WFNR
World Federation for NeuroRehabilitation

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UMF
UNIVERSITATEA DE MEDICINĂ ŞI FARMACIE IULIU HAŢIEGANU CLUJ-NAPOCA

THE SOCIETY FOR THE STUDY OF NEUROPROTECTION AND NEUROPLASTICITY

European Teaching Course on Neurorehabilitation

9 - 12 APR 2011 | HOTEL OPERA PLAZA | CLUJ-NAPOCA | ROMANIA

European Teaching Course on Neurorehabilitation

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SCIENTIFIC PROGRAM

Saturday April 9th 2011

12:00 - 13:00
Lunch

13:00 - 13:30
Introductory address (Dafin F. Mureşanu, Volker Hömberg, Anca Buzoianu, Constantin Ciuce)

Module 1
Basic structure of rehabilitation,
Goal finding and monitoring processes and the health model of rehabilitation

13:30 - 15:00
The comprehensive approach of rehabilitation medicine, ethical and legal aspects
/ **Volker Hömberg** / Germany

15:00 - 16:30
The bio-psycho-social paradigm of disease understanding and ICF
/ **Volker Hömberg** / Germany

16:30 - 17:00
Coffee Break

17:00 - 18:30
Organisation of the rehabilitation team
/ **Klaus von Wild** / Germany

18:30 - 20:00
Goal setting and monitoring of the rehabilitation process
/ **Volker Hömberg** / Germany

20:00 - 22:30
Dinner

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Sunday April 10th 2011

09:15 - 09:30
Introductory address (Dafin F. Mureşanu, Heinrich Binder, Klaus von Wild, Florin Stamatian)

Module 2 (part 1)
Principles of reorganisation and recovery of the nervous system, elementary assessment tools and epistemology of neurorehabilitation

09:30 - 11:00
Basic principles of neurological recovery and related pharmacology
/ **Dafin F. Mureşanu** / Romania

11:00 - 11:30
Coffee Break

11:30 - 13:00
Basic principles of learning
/ **Volker Hömberg** / Germany

13:00 - 14:00
Lunch

14:00 - 15:30
The concept of evidence based medicine and design for clinical studies
/ Volker Hömberg / Germany

15:30 - 16:00
Coffee Break

16:00 - 17:30
Assessment tools for vocational placements and quality of life
/ **Klaus von Wild** / Germany

20:00 - 22:30
Dinner

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Monday April 11th 2011

09:15 - 09:30
Introductory address (Dafin F. Mureşanu, Heinrich Binder, Ioan Onac, Gelu Onose)

Module 2 (part 2)
Principles of reorganisation and recovery of the nervous system, elementary assessment tools and epistemology of neurorehabilitation

09:30 - 11:00
The applicability of neurological diagnostic tools (electrophysiological, neurosonological, imaging) for prognosis and goal definition in neurorehabilitation
/ Heinrich Binder / Austria

11:00 - 11:30
Coffee Break

11:30 - 13:00
External validity of randomized controlled trials and personalized medicine
/ Dafin F. Mureşanu / Romania

13:00 - 14:00
Lunch

14:00 - 15:30
Assessment tools for special nursing problems
/ Dana Boering / Germany

15:30 - 16:00
Coffee Break

16:00 - 17:30
Definition of rehabilitation outcomes
/ **Dana Boering** / Germany

20:00 - 22:30
Dinner

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Tuesday April 12th 2011

08:45 - 09:00
Introductory address (Dafin F. Mureşanu, Ovidiu Băjenaru, C. D. Popescu, Mihai Berteanu)

Module 3
Special Topics

09:00 - 09:30
Cortical excitability changes in stroke patients - a transcranial magnetic stimulation study
/ **C.D. Popescu** / Romania

09:30 - 10:00
Clinico-biological background for early neurorehabilitation after stroke
/**Ovidiu Băjenaru** / Romania

10:00 - 10:30
Rehabilitation nursing - integrative approaches - in post acute sci patients
/ Gelu Onose / Romania

10:30 - 11:00
Clinical and therapeutic aspects in lumbar sciatica by disc herniation
/ **Ioan Onac** / Romania

11:00 - 11:30
Injection techniques for pain management
/ Mihai Berteanu / Romania

11:30 - 12:30
Lunch

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REGISTRATION DESK

All materials and documentation will be available at the registration desk located at SSNN booth. The staff will be pleased to help you with all enquiries regarding registration, materials and program. Please do not hesitate to contact the staff members if there is anything they can do to make your stay more enjoyable.

LANGUAGE

The course language is English. Simultaneous translation will not be provided.

CHANGES IN PROGRAM

The organizers cannot assume liability for any changes in the congress program due to external or unforeseen circumstances.

ABSTRACT BOOK

The participants documents include the abstract book which will be handed the registration counter.

SECRETARIAT

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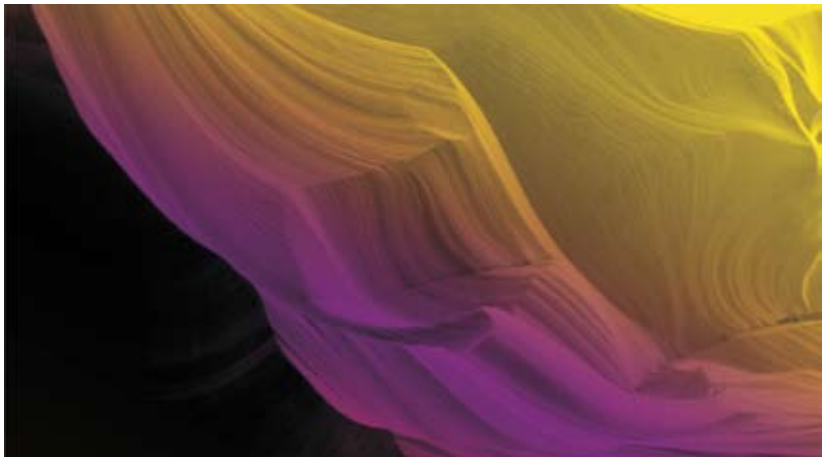

ABSTRACTS

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OVIDIU
BĂJENARU

Clinico-biological background for early neurorehabilitation after stroke

Acute stroke is an exremely complex medical condition which always appears as a consequence of another, usually chronic disease and which often is accompanied by significant comorbidities. Stroke also represents the most often invalidating medical condition, both pfysical and mental. The treatment of patients with stroke has 2 main targets: survival and minimizing the invalidating consequences in survivors, which in turn has two main pathways: secondary prevention and rehabilitation. As early as rehabilitation process of the patients after acute stroke could be initiated in parallel with secondary prevention and treament of medical complications, a better prognosis could be expected. In term to have a rationale approach of early neurorehabilitation in these patients, the evaluation and terapeutical measures must be individualized taking into account not only the brain lesions themselves but also the risk factors, the general cardiovascular condition of the patient, the comorbidities and acute/ subacute complications which have an important impact on each patient's brain lesions and their evolution both on short term but also on long term prognosis of functional medical rehabilitation and life expectancy.

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MIHAI
BERTEANU

Injection techniques for pain management

MAIN GOALS of the techniques of nerve blocks are:
Management of Musculoskeletal Pain
Management of Spasticity (restore musculoskeletal function)

TARGET OF NERVE BLOCKS (NB):
Sensory – management of pain
Sympathetic – management of simpathetically maintained pain (SMP)
Motor – spasticity or trigger points

MANAGEMENT OF PAIN
Diagnostic
Prognostic
Therapeutic

DIAGNOSTIC NB
Ascertain specific nociceptive pathways
Help determine possible mechanism of chronic pain
Aid differential diagnostic of site and cause of pain
Determine patients reaction to pain relief (psychological evaluation)

Small volumes (2-4ml) of LA
Duration of pain relief correlated with duration of action of LA (research)
Also use placebo blocks
Fluoroscopy, echography or CT, nerve stimulator for accurate needle placement
Consistent result for 2-3 nerve block sessions to evaluate effectiveness

PROGNOSTIC NB
Predict effects of neurolytic block
Predict effects of nerosurgery

Allow patient to experience the sensory changes (e.g. numbness)
Help patient to decide

Determine change in behaviour and affect in the absence of pain and analgesic medication
Degree of physical limitation unrelated to pain
Evidence of narcotic dependence and its severity
New pain in other location previously unnoticed, but now unmasked
Performed for 2-3 days (continuous technique-catheter)

THERAPEUTIC NB
Only after nature and location of pain is established by diagnostic blocks

Allow normalisation of posture through muscle relaxation
Allow the patient to perform other therapeutic procedures (e.g. therapeutic exercise)

INDICATIONS - SOMATIC PAIN:
Unilateral
Well localized
Confined to a small number of dermatomes

EXAMPLES
Low back pain (discal, facet, etc.)
Head/ neck pain
Shoulder pain (various ethiologies...)
Wrist / hand pain
Foot / ankle
CRPS I or II

Nerve Blocks should be used as an adjunct in the comprehensive treatment of the patient, offering a "therapeutic window" for other rehabilitation procedures to be applied.

