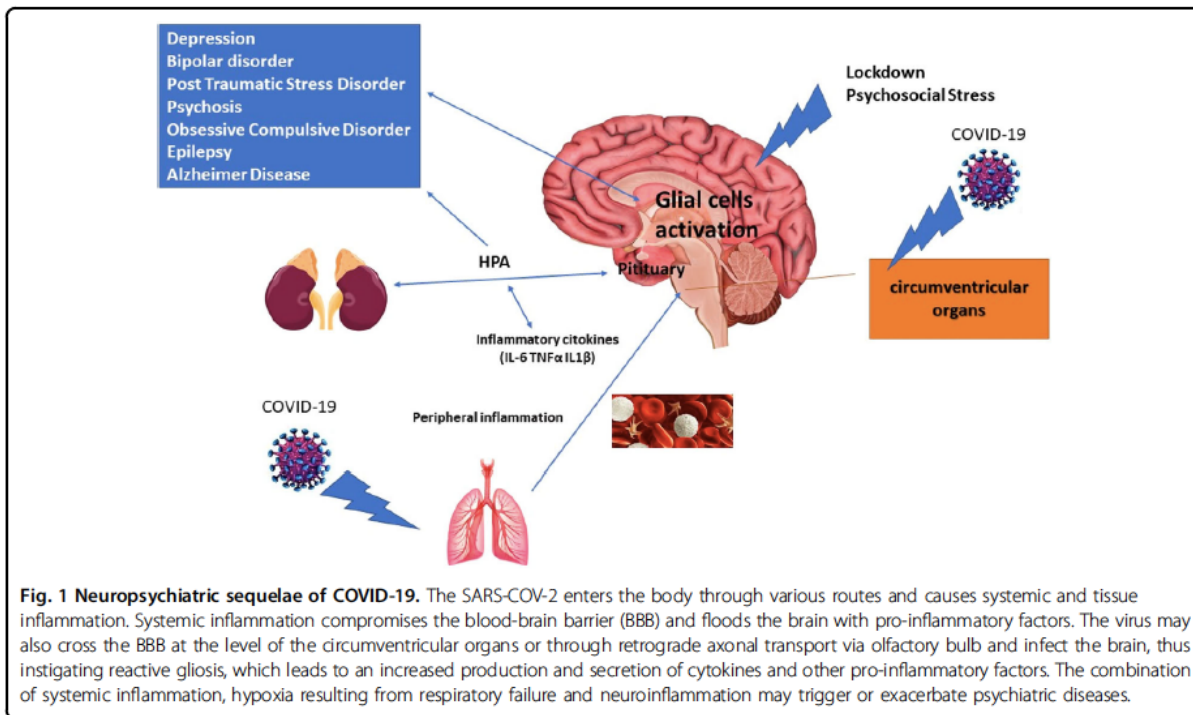


# BBC newsletter 36 January 2021

## COVID-19 and neuropsychiatry

**EDITO** par Roland Pochet, PhD

Coronavirus disease (COVID-19) is a serious multi-organ disease that in addition to cardiorespiratory manifestations, affects central nervous system (CNS) function. Coronavirus 2 or Severe Acute Respiratory Syndrome (SARS-CoV-2 or COVID-19), like other coronaviruses<sup>1</sup>, infects the brain (neurotropism). Additionally, viral infection of the brain stem can complicate disease progression by damaging central cardiorespiratory control.



**Fig. 1 Neuropsychiatric sequelae of COVID-19.** The SARS-CoV-2 enters the body through various routes and causes systemic and tissue inflammation. Systemic inflammation compromises the blood-brain barrier (BBB) and floods the brain with pro-inflammatory factors. The virus may also cross the BBB at the level of the circumventricular organs or through retrograde axonal transport via olfactory bulb and infect the brain, thus instigating reactive gliosis, which leads to an increased production and secretion of cytokines and other pro-inflammatory factors. The combination of systemic inflammation, hypoxia resulting from respiratory failure and neuroinflammation may trigger or exacerbate psychiatric diseases.

