### DEUTSCHE GESELLSCHAFT FÜR GESCHICHTE DER NERVENHEILKUNDE e.V.

#### Band 14 der Schriftenreihe der DGGN - Abstracts

#### I. Bonn's History of Psychiatry

#### Heinz Schott: Contextualizing the History of Psychiatry in Bonn

Abstract: This paper will highlight the origins of psychiatry which was established as a medical discipline in the aftermath of the Enlightenment and the French Revolution. The regional insane asylum ("Provinzial-Irrenheilanstalt") founded in Siegburg near Bonn in 1825 is an example for the development of the hospital psychiatry ("Anstaltspsychiatrie") in the early 19th century. Patients however were treated using rather brutal methods like the compulsory chair ("Zwangsstuhl"), cold showers etc. The composer Robert Schumann, who suffered from severe psychotic symptoms ("melancholy with delusion" etc.), received treatment in one of the seven private psychiatric institutions in Bonn. He died in 1856. The general situation improved in 1882 as a new regional hospital ("Privinzial-Heil- und Pflegeanstalt") was established in Bonn. During this period the psychiatric department at the university ("Universitätspsychiatrie") was applying a scientific approach in the sense of natural sciences (especially brain research). Consequently, in 1908 a psychiatric clinic was set up at the university ("Universitätsnervenklinik") in Bonn. Just as was the case with many other psychiatric institutions, physicians of psychiatric clinics in Bonn were involved in Nazi crimes (e.g., compulsory sterilization, euthanasia). The development after 1945 will be summarized briefly: The university psychiatry at Bonn – together with the departments of neuropathology, neurosurgery and neurology – joined the "university nerve center" ("Universitätsnervenzentrum"). After 1970 the so-called psychiatry reform initiated a sort of humanistic revolution as social psychiatry became the guideline for reconstruction, i.e. the new establishment of psychiatric institutions. Today, the economization of health systems is threatening to compromise the relatively high standards of care provided for mentally ill persons that has been achieved over the last decades.

Keywords: insane asylum; hospital psychiatry; university psychiatry; national socialism; psychiatry reform; Robert Schumann.

### Hans-Otto Dumke: Karl Leonhard's Contribution to the Pathography of Robert Schumann

Abstract: The psychiatric disease of Robert Schumann has been discussed in many biographies as well as pathographies since his passing in 1856. The diagnostic classification efforts cover almost the entire spectrum of psychiatric diseases. Besides Karl Leonhard the following psychiatrists, H.W. Gruhle, J. Moebius, H. Kleinebreil and R. Steinberg were engaged in finding out more about the life, the pathography and the musical accomplishments of Robert Schumann. Karl Leonhard describes Robert Schumann's illness as a specific form of "unsystematic schizophrenia" from his classification of endogenous psychosis (Wernicke, Kleist, Leonhard). The last years of his life Robert Schumann lived in a private clinic in Endenich which is now part of Bonn.

*Keywords:* Psychiatric disease of Robert Schumann – contribution of Karl Leonhard – unsystematic Schizophrenia

# Jürgen Junglas: "German Psychiatry and Euthanasia". Friedrich Panse Between Justification and Reflection in 1946

Abstract: Friedrich Panse (1899 - 1973) was in charge of the hereditary archives at the regional institute of the Rhineland in Bonn since 1936. After 1940 he appears on the T4 list and with Pohlisch takes part in closed sessions of T4 consultants. He actively seeks his rehabilitation after he was removed from office and was not readmitted as a lecturer in 1945. As a consequence he writes the paper titled "German Psychiatry and Euthanasia" on the 29th of October in 1946. In this remarkable text he walks the thin line between providing an insider view as someone who has had "something to do with euthanasia" and simultaneously maintaining faith in the medical ethos. He tries to clearly separate psychiatry from politics and classifies his colleagues in psychiatry according to their involvement in events surrounding euthanasia. The argumentation developed by Panse finally led to his and Pohlisch's acquittals and the reopening of the proceedings in 1953.