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HEINRICH
BINDER

The applicability of neurological diagnostic tools (electrophysiological, neurosonological, imaging) for prognosis and goal definition in neurorehabilitation

Purpose of neurorehabilitation is to reintegrate adequately patients with disability resulting of neurological illness into and her social and also adequately occupational context. Condition for it is an analytic as well as synthetic consideration and approach. Both the rehabilitation doctor must master. Decisions must be dripped whether in which magnitude and how the recognized deficits can be removed or be reduced. Measures and purpose reaching are to be accompanied by suitable controls and measuring instruments. On the one hand these measuring instruments enclose indispensable clinically neuropsychiatric and neuropsychologic examination including various scores. On the other hand there is a row on electrophysiologic and neuroimaging investigations which are aimed on morphology as well as function. Both are indispensable if it is about detailed questions of patients condition and necessary rehabilitation process. However, a critical view of the results is required in relation on the final goal of the aimed rehabilitation success because the information won thereby are only stones of a whole. The right estimation and synthesis is the challenge of neurorehabilitation.

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DANA
BOERING

Assessment tools and special nursing problems in early rehabilitation

Early rehabilitation involves a complexity of medical, nursing and special therapeutic tasks under ICU typical conditions requiring special skills from all the members of the therapeutic team. It may essentially be considered as applied neuroscience.

The majority of neuro- rehabilitationists are therefore applying actual knowledge about brain plasticity and principles of motor learning in their everyday work. In this context assessments are a very important tool of evidence based practice.

The most frequently used assessments in early rehabilitation will be presented. Special aspects of everyday nursing practice and especially genuine nursing therapy skills will be specified including the Checklist of Therapeutical Nursing of the German Neurorehabilitation Society.

A very important aspect of daily work in early rehabilitation concerns patients with consciousness disorders. The new nomenclature of DOC, elaborated 2011 by the European Task Force will be itemized. The state of affairs in the assessment of DOC patients will be presented with a special focus on the Revised Coma Recovery Scale which will be video demonstrated.
The problem of pain assessment in DOC patients will be discussed and the new Coma Pain Scale will be presented.

Definition of rehabilitation outcomes

Scientific guidance is fundamental for the further development of therapeutic techniques. Due to the shortened therapy duration, it is usually not possible to discern empirically which evidence based therapy techniques help most an individual patient . Therefore it is of eminent importance to develop a systematic research to point out which therapeutic techniques help which patient in a specific stage of his postacute development.
A group of clinicians from the German Neurorehabilitation Society on the initiative of Prof. Hömberg initiated a multicenter trial with this aim.
The general, motoric, communication, dysphagia and neuropsychological assessments used to define rehabilitation outcomes in this trial will be extensively described and video demonstrated to afford a comprehensive overview to the audience.
The necessity of individual shaping of rehabilitation goals beyond all evidence and guideline based rehabilitational approaches will be pointed out.

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VOLKER
HÖMBERG

The comprehensive approach of rehabilitation medicine, ethical and legal aspects

In acute medicine there is a clear nosological definition of a disease followed by a set of diagnostic procedures leading to a treatment approach directed towards the known properties of this disease. Threfore the entire treatment process is centered around the diagnosis and nosological entity and in some sense monodimensional.
In contrast in rehabilitation medicine a much more comprehensive multi- facetted approach has to be used. The entire social and environmental circumstances and tradition in which the individual patient is embedded in has to be taken into account. Treatment is not marshalled according to a particular diagnosis but rather oriented on the balance between what the patients is able to do and is not able to do in particular domains of behavior. These domains today can be described by the use of the international classification of functions (ICF) (see module 2). Therefore rehabilitation needs a specialized way of looking at the necessary assessment of the patient, describing the patient's needs and goals and try to find a compromise what goals can be achieved in a particular condition and giving a particular behavior repertoire the patient has access to.

In this module furthermore legal and ethical aspects will be described as well as short overview will be given about different structure of rehabilitation approaches in neurology across Europe. In this respect it is also important to define the relative roles of physicians in neurology and physical medicine/ rehabilitation contributing to the definition of neuro rehabilitation procedures.

Gold setting and monitoring o the neurorehabilitation process

As a mentioned in the earlier modules the International Classification of Functions (ICF) has become sort of a gold standard for the classification of functions and abilities to participate. In this module practical exercises will be done how to extract from the ICF a reasonable matrix for the definition of rehabilitation goals.
It is important in the process of rehabilitation that goals can be clearly and operationally defined in the interaction between physicians and the patient as well as relatives. An attempt will be made to give real live oriented examples for definition of goals for various domains within the ICF framework.

The biol – psycho – social paradigm of disease understanding and ICF

VOLKER HÖMBERG

In medicine today it is standard to describe diseases by the international classification of diseases (ICD). In acute medicine treatment and diagnoses of a particular disease is the most important point.
As already mentioned in module 1 in rehabilitation medicine the problem is some different: Here in the foreground of interest of physicians and patients is the ability of the patient to do particular things i.e. to find descriptors for the actual abilities, function and chances of participation for the patient.
To make also such a classification comparable on an international level and find sort of a "micro language" to describe such differences in function and abilities the world health organization (WHO) has suggested to use a standardized international classification of function (ICF).
The ICF exit definition in:

1. Body functions and structures and
2. Activity
3. Participation

In the course of rehabilitation there is a transition from the acute medical treatment of body structures and body functions towards a more functional activity and participation related view. Within the ICF nine chapters of different activities can be differentiated from elementary mobility to major live areas as social, civic and religious actvities.
Within each domain (e.g. mobility) activities can be further sub defined into sub categories:
It will be demonstrated how ICF classification can be institute to describe rehabilitation process. Furthermore it is critically discussed in how far the micro language of ICF really reflects the patients ambitions and needs in the rehabilitation process.
It is important to note to that the ICF tries to reflect a bio- psycho- social model of disease rather than a pure biological understanding.

Basic principles of learning

For the rehabilitation of motor function an elementary understanding about the processes of motor learning is important. Within the last decade there has been a dramatic change in the paradigm of motor rehabilitation concepts and techniques.
In this module elementary aspects of motor learning especially of learning by repetition and feed-back will be demonstrated.Also the key behaviorial and psychological basic science elements contributing to our modern understanding of motor learning will be described. Furthermore the neurobiological foundation of motor learning process as well as the brain areas involved in learning by doing, imagery and imitation will be discussed.
Finally examples will be given in how far knowledge about motor learning principles in general over the last two decades has been implemented into reasonable motor retraining strategies such as the forced use approach or the use of auditory pacing (e.g. neurological music therapy).

Students will also be invited to practical exercises in designing "new" possible motor rehabilitation strategies based on elementary knowledge about motor learning.

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The concepts of evidence based medicine and design for clinical studies

VOLKER HÖMBERG

Historically the concept of evidence based medicine going back to the French encyclopedist of the 18th century and the first medical application of such an approach will be shown. The different levels of evidence will be introduced and the general properties of randomized controlled trials as a key element of the modern concept of evidence based medicine will be demonstrated.
In addition a critical epistemiological l discussion about the usefulness of this concept of evidence based medicine in neuro rehabilitation in contrast to concepts of individualized medicine will be presented and the design of Number of 1 studies as an alternative to groip designs will be introduced. Finally a systematic review of treatments based on evidence based medicine which today are widely used in neurologic rehabilitation will be reviewed.

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DAFIN F.
MUREŞANU

Basic principles of neurological recovery and related pharmacology

The effects of etiological agents on the brain traditionally are conceived as a linear sum of independent pathophysiological processed (excitotoxicity, inflammation, apoptosis-like, oxidative stress, misfolding protein, etc.) generating the pathways of pathological cascades in acute and chronic disorders.

The pathway approach has produced a very detailed understanding of molecular changes in the postlesional brain but it possesses blind spots that are critically related to the failure of pharmacological neuroprotection treatment in neurodegenerative disorders.

This is due to the simplistic way of understanding the neurobiological processes supporting brain protection and recovery and pathophysiological mechanisms. The failure of modifying disease therapies in many pathological conditions is measuring the failure of the reductionistic approach to the problem.

Every lesion in the nervous system initially triggers an endogenous neuroprotective reaction followed by an endogenous repair process, combining neurotrophicity, neuroprotection, neuroplasticity and neurogenesis, overlapping and acting under genetic control to generate endogenous defense activity (EDA) which continually counteracts pathophysiological processes - damage mechanism (DM).

All these biological processes are initiated and regulated by biological molecules.
Neurotrophic factors are probably the best example in this respect. They are acting in a pleiotropic neuroprotective way against pathological cascades.

The same molecules, due to a complex genetically regulated process, are able to regulate further on neurotrophicity, neuroplasticity and neurogenesis as well. Therefore, they have not only pleiotropic neuroprotective activity but also multimodal mechanism of action.

Beside the concept and therapeutical effects of pleiotropic multimodal molecules, current presentation will introduce the concept of neurorecovery, restitution, substitution and will highlight the therapeutical factors capable to support and enhance EDA in order to improve patient condition after CNS lesion.

