The Role of Neuropsychiatrists in Medical Science

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Abstract
The re-emergence of neuropsychiatry in the twentieth century occurred in the context of a history of neuropsychiatric contributions to medical science. In parallel to the growth of neuropsychiatry as a medical specialty, psychiatry has benefitted from developments in neuroscience, many of these built upon foundations established by neuropsychiatrists. We sought to enumerate the contributions by psychiatrists with neurological training to advances in medical science.

Methods
We searched PubMed using the terms neuropsychiatry history, psychiatry and neurology history and cross-referenced physicians, scientists, doctors and clinicians in psychiatry and neurology, including publications in all languages. The search was repeated in PsychINFO. We reviewed several textbooks that include neuropsychiatry history and interviewed neuropsychiatrists, behavioral neurologists, and combined neurologists/psychiatrists. From these sources, we created a database of neuropsychiatrists and their contributions.

Results
Electronic searches yielded 165 articles for review. Using these, combined with textbooks and interviews, we identified over 50 neuropsychiatrists who made important contributions to medical science since the inception of the field of psychiatry.

Conclusion
Physicians who have trained and/or practiced in both neurology (or neurological sciences) and psychiatry have made major contributions to medical science. Rather than solely looking to the creation of clinician scientists to push the field of psychiatry forward, there is a strong argument to be made that interdisciplinary training in neurology and psychiatry will continue to spawn advances in psychiatric understanding.

Syndromist
Gabriel Anton 1858-1933 Hydrocephalus, visual anosognosia
Charles Arling 1904-1998 Spinocerebellar degeneration
Karl Bonhoeffer 1868-1948 Exogenous vs. endogenous psychosis, aphasia
Sergei Korsakoff 1853-1900 Korsakoff's psychosis
Silas Weir Mitchell 1829-1914 Causalgia (Now complex regional pain syndrome)
Hermann Oppenheim 1858-1919 Tabes dorsalis, bulbar paralysis, war trauma
Paul Sollier 1861-1933 Early description of CBT, first clinical neuropsychiatrist
Erwin Stengel 1902-1972 Asymptomatic for pain
Constantin Von Economo 1876-1931 Encephalitis lethargica
Julius Wagner-Jauregg 1857-1940 Malaria treatment of neurosyphilis
Josef Gerstmann 1887-1969 Gerstmann syndrome
George Gilles de la Tourette 1857-1904 la Maladie des Ticcs (Tourette Syndrome)
Otto Kauders 1843-1949 Mental component of encephalitis lethargica
Arnold Pick 1851-1924 Pick disease, Pick bodies
Emil Kraepelin 1856-1926 Manic depression, psychiatric syndromes

Neuroanatomist
Vladimir Bekhterev 1857-1927 Superior vestibular nucleus, central tegmental tract
Edouard Brissaud 1852-1909 Hemifacial spasm
Hirota Tanabe Behavioral Disturbance in FTD
Johann Bernhard Aloys von Gudden 1824-1886 Commissure of Gudden (optic tract fibers)
Kurt Goldstein 1878-1963 TBI, organismic approach to aphasia, holistic diagnosis
Auguste-Henri Forel 1848-1931 Cofounder of the neuron theory, early work in sexology
Károly Schaffer 1864–1939 axon projection in the hippocampus

Investigator • Theorist
Edwin Weinstein 1911-1998 Author of “Denial of illness”
Dionisio Nieto Gomez 1908-1985 Copper metabolism in the CNS, lithium research, psychopharmacology in Mexico
Smyth Ely Jelliffe 1866-1945 Editor, Journal of Nervous & Mental Disease; founded Psychoanalytic Review; helped establish Psychosomatic Medicine
Francisco J. de Echaleuc 1897-1957 Criminal psychology and the totalitarian psychological project in Spain
Wilhelm Griesinger 1817-1868 Author of “Mental Pathology and Therapeutics,” neurological basis of psychopathology

Neuropathologist
Alois Alzheimer 1864 – 1915 Described eponymous disease and its pathology
Jules Gabriel Francois Baillarger 1809-1890 Subarachnoid hemorrhage, hypnagogic hallucinations
James Crichton-Browne 1840-1938 Brain injury and psychopathology
Joseph Jules Dejerine 1849-1917 Alexa: Treatment of war neurosis
Gyula Donath 1849-1944 Anankastic (obsessive compulsive) personality disorder
Alekssei Kozhnevnikov 1836-1902 ALS, advocate for the mentally ill, syndromic epilepsy
Theodore Meynert 1833-1892 Nucleus basalis, subcortical role in psychopathology
Willelm Verhaart 1889-1983 Primate brains in the Dutch East Indies
Ernst Wilhelm Von Brucke 1819-1892 Physiology of language, optics
Carl Wernicke 1848-1905 Receptive aphasia and encephalopathy
Arthur Schiller 1874-1957 Established neuroradiology
Paul Charles Dubois 1848-1918 Persuasion therapy
Adolf Meyer 1866-1950 First American neuropsychiatrist, established psychobiology
Franz Nissl 1860-1919 Nissl stain
Paul Emil Flechsig 1847-1929 Myelogenesis

Neurophysiologist
Eduard Hitzig 1868-1948 Exogenous vs. endogenous psychosis, aphasia
Charles Aring 1887-1969 Gerstmann syndrome
Eduard Hitzig 1868-1948 Exogenous vs. endogenous psychosis, aphasia
Eduard Hitzig 1868-1948 Exogenous vs. endogenous psychosis, aphasia
Edward Hoffman 1660-1742 Equilibrium equivalents

Educator • Advocate
Stanley Cobb 1897-1968 First American Neuropsychiatry textbook
José Martins da Cruz Jobim 1802-1878 First Brazilian neuropsychiatrist, first Brazilian Psychiatry textbook
Abraham Myerson 1881-1948 Heredity and Social Environment in the Mentally III
Thomas Salmon 1824-1886 Commissure of Gudden (optic tract fibers)
Christa Kohler 1926-2004 Habilitation thesis for social psychiatry (in the GDR)

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