Keywords: euthanasia, T4, nazi psychiatry, collission of duties

#### II. Nerve clinics and asylums

# Ellen Leibrock: Dr. Hermann Dick and the "Non-Restraint-Systems" in Germany A contribution to the 150 year anniversary of the "Pfalz-Klinikum für Psychiatrie und Neurologie"

Abstract: Dr. Hermann Dick was born on November 25 in 1844 in Speyer/Palatinate. He studied medicine at the universities of Heidelberg, Freiburg, Munich and Bamberg. He completed his internship in Berlin under Ideler and in the asylum in Frankenthal. In 1839 he became a member of the Association of Palatine Physicians (Verein Pfälzischer Ärzte). In 1841, he went to study under the famous physicians Skoda and Rokitanski in Vienna. A year later he was appointed as the director of the newly founded asylum at Klingenmünster. In 1853 he went on study trips to German and foreign asylums for two years. In 1856 he published "Reiseskizzen über das 'Non-restraint-System'...." It was in this text that he defended the method of the "non-restraint system" which he practised at his own asylum in Klingenmünster right from the beginning. Dick was awarded the "Order of Holy Michael" (Orden des Heiligen Michael) and the title of "Royal Court Councelor" (Königlicher Hofrat.) Dick's greatest merit was the introduction of the "non-restraint system" in his own asylum in the year of 1857. Kraepelin and other psychiatrists alleged that it was Ludwig Meyer who had introduced the "non-restraint" in Germany in the year of 1862. Nevertheless, one has to state that actually Hermann Dick was the pioneer of the "non-restraint system" in Germany. He died on February 22nd in 1879.

Keywords: Dr. Hermann Dick, "Non-restraint System", Klingenmünster.

#### Detley John: The Organisation of Psychiatry in the Grand Duchy of Hesse and by Rhine

Summary: In the Grand Duchy of Hesse and by Rhine with the capital of Darmstadt the so-called care for mentally ill was one of the most significant elements of state policy and internal development. This small state established a model system for taking care of mentally ill patients.

Keywords: asylums of the insane and incapacitated, Grand Duchy of Hesse and by Rhine

#### F.Reimer: The Foundation of German Mental Hospitals: A Mighty Humanitarian Deed?

Abstract: German institutions were accused of having many different disadvantages which however was not the case from the beginning. These alleged disadvantages basically included bad accommodation of inpatients and inadequate therapy. In the canton of Fribourg (Switzerland) housing facilities of mentally ill persons were examined in order to determine whether a mental hospital should be build. The patients were visited in their homes and it was ascertained that the housing situation was comparatively intolerable.

Keywords: Mental Hospital Kanton Fribourg, Psychiatric Hospitals, Chronic Psychosis

#### Christian Donalies: On the Situation of Psychiatric Hospitals in Brandenburg Before World War II

Abstract: The meeting minutes of the directors of the psychiatric hospitals in March of 1939 provide an impressive insight into the hardships of the patients and of the personnel. At the same time the bravery of Dr. Baumann of Eberswalde stands out. He was very outspoken about the situation. The NS functionaries' negative attitude toward psychiatry is shown by the ruthless cut in budget as well as in personnel. However, efforts were made by psychiatrists to alleviate or even cure the diseases of many patients. On the other hand measures against Jewish patients were also described. At that time nothing was known of the horrendous events such as the outbreak of war and practice of euthanasia that were to follow.

*Keywords:* attitude against psychiatry, bravery to resist, cuts in budget and in personnel, D. v. Arnim, F. Baumann, H. Ehlers

#### III. Psychopathology

## Horst Isermann: The Psychiatrist Heinrich Damerow (1798-1866) and His Attitude Towards Mental Retardation

Abstract: In today's society caring for and supporting people with mental retardation is carried out with the aim of enabling them to live as independently as possible. At the beginning and in the mid-nineteenth century predominantly doctors but also teachers and theologians took care of and supported the "idiots" – as mentally handicapped persons were called in those days – that had been so far neglected and often hidden from

society. Charity, social understanding and the ability of sympathetic understanding in a pedagogic sense were characteristic of those who were the first to work with handicapped people. Heinrich Damerow (1798-1866) however, a renown Psychiatrist at that time and a founding member of the German Psychiatric Society, considered people with mental handicaps as humans without a soul like animals and as degenerated or miscarried creatures. In his opinion there was no reason to promote these beings and annihilation should be taken into consideration. We can assume that Damerow in no way realized or understood the special case of mental retardation. From our present point of view despising humans in this manner was a result of a mental attitude at that time coming from mediaeval sources which in the end led to the human catastrophe caused by the Nazi regime.