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External validity of randomized controlled trials and personalized medicine

DAFIN F.
MUREŞANU

The last decade has been very fertile in the development of both neurosciences and evidence based medicine (EBM), even if sometimes they did not go hand in hand.

Evidence based medicine is a concept that tries to build clinical decisions based on empirical knowledge collected from randomized control trials (RCTs). RCTs were designed in order to avoid systematic sampling errors.

As we can see from the genomic, transcriptomic and proteomic studies of post lesional regulations, the biological reality of the nervous system is extremely complex and rather individualistic (neurotrophicity, neuroplasticity and neurogenesis responses).

Therefore, due to patients' heterogeneous responsivity in clinical practice, the approach of neurorehabilitation should be more individualistic, with better chances to manage complex situations.

This presentation will analyze why RCTs concept is difficult to be applied to neurorehabilitation studies.

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IOAN
ONAC

Clinical and therapeutic aspects in lumbar sciatica by disc herniation.

Lumbar sciatica represents a form of clinical manifestation of a peripheral motor neuron syndrome in the low back pain, most frequently having a mechanic disc etiology, characterized by dermatome distribution aggravated by flexion and Valsalva maneuver, with monoradicular neurologic deficit in 50% of cases. Annual costs of treatments are impressive, ranging at billions of Euros/US dollars annually. Properly treated it has a high healing potential within 3 month from beginning (60-80%), untreated it is prone to chronic pain. Severe forms with ponytail syndrome require neurosurgical treatment.

Current guidelines recommend positive diagnosis of sciatica in the presence of a typical radicular pain, lower limb irradiated and at least one neurological test (sign) indicating nerve root damage or characteristic neurological deficit, excluding warning signs (“ red flags “) , both anamnesis and physical examination.

Computer tomography (CT) and magnetic resonance imaging (MRI) have both the needed accuracy for the diagnosis of disc herniation.

Initial treatment is conservative, with a major focus on patient education (see the clinic guide of the Dutch College of General Practitioners). It recommends relative rest with continuing normal activity, combined with drug therapy (NSAIDs, analgesics, muscle relaxants, general corticotherapy or paravertebral , epidural, infiltration, sedatives).

Surgical treatment (discectomy ‘the golden standard’ in the herniated disc) is reserved for severe cases with ponytail syndrome or if clinical symptoms persist after 6-8 weeks of treatment.

Regarding the optimal treatment and application timing, no definite conclusion was reached yet. No significant differences appeared in the evolution of patients treated surgically compared with those treated conservatively, on the long term of 1-2 years.

GELU ONOSE

Rehabilitation nursing - integrative approaches - in post acute sci patients

Spinal Cord Injuries (SCI) usually generate severe impairment or even loss of basic functions: voluntary/ active motility, sensitivity, micturition and/or defecation control, erection/ ejaculation/ fertility. They are devastating, especially because they are frequently irreversible. They are usually associated with serious co-morbidities, emerging from: tissue distrophicity (mainly pressure sores), urinary tract infections (chronic/ recurrent), respiratory, respectively metabolic and/or circulation disturbances of: blood pressure, respectively of the venous-lymphatic flow - especially antigravitational, in lower limbs, psycho-social subsequent troubles.
The SCI acute standard treatment is limited nowadays, unfortunately just to surgical intervention - spinal cord decompression, drainage and spine stabilization - and to complex (supportive and assistive) care, intricated with long term rehabilitation programs.
Generally, the multitude of: prophylactic/ therapeutic/ rehabilitative - including of related comprehensive cares/ nursing - measures are/ remain, on long-term intricate, but with subtle nuances of qualitative and quantitative type - evolution/ minute assessment based.
All RN assistance, for a post SCI patient, must be run since his/her admission in a hospital NeuroRehabilitation unit and has to continue as long as it is necessary some of it: life-long.
The main integrated measures (intricate with prophylactic and/or therapeutic components) of RN, to be approached are: continuous inspection of patient skin, turns into bed, anti latch. respectively stretching and anticipative posturing, passive/ assisted active limb mobilization, appropriate methodological massage, bronchial drainage/ expectoration maneuvers, assistance of the process to evacuate urine or/and stools/ bladder/ bowel training, progressive verticalization/ standing/ balance training, transfers and wheelchair use instruction, psychological communication, sanitary specific education.
As long as the patient remains in bed, on medical rest indication, the mentioned measures prevail. To these progressivelly are added, physical – kinetological approaches towards the"switch", from upmost RN to mainly effectivelly rehabilitative programmes, when possible.

Key words: Spinal Cord Injury, Rehabilitation Nursing, integrative approaches

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C. D.
POPESCU

Cortical excitability changes in stroke patients - a transcranial magnetic stimulation study

Stroke is one of the major pathologies that disrupt the normal brain function. Reorganization occurs naturally after the initial distructive event, but also as a consequence of different interventions that are globally grouped in "rehabilitation". Passive kinesitheraphy, active movement and other procedures (as is functional electrical stimulation) are attempting to guide the neuroplastic processes in order to achieve a better level of functionality. Motor learning and cortical plasticity are influenced among other factors by the type and quantity of the rehabilitation procedure that is applied.

Transcranial magnetic stimulation is a noninvasive method that allows both the evaluation and the modulation of cortical excitability. TMS studies allow an evaluation of the area responsible with voluntary movement of the limbs (cortical maps) in different moments in time, thus allowing an evaluation of the changes that are eventually induced by different modulatory interventions on the cortical representation's surface and responsiveness.

We have evaluated the cortical projection of the upper limb in a group of 9 stroke patients and 6 healthy volunteers, before and after a motor training program. One of groups have trained using a force tracking system device that required precise coordination of contraction force of the hand (in prehension movement); another group has been using FES training for the upper limb (stimulated extension of the forearm and the hand), and the third group had only passive kinesitheraphy of the upper limb. Active movement increased the surface of the cortical projection of the hand from the first day but and the effect was more pronounced after the 5th day of training. Functional electrical stimulation induced a positive modulation of the motor area, which became significant after 5 days of training. Passive movement did not induce detectable changes on the motor area.

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KLAUS VON WILD

Organization of the rehabilitation team

Objectives: Today, increasingly more patients with brain lesions survive the acute stage, however, suffering from severe impairment of higher cerebral functioning (WHO-ICF). Holistic neurorehabilitation can significantly improve functioning and patients' reintegration.
Methods: Functional rehabilitation is an original task of rehabilitation medicine, neurology, and neurosurgery. Impairments refer to loss of structures and functions. Disabilities refer to limitations or participating restrictions. Functioning is an umbrella term encompassing all body functions, activities and participation. WHO- ICF defines components of health and some health –related components of well-being: These domains are described from the perspective of the a) body, b) individual, c) society in two basic lists: 1. Body functions and structures 2. Social activities and participation.. Functional rehabilitation, therefore, aims at the victims restoration of impaired higher cortical functioning and the reconstruction of human lives within a social context. That is why NeuroRehabilitation needs a multidisciplinary team approach.
Results: The essential aspect in early rehabilitation is the integration of disciplines and consistent goal setting to regard individual patients' needs. Good structural organization of the team, notice of basic communication rules, conflict management and a definite decision making increase productive interdisciplinary working. Post-acute and long-term rehabilitation is focused at the individuals social re-integration. Most important criteria for a good health related quality of life were shown to be happiness above all, related to regained social reentry, social competence and work, personal responsibility; love, with partners and the family, having fun with play, leisure time and friends, to enjoy mobility again. The transdisciplinary team approach (Figure 1) will be shown in a scientific movie from the early beginning in some typical examples for the early phase of neurorehabilitation and after some years of holistic rehabilitation. Multidisciplinary team approach is the key issue for the final success .
Discussion: Obviously the impairment of mental-cognitive and neurobehavioral functioning and not the loss of physical skills will cause patients' loss of life transactions and final outcome. NeuroRehabilitation is possible because of the individuals' neural plasticity.
Conclusion: Functional rehabilitation is a process whereby patients who suffer from impaired higher cerebral functions following injury or disease regain their former abilities or, if full recovery is not possible, achieve their optimum physical, mental, social and vocational capacity. It aims at patients' reintegration. In order to facilitate such goals neurosurgeons should start with team approach as early as possible and will have to work in close collaboration with the neuropsychologist and all other members of the team day by day.

