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Neuropharmacology and Translational Neuroscience: A Review Literature

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ABSTRACT

Protecting and preventing from the neuronal damages due to stroke, brain trauma, neurodegenerative diseases, such as Parkinson's or Alzheimer's, and even aging is an increasingly important research topic. Translational Neuroscience is a fundamental laboratory research relating to brain structure and function to advancements of new therapies for neurodevelopmental diseases, neuropsychiatric and neurodegenerative diseases. Translational Neuroscience is the study of using all Neurological advances to bring novel therapies with measurable outcomes to patients with Neurological diseases. The concept is derived from the need to translate the wealth of basic working out about neuroscience, neuropathogenesis, and neuroengineering right into a trajectory so as to realistically lead to cures and measurable improvement to members at danger for or suffering from Neurological diseases. In this review literature we have discussed some novel findings in Neurology and Neurosciences which have been published in some reputed open access journals.

INTRODUCTION

Functional Proteomics is a valuable science to gain knowledge of the neuronal biochemistry, enabling to evaluate the metabolic alterations inside neuronal cells and brain tissue that can imply some physiopathological adjustments explained by Federico et al. ^[1]. Dr. Zi-Jian Cai, newly steered that there are minimum two forms of Korsakoff alcoholism, one attributable to alcohol intake as average appetitive habit, while one more for alleviation of psychological stress. Korsakoff syndrome from alcohol addiction manifests huge dysfunctions in Neurological structures, varying from case to case ^[2]. Dr. Busuttill DP, presented Primary intraocular lymphoma of a sufferer who had recurrent bilateral uveitis that used to be handled with topical steroids. Important Intra-ocular lymphoma is a condition which is difficult to diagnose as it will possibly mimic different conditions. There is mainly a prolong in diagnosis as empirical steroid healing is by and large instituted which interferes with the dynamics of the disease method ^[3]. Reshkova V et al. presented a medical case of a 45 years old woman with SCLC with gradual progression associated with paraneoplastic Lambert-Eaton myastenic syndrome. Lambert-Eaton myastenic syndrome (LEMS) is an autoimmune disorder, affecting the presynaptic neuronal transmission. It's the outcome of an autoimmune reaction in which antibodies are fashioned towards presynaptic voltage-gated calcium channels (VGCC) within the neuromuscular junction ^[4]. Yamada S, et al. evaluated the results of CEA in patients aged above 80. Carotid endarterectomy (CEA) is without doubt one of the surgical remedies for carotid artery stenosis. Whilst

a gigantic medical trial confirmed that advances age is a threat element for CEA, different reviews stated contradictory outcome [5]. Alanazy M, et al. studied a 60-year-old right-surpassed woman offered with acute disorientation. The Neurological examination showed impaired brief-term reminiscence, disorientation to time and place, and flattened proper nasolabial fold. Brain MRI confirmed acute ischemic stroke in the territory of anterior choroidal artery (AChA) involving left mesial temporal, globuspallidus, posterior limb of internal capsule and lateral thalamus [6]. The findings and implications of chaotic mind are mentioned in detail by Sanyal S et al. This work is nearly a case report of the various amazing scientific nonlinear instruments used in the comparison of complicated neural dynamics caused via a style of musical clips [7]. West Nile virus (WNV) is probably the most usual arthropod borne virus and is the main rationale of domestically got sickness in USA. Animal models have examined the benefit of WNV certain IV Immunoglobulin (IVIG) and humanized monoclonal antibodies concentrating on viral envelope proteins. Future reports should compare the efficacy of novel retailers in providing extra everlasting therapies rather than supportive, temporizing measures of managing WNV [8]. Din F et al. reported 18 months old Caucasian lady who presented with a multiple episodes of intermittent ataxia and vomiting with unremarkable Neurological examination. Non contrast head CT was once consistent with marginally dilated proper lateral ventricle. Histologic findings and the immunophenotype was once consistent with a diagnosis of ependymal cyst. The patient made a first-rate healing after the process [9].