*Keywords:* Heinrich Damerow, psychiatry in the nineteenth century, mental retardation (idiotism), care and promotion, psychic-somatic-debate

### Hans-Dieter Mennel: Syphilis - Genius and Psychosis

Abstract: Despite its strong impact on social life since its presumable appearance in Europe around the end of the 15th century, no other illness led to such controversies in the medical sciences than the syphilitic disease. Questions of its origins, its causes and transformability were treated in numerous medical and sociological publications. The development of immunological resistance and different therapeutic measures more than likely led to modifications in the phenomenology of the condition. The situation became more complicated during the 19th century as it was realized that which was only reluctantly acknowledged as late syphilitic complication was actually organic psychosis, a hypothesis that however was only confirmed in the first years of the 20th century. Organic psychosis - the general paralysis of the insane (GPI) - was originally described as chronic arachnoid inflammation together with brain atrophy in a small number of cases. Its nature as a long-term consequence of syphilitic infection remained unnoticed in the beginning and was hardly contested later on. For a long time neurodegenerative processes were considered to partly cause GPI even after the final confirmation of its syphilitic origins. Together with the common acceptance of GPI as a consequence of the luetic-syphilitic disease, new therapies became available that eventually resulted in the complete disappearance of the condition in the present-day. Empirical investigations in these cases are therefore not possible anymore; only retrospective, i.e. historical access remains feasible. The fact that GPI manifests itself mainly in the production of psychotic phenomena inspired new investigations on somatic aertiologies for cognitive and affective psychoses mostly by using a morphological, i.e neurohistological approach. On the other hand, by ranking this psychosis together with other psychoses despite its clear organic signs, an old, time-honored association was also applied to GPI, namely the association of madness with ingenious creativity. A certain number of prominent personalities in arts and politics during the 19th century were supposed to suffer from GPI. In Germany, Nikolaus Lenau, Hugo Wolf and Friedrich Nietzsche are almost unanimously regarded as affected by syphilis and GPI. In these and other cases the diagnosis however remains controversial; using our present criteria a clear confirmation in retrospect seems impossible. These prominent persons were often objects of artistic fiction; Thomas Mann's novel Doktor Faustus can be regarded as an example in which Friedrich Nietzsche's fate served as a model. The doctrine of the relationship between madness - here PGI - and geniality was again underscored by pathographies of ingenious people and by reports of increased creativity after he outbreak of the illness which subsequently led to dementia and death. A more sober approach might however explain the presumed creative forces as intricately belonging to the psychotic condition. Yet it must be conceded that this statement suffers from the inherent hazards of the retrospective approach.

Keywords: Syphilis – General Paralysis of the Insane (GPI) – Psychosis and geniality – literature and pathographies

## Rebecca Schwoch: Ernst F. Müller vs. Carl Wernicke: A Critical Contestation of Psychiatry Around 1900

Abstract: This essay treats the conflictual situation between the professor Carl Wernicke of Wroclaw and a "insane" and legally incapacitated man: Ernst F. Müller, PhD. As a result of the psychiatric expert opinion presented by Wernicke, Müller was placed under disability in 1895. Müller himself did not accept this degradation and continued litigations until he succeeded in producing another psychiatric expert opinion which pronounced Müller as healthy in October of 1896. This expert opinion also declared that there was no reason to maintain his legal incapacitation. The "Müller affair" consequently became precarious, not only in being able to harm the reputation of Wernicke himself but also the reputation of psychiatry in general even in the prime of the critique of psychiatry and asylums.