Figure 1 UN Convention on the rights of persons with disabilities

Convention on the Rights of Persons with Disabilities

entered into force on 3May 2008

- The Convention marks a "paradigm shift" in attitudes and approaches to persons with disabilities. It takes to a new height the movement ***from viewing persons with disabilities as "objects"*** of charity, medical treatment and social protection ***towards viewing persons*** with disabilities ***as "subjects" with rights***, who are capable of claiming those rights and ***making decisions for their lives*** based on their free and informed consent as well as ***being active members of society.***

Figure 2: The interdisciplinary team for neurorehabilitation

Team Approach after brain damage

To manage restoration and social re-entery

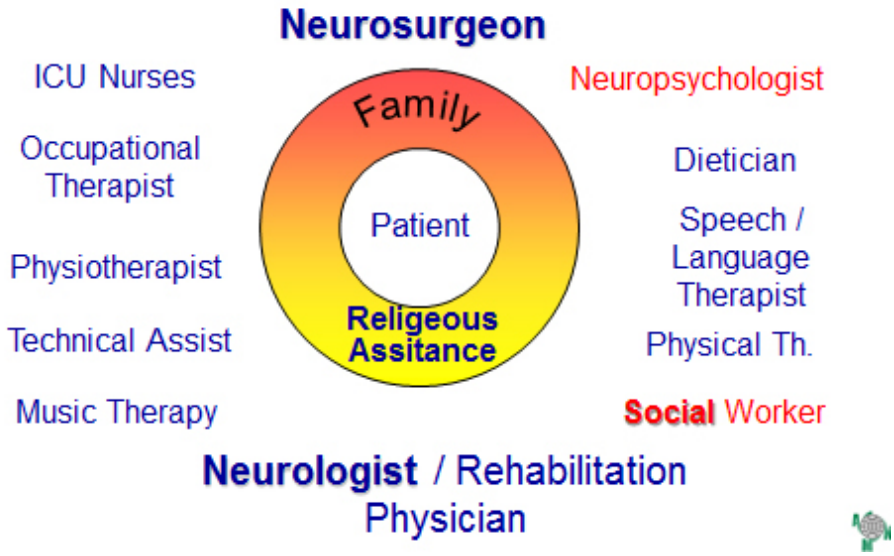


Figure 3

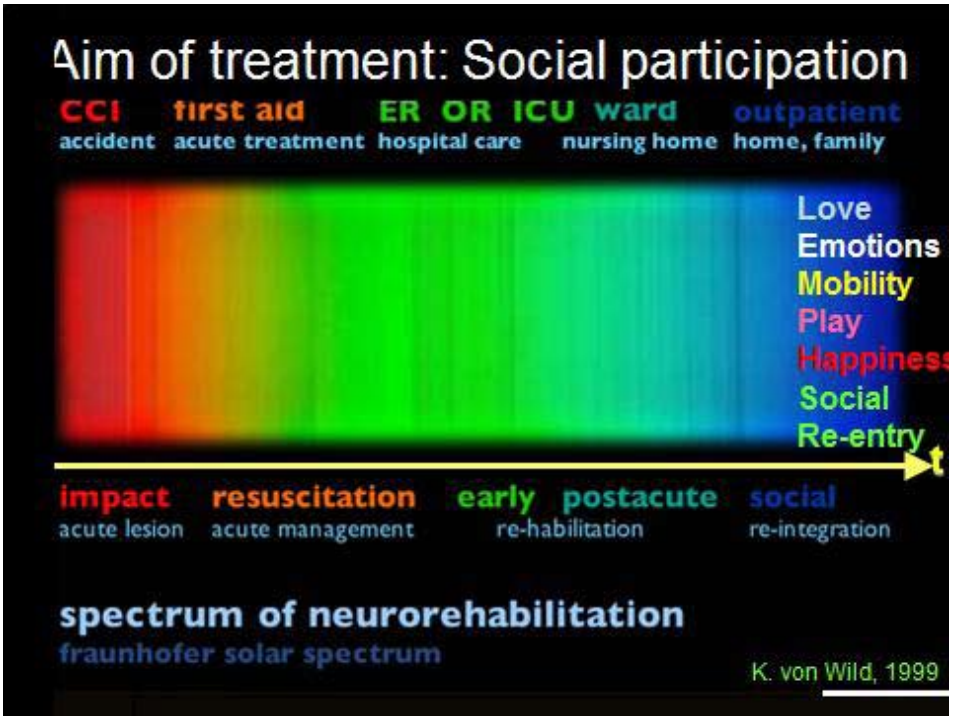
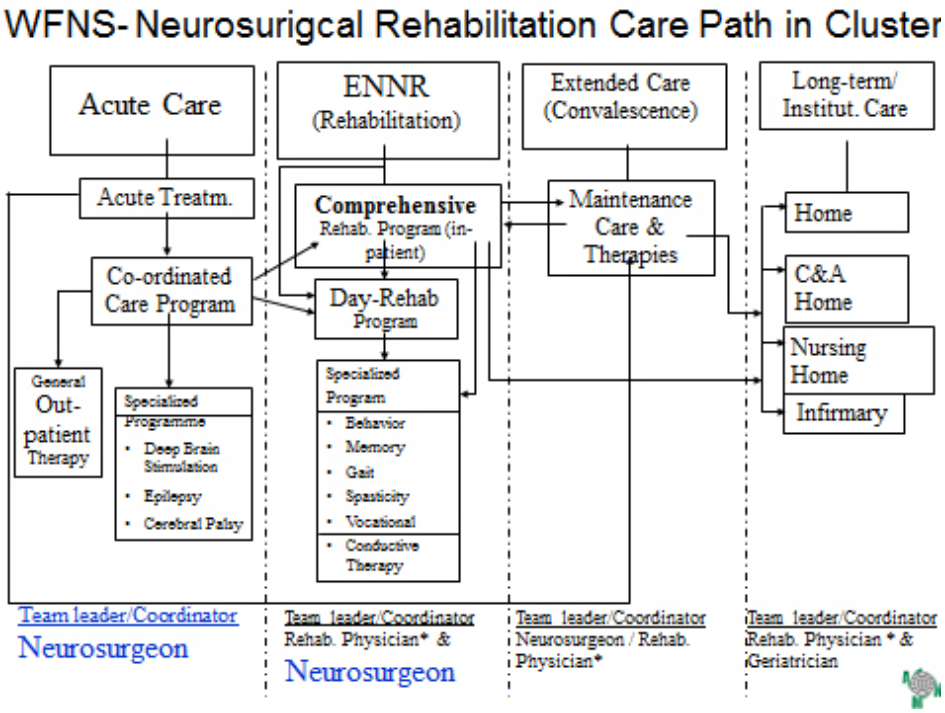


Figure 4
Tables 1 – 3: Staff requirement, Intensity of therapies, Consultation in Early NNR
Figure 5 Flow Chart Holistic Neurorehabilitation



Tables 1 – 3: Staff requirement, Intensity of therapies, Consultation in Early NNR

Staff requirement for ER-Department

Calculated for 15 – 20 beds (German Guidelines 1993)

Nurses (half of them ICU nurses)	1 : 0,4-0,7 pts.
Psychologist	1½: 15
Speech therapy	1: 7,5
Physiotherapy	1: 15
Occupational, vocational therapy	1: 4 - 1: 5
Dietetics	½: 15
Social services	1: 15
Tech.assistant elctroneurophysiology	1: 15
Secretary	1: 12
Neurosurgeon, Neurologist, ICU physician	1 ½
Ward assistant if not covered centrally	1 ½

Intensity of daily therapies with regard to TBI severity during neurorehebilitation

Intensity of therapies	*TBI severity at time of admission for neurorehabilitation (GCS)*				
	Mild	*moderate*	*severe*	*no data*	*all (%)*
on week-days	39 35,1 %	11 9,9 %	2 1,8 %	59 53,2 %	111 100,0 %
on week-days & week-ends	74 52,5 %	29 20,6 %	16 11,3 %	22 15,6 %	141 100,0 %
no data	2	1	1	2	6
total N %	115 44,6 %	41 15,9 %	19 7,4 %	83 32,2 %	258 100,0 %