From Psychiatric face of COVID-19, Transl Psychiatry August 2020 by L. Streato, Jr., L. Strato and A. Verkhatsky

Systemic inflammation and neuro-inflammatory changes are associated with a massive increase in brain pro-inflammatory molecules, neuroglial reactivity, an altered neurochemical landscape and pathological remodeling of neural networks. In addition, there is a significantly increased risk of stroke. These organic changes in conjunction with the major stress caused by intensive care unit stays, pandemic fears and social restrictions, promote the development of neuropsychiatric disorders, including significant depression and post-traumatic stress disorder. This combination of infection and external stressors have also led to relapse and exacerbation of pre-existing bipolar, psychotic and obsessive-compulsive disorders.

Considering the large number of people infected and the existing number of patients suffering from neurological and psychiatric disorders, the associated health, social and economic burdens will very likely be considerable. Health care planners and policy makers need to prepare for this reality<sup>2</sup>, as we continue to improve our understanding of the relationship between psychiatric and neurological diseases related to COVID<sup>3</sup>.

<sup>1</sup> SARS-CoV-2 belongs to group 2B of the coronavirus family  $\beta$ . SARS-CoV-2 is recognised as the 7th member of the coronavirus family and has been included in the subfamily orthocoronavirinae.

<sup>2</sup> Cf article in British Medical Journal from 12 janvier 2021 (<https://bit.ly/3oKhUa7>): *The risk of long covid must be a primary consideration in policy decisions* \* LongCovidSOS is the voice of the thousands of long covidosis patients in the UK.

<sup>3</sup> Almqvist et al Neurological manifestations of covid-19-systematic review-Medrxiv 2020

# BBC and Brain Awareness Week



Brain Awareness Week (BAW) is a global campaign to build public enthusiasm and support for brain science. The next campaign will take place from 15-21 March 2021.

Despite the constraints of the 2021 pandemic, the BBC supports BAW 2021 activities. Three institutions : Leuven Brain Institute, Réjouissances de l'Université de Liège and the University of Mons have already built a programme (cf <https://braincouncil.be/belgian-baw-events-2021>).

The other institutions are finalising their programme (to be continued).

## New from our members

- **Belgian Stroke Council (BSC)**

The 19th BSC National Symposium was held online on 5 December 2019. During this symposium 3 prizes were awarded to young researchers:

- o The Helaers Foundation prize to Anneliese Mondelaers of the Centre for Surgical Training, Anatomy and Research of the Antwerp University for her project on *Exploring the relationship between the bacterial microbiome and intracranial aneurysm*.
- o BSC-ESOC travel grant to Senna Staessens from the Department of Cardiovascular Sciences, Kulak Kortrijk Campus of the KULeuven for her project on *the histology of trombus heterogeneity after stroke*.
- o The BSC Scientific Symposium Prize to Ioannis Doumas of the Institute of Neurosciences of the UCLouvain for his project: *Serious games for upper limb rehabilitation after stroke: a meta-analysis*

- **Belgian College of Neuropsychopharmacology and Biological Psychiatry (BCNBP)**

Organise during 2021 a series of psychopharmacology courses.

1. Program and registration in French<sup>4</sup>
2. Program and registration in Dutch<sup>5</sup>

- Following the publication of the new statutes in the Moniteur des nouveaux statuts (cf <https://braincouncil.be/en/mission/2020-moniteur>), the call for subscriptions for individual members has been launched and already about ten people have expressed their support for the BBC's missions by becoming a 2021 member. It is by becoming a member that you will also be able to make your voice heard.

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<sup>4</sup> <https://braincouncil.be/fr/2021/cours-de-psychofarmacologie-programme-inscription/view>

<sup>5</sup> <https://braincouncil.be/nl/2021/programma-bcnbp-nederlandstalige-lessen-psychofarmacologie/view>



- Collection of contributions : To date (25 January 2021) have already paid their contributions:
  - 24 Patients associations
  - 20 Scientific societies
  - 10 Pharma societies

**BBC and Erasmus+**

The BBC is now an active partner until 2022 in 3 Erasmus+ projects dedicated to adult education:

