### **OMICS** Journals are welcoming Submissions

OMICS International welcomes submissions that are original and technically so as to serve both the developing world and developed countries in the best possible way. OMICS Journals are poised in excellence by publishing high quality research. OMICS International follows an Editorial Manager® System peer review process and boasts of a strong and active editorial board.

Editors and reviewers are experts in their field and provide anonymous, unbiased and detailed reviews of all submissions. The journal gives the options of multiple language translations for all the articles and all archived articles are available in HTML, XML, PDF and audio formats. Also, all the published articles are archived in repositories and indexing services like DOAJ, CAS, Google Scholar, Scientific Commons, Index Copernicus, EBSCO, HINARI and GALE.

For more details please visit our website: http://omicsonline.org/Submitmanuscript.php





Editor of

MICHAEL HOFFMANN PROFESSOR OF NEUROLOGY (UCF, UF, COURTESY) DIRECTOR, COGNITIVE NEUROLOGY AND STROKE PROGRAMS JAMES A HALEY VA HOSPITAL TAMPA, FLORIDA , USA

# ANATOMY & PHYSIOLOGY: CURRENT RESEARCH

G R A 

Professor Michael Hoffmann MD, PhD, FCP(SA), FAHA, FAAN received his initial medical degree, MBBch, at the University of Witwatersrand Johannesburg, South Africa, followed by a neurological registrarship at the University of Natal, Durban, South Africa with subsequent subspecialty fellowship training in Stroke at Columbia University Neurological Institute and Presbyterian Medical Center, New York. Currently, he is working as director of Cognitive Neurology and Stroke at the James A Haley VA Medical Center in Tampa, Florida and affiliate Professor of Neurology with the University Central Florida and courtesy Professor with the University of Florida. He is serving as an editorial member of several reputed journals and has authored over 200 research abstracts and manuscripts. He is a fellow of the American Academy of Neurology and American Heart Association Stroke Section.

### RESEARCH INTEREST

Cognitive neurology, Cerebrovascular disease, Frontal lobe function, Neuro archeology.

### **RECENT PUBLICATIONS**

- Dolichoectasia A Posterior Circulation, Large Vessel Vasculopathy with Unique Clinical and Radiologic Features Michael Hoffmann, Charles Brock Research Article: J Neurol Neurophysiol 2014, 5:216 doi: 10.4172/2155-9562.1000216
- See Assembly of the Human Mind: How Present Day Primates Reflect our MindÂ's Anatomical and Physiological Evolution Michael Hoffmann Editorial: Anat Physiol 2013, 4: e132 doi: 10.4172/2161-0940.1000e132
- Beyond the Three Dimensional Aspects of Neuroanatomy: The Multidimensional Brain Michael Hoffmann Editorial: Anat Physiol 2011, 1: e101 doi: 10.4172/2161-0940.1000e101



#### CROSS SECTION

Corpus callosum A large band of nerve fibers through which information flows back and forth between the left and the right hemispheres of the brain

#### Thalamus -

The relay station for most information going into the brain

#### Hypothalamus

Regulates sex hormones, blood pressure and body temperature

#### Pituitary gland

The master gland of the body produces its own hormones and also influences the hormonal production of the other glands in the body

Amygdala Regulates the heartheat and other visceral functions and processes the emotion fear

#### Hippocampus

Helps establish long-term memory in regions of the cerebral cortex Poos Medulla oblongata – Spinal cord Control of breathing, circulation, heartbeat and digestion

#### **Basal** ganglia

A control system for movement and cognitive functions

#### Cerebellum

Essential for coordination of movement

TMI Graduate Structure, Press Marchel Kape Press Annel

# DEFINITION

Cerebrovascular disease refers to a International of conditions that affect the circulation of blood to the brain, causing limited or no blood flow to affected areas of the brain.



## TYPES OF CEREBROVASCULOAR DISEASES

- There are a number of different types of cerebrovascular disease. The four most common types are:
- **stroke** a serious medical condition where the blood supply to the brain is interrupted
- transient ischaemic attack (TIA) a temporary fall in the brain's blood supply, resulting in a lack of oxygen to the brain
- subarachnoid haemorrhage an uncommon cause of stroke where blood leaks out of the brain's blood vessels
- vascular dementia problems with the blood circulation, leading to parts of the brain not receiving enough blood and oxygen







## SYMPTOMS OF BRAIN DISORDERS

- The following are some common symptoms brain disorders may present:
- confusion or problems concentrating
- headaches or migraines
- seizures (convulsions)
- memory problems
- change in the way you normally behave
- problems with your vision (double vision, for example)
- lack of muscle control
- vomiting or nausea

## CAUSES!!!

- Trauma to the brain
- Stroke (restricted or reduced oxygen and blood in the brain that leads to cellular death)
- Viral infections (viruses may cause inflammation and swelling in the brain's tissue)
- Disease and cancer
- Abnormal growths (tumors)
- Inherited conditions that affect the brain
- Change in your brain's electrical pathways (communication between neurons)

## ARE YOU IN RISK ZONE???????

Brain disorders may have certain risks too which are as follows:

- have blunt trauma to the head
- have a family history of brain disorders or disease
- have a viral infection
- have a stroke
- smoke tobacco products
- stop breathing (can prevent oxygen from reaching the brain)

# DIAGNOSING CAN BE DONE IN RISK ZONE TOO...

Diagnosing can be done by various methods like:

- Computed Tomography (CT) scan—to take images of your brain.
- Magnetic Resonance Imaging (MRI)
- Positron Emission Tomography (PET)
- Electroencephalogram (EEG)

## GO FOR TREATMENT???

There can be different medications, medicines, advices too but the most reliable used method is to do MEDITATION and the other successful method for damaged brain is SURGERY.





### **Approved By**

### **E-signature: Michael Hoffmann**

OMICS International Open Access Membership

OMICS publishing International Open Access Membership enables academic and research institutions, funders and corporations to actively encourage open access in scholarly communication and the dissemination of research published by their authors. For more details and benefits, click on the link below:

http://omicsonline.org/membership.php