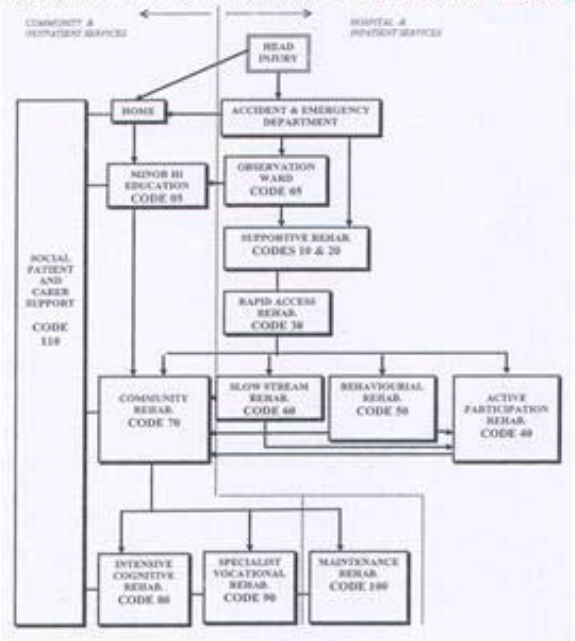
Consultations during rehabilitation

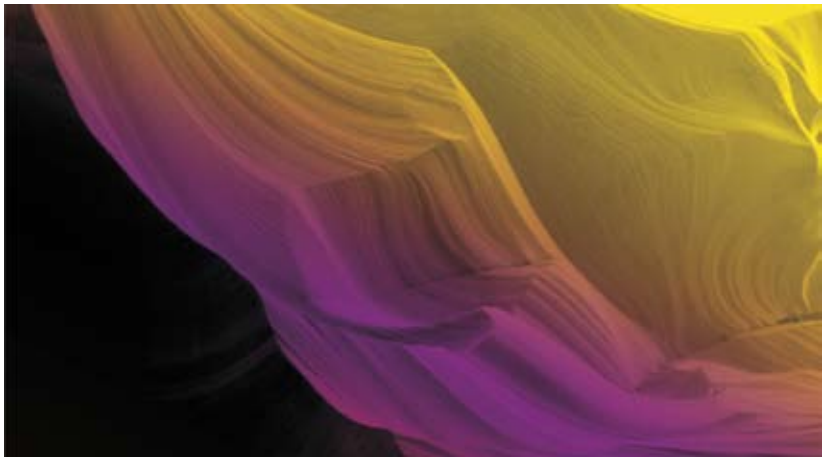
consultations	*number*	*[%]*
trauma surgeon	62	24,0
general (abdominal) surgeon	16	6,2
neurosurgeon	40	15,5
neurologist	73	28,3
internal physician	97	37,6
pediatrician	6	2,3
hygiene specialist	103	39,9
urologist	11	4,3
gynecologist	2	0,8
ENT	114	44,2
maxillofacial	15	5,8
ophthalmologic injuries	118	45,7
others	17	6,6

Figure 5 Flow Chart Holistic Neurorehabilitation

Flowchart of potential head injury services

Seeley HM, Hutchinson P,Pickard et al(2006):A decade of change in the regional head injury care:a retrospective review Brit.J.Neurosurg 20(1):9-21





CURRICULUM VITAE

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OVIDIU BĂJENARU /ROMANIA

1983 : M.D. at the Faculty of Medecine of University of Medecine and Pharmacy "Carol Davila" Bucharest
1989 : specialist in neurology, confirmed by the Ministery of Health of Romania
1993 : Ph.D. at the University of Medecine and Pharmacy "Carol Davila" Bucharest
1999 (since) : Professor of Neurology at the University of Medicine and Pharmacy " Carol Davila" Bucharest, Chairman and Head of the Neurology Department of the University Hospital of Emergency Bucharest
2000-2004 : Vice-Dean of the Faculty of Medecine - University of Medecine and Pharmacy "Carol Davila" Bucharest
2001(since) : President of the Romanian Society of Neurology
2003 – 2009 : member of the Scientific Committee of ECTRIMS
2004 - 2009 : Member of the Executive Committee of the European Society of Neurology
2008 (since) : Romania official delegate in UEMS – EBN (Board of Neurology)
*sept. 2010 : elected Sectretary of the Executive Committee of UEMS-EBN

POST GRADUATE TRAINING:
1992 - 1994 : post graduate training in clinical neurology and functional investigations of the nervous system at University "Rene Descartes"(Paris)

FIELDS OF INTEREST FOR THE SCIENTIFIC RESEARCH
- stroke, dementia and neurodegenerative diseases (in particular Alzheimer and Parkinson's disease), multiple sclerosis
- more than 300 scientific papers published and reported in different national and international scientific meetings, 5 medical books and monographies (published in Romania), co-author (1 chapter) to the "International Neurology - A Clinical Approach", Wiley-Blackwell, 2009; Principal Investigator in 12 research grants from the Romanian National Council for Science and Research, Coun try Principal Investigator in an International Program of Research for genetic factors in stroke patients; Country Principal Investigator – in more than 30 international, multicentric clinical trials; Principal Investigator of the research site – in more than 30 international and national multicentic trials

AFFILIATION:
- Romanian Society of Neurology (president), European Neurological Society European Stroke Organization, European Federation of Neurological Societies, American Academy of Neurology, Romanian Brain Council (foundation member), Danube Neurological Association (member in the Board), New York Academy of Sciences, American Academy for Advancement in Science, Movement Disorders Society

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MIHAI BERTEANU /ROMANIA

TITLE
- Professor at the University of Medicine "Carol Davila" Bucharest
- Chief of Dept. Physical and Rehabilitation Medicine, University Hospital ELIAS
- Senior consultant in Physical and Rehabilitation Medicine (PRM)
- PhD -cum laudae.
- European Board certified in PRM

STUDIES
- 1969-1980 German School Bucharest
- 1981-1987 General Medicine at the University of Medicine "Carol Davila" Bucharest,
- 1987 MD License

POSTGRADUATE EDUCATION
- Complementary studies in: Electromyography (2000), Pain Therapy(2000), Homeopathy (1994), Management of Health Services (2003), Hospital Management (2006)
- Multiple national and international courses: in EMG (2001), Train the trainers (2002), Entrepreneurship (2002), European Practicum on Clinical Exercise Testing (2010)
- Clinical exchange in: Bruxelles (1997), Berlin (1998), Angers (2001), Washington (2000), Innsbruck (2000), Winterthur (2004), Barcelona (2006), etc.

STIINTIFIC ACTIVITY
- Author or coauthor in over 250 papers, chapters in textbooks, etc., published nationally and internationally
- Keynote speaker in international congresses: Sao Paulo (2005), Hong Kong (2006), Antalya (2005), Athens (2006), Porto (2008), etc.
- PhD –CUM LAUDAE: Value of Electromyographic Biofeedback in Rehabilitation of Voluntary Movement, increase of Muscle Force and Treatment of Spasticity. 2003
- European Board certified since 2005.

PATENTS
- 5 patents with medical application

RESEARCH
- Partner in 6 national grants
- Partner in 2 international grants

MANAGEMENT ACTIVITIES
- Medical Director , University Hospital ELIAS 2006-2010
- Manager University Hospital ELIAS 2010

MEMBER OF
INTERNATIONAL
- ISPRM Int. Society of Physical & Rehabilitation Medicine. Board member (since 2004)
- WFNR World Federation of Neurological Rehabilitation. Board member (2001-2006)
- AAPM&R American Academy of Physical Medicine and Rehabilitation. Member.
- UEMS European Union of Medical Specialists PRM section, National Delegate (since 2004)
- UEMS, President of the Professional Practice Committee (since 2010)
- Bone and Joint Decade – National Delegate. (since 2002)
- WHO-ICF delegate since 2002

NATIONAL
- President of the Commission of PRM in the Ministry of Health
- President of the Romanian Society of PRM. (1998-2008 Secretary General)
- Council and Senate of the University of Medicine "Carol Davila" Bucharest

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HEINRICH BINDER /AUSTRIA

After the study of the medicine at the Viennese university graduated Binder his education as specialist for neurology and psychiatry in the neurological accommodation university clinic of Vienna where he was working clinical as well as scientifically in the field of neurointensive care, neuroimaging and neurorehabilitation. 1982 the title Dozent was awarded to him which is comparable the PhD because of his scientific research and 1988 he got the professorship for neurology at the Viennese medical university.

Among other things during this time he built up one of the first model station for neurological early rehabilitation. In 1989 he took over the administration of one of the biggest neuro-logical departments of Austria, to "Maria Theresia Castle" originally founded of former but in the meantime no longer existing Rothschild Foundation.

Since that time he developed there the concept of neurological early rehabilitation into a continuous care concept by taking the example of consistent stroke care from the acute phase till day clinic and outpatient rehabilitation.

During this time he also established and led there the Ludwig Boltzmann Institut for restorative neurology and neurorehabilitation which in many years' has cooperated with Texas Houston Medical Center and which has changed 2008 to the Landsteiner Institute for neurorehabilitation and space medicine. Main topics of his research during this time were neurorehabilitation of brain and spinal cord injury.

Binder is founding member and at that time also president of the Austrian society for neuro rehabilitation foundet 1985 and founding president of the European Federation of neurorehabilitation societies which exists since 2 years and has set itself the task to establish neuro rehabilitation all over Europe on an important public-health subject, particularly offering aid in contemporary education and practice.

Not at least he is chairman of the special interest group for spinal cord as well as early neurorehabilition of the WFNR and of the Panel on Brain recovery and rehabilitation of the EFNS.

Below you find a choice of publications from him or his work-group published:

- Binder H., Draxler V., Sporn P., Gerstenbrand F., Watzek C.: Das spinale Reflexgeschehen beim sogenannten „Hirntoten". Anaesth. und Intensivmedizin 129, 103-109, 1979.

- Binder H.: Die neuropsychiatrische Symptomatik des sogenannten „Coma hepaticum". Beilage zur Wr.Klin.Wsch. 93, 1-19, 1981

- Reisner Th., Binder H.: The value of the CT in various lesions of the spine and spinal cord. In: Neuroimaging. Eds.: Gerstenbrand F. ,Grcevic N., Aichner F., G. Fischer, Stuttgart, New York 1985.

- Oder W., Binder H., Baumgartner Ch., Zeiler K., Deecke L.: Is asphasia an additional prognostic factor in ischemic stroke with regard to the severity of hemiparesis in the suacute stage? Acta Neurol. Scand 78, 85-89, 1988.