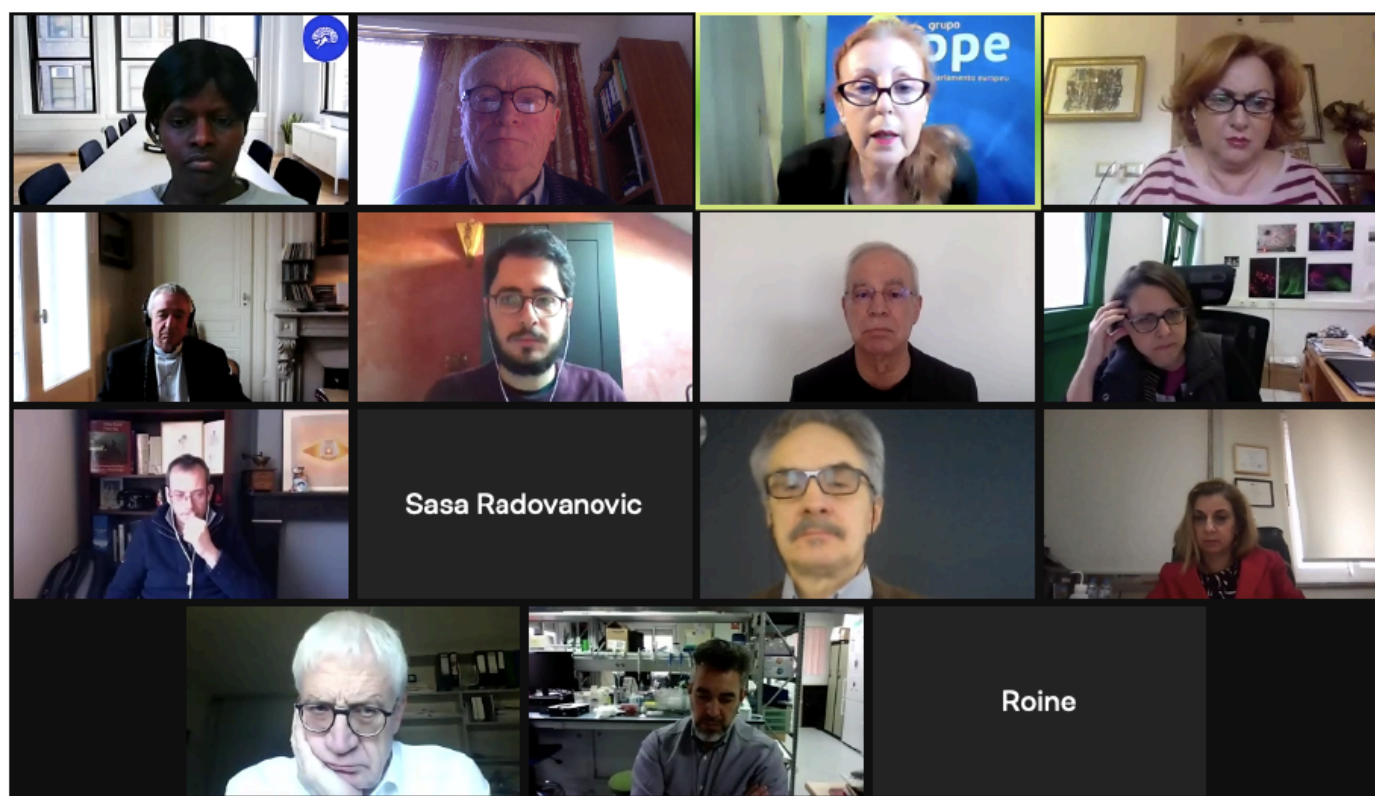


More info: <https://braincouncil.be/en/erasmus>

**BBC et Lobbying**

- On 18 December 2021 a one-hour NBCs Advocacy meeting was held.

## Zoom meeting attendance:



Rang 1 : Latifah Irakiza (Eur BC) Roland Pochet (Belgian BC) M. da Graça Carvalho (MEP) Monica Di Luca (Eur BC)  
Rang 2 : F. Mauguière (French BC) Domenico Iannone (EBC) A. Freire (Portuguese BC) K. Sidiropoulou (Hellenic BC)  
Rang 3 : F. Destrebecq (European BC) S.Radovanovic (Serbian BC) Pavle Andjus (Serbian BC) C. Dalla (Hellenic BC)  
Rang 4 : Wolfgang Oertel (European BC) Jose-Luis Trejo (Spanish BC) Risto Roine (Finnish BC)

It was proposed to use the EBC Statement<sup>6</sup> as a tool allowing National Brain Councils (NBCs) to contact their national policy-makers and to draw their attention to them once again. It was agreed on an action plan to be implemented by the NBCs: i.e. to write again to the national ministries of health and research to inform them of this new covid statement, and thus demand greater prioritisation of brain research as a whole.