An unusual late onset PKAN patient homozygous for (G1070C) PKAN2 gene alteration. The scientific Espinosa NR and Miguel AM reported onset was once within the five decade of lifestyles with a slowly progressive parkinsonian syndrome. Not like other PKAN sufferers the plasma lipid profile confirmed hypercholesterolemia because of extended endogenous precursor synthesis [10]. Al-Shimali HM et al. Investigated the consequences of in utero low dose exposure to steer on neurogenesis in hippocampus and spatial studying and memory in young rats [11]. Dystonia is a can have an impact on high-quality of existence and lead to employment and monetary difficulties. Horiuchi M et al. Evaluated the opposed effects of dystonia on everyday existence and the cost involved in treatment [12]. Stoke is a long-time condition. Estimation of stroke outcomes is lacking. Stroke is referred to as essentially the most fashioned rationale of incapacity among adults. The measurement of health-related quality of life (HRQOL) is primary to fully grasp the genuine status of the patients. Goma SH et al [13].

Cerebrovascular disorder performs a larger phase in ARCID than is by and often recognized and much bigger phase than incorporated beneath the category of vascular dementia. Davey DA recommended that the cardiovascular measures that reduce the incidence of dementia achieve this principally through decreasing the prevalence or severity of cerebrovascular ailment [14]. In a study Anyanechi CE and Saheeb BD showed that the problems related to the surgical extractions of the asymptomatic impacted mandibular third molars have been acute, Neurological and without an everlasting sequel [15]. Khanna RR, et al. described an infrequent case of isolated left ventricle non compaction as an etiology for recurrent strokes in younger members. Echocardiography customarily supplies the first clue to diagnose. Cardiogenic cerebral embolus is likely one of the most original motives of stroke in the younger, accounting for as much as one third of the cases [16].

In up to date instances suicidal tendency is a predominant illness in western nations. The trendy statistics to be had on it obviously depict the truth that the quantity of men and women affected by this dreadful 'disorder' has been increasing day by day regularly in the time interval from 2000 to 2006 [17]. Excessive-altitude diseases is the term given together to Acute Mountain ailment (AMS), high-Altitude Cerebral Edema (HACE) and excessive-Altitude Pulmonary Edema (HAPE), the latter two being probably fatal conditions [18]. Hemi facial spasm (HFS) is an infrequent entity, characterized by means of alternating involuntary twitching (clonic or tonic contractions) of the facial muscle tissues on one facet of the face. Mainly the pathophysiological mechanism is represented by using a neurovascular conflict [19]. In study Degirmenci Y, Kececi H presented a rare patient with epilepsy who was suffering from prolonged TP persisting when you consider that 1 month with none evidence of acute cerebrovascular or structural lesions [20].

The possibility of occurrence of GBS brought about through risperidone was once analyzed making use of causality comparison scales of Naranjo and World health institution collaborating Centre for international Drug Monitoring, the Uppsala Monitoring Centre (WHO-UMC) [21]. There is a noninvasive process with therapeutic factor of view that presents the likelihood of concurrently administering a cocktail of neurogenic and neuroprotective factors to the CNS for alteration of adult neurogenesis [22]. The ability to peer confers a certain survival talents to organisms and the visual apparatus has developed as a consequence to adapt to evolutionary specifications [23].

Disability is final result of a partial or complete impairment that may be physical, sensory, intellectual, cognitive and developmental or combination of those that results in restrictions on a c individual's ability to practice and participate in what is considered "usual" of their everyday pastime [24]. In a study Vanadia E et al. revealed that the RSPD could also be associated with periventricular hyperintensities (PVHs), so demonstrating a possible

neurobiological disorder [25]. Clinical Neurology and Translational Neuroscience provides a forum of classification of Brain and behavior Neurology, Neurosurgery, Spinal Cord related studies, Neurodegenerative disorders, Brain Tumors, Cognitive Neuroscience, Neurological Disorders, Depression and Anxiety, Neuroimmunology, Child Neurology, neurophysiology, neuropharmacology, Neurochemistry etc [26-32]. Translational and clinical research is core components of a full-spectrum biomedical study corporation. Yet, these crucial areas of research are hampered with the aid of increases in costs and complexity, a dearth of information methods, and increases in the regulatory burden [33-39]. Current clinical research has emphasized novel concepts for clinicians, such because the function of plasticity in recovery and the renovation of mind functions in a broad variety of diseases [40-45].