- Oder W., Goldenberg G., Spatt J., Poderka J., Binder H., Deecke L.: Behavioural and psychosocial sequelae of severe closed head injury and regional cerebrale blood flow a SPECT study, J. Neurology, Neurosurgery and Psychiatry 55, 475-480, 1992.

- Wöber Ch., Oder W., Kollegger H., Prayer L., Baumgartner Ch., Wöber-Bingöl C., Wim-

berger D., Binder H., Deecke L.: Posturographic Measurement of Body Sway in Survivors of Severe Closed Head Injury. Arch. Phys. Med. Rehabil. Vol, 74, 1151-1156, 1993.

- Friedl-Francesconi H., Binder H.: Kognitives Funktionstraining in der neurologischen Rehabilitation von Schädel-Hirn-Traumen. Z. Exp Psychol 1996; 43 (1): 1-21

- Friedl-Francesconi H., Balazs S., Binder H.: The need for information for relative of inpatients with severe brain damage. In: European journal of neurology, Volume 3 Supplement 2 May 1996, Seite 126, 1996.

- Pinter M., Alesch F., Murg M., Seiwald M., Helscher R.J., Binder H.: Deep Brain Stimulation of the subthalamic nucleus for control of extrapyramidal features in advanced idiopathic parkinsons disease: one year follow up. J.Neural Transmission, 106, 693-709, 1999

- Pinter M., Alesch F., Murg M., Helscher R.J., Binder H.: Apomorphine test: a predictor for motor responsiveness to deep brain stimulation of subthalamic nucleus. J. Neurol. 246, 907-913, 1999.

- Pinter M., Birk M., Helscher R.J., Binder H.: Short-term effect of amantadine sulphate on motor performance an reaction time in patients with idiopathic Parkinson's disease. J. Neural. Transm. 106, 711-724, 1999.

- Murg M., Binder H., Dimitrijevic M.R.: Epidural electric stimulation of posterior structures in the human spinal cord: 1.Muscle Twitches -–A functional method to define the site of stimulation. Spinal Cord. 2000, Jul; 38 (7) 394-402

- Jilge B, Minassian K, Rattay F, Pinter MM, Gerstenbrand F, Binder H, Dimitrijevic MR. Initiating extension of the lower limbs in subjects with complete spinal cords injury by epidural lumbar cord stimualtion. Exp Brain Res. 2004 Feb; 154 (3): 308-26. Epub 2003 Oct. 25

- Minassian K, Jilge B, Rattay F, Pinter MM, Binder H, Gerstenbrand F, Dimitrijevic MR: Stepping-like movements in humans with complete spinal cord injury induced by epidural stimulation of the lumbar cord: electromyographic study of compound muscle action potentials. Spinal cord. 2004; 42(1):401-416

- Stepan Ch, Haidinger G, Binder H: Prevalence of persistent vegetative state/apallic syndrome in Vienna. Eur J Neurol. 2004 ;11(7) :461-466

- Balazs S, Stepan Ch, Binder H, Bodis-Wollner I, Gizycki HV: Slow Ballistic Eye Movements and Gamma-Modulation in Persistent Vegetative State. Clinical EEG and Neuroscience, Vo. 36, No. 3, p 231, 2005

- Balazs S, Stepan C, Binder H, von Gizycki H, Avitable M, Obersteiner A, Rattay F, Selesnick I, Bodis-Wollner I. Conjugate eye movements and gamma power modulation of the EEG in persistent vegetative state. J Neurol Sci. 2006 Jul 15;246(1-2):65-9.

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DANA BOERING /GERMANY

EDUCATION:

1. Secondary School I. Slavici Arad, Romania
2. Medical School: Facultatea de medicina si Farmacie I.M.F. Cluj- Napoca, Romania

ACADEMICAL QUALIFICATIONS:

1. Dr. medic : I.M.F. Cluj Napoca 1981
2. German acknowledgement as Dr. med. 1987
3. Specialty qualification: Neurologist 1994
4. Further specialty qualification: Neurorehabilitationist 2001, Neurophysiologist 2002

EMPLOYMENT:

St. Mauritius Therapieklinik Meerbusch since 2002
Professional appointments, scientifical activities:
1994-2002 Collaboration with the University of Essen in the field of plasticity after stroke, with an emphasis on the role of theerebellum in motoric learning tasks
Since 2002 Collaboration with the University of Düsseldorf in the field of plasticity after stroke
2009 Collaboration with the Coma Science Group Liege/Belgium
2010 Collaboration with the Neuroradiology of the Wake University Winson- Salem U.S.A. in a study on network properties of DOC patients

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ANCA BUZOIANU /ROMANIA

OCCUPATION OR POSITION HELD
-Professor in Pharmacology
-Dean of the Medical Faculty, University of Medicine and Pharmacy "Iuliu Hatieganu" , Cluj-Napoca, Romania
-General Secretary of the Romanian Society for Pharmacology. Therapeutics and Clinical Toxicology

TITLE OF QUALIFICATION AWARDED
-Specialist in Pediatrics
-Specialist in Clinical Pharmacology
-Senior Clinical Pharmacologist
-PhD

AWARDS IN THE LAST 2 YEARS
-Great "Iuliu Haţieganu" Award of the University of Medicine and Pharmacy Cluj-Napoca 2007
-"Victor Papilian " University Award for fundamental sciences 2006
MAIN ACTIVITIES AND RESPONSIBILITIES
-Head of the Department of Pharmacology (medical, scientific, and administrative responsibilities)
-Chairman of University Department (teaching courses for undergraduate students, postgraduate students and PhD students)
-Dean of the Medical Faculty of the University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca (administrative tasks, universitary management, curriculum planning etc)
International journal publications cited in databases
-4 articles
Articles published in Romanian journals, cited in international databases
-6 articles
Papers published in Romanian journals
-46 articles
Monographies
-2 monographies
Chapters in published books
-9 chapters

ORGANISATIONAL SKILLS AND COMPETENCES
-European Society of Clinical Neuropharmacology- member in International Advisory Board
-The Society for the Study of Neuroprotection and Neuroplasticity (SSNN)
-Member European Association of Clinical Pharmacology and Therapeutics
-Member in the Balkan Medical Union
-Member in the International Association for the Study of Pain
-Vice-president of the Romanian Ministry Commission of Clinical Pharmacology, Toxicology and toxic dependences
-Member in The Romanian Group for Therapeutic Guidelines Elaboration
-Executive general secretary of the Romanian Society for Pharmacology, Therapeutics and Clinical Toxicology
-Member in the Ethical Committee of the "Iuliu Hatieganu" University Cluj-Napoca
-Head of the Pharmacology Department
-President of the Deans Romanian Association of Medical Faculties

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VOLKER HÖMBERG /GERMANY

MEDICAL DIRECTOR

St. Mauritius Therapy Hospital Meerbusch

PERSONAL DATA

Born 25 July 1954
Married to Priv.-Doz. Dr. Kristina Müller, paediatric neurologist

MEDICAL CAREER

1973 - 1980	Medical School, Universities of Düsseldorf and Freiburg; Elective in Neurology at Boston City Hospital, Boston, Mass.; National Hospital for Nervous Diseases, London
since 1975	Junior researcher in the Department of Neuropsychology at the C. & O. Vogt Institute for Brain Research, Düsseldorf and the Department of Neurology, Freiburg (Prof. R. Jung)
1980 - 1981	Research fellow in the Department of Neuropsychology (Prof. G. Grünewald) at the C. & O. Vogt Institute for Brain Research, Düsseldorf
since 1981	Clinical training in the Department of Neurology (Prof. H.-J. Freund), Heinrich-Heine-University Düsseldorf
since 1985	Senior registrar in the Department of Neurology, Heinrich-Heine-University Düsseldorf
since 1987	Senior investigator for the German Research Council Special Task Force in Neurology at Heinrich-Heine-University (SFB 200 and SFB 194)
1987-2005	Medical director of the Neurological Therapy Center (NTC), Heinrich-Heine-University Düsseldorf
since 1988	Board examiner for Neurology at the local examination board (Ärztekammer Nordrhein)
1989-1997	Vice president of the German Society for Neurological Rehabilitation
1993	Habilitation in Neurology, Heinrich-Heine-University Düsseldorf
since 1995	Board examiner for physical medicine and rehabilitation (Ärztekammer Nordrhein)
1997-2005	Medical director of the Neurological Therapy Center, Cologne
1998-2004	President of the German Society for Neurological Rehabilitation
since 2000	Medical director and head of neurology, St. Mauritius Therapy Hospital, Meerbusch
since 2003	Secretary General World Federation for NeuroRehabilitation (WFNR)
since 10/2004	Vice president of the German Society for Neurological Rehabilitation
since 2005	Panel-Chairman Neurorehabilitation for European Federation Neurological Societies (EFNS)

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DAFIN F. MUREŞANU
/ROMANIA

CURRENT POSITIONS

Chairman and Professor of Neurology, Department of Neurology, University CFR Hospital, Cluj Napoca, Romania

