



THE BRIDGE

Linking Practitioners of German Biological Medicine

Volume 9, Issue #11, November 2013

Wednesday, 20 November 2013

Dear Colleagues and Friends of OIRF,

👉 Welcome to Issue #11 of "The Bridge" newsletter for 2013! In this Issue we continue with Part 6 of the seven part series of articles by the esteemed **Prof. Dr. Harmut Heine** on The Ground Regulation System. Here again are the titles of all seven articles:

Part 1 – The Ground Regulation [A History and Background] – Published Issue #3

Part 2 – GRS as a non-linear system – structure, function and determined chaos – Published Issue #5

Part 3 – GRS as a non-linear system – structural components of the extracellular matrix (ECM) – Published Issue #7.

Part 4 – Spatial structure of the ECM and material transport within the system – Published Issue #9

Part 5 – Contact, limitation and clogging up: Cell adhesion, basal membrane and glycosylation – Published Issue #10

Part 6 – Functional relations of the ground regulation with the central nervous system – Published in this Issue #11

Part 7 – The Ground Regulation and the Circadian Rhythm
– The Ground Regulation and Alzheimer Dementia
Scheduled to publish in Issue #12 in mid-December 2013

And, in that same Issue #12 we will definitely also see another of the thought provoking and well researched articles from our Medical Advisor **Dr. Tony Scott-Morley**.

👉 Reminder: All Volume 9 Issues of "The Bridge" will also be published on our website and are available to download in pdf/print format. Follow this link to download your PDF copy of Issue #11. Renewal to "The Bridge" newsletter for 2014 will again be a paid subscription of \$35. Renew before 16 December 2013 and take advantage of the early renewal fee of \$30!

➡ The **Special 40th Anniversary Biological Medicine Tour to Germany** program is history. Altogether twelve practitioners joined us for the three separate portions of the two week tour through Germany and Switzerland – and what a great group it was! We had good food, many good conversations and discussions and – most importantly – heard educational and enlightening lectures from numerous famous Biological Medicine practitioners and researchers. We even visited three different but complementary biological medicine clinics.

You can still see what you missed by visiting our website for full [Germany Tour details](#) and there is a full web page which is devoted to [speaker bios & pics](#) along with the many other presentations heard.

Already I have been contacted by several speakers and a clinic who want to speak to the group next year – I guess I will have to work on a Tour #41 as the New Year rolls around!

➡ In this Issue #11 of “The Bridge” I have included two important articles. First up are some comments from me (your esteemed OIRF “boss lady”) concerning the changes, news, views and innovations within the field of BioResonance Therapy which I was able to investigate in greater detail during my Germany travels this year. Then following is Part 6 of Prof. Heine’s article series. I was unable to visit with Prof. Heine at Med-Week this year, but will be in touch with him privately to send him copies of these translations of his phenomenal research.

➡ So, here are your newsletter items for this Issue #10:

BioResonance News, Views and Innovations from Germany

An Update Article from Carolyn L. Winsor-Sturm OIRF Managing Director and CEO

We are all familiar with MORA and the original BioResonance devices researched and developed by **Franz *Morell*, MD** and the engineer **Erich *Rasche*** within the framework of the **Med-Tronik** Company. The foundation of this field is called BioCybernetic or BioResonance Therapy – and in fact the name MORA comes from the first 2 letters of their last names MO and RA. To this day the Med-Tronik BioResonance equipment is without equal for effectiveness and quality. However basic business practice was never the strong point of the Med-Tronik firm – they were instead incredible engineers, innovators and educators. Sadly however, when Erich Rasche passed away a few years ago, there was no legal plan of succession in place and the company has floundered in the past few years.

They have managed to finish development and bring the new **MORA Nova** to market and have continued to offer the best possible service and support. Recently Med-Tronik was purchased from the widow (**Eva Rasche, MD** who has since retired) by the businessman Mr. **Dirk Reupke**. His wife, **Andrea Reupke, MD** has worked with MORA for many years and she has already begun to publish articles and information on BioResonance (watch for a few translations in our 2014 newsletters). With this new management and a more stable business approach there are a lot of changes, and a lot of new concepts that are now taking effect within Med-Tronik.

But on the other side of this corporate changeover a new company called **Bio-Kat Systems** was founded about one year ago. Mr. **Andre Rasche** – the nephew of the original engineer Erich Rasche – trained and worked with him for many years and is one of the major engineering developers of the MORA Nova. About one year ago Mr. Andre left Med-Tronik and has been joined by many of the former employees and workers of that firm. New BioResonance devices and models are being developed and several will be available on the market early in the New Year (watch for descriptive and pricing information).