Psychiatry is grounded in clinical neuroscience. Its core mission, now and in future, is great served within this context due to the fact advances in assessment, treatment, and prevention of brain disorders are more likely to originate from reports of etiology and pathophysiology centered in medical and translational neuroscience [46-50]. Translational Neuroscience presents a better interaction between basic and clinical neuroscientists to broaden working out of brain constitution, function and disease, and translate these capabilities into clinical applications and novel remedies of Neurological disorders [51-60].

The imaginative and prescient of the Translational Neuroscience is to inspire a new generation of biomedical investigators incredibly-educated in interdisciplinary science that specializes in making improvements to the health and care of contributors littered with psychiatric or Neurological problems, or accidents within the fearful approach via a working out of ailment mechanisms [61-70]. The world health organization (WHO) recently listed Neurological and psychiatric disorders as a global emergency with the numbers of affected people from such issues anticipated to marked increase over the subsequent 25 years as existence expectancy globally raises [71-75]. For the majority of Neurological and psychiatric disorders, there are not any strong treatments [75-80].

A gigantic percentage of people suffering from disturbances of mood and memory, do not respond to the available medication, and so there may be an urgency to supplement or provide a substitute to current remedies [81-90]. Neuroimaging provides a window into the brain, and is a more and more central experimental medicine tool for neuro-psychiatric disease [91-100]. It's the accountability of those of us involved in today's biomedical study enterprise to translate the splendid scientific improvements we're witnessing into wellness gains for the nation [101-102].

CONCLUSION

Translational Neuroscience will help the Neurologists for the further developments of novel therapeutic approaches to treat the patients with Neurological and psychiatric disorders. There's a strong ought to train our subsequent generation of translational neuroscientists to help close the hole that has developed between the dramatic advances biomedical discovery and significant medical applications. Translational Neuroscience will provide a better understanding the cases of Neurological disorders and to develop better treatments.

REFERENCES

1. Federico VR and Federica F. Functional Proteomics as Marker for Neurological and Psychiatric Disorders: The First Application to Dementia for an Immediate Future. *J Neurol Neurosci.* 2016;7: S2.
2. Zi-Jian Cai. Two Types of Korsakoff Alcoholism in Reference to Habenula: A New Opinion. *J Neurol Neurosci.* 2016;7:S2.
3. Busuttill DP. The Role of Sub retinal Aspiration in the Diagnosis and Management of Primary CNS Lymphoma. *J Neurol Neurosci.* 2016;7:S2.
4. Reshkova V, et al. Case Report of Paraneoplastic Lambert-Eaton Myastenic Syndrome Associated with Small Cell Lung Cancer with Slow Progression. *J Neurol Neurosci.* 2016;7:S2.
5. Yamada S, et al. Carotid Endarterectomy for Patients over 80 Years Old. *J Neurol Neurosci.* 2016;7:S2.
6. Alanazy M, Albarrak AM. Disorientation as a Presenting Symptom of Unilateral Anterior Choroidal Artery Stroke. *J Neurol Neurosci.* 2016;7:S2.
7. Sanyal S, et al. Chaotic Brain, Musical Mind-A Non-Linear neurocognitive Physics Based Study. *J Neurol Neurosci.* 2016;7:S2.
8. Duong N and Mishra A. Parkinsonian Symptoms with Fever. *J Neurol Neurosci.* 2016;7:S2.
9. Din F, et al. Ependymal Cyst of Third Ventricle Presenting as Intermittent Ataxia in a 2 Year Old Child. *J Neurol Neurosci.* 2016;7:S2.
10. Espinosa NR and Miguel AM. Late Onset and Slowly Progressive Pantothenate-Kinase Associated Neurodegeneration may be linked to Plasma Hyperlipidemia. *J Neurol Neurosci.* 2016;7:S2.