Vice Dean of the Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

President of the Society for the Study of Neuroprotection and Neuroplasticity

Member of the Romanian Academy of Medical Sciences, Romania

OTHER ACADEMIC DEGREES

2002-2004 MBA, School of Health Care Systems Management, The Danube University, Krems, Austria

1998 Specialization in Leadership, The Arthur Anderson Institute, Illinois, USA

PAPERS PUBLISHED IN INTERNATIONAL JOURNALS (INDEXED IN ISI AND PUBMED)
30 articles

PAPERS PUBLISHED IN OTHER JOURNALS, (INDEXED IN OTHER DATABASES)
44 articles

PAPERS PUBLISHED IN ROMANIAN JOURNALS
46 articles

MONOGRAPHS
7 monographs

CHAPTERS IN PUBLISHED BOOKS
5 chapters

Fluent in: English, Italian

ACADEMIC MEMBERSHIPS
INTERNATIONAL SCIENTIFIC SOCIETIES

World Academy for Multidisciplinary Neurotraumatology (WAMN); Chairman of the Scientific Committee (2008-2010); Secretary (2010-present)

Danube Neurological Society; Executive Management Committee

European Society of Clinical Neuropharmacology; Secretary General

European Federation of Neurological Societies (EFNS); Member of the Neurotrauma Panel

Global College for Neuroprotection and Neuroregeneration (GCNN);

Vice-President, Chairman of the Clinical Committee

The Society for the Study of Neuroprotection and Neuroplasticity (SSNN);
Founder and President

European Neurological Society (ENS)
Society for Neuroscience

European Stroke Organization

New York Academy of Science

EDITORIAL BOARD

Frontiers in Neuroscience; Associate Editor

International Journal of Neuroprotection and Neuroregeneration

The Romanian Journal of Neurology

Romanian Journal of Clinical Anatomy and Embryology

Acta Neurologica Transilvaniae

American Journal of Neuroprotection and Neuroregeneration; Guest editor

Journal of Cellular and Molecular Medicine; Guest editor

Journal of Medicine and Life

AWARDS

2010 University of Medicine and Pharmacy Cluj-Napoca, Faculty of Medicine
"Octavian Fodor" Award for the best scientific activity of the year

2009 Romanian Academy "Gheorghe Marinescu Award" for contribution to
neuroprotection and neuroplasticity

2009 Excellence Award; "Viata Medicala Romaneasca" Medical Journal

2007 Award for the best Medical TV Series Program; Romanian Television Channel 2.

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IOAN ONAC /ROMANIA

Education:
Oct 1974 – June 1980 UMF "Iuliu Haţieganu"-Cluj, General practitioner
1982 – prezent UMF "Iuliu Haţieganu"-Cluj, Project Manager, physician on rehabilitation, physical medicine, balneology

Degree : Doctor of Medicine Degree, Project Manager

Working experience: 24 years

1982 – present Chair of Balneophysical Therapy and Medical Rehabilitation, UMF "Iuliu Haţieganu"-Cluj, Lecturer
1982 – present Rehabilitation and Physical Medicine department, Clinical Rehabilitation Hospital, Head of Department

Present working status and position: Clinical Rehabilitation Hospital, General Director, Head of Department

Experience in medical field : 22 years;

Elaborated and/ or published research: most important projects:
5 scientific projects: VIASAN, project participant, no. 128/2004

BOOKS, MONOGRAPHIES
1.Alexandrina Nicu, I. Onac, Luminiţa Pop, Rodica Ungur, Laszlo Irsay, Liviu Pop/ sub redacţia Conf. Dr. Liviu Pop: Evaluare clinică articulară şi musculară, University Medical Publishing House „Iuliu Haţieganu" – Cluj, 2002.173 pages, B5 format, ISBN 973-8385-39-3
2.L. Irsay, L. Pop: Masajul medical clasic, suport DVD, ISBN 973-693-127-7, DACIN SARA 1060/2005, University Medical Publishing House „Iuliu Haţieganu" – Cluj, 2005
3.I.Onac: Masajul medical, University Medical Publishing House „Iuliu Hatieganu" Cluj-Napoca, 2009.
13. Member of profesional associations: Romanian Society of Physical and Rehabilitation Medicine, European Society of Physical and Rehabilitation Medicine .
14. Language knowledge: english, french.
15. Other core copetences:
16. Specialisation and qualification: physician, rehabilitation, physical medicine, balneology
17. Cumulated experience other national/international programmes:
Active grants:
1.PN-II-ID-PCE-2008-2 Grant, no.ID- 2623 /2008
Studiul efectelor ultrasonoterapiei asupra balantei oxidanti/antioxidanti la pacientii artrozici
Role : Member

Past grants:
1.VIASAN Grant no.362/2004,2005-2006:
Eficientizarea tratamentului artrozelor prin demonstrarea utilitatii condroprotectoarelor pe plan clinico-functional, biologic si radiologic
Role: Member
2.CNCSIS Grant no. 1415/2006, 2006-2008:
Ameliorarea calitatii vietii femeilor cu osteoporoza prin asocierea la medicatia osteoporotica a metodelor balneofizioterapeutice si a unor practici de management, marketing social
Role:Member

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Neurorehabilitation

9-12 APRIL
HOTEL OPERA PLAZA
CLUJ NAPOCA

GELU ONOSE
/ROMANIA

DEGREES, QUALIFICATIONS AND PROFESSIONAL POSITIONS:

- Professor at the (State) University of Medicine and Pharmacy (UMF) "Carol Davila", in Bucharest, Romania - the M6 Chair
- MD; - PhD; - Scientific Researcher of I-st Degree; Doctorate Conductor
- Senior Physician of : - Physical & Rehabilitation Medicine (PRM) and
  - Gerontology & Geriatrics (G-G)
- Competences in : - General Ultrasonography
  - Health Services Management
- Chief of the M6 Chair of the "C. Davila" UMF and of the PRM Discipline/ (neural-muscular) Clinic Division of UMF, at the Teaching Emergency Hospital "Bagdasar-Arseni" (TEHBA), in Bucharest
- Research-Development Director of TEHBA
- Selected and invited, based on the field of study, by Thomson Reuters and Times Higher Education, to participate, among highly-specialized scholars worldwide, in the annual invitation-only Academic Reputation Survey - part of the Thomson Reuters Global Institutional Profiles Project - that will support the World University Rankings and thus represent, with the response, thousands of peers - as: students, scholars, and administrators (March, 2010)
- A member of the Board of the Romanian Society of Rehabilitation, Physical Medicine and Balneoclimatology

EDITORIAL, SCIENTIFIC, DIDACTIC, MANAGERIAL - ACTIVITIES, ACHIEVEMENTS AND RECOGNITION:

- Seven (7) published books (see below, the list of works) - the last one in October, 2009 - (one of them : "The Spondyloarthropathies", was distinguished and received, in 2002, the "Iuliu Hatieganu" Award of The Romanian Academy)

- Four new books and a chapter within a textbook in preparation (to be published between 2010 - 2011)

- About 200 scientific works and papers - communicated within many national and international congresses, conferences, symposia, etc., and/or published in peer-reviewed or non peer-reviewed medical journals -, scientific phase reports within research projects and professional interviews/ articles, in mass-media

- 2 Invention Certificates, appointed by the State Office for Inventions and Marks (SOIM) and 2 Invention requests - one already accepted by SOIM and published in the Official Bulletin of Intellectual Property (No. 1/ 2008 - list of works)

- Main awards: the "Iuliu Hatieganu" Award of The Romanian Academy (2002); the Award of the National Authority for Scientific Research, for the RDI project, entitled "ACTUAT"(2006); the Gold Medal at the International Saloon of Inventions, Geneve/ Switzerland, for the RDI project acronymed: "MOD" (2008)

- A member of the Grants & Research Department's Scientific Council, of the UMF "C. Davila"
- A member of the Editorial Board of the (peer-reviewed) journal "Infomedica",
- A member of the Editorial Board of the (Romanian) "Rehabilitation, Physical Medicine and Balneology " Review,
- A member of the Editorial Board (in charge with Neurorehabilitation and Scientific

Research) of "Romanian Neurosurgery"- the Romanian Society of Neurosurgery's review
- President of the :
- Romanian Society for Neurorehabilitation (RoSNeRa) - affiliated to WFNR and AMN
- Romanian Society of Pathology, Therapy and Rehabilitation in SCI (RoSCoS) - affiliated to ISCoS and ESCIF
- A member of the :
- Romanian Medical Association
- Romanian Society of Physical Medicine & Rehabilitation
- Romanian Society of Neurosurgery (RSN) - Head of the Neuro-Rehabilitation Section and respectively, of the Research Department of RSN
- Romanian Society of Biomaterials,
- Balkan Medical Union (BMU),
- International Society of Hydrothermal Technique (SITH - the National Council of the Romanian Section SITH - RS),
- British Society of Gerontology (BSG)
- The International Spinal Cord Society (ISCoS)
- World Academy for Multidisciplinary Neurotraumatology (AMN)
- a member of the Scientific Committee, afferent to the Prezidium
- World Federation For Neurorehabiliation (WFNR) - a member of the Management Committee

A (FORMER):

- Department Director within the Romanian Fellowship of Physicians (1997-1999)
- General Manager of the State Sanitary Authority of Bucharest (1998)
- Assistant General Manager of the National Institute of Gerontology and Geriatrics "Ana Aslan" (1998-2001)
- National Representative for Key Action 6 - "The Aging People and their Disabilities" (within the Frame Work Program - FP - 5) at the Scientific Directorate of the European Commission, Brussels, 2000
- General Manager of the National Institute of Rehabilitation, Physical Medicine and Balneoclimatotogy (2000-2001)
- Member in Evaluation Panels for Scientific Grant Proposals (of the National RDI Agency or/and of the Romanian Academy, 1999-2005)

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C. D. POPESCU /ROMANIA

Cristian Dinu POPESCU is a professor of Neurology at the University of Medicine and Pharmacy "Gr. T. Popa" Iasi. He graduated from the same University in 1975 and holds a PhD from 1991. He is the head of the Neurology Clinic in The Clinical Rehabilitation Hospital in Iasi, Romania, where he conducts his clinical and scientific activity.