The detailed minutes of this meeting can be read at: <https://braincouncil.be/BBC-EBC-NBCs/national-brain-councils-advocacy-meeting/nbcs-advocacy-minutes-dec-2020-final.pdf>

- NBCs liaison and EBC

The 4 members of this task force composed of Mrs Pavle Andjus (Serbian Brain Council), François Mauguière (Conseil Français du Cerveau), Roland Pochet (Belgian Brain Council) and Jose-Luis Trejo (Consejo Espanol del Cerebro) sent a letter to Professor Monica Di Luca<sup>7</sup>, EBC President de l'EBC supporting the alert letter launched by the French Brain Council to the following French politicians<sup>8</sup>: aux Ministres de la Santé et de la Recherche à Monsieur Jean Castex, Premier Ministre, à Madame Catherine Deroche, Présidente du Comité des Affaires Sociales du Sénat, à Monsieur Jean-François Rapin, Président du Comité des Affaires Européennes du Sénat, à Madame Marielle de Sarnez, Présidente du Comité des Affaires Européennes de l'Assemblée Nationale, à Monsieur Bruno Studer, Président du Comité des Affaires Culturelles et de l'Education de L'Assemblée

<sup>6</sup> <https://braincouncil.be/BBC-EBC-NBCs/national-brain-councils-advocacy-meeting/ebc-statement-the-impact-of-covid-19-on-brain-health/view>

<sup>7</sup> <https://braincouncil.be/BBC-EBC-NBCs/national-brain-councils-advocacy-meeting/nbcs-letter-to-ebc-president-jan-2020/view>

<sup>8</sup> <https://braincouncil.be/BBC-EBC-NBCs/national-brain-councils-advocacy-meeting/conseil-francais-du-cerveau-ag-dec-201/view>

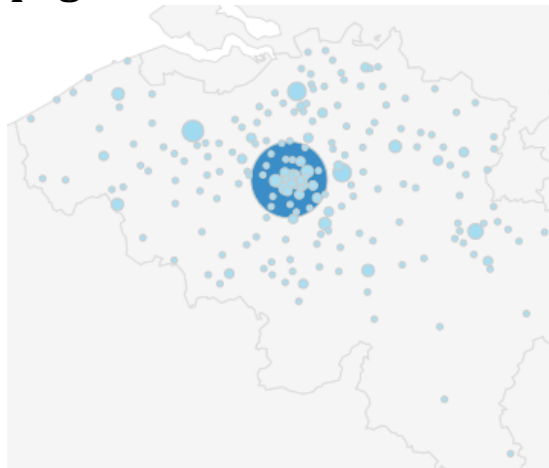
## Other infos of interest

- **BBC adhesion to ALBA**

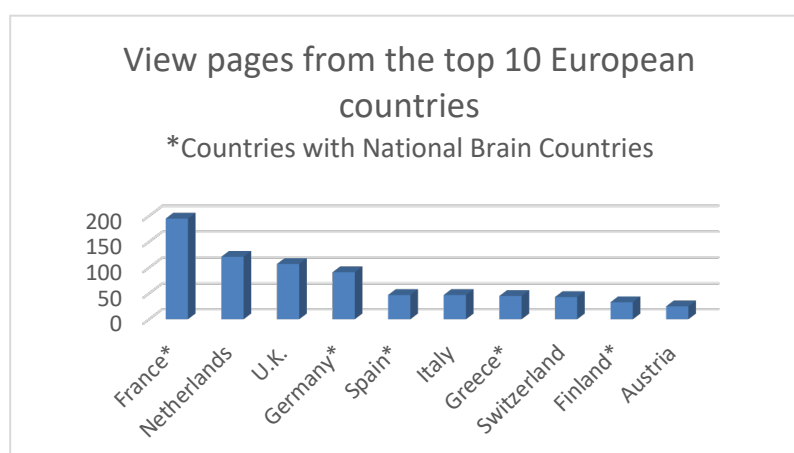
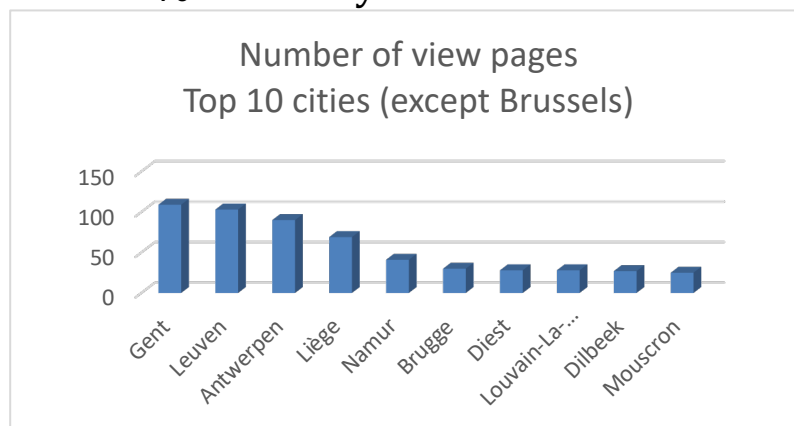
Born out of the European Federation of Neurosciences, this network has since become global and aims to raise awareness and provide a concrete set of actions that individuals and institutions can commit to take in order to make their organisations, and neurosciences in general, more equitable and inclusive. It focuses on 1) recognising and overcoming implicit prejudices, and 2) creating inclusive work cultures.