Keywords: ERNST F. MÜLLER – CARL WERNICKE – psychiatric expert opinion – backlash against psychiatry and asylums – Germany around 1900

## Norbert Andersch, David Barfi: Cassirer, Goldstein, Kronfeld, Lewin: Reexamining a Lost Approach to Psychopathology

Abstract: In search for the structure of mental existence In 1894 philosopher Wilhelm Dilthey initiated a public debate when he accused the empirical research strategies of Psychology and Psychiatry of failing to grasp the structural content of mental existence. What was felt as blame in those days has grown to a matter of scandal as Dilthey's allegations still properly describe the state of clinical psychiatry and psychopathological approach - more than a hundred years later. This paper reconstructs an interdisciplinary theoretical network beyond the Kraepeliean dichotomy, the focal concept of neurology and Freudian psychoanalysis, including Psychiatrist Arthur Kronfeld, Neurologist Kurt Goldstein and Psychologist Kurt Lewin - all of them shifting the focus of clinical observation away from the brain, to the "Gestaltung" of inner tension and relational order between individual and environment/social field. They all had been influenced by Ernst Cassirer's "Philosophy of Symbolic Forms", applying the ideas of constant change in mathematical perspectives and mental complexity to cultural development - and its pathological disorders. It was only the radical paradigm shift from the 'Euclidian Geometry' to the Abstract: worlds of the newly developed "Riemann' Geometries" which allowed Einstein's and Maxwell's theories to emerge and modern mathematics to be developed. Psychopathology - following Cassirer - is in urgent need of a comparable turn - beyond the narrow field of clinical observation towards a theory of "Mental Formation" - to categorize its underlying structural order, only from which a concept of mental illness can be deducted. This cooperation towards a "New Psychopathology" never entered mainstream psychiatry as all its stakeholders were driven into exile from Nazi-Germany. This paper reuptakes the concept of 'Symbolic Forms' which emerge as magic, myth, language, religion, law, politics, science, the arts and others. They can be seen as "invariant patterns" of mental formation, which in their entirety create consciousness. A structural concept and a visualisation of its categorical order (MATRIX) is presented. Psychiatric illness is always connected to a breakdown of "Symbolic Formation" as an artificial construct of culture. Its typical symptoms are not a mere lack of organic / psychological functioning - but derive from the inability to establish and to manage the complex relational order of 'meaning', while constantly changing its 'frames of reference'. Possible changes to the concepts of psychopathology are discussed.

*Keywords:* Crisis of psychopathology, Concept of Symbolic Form, Cassirer, Goldstein, Kronfeld, Lewin, Model (Matrix) of Mental Formation

#### IV. Neuroanatomy and Neuropathology

### Stephan Jaster: Gorg Büchner's lecture on "Cranial Nerves

Abstract: In the early nineteenth century the German writer Georg Büchner (1813-1837) studied medicine in Giessen and Strasbourg. He was most interested in anatomy, therefore his doctoral thesis was on the nervous system of fishes (barbels) in order to draw conclusions on human cranial nerves and scull development. At this time the natural philosophy of Schelling and the theory of Oken on vertebral development were prevalent in discussions held by the scientific community. Büchner's results and conclusions stem from his own experiences from preparing the barbels. Therefore he had a special point of view; unfortunately he died a few months after receiving an assistant professorship in Zurich. He was one of the first anatomists who made use of modern scientific methods, even if his fame over the centuries is based rather on his literary works.

Keywords: Georg Büchner - natural philosophy - cranial nerves - scull theory- 19th century

## Ulrike Eisenberg: Beyond the Mainstream: LOUIS JACOBSOHN-LASK (1863-1940) and His Photographic Atlas of Comparative Neuroanatomy

Abstract: The neurologist and neuroanatomist LOUIS JACOBSOHN-LASK (1863-1940) held lectures at Berlin University from 1900 until 1933. He was doing basic neuroanatomical research and his main interest was comparative neuroanatomy, even when this topic was no longer a field of neuroscientific interest. This essay deals with his photographic atlas of comparative neuroanatomy which presents an interesting theory of evolutionary biology. JACOBSOHN-LASK published the first volumes himself in 1934/35. His work however remained unfinished because as a Jew he had to emigrate. In 1936 he followed his wife, the communist writer BERTA LASK, to the Soviet Union. He died in Sevastopol. JACOBSOHN-LASK'S biography illustrates the suppression of scientific theories by the national socialist's persecution as well as the marginalization by the scientific mainstream.