Since 2008 he is chief of the Neurology Department and also the chief of the VI th Medical Chair of the Iasi Medical University.

He is a member of national and international professional associations (vice president of the Romanian Society of Neurology, member of the Society for Study of Neuroprotection and Neuroplasticity, Society of Parkinson's Disease and Movement Disorders, European Council of Neurological Rehabilitation, Balcanian Medical Union).

He was an invited speaker in most of the important national neurology scientific events during the last years.

He is a local coordinator for MS immunomodulatory treatment. He initiated and coordinated the organization of the National Multiple Sclerosis Conferences during the last 5 years.
He has authored or coordinated 5 books and took part in writing of 12 other books as coautohor, and more than 150 papers.

His main fields of interest have been aging of the brain and its vascular system, multiple sclerosis, rehabilitation in stroke and other neurological diseases. Neurorehabilitation and neuroplasticity are among the main topics of concern, both in current clinical practice and regarding the research activities.

His group was among the first to use functional electrical stimulation in Romania - current research targets applications and effects of FES in stroke, MS and Parkinson's disease.
He is the coordinator of one of the first groups in our contry to use transcranian magnetic stimulation in neurology – both in clinical practice (diagnostic and therapeuthical TMS) and for research (cortical neuroplasticity and neuromodulation).

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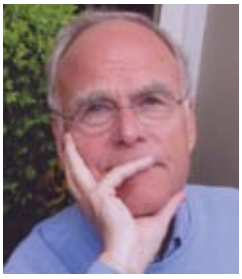

KLAUS VON WILD /GERMANY

PRESENT APPOINTMENT
Professor (apl) for Neurosurgery Medical Faculty Westphalia Wilhelms- University of Münster, Professor (apl) for Neurorehabilitation and Re-engineering of Brain and Spinal Cord Lesions,International Neuroscience Institute, INI, Hannover, Institute at Otto-von-Guericke University, Medical Faculty, Magdeburg, Germany
Visiting professor Armed Force and Rheumatic Rehabilitation Hospital EL AGOUZA Military Hospital Centre, Cairo, Egypt; China Rehabilitation Research Centre, CRRC, Beijing, PRCh

MEDICAL EDUCATION - QUALIFICATIONS:

1966 Graduation from the Medical Faculty of the J.W.Goethe-University Frankfurt/ Main

1968 M.D.

1975 Specialist Neurosurgeon, Department of Neurosurgery, Head Prof. Hugo Ruf

1977 Postdoctoral lecture qualification (Habilitation), Dr.med. habil., in Neurosurgery

1977- 1984 Assistant Professor Med. Faculties of the Universities of Frankfurt and Hanover Consultant Neurosurgical Department Academic Public Hospital Nordstadt, Director Prof Madjid Samii, Hanover

1982- 2002 Director Neurosurgical Clinic Clemens Academic Hospital, Med. Faculty Muenster

1984 Professor Medical Faculty University Münster, North Rhine Westphalia, Germany

1993- 2002 Founder & Head Special Department for Early Neurorehabilitation in Neurosurgery, Licence for education and board examination for neurosurgeons of the medical association in Neurosurgical intensive care, Clinical laboratory medicine in neurosurgery, Neuroradiology, Electroencephalography, Treatment of Pain, Physical Training

Dr von Wild has personally performed more than 5000 major operations of CNS and PNS lesions with special interest in pituitary adenomas & tumours of the sella region & the cavernous sinus , CPA tumours , tumours of the spinal cord, brain stem cavernomas; Intramedullary tumours of the spinal cord; all kind of spinal surgery. Birth traumatic spinal cord and brachial plexus lesions;transdisciplinary neurotraumatology and functional reconstruction in cooperation with Reconstructive trauma-, Ear-nose and through-, Head and Neck, Thoracic-, Maxilla facial, and Eye surgeons.

At present: Functional restoration of locomotion in paraplegics by FES implanted neuroprosthesis and via central nervous system- peripheral nervous system (CNS_PNS) by pass grafting procedure following SCI; Neuro modulation of patients in coma and VS State

CLINICAL RESEARCH:
Organizer & President of numerous national and international congresses, workshops and coursesGuidelines On Quality management in neurotraumatology, functional neurorehabilitation, and outcome:

The German Coma Remission Scale (CRS) In Schmidek, HH (ed) 2000: Operative neurosurgical techniques, 4th edition, Vol. 1, Saunders Comp, Philadelphia, US, pp 45-60

Guidelines on Early Neurological-Neurosurgical Rehabilitation

See Acta Neurochir Suppl. 79, 11-19, 2001
Guidelines on Management of Poly -traumatised Patients .
See The German Interdisciplinary Association for Intensive Care Medicine (DIVI) 1998, only in German
Guidelines on Mild Traumatic Brain Injury,
European J. Neurology, 2002, No 9,207-219)
Revised Guidelines on MTBI Early Management,
See EFNS MTBI Taskforce in EFNS Hand book of neurology 2006,
Guidelines on quality management for AS/VS
European Journal of Trauma Emerg Surg. 2007, No3:268-292
The QOLIBRI : Quality of Life after traumatic brain injury assessment tool See von Steinbüchel N et al 2005 in Acta Neurochirurgica Supp.93, pp 43-49

PRESET
Quality management of multidisciplinary neurotraumatology and brain protection
Quality management and amelioration of patients in long-lasting coma and AS/VS
Neuromodulation in paraplegics after SCI; Exernal audit for cell-transplantation
Neuroethics; Long term outcome, HRQoL, and social re-entry following TBI

DISTINCTION
Professor honoris causa (h..c.) for Neurorehabilitation and Reconstructive Neurosurgery Faculty of Physical Rehabilitation at Al Azhar University, Cairo, Egypt
Doctor honoris causa (Dr.h.c.) at the Faculty of Medicine and Pharmacology, „Iuliu Hatiegau“ University, Cluj- Napoca, Romania Honorary (& founding) President EMN, Euroacademy, and AMN, World Academy of Multidisciplinary neurotraumatology;;Honorary President Romanian Society of Neurorehabilitation RoSNeRa ; Corresponding Fellow The Cuban Society of Neurophysiology (SCNFC); Honorary Chairman WFNS Committee Neurorehabil. & Reconstructive Neurosurgery; Honorary Chairman EFNS Panel Neurotraumatology
Honorary Member (former President)German Soc. Neurotraumatology & Neurorehab.
Honorary Member of the Austrian Society , the Lithunian Society, the Polish, the Romanian Society of Neurosurgery, the Russian Federation of Neurosurgical Societies; The Cuban Neurological Society, Egyptian and Pan Arab Societies for Neurorehabilitation, the Japanese Society for Neural Repair and Neurorehabilitation

SCIENTIFIC SOCIETIES / PRESENT DUTIES
Since 2001 WFNR Executive Board , World Federation for Neurorehabilitation,
Since 2009 EBIS 1st Vice-President , European Brain Injury Society,
IANR Scientific Executive Board, International Association of Neurorestoratology
Since 2008/9 Treasurer (Founding Member) International QOLIBRI Society, CNM, International Society for Clinical Neuromusicology, EFNR Europ. Federation Neurorehabilitation
Since 2003 AMN Secretary General, World Academy of Multidisciplinary Neurotraumatology, Director (CEO) kvw neuroscience consulting GmbH Muenster, D
Founding Member & Member of the Presidium: ISRN International Society of Reconstructive Neurosurgery ;
MASCIN, Madjid Samii Congress of International Neurosurgeons; ESCRI Europ. Spinal Cord Research Institute Giorgio Brunelli Foundation, Brescia, Italy;
Founding Member . DANC/GANS German Academy of Neurosurgery; BDNC, German Social Professional organisation of neurological surgeons.


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