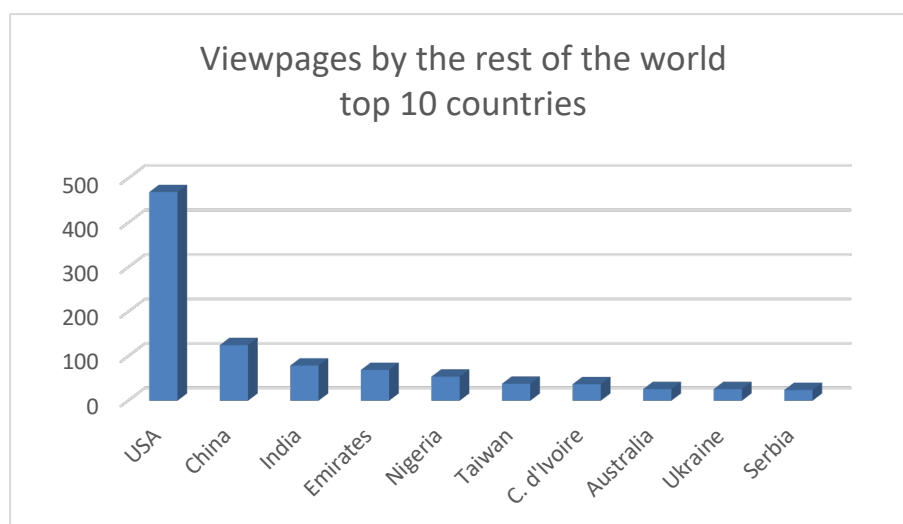
The network presented a statement (attached) on equity and inclusion to the American Society for Neuroscience on January 12. To date, 167 organisations and 275 leading scientists have signed the declaration (<http://www.alba.network/declaration>).

- **2020 BBC WEB page : statistics** from Jan 1, 2020 to Dec. 31, 2020



216 Belgian cities. 61% visited by Bruxelles for a total of 1.971 sessions





**Reminder to members:** BBC makes use of GoToMeeting available to members who wish to organise online meetings. *Contact: R.Pochet*

**Tool to be used by our members for any promotional action: Evidence on the exceptionally high burden of brain disorders cf**  
[https://braincouncil.be/en/burden-of-brain-diseases\\_evidence](https://braincouncil.be/en/burden-of-brain-diseases_evidence)

**Dates à retenir** (cf plus de détails on line à la page [braincouncil.be](https://braincouncil.be))

<b>26 janvier</b>	<b>Brain Innovation Days</b>
<b>8-11 février</b>	<b>Blankenberg International Sleep Medicine</b>
<b>26 février</b>	<b>1er symposium de neurochirurgie pédiatrique et de neuropédiatrie</b>
<b>27 février</b>	<b>Journée Mondiale de l'Epilepsie</b>
<b>5 mars</b>	<b>Epilepsie-Accompagnement de la personne</b>
<b>15-21 mars</b>	<b>Brain Awareness Week</b>
<b>15 avril</b>	<b>7th National Brain Councils Academy</b>
<b>5 juin</b>	<b>Charcot Foundation-MS Symposium</b>
<b>juin</b>	<b>Leuven BASS spring meeting</b>
<b>20-24 sept</b>	<b>World Congress Military Medicine</b>