*Keywords:* LOUIS JACOBSOHN-LASK – comparative neuroanatomy – photographic atlas – evolutionary theory – emigration to soviet union – suppression of scientifical theories

#### Christoph Schindler: Christfried Jakob: Neuropathologist in Bamberg and Buenos Aires

Abstract: Christfried Jakob (1866-1956) was nerve doctor and neuropathologist initially at Erlangen and Bamberg. He produced scientific papers and anatomical books in Germany and later in Argentina, where he is known up to now because of his multifaceted interests and his extraordinary personality.

Keywords: Christfried Jakob, neuropathologist, Bamberg, Buenos Aires

#### V. Neurology

#### Roland Schiffter: The Disease and Death of Karl Friedrich Schinkel

Abstract: The medical history of Karl Friedrich Schinkel will be discussed on the basis of the report by Dr. A. Pätsch "Schinkels letzte Krankheit und Leichenbefund" published in the Journal "Wochenschrift für die gesammte Heilkunde" in 1841. Schinkel had suffered from Parkinsons disease and multiple cerebral infarctions. He died after a long period of severe suffering from right hemiplegia, aphasia and hemianopsia. The therapy (blood-lettings, cupping glasses, cantharides plasters and purgatives) applied by Dr. Pätsch was not helpful, rather harmful.

Keywords: Parkinsons disease, multiple cerebral infarctions, harmful therapy

# Axel Karenberg: The Foundation of the German Neurological Society in 1907 and the Early Years of Clinical Neurology in Germany

Abstract: The following paper attemps to reconstruct some of the events surrounding the establishment of the German Neurological Society in the autumn of 1907. Two different groups of persons participated in neurology's struggle for independence. On the one hand, scientific founders such as Wilhelm Erb, Alois Alzheimer and Max Nonne laid the cognitive basis for clinical neurology. On the other hand, institutional forerunners struggled to anchor the new discipline structurally within medical faculties and hospitals. Among these less well-known physicians are Hermann Bruns, Alfred Sänger and Paul Julius Möbius, whereas Hermann Oppenheim was the only person who belonged to both groups. In addition to short biographical sketches, this paper will focus on the internal and external framework that hampered development of German neurology around 1900.

Keywords: Neurology/19th century, Germany

# B.Holdorff: Leyden's Progressive Bulbar Paralysis (1870) and Charcot's Amyotrophic Lateral Sclerosis (1869, 1874) at the Historical Intersection of Nosographical Science

Abstract: While this chapter in the history of nosography is primarily associated with the name of Jean Martin Charcot, numerous other forerunners have made considerable contributions in this field. At the time of Charcot's influential paper, one of the forerunners was a German clinician who was essentially unknown abroad: Ernst Leyden or Ernst von Leyden (1832 – 1910) who was nobilitated in 1896. Ernst Leyden was crucial in the identification of neurological disorders, especially of the spinal cord. His first important step toward academic success was his outstanding work on "the grev degeneration of the dorsal spinal tract" in tabes dorsalis which was his habilitation thesis completed in 1864 as part of his postdoctoral qualification which led to the sensory explanation of spinal ataxia (1868). His outstanding academic accomplishments continued: In 1870 he was the first to describe the spinal cord sequelae of Caisson disease, a two volume treatise on spinal disorders followed (1872-4) as well as the identification of "multiple neuritis" (later named polyneuritis) as a peripheral disorder (1878-80). (The inflammatory character of spinal cord and peripheral disorders was overestimated by Leyden so that many cases of "myelitis" and "neuritis" were later classified as non-inflammatory and referred to as "myelopathies" and "neuropathies"). Leyden held the position of director (ordinarius) of internal medicine at the Charité hospital Berlin beginning in 1876 and before then he was located in Koenigsberg (1865-72) and Strasbourg (1872-76). He received his medical training at the military medical academy (Pépinière) at Berlin. The portrait of the young military doctor (Stabsarzt) is shown in Fig.1. Leyden studied motor system diseases almost at the same time as Charcot did which consequently lead to a long-lasting rivalry between the two without ever having met each other.