11. Al-Shimali HM, et al. Low-Dose Exposure to Lead during Pregnancy Affects Spatial Learning, Memory and Neurogenesis in Hippocampus of Young Rats. *J Neurol Neurosci.* 2016;7:3.
12. Horiuchi M, et al. Economic and Employment Issues in Patients with Dystonia: A Self-report Questionnaire Survey. *J Neurol Neurosci.* 2016;7:3.
13. Goma SH, et al. Multicenter Assessment of Health-Related Quality of Life (HRQOL) Among Stroke Survivor. *J Neurol Neurosci.* 2016;7:3.
14. Davey DA. Alzheimer's Disease, Cerebrovascular Disease and Dementia: Pathology, Risk Factors and Prevention; A Comprehensive Approach. *J Neurol Neurosci.* 2016;7:3.
15. Anyanechi CE and Saheeb BD. The Complications Associated with the Extraction of Asymptomatic Impacted Mandibular Third Molars: A Prospective Clinical Study of 63 Patients. *J Neurol Neurosci.* 2016;7:3.
16. Khanna RR, et al. Isolated Ventricular Non-Compaction Syndrome, Rare Cause of Recurrent Stroke in Young - A Case Report. *J Neurol Neurosci.* 2016;7:3.
17. Bhaduri S, et al. Speech Emotion Quantification with Chaos-Based Modified Visibility Graph- Possible Precursor of Suicidal Tendency. *J Neurol Neurosci.* 2016;7:3.
18. Srivastava S. High Altitude Brain Swelling. *J Neurol Neurosci.* 2016;7:3.
19. Anghelescu A, et al. Iontophoresis with Potassium Iodide, Inedited Palliative Physiatric Method for Hemifacial Spasm-Case Report and Literature Review. *J Neurol Neurosci.* 2016;7:3.
20. Degirmenci Y and Kececi H. Prolonged Todd Paralysis: A Rare Case of Postictal Motor Phenomenon. *J Neurol Neurosci.* 2016;7:3.
21. Bektas G, et al. Risperidone - A Probable Cause of Guillain-Barre Syndrome: A Case Report. *J Neurol Neurosci.* 2016;7:3.
22. Yazdankhah M and Barough SE. In Vivo Administration of Cerebrospinal Fluid of Patients with Multiple Sclerosis; A New Model to Study Adult Neurogenesis in Different Stages of Disease. *J Neurol Neurosci.* 2016;7:3.
23. Sharika R, et al. Intraoperative Visual Evoked Potentials: There is More to it than Meets the Eye. *J Neurol Neurosci.* 2016;7:3.
24. Attia TH. Children With Special Needs, How Can We Afford Optimal Care?. *J Neurol Neurosci.* 2016;7:3.
25. Vanadia E, et al. The Relationship between Regulation Disorders of Sensory Processing (RDSP) and White Matter Abnormalities. *J Neurol Neurosci.* 2016;7:3.
26. Wilson OIB. The Occurrence of a High Number of Lung Cancer Metastases is Consonant with the Proposed Theory of "Erythrocyte Associated Necrosis Factor". *Transl Biomed.* 2016;7:2.
27. Menon JA, et al. Alcohol and Tobacco usage Among Students in a Higher Education Institution in Lusaka, Zambia. *Transl Biomed.* 2016;7:2.
28. Li JX, et al. Classical Hodgkin Lymphoma Presenting as A Post-Transplant Lymph proliferative Disorder after Organ Allograft Transplantation. *Transl Biomed.* 2016;7:2.
29. Gandhi J, et al. Effect of Diabetes Mellitus on Sexual Arousal and Intercourse. *Transl Biomed.* 2016;7:2.
30. Chaudhary R, et al. Cystic Duct Opening into Right Hepatic Duct; a Disaster Waiting to Happen During Cholecystectomy: A Case Report. *Transl Biomed.* 2016;7:2.
31. Karthikeyan R, et al. Anti-Inflammatory Activity of Ethanolic Extract of Flowers *Hymenocallis littoralis* (Jacq.) Salisb. By Hrbc Membrane Stabilization Method. *Transl Biomed.* 2016;7:2.
32. Ifeanyichukwu MO, et al. Activated Partial Thromplastin Time, Prothrombin Time, Thrombin Time and Platelet Count Study in HIV Seropositive Subjects at Nnamdi Azikiwe Teaching Hospital Nnewi. *Transl Biomed.* 2016;7:2.
33. Benveniste H and Blackband SJ. Translational neuroscience and magnetic-resonance microscopy. *The Lancet Neurology.* 2006;5:536-544.
34. Schmitz C and Hof PR. Design-based stereology in neuroscience. *Neuroscience.* 2005;130:813-831.
35. Center UN. The GAPs, GEFs, and GDIs of heterotrimeric G-protein alpha subunits. *Int. J. Biol. Sci.* 2005;1:51.
36. Panksepp J. *Affective neuroscience: The foundations of human and animal emotions.* Oxford university press. 1998.
37. Jeannerod M. *The cognitive neuroscience of action.* Blackwell Publishing. 1997.
38. Dayan P and Abbott LF. *Theoretical neuroscience (Vol. 10, pp. S0306-4522).* Cambridge, MA: MIT Press. 2001.

