**Research and Critical Analysis**

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Nikita Avralev (December 2017). Developing a Neurochip to Replace Damaged Brain Areas. Retrieved from: [http://neurosciencenews.com/brain-damage-neurochip-8111](http://neurosciencenews.com/brain-damage-neurochip-8111e)

Brain is a very important part of not only our body but also for life. And to protect it from getting damaged and if get damaged, then to replace that damaged part of the brain, researchers in Lobachevsky university are developing a neurochip. And in the experiments of this neuro research, the initial results reported by researchers were positive and they got success in transmitting signals from artificial to neurons and devices can be used with this neurochip for replacing the damaged part of the brain.

As a professional in the field of brain damage and neuro chip research, researchers of Lobachevsky university have authority on and investment in the field of Neurochip for replacing damaged brain area that has been discussed in this article. Their knowledge for replacing damaged part of brain by the Neurochip does not need others recommendation because the experiments they have conducted and the success that they got, is enough for proof. The possibilities in this field are immense but though it requires to go ahead and achieve it completely. The experiments that have been already conducted and the small success which has been received by the researchers, it works as a link in connecting them. Overall, this article illuminates the research about the mechanisms of replacement and transmission of signals from one neuron to another. Like, in the case of nature of paralysis in humans, with the help of this neurochip, it is possible to restore the lost transmission.

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Hayley Dunning. (November 2017). New way to write magnetic information may pave way for hardware neural networks. Retrieved from: <http://neurosciencenews.com/neural-network-megnetism-7999>

The current innovations and advancements in neural networks developed an entire new view in the concept of writing magnetic information for hardware neural networks. Composing attractive examples onto nanowires could enable PCs to better copy how the mind forms data, another investigation reports. Registering frameworks that are intended to process data in comparable approaches to our brains are known as 'neural networks.'

Being a practitioner in the stream of neural networks and magnetic information, researchers in this field have supremacy on and contribution in the right of finding new ways to write magnetic information which can make an easy way for hardware neural networks. Their research in this technical field is supported by the Imperial college London, which shows the credibility about the research. This article is intending about the new written method that researchers from Imperial College London have found, varieties of attractive nanowires might have the capacity to work as hardware neural networks – possibly more effective and proficient than programming based methodologies. Overall, this article is about the technique that could be utilized to think about basic parts of complex frameworks, by making attractive states that are a long way from ideal and perceiving how the framework reacts.

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Elaine Schmidt. (October 2017). Advanced artificial limbs mapped in the brain. Retrieved from

<http://neurosciencenews.com/artificial-limb-brain-mapping-7822>

The main objective in this research is focused on motor and sensory re-innervation, a technique that reroutes leftover limb nerves to in place muscles and skin in amputees, the cerebrum remaps both engine and tactile pathways. Furthermore, specialists note, TMSR may help check ineffectively adjusted cortical versatility following removal. In this research the questions like how does the cerebrum encode and coordinate such simulated touch and developments of the prosthetic limb and how does this effect our capacity to better incorporate and control prosthetics have been discussed.

As a professional in the neuroscience field, EPFL scientist are invested in the study of advanced artificial limb and, as such, are very qualified to speak to the issues facing artificial limbs in the brain. Their knowledge about these limbs in the brain is sound and well supported, which went in depth of more knowledge into the nature and the reversibility of cortical pliancy in patients with removals and its connect to limb appendage disorder and torment. The discoveries give the main point by point neuroimaging examination in patients with bionic appendages in light of the TMSR prosthesis, and demonstrate that ultra-high field 7 Tesla fMRI is an extraordinary apparatus for concentrate the upper-appendage maps of the motor and somatosensory cortex following removal.

At long last, the investigation additionally demonstrates that there is a need of further building advances, for example, the coordination of somatosensory criticism into current prosthetics that can empower them to move and feel as genuine appendages.

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