Keywords: Ernst von Leyden, progressive bulbar paralysis, Jean Martin Charcot, amyotrophic lateral sclerosis

#### Detlef- Ernst Rosenow: Paul Robert Bing (08.05.1878-15.03.1956): Co-founder of Swiss Neurology

Abstract: Bing was born in Strasbourg on May 8th in 1878 which at that time was the capital of the Alsace region which became part of Germany after the French lost the war of 1870/71. Bing's scientific impact on neurology was minor, however his impact on the development of neurology in Switzerland in the 20th century was immense. Apart from a paradox ankle joint reflex in spastic states that did not find entry into scientific literature and coining less handy eponyms such as "erythroprosopalgia" or "erythromelalgia" which were later transformed into the more convenient term "Bing-Horton syndrome." Bing was primarily a clinician of highest reputation and his name will always be associated with two monographs which at his time were considered to be "bibles" in neurological literature due to first class didactics. Bing's family was Jewish, his father was German and his mother Swiss. In 1888 the family moved from Strasbourg to Basel, Switzerland. Bing left high school in Basel (1896) where he also studied medicine and received his medical degree in the autumn of 1901. After receiving his PhD in the spring of 1902, he spent a term at the pathological department at the University of Basel, went on to Ludwig Edinger in Frankfurt on the Main for one year (1902-1903), continued to work at the medical department of the University of Basel under His (1903-1904), spent the next winter term in Paris (Dejerine, 1904/1905) and the summer term 1905 in Berlin (Oppenheim, Munk) before settling as a neurologist ("Nervenarzt") in Basel in a private practice in the autumn of 1905. Here he started to conduct scientific work in the laboratory of the medical department. He was nominated as private lecturer (Privatdozen) in the spring of 1907 after submitting his habitation thesis as part of his postdoctoral qualification with the title "On the Significance of Spino-Cerebellar Systems". In the same year he launched the "nerve ambulatory" in the physical department of the university under very frugal circumstances which he financed with his own funds. Here he worked along with Emil Villiger between 1907-1913. Bing was among the ten founders of the Swiss Society of Neurology in November of 1908. In 1909 the first of 14 editions of his "Compendium of Regional Diagnosis in Lesions of the Brain and the Spinal Cord" appeared and in 1913 the first of nine editions of "A Textbook of Nervous Diseases for Students and Practising Physicians in Thirty Lectures", both monographs which were translated into six foreign languages. Bing also had a strong interest in neuroopthalmology and published a monograph "Brain and Eye" (1914) which was edited three times. In 1917 Bing became one of the editors of the newly founded periodical "Swiss Archives for Neurology und Psychiatry" which is still in publication. In 1918 he was nominated "extraordinarius" by the medical faculty in Basel, but it was not until 1932 that he was nominated "personal full professor." Even later in 1937 he received a "teaching assignment in neurology," a position he held until 1948 when he celebrated his seventieth birthday. Bing published approximately 100 scientific publications and supervised 264 dissertations. Bing died on the morning of March 15th in 1956 following a heart attack or apoplexy. Bing, who was without descendants donated a "Bing Prize" honouring Swiss or Western international researchers in the field of neurology, which excluded citizens of states who persecuted Jews.