39. Izhikevich EM. Dynamical systems in neuroscience. MIT press. 2007.
40. Bolam JP, et al. Characterization of cholinergic neurons in the rat neostriatum. A combination of choline acetyltransferase immunocytochemistry, Golgi-impregnation and electron microscopy. *Neuroscience*. 1984;12:711-718.
41. Castellanos FX and Tannock R. Neuroscience of attention-deficit/hyperactivity disorder: the search for endophenotypes. *Nature Reviews Neuroscience*. 2002;3:617-628.
42. Cador M, et al. Involvement of the amygdala in stimulus-reward associations: interaction with the ventral striatum. *Neuroscience*. 1989;30:77-86.
43. Kriegeskorte N, et al. Circular analysis in systems neuroscience: the dangers of double dipping. *Nature neuroscience*. 2009;12:535-540.
44. Adolphs R. Cognitive neuroscience of human social behaviour. *Nature Reviews Neuroscience*. 2003;4:165-178.
45. Davidson RJ, et al. Emotion, plasticity, context, and regulation: perspectives from affective neuroscience. *Psychological bulletin*. 2000;126:890.
46. Camerer C, et al. Neuroeconomics: How neuroscience can inform economics. *Journal of economic Literature*. 2005;43:9-64.
47. Dehaene S and Naccache L. Towards a cognitive neuroscience of consciousness: basic evidence and a workspace framework. *Cognition*. 2001;79:1-37.
48. Shirakawa M, et al. Effectiveness of Endoscopic Endonasal Transsphenoidal Surgery Using a Neuronavigation: Clinical Results of 178 Pituitary Adenomas. *J Neurol Neurosci*. 2016;7:1.
49. Novotna A, et al. Pulmonary Arterial Hypertension in a Patient with Multiple Sclerosis Treated with Interferon Beta: A Case Report. *J Neurol Neurosci*. 2016;7:1.
50. Batista P and Pereira A. Quality of Life in Patients with Neurodegenerative Diseases. *J Neurol Neurosci*. 2016;7:1.
51. Sidhu KS. Neurodegenerative Diseases Stem Cell-based Therapeutic: A Perspective. *J Neurol Neurosci*. 2016;7:1.
52. Davico C, et al. Carbon Monoxide Intoxication: A Case of Misdiagnosis with Neuroradiological Follow Up. *J Neurol Neurosci*. 2016;7:1.
53. Kulikova OI, et al. Effects of Antioxidants on the Viability of the Human Neuroblastoma SH-SY5Y Cell Culture under the Conditions of Heavy Metal Toxicity. *Biol Med*. 2016;8:305.
54. Maiga Y, et al. Low Back Pain in Out-door Patient at the Department of Neurology at Gabriel Touré Teaching Hospital in Bamako: Longitudinal, Descriptive and Prospective Study about 120 Patients. *J Pain Relief*. 2016;5:247.
55. Gozum MALP and Rosales RL. Botulinum Toxin A Therapy in Early Poststroke Spasticity: Providing a Wider Treatment Avenue. *Int J Neurorehabilitation*. 2016;3:207.
56. Ojinnaka NC, et al. Posttraumatic Epilepsy among Epileptic Children Seen in a Pediatric Neurology Clinic in Enugu, Nigeria-A Descriptive Study. *J Epilepsy*. 2016;2:105.
57. Ligier F and Kabuth B. Between Neurology and Psychiatry, a Difficult Preliminary Diagnosis of Kleine-levin Syndrome: Case-report of a Young Girl. *J Child Adolesc Behav*. 2016;4:274.
58. Larner AJ and Ziso B. STOP-Bang: Screening for Obstructive Sleep Apnoea in a Cognitive Disorders Clinic . *J Sleep Disord Ther*. 2016;5:223.
59. Yamel R, et al. Optic Neuritis Unresponsive to Steroids: Prevalence, Characteristics and Plasma Exchange Treatment. *J Mult Scler*. 2015;2:154.
60. Marquetand JC, et al. Contrast-Enhancing Lesions within the Spinal Chord Suggests Immune Reconstitution Inflammatory Syndrome (IRIS) in a Patient with Natalizumab Associated Progressive Multifocal Leukoencephalopathy (Natalizumab-PML). *J Neuroinfect Dis*. 2015;S1:001.
61. Tena-Suck ML, et al. Chordomas; Crush Intraoperative Analysis. *J Cytol Histol*. 2015;6:328.
62. Sofiene B, et al. Primary Spinal Epidural Rhabdomyosarcoma of the Upper Thoracic Spine. *J Spine*. 2014;3:193.
63. Martínez HR, et al. Increase of Pyramidal Tract Fractional Anisotropy on MRI after Stem Cell Transplantation in ALS Patients. *J Neurol Neurophysiol*. 2014;5:244.

64. Joanna S, et al. What Is 'Early Intervention' for Work Related Difficulties for People with Multiple Sclerosis? A Case Study Report. *J Neurol Neurophysiol*. 2014;5:252.
65. Tekin R, et al. Fourteen Year Surveillance of Nosocomial Infections in Neurology Unit. *J Bacteriol Parasitol*. 2012;3:149.
66. Dobkowska EE, et al. Familial 15q11.2 Micro deletions are not Fully Penetrant in Two Cases with Hereditary Spastic Paraplegia and Dysmorphic Features. *J Genet Syndr Gene Ther*. 2014;5:247.
67. Sharma B, et al. "JAW CLONUS" – A Rare yet Fascinating Clinical Sign in Neurology. *J Neurol Disord*. 2014;2:161.
68. Freitas TS, et al. Pulsed Radiofrequency of Sympathetic Lumbar Plexus versus Sympathetic Block in the Management of Lower Limb Complex Regional Pain Syndrome Type 1. *J Pain Relief*. 2014;3:138.
69. Bucurescu S. Pre-analytical Laboratory Error in a Stroke Patient due to Blood Collection from another Stroke Patient: A Case Report. *J Neurol Neurophysiol*. 2013;4:178.
70. Noguchi H, et al. Does Prior Trauma Predict Negative Posttraumatic Appraisal in Motor Vehicle Accident Survivors? *J Depress Anxiety*. 2013;S4:003.
71. Machado RA, et al. Prospective Randomized Controlled Trial of Nimodipine as Add-On Therapy in the Treatment of Focal Refractory Epilepsy Patients: A Pilot Study. *J Neurol Neurophysiol*. 2013;4:151.
72. Pearce JMS. The Neurology of Erasistratus. *J Neurol Disord*. 2013;1:111
73. Hernández Y, et al. Visual Disorders in Optic Neuromyelitis: Report of Two Cases. *J Clin Exp Ophthalmol*. 2013;3:005.
74. Karkare K, et al. Sleep Abnormalities in Guillain Barre Syndrome: A Clinical and Polysomnographic Study. *J Sleep Disord Ther*. 2013;2:109.
75. Femia G, et al. Steroid Responsive Meningitis and Myelitis in Complicated *Mycoplasma pneumoniae* Infection. *J Neurol Neurophysiol*. 2012;3:132.
76. Carod-Artal FJ. The Impact of Emerging Tropical Diseases in Neurology: Challenges to Accurate Diagnosis. *J Neurol Neurophysiol*. 2012;3:e105.
77. Mancini M, et al. (2011) Mobility Lab to Assess Balance and Gait with Synchronized Body-worn Sensors. *J Bioeng Biomed Sci*. 2011;S1:007.
78. Harirchian MH, et al. Dairy Products Consumption in Multiple Sclerosis Patients: Useful or Harmful. *Int J Neurorehabilitation*. 2016;3:e126.
79. Yasaminshirazi M and Ahmadi M. Neuroimaging Findings in Methamphetamine Abusers. *J Addict Res Ther*. 2016;7:285.
80. Kaneko F, et al. Acute Effect of Visually Induced Kinesthetic Illusion in Patients with Stroke: A Preliminary Report. *Int J Neurorehabilitation*. 2016;3:212.
81. Hou D, et al. Model Roles of the Hypothalamo-Neurohypophysial System in Neuroscience Study. *Biochem Pharmacol*. 2016;5:211.
82. Carlotta F, et al. Changes in BDNF and MAPK Signaling Pathways in Experimental Glaucoma. *J Clin Exp Ophthalmol*. 2016;7:530.
83. Biswas A and Das SK. Alzheimer and Parkinson's Disease -Two Faces of the Same Disease? *J Alzheimers Dis Parkinsonism*. 2016;6:222.
84. Ludvig N and Kral JG. Bioengineered Cranial Bones with Multiple Intelligent Functions for the Effective Treatment of Currently Intractable Brain Disorders: Prospects and Challenges. *J Biomed Eng Med Devic*. 2016;1:107.
85. Werner FM and Coveñas R. Efficacy of the Deep-Brain Stimulation in Parkinson's Disease According to a Neural Network. *J Cytol Histol*. 2016;S5:S5-010.
86. Mishra AK and Mukherjee A. Recent Advances in Notch Signaling Pathway in *Drosophila*: A Snapshot. *Adv Tech Biol Med*. 2016;4:165.
87. Rajeshwaren J, et al. Stress- Does Brain and Mind Matter- EEG Neurofeedback Training in Alcohol Dependence Syndrome. *Int J Neurorehabilitation*. 2015;2:187.
88. Alvarez AM, et al. Primary CNS Lymphoma: Analysis of Treatment by Gamma- Knife Radiosurgery and Chemotherapy in a Prospective, Observational Study. *J Integr Oncol*. 2015;4:150.
89. Treadway MT and Zald DH. Reconsidering anhedonia in depression: lessons from translational neuroscience. *Neuroscience & Biobehavioral Reviews*. 2011;35:3.