Keywords: Straßburg, Basel, Villiger, Dejerine, Edinger, Oppenheim, Munk, Bing-Prize, Swiss Society of Neurology, Swiss Archives of Neurology and Psychiatry

### VI. Neurosurgery

# Hartmut Collmann and Detlef-Ernst Rosenow: Nearly forgotten: Emil Heymann – A Pioneer of Neurosurgery in Germany

Abstract: Emil Heymann (1878 – 1936) was the single neurosurgical descendent of Fedor Krause, a pioneering German neurosurgeon at the beginning of the 20th century. Heymann succeeded Krause as chairman of the surgical department at the Augusta-Hospital in Berlin in 1921. He continued to work there until his untimely death in 1936. Heymann was innovative and introduced new neuroradiological and operative techniques and significantly contributed to technical advances in the field of neurosurgery. As he was Jewish, he was persecuted by the Nazis after they came into power in 1933. In 1935 he was expelled from the University of Berlin. He died of natural causes in early 1936 shortly before starting a new career overseas.

Keywords: Emil Heymann – Fedor Krause – Georg Merrem – history of neurosurgery – Germany

#### VII. Expulsion and War

### Heiko Bewermeyer and Hans-Dieter Mennel: KLAUS JOACHIM ZÜLCH: Neurologist in WWII.

*Abstract:* During World War II (1939 – 1945) KLAUS JOACHIM ZÜLCH was working in various fields and published articles on brain tumours, intracranial pressure and injuries of the nervous system. As a soldier he participated in three campaigns and was wounded several times. He recommended changes in favor of the

acute care and the medical organisation of the tank units. He led five military hospitals and his interest was the care of brain injuries and other woundings. In addition he was involved in sufficiently structuring and organising military hospitals. His restless activities included neuropathological and neurological problems. He maintained contact with the Kaiser Wilhelm Institute in Berlin. During the war he kept in touch with the neurosurgeon WILHELM TÖNNIS. His experiences, contacts and scientific research conducted during WWII determined his career afterwords.

*Keywords:* Medical officer of a tank division in 3 campaigns of World War II. Chief officer of military hospitals. Scientific publications in brain tumours, intracranial pressure and war injuries of the nervous system.

# Frank Stahnisch: On the forced-migration of German-speaking neuroscientists to North-America: The historical case of the Montreal Neurological Institute

Abstract: Under specific consideration of the theoretical approaches and practical research influences of "interdisciplinarity" in neuroscientific research, this article addresses a time period and a subject of investigation which has only been dealt with at the peripheral margins of the historiography of medicine and the neurosciences: As the more general works from historiographical migration research have shown so far, especially in respect to the manifold biographies of emigrated neuroscientists and individual case studies of specific institutions and clinics, the loss of nearly 30 per cent of all academic neurologists and psychiatrists in Germany between 1933 and 1945 had destroyed the basis of German-speaking neuroscientific research or, at least, disrupted it in various areas for a long and very critical time. Independent of such progress-oriented perspectives, however, and of those that took primarily the moral dimensions of the forced-migration process into account, the distinctive question of the fate and destiny of a great number of émigrés-neurologists and psychiatrists, who had been received by Canada and the United States of America, is still strongly neglected. In fact, this huge and extraordinary historical process had been downgraded under the label of mere "brain gain" in the American research landscapes that were to receive countless scientific refuges from Central-Europe. In specific view of the historical case of the Montreal Neurological Institute, as a center of excellence in the neurosciences, the attempt shall here be made to further clarify the fate, the modi of support, and the constraints of scientific development and clinical work on the other side of the Atlantic. This shall be pursued by mapping out the concrete example of one of the most excellent institutions, which had been created and shaped along the pivotal brain research program of WILDER PENFIELD (1891-1976), and which has integrated a great number of Central-European émigrés. In access to archival material from the Osler Library of the History of Medicine at McGill University, the individual fate of KARL STERN (1906-1975), HEINZ LEHMANN (1911-2000) and FRED ANDERMANN (b. 1930) shall be scrutinized in particular respect to their impact on interdisciplinary work in the modern neurosciences.

*Keywords:* Historiographical Migration Research, Interdisciplinarity, Forced-Migration, Neuroscientists, North-America, National Socialism, Montreal Neurological Institute, Wilder Penfield, Karl Stern, Heinz Lehmann, Fred Andermann