90. Milad MR. and Quirk GJ. Fear extinction as a model for translational neuroscience: ten years of progress. *Annual review of psychology*. 2012;63:129-151.
91. Yehuda R. and LeDoux J. Response variation following trauma: a translational neuroscience approach to understanding PTSD. *Neuron*. 2007;56:19-32.
92. Moghaddam B and Krystal JH. Capturing the angel in "angel dust": twenty years of translational neuroscience studies of NMDA receptor antagonists in animals and humans. *Schizophrenia bulletin*. 2012;38:942-949.
93. Stewart AM, et al. Zebrafish models for translational neuroscience research: from tank to bedside. *Trends in neurosciences*. 2014;37:264-278.
94. Marsh R, et al. Habit learning in Tourette syndrome: a translational neuroscience approach to a developmental psychopathology. *Archives of general psychiatry*. 2004;61:1259-1268.
95. Krishnan AV, et al. Axonal ion channels from bench to bedside: a translational neuroscience perspective. *Progress in neurobiology*. 2009;89:288-313.
96. Parpura V and Verkhratsky A. Homeostatic function of astrocytes: Ca²⁺ and Na⁺ signalling. *Translational neuroscience*. 2012;3:334-344.
97. Glover EM, et al. Tools for translational neuroscience: PTSD is associated with heightened fear responses using acoustic startle but not skin conductance measures. *Depression and anxiety*. 2011;28:1058-1066.
98. Canetta SE and Brown AS. Prenatal infection, maternal immune activation, and risk for schizophrenia. *Translational neuroscience*. 2012;3:320-327.
99. Bockholt HJ, et al. Mining the mind research network: a novel framework for exploring large scale, heterogeneous translational neuroscience research data sources. *Frontiers in neuroinformatics*. 2010;3:36.
100. De Lange EC. Utility of CSF in translational neuroscience. *Journal of pharmacokinetics and pharmacodynamics*. 2013;40:315-326.
101. Kalueff AV, et al. Gaining translational momentum: more zebrafish models for neuroscience research. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*. 2014;55:1-6.
102. Ehrenreich H. A boost for translational neuroscience. *Science*. 2004;305:184-185.