For Occidental Institute this is a very difficult position and quite a challenge in negotiation and diplomacy. We must honor our contacts, contracts and support of Med-Tronik after having placed hundreds of devices into North American practices over the past thirty-five plus years. But, it is our obligation and responsibility to you – our members and supporters – to make instrumentation recommendations that will offer you a choice of the best quality devices for the fairest price with the best possible service. And thus we must **also** look to this new company of Mr. Andre Rasche where new and specialized BioResonance devices are being made that meet the exacting standards of the Med-Tronik MORA devices.

The end result of my meetings and negotiations with both Med-Tronik and BioKat during my recent travels in Germany and Switzerland, is that Occidental Institute will now recommend both companies as long as their two product lines do not coincide with a directly competitive (or similar) device. Quite frankly neither company wants the added (legal) headaches of manufacturing and marketing directly competitive devices and I do not foresee this as a difficulty.

The BioKat Company of Mr. Andre Rasche has already managed to have a smaller BioResonance device called the "M 3" (similar to the discontinued Med-Tronik MORA III device but including color therapy – very nice!) certified within the full DIN ISO and medical categories. This is an excellent device that will sell in North America for about \$12,000. "Soon" it will also connect with an external computer for access to remedy software. For practitioners looking for **a second unit, a backup unit or a startup BioResonance unit this "M 3" has now attained our Occidental Institute recommendation**. The design of a larger device is nearly completed and that device (called the "M 5") will be certified early in the New Year. Mr. Rasche has also promised to develop a small EAV/Vega style testing device (like the long ago discontinued RM-10S from Med-Tronik). We are anxiously looking forward to

information on that device which should be available in late 2014. Our thanks go to Mr. Rasche and Mrs. Sitkowski who gave us an excellent presentation and demonstration during the recent Biological Medicine Group Tour #40.

During that group tour we were privileged to visit the Med-Tronik Company in Friesenheim, Germany. We heard a great presentation and introduction from one of their new instructors, **Dr. Arndt Kalinke**. As a Med-Tronik representative Occidental Institute is already seeing a lot of change and support from the new management. They have recently introduced several different models of the MORA Nova including a "basic" unit which will only do BioResonance Therapy and is not upgradeable. As well, you can still purchase the base model professional level MORA Nova (which includes EAV-type diagnostics, BioResonance Therapy, built-in computer and built-in DAC interface) at around \$28,000 and upgrade with a broad range of newly re-recorded remedy software.

After all is said and done, **the MORA Nova retains our Occidental Institute recommendation as a professional model BioResonance device**. North American members and supporters please contact Elaine or Carolyn at our offices for an opportunity to discuss the instrumentation needs applicable to your practice. And just to finish off all this "commercial" talk about sales and equipment and prices, here is our official OIRF instrumentation policy:

Occidental Institute Research Foundation is a **non-profit research organization**. The instrumentation recommendations of this organization are based on thorough testing to determine efficacy, quality, pricing, availability, service and support. **All instrumentation is sold at or below Germany factory (export) prices** to assist our Affiliates in obtaining the best product for their needs at the best possible price. Longtime Affiliates consider OIRF as the "Consumer Reports" of German Biological Medicine. Training and educational materials on all recommended instrumentation are available through OIRF.

As a non-profit research organization, we are here to educate and inform our research associates (members), and to make instrumentation recommendations based on our years of research. Then, as a fund raising activity, we can assist you with a purchase that will work best in your practice for the most reasonable price.

I clearly understand that as practitioners working and practicing in this field, you really don't care about all these politics and back room negotiations. But, in light of the uncertainty and disruption that has plagued the BioResonance industry over the past few years I wanted to at least give you some background information to support the decisions and agreements reached on your behalf by myself and our esteemed directors and advisors. We thank you for your trust and support as we continue to follow the many changes and innovations in Biological Medicine in Germany and Europe.



*An **exclusive article** published November 2013
by Occidental Institute Research Foundation . . .*

The Ground Regulation System (GRS) –

Part 6 – Functional Relationships of the Ground Regulation with the Central Nervous System

By o. Univ.Prof. Dr.rer.nat. med.habil. Hartmut Heine

**From an article in Naturheilkunde 2010; 5: 33-35. Reprinted in
Der Weg zur Grundregulation, Zaen Plus GmbH 2011, 281-284**

**Machine Translation by SYSTRAN, Lernout & Hauspie, LogoMedia & Promt
Translation & redaction by: Carolyn L. Winsor, OIRF**

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Over a long period of time the ancient theory of the [bodily] humors has changed to the Ground Regulation System (GRS). The oldest and most effective theory of the history of medicine thus became a theory of complementary medicine. Here school [orthodox] medicine and complementary medicine find a common denominator. In the previous parts the historical background was explained (Part 1), the GRS was introduced as a non-linear system (Parts 2 and 3), a structural analysis of the extracellular matrix was carried out (Part 4), and aspects of cell adhesion, the basal membrane and glycosylation were reported (Part 5). The main focus of the current issue is devoted to fuzzy logic as a working principle of the neuronal networks as well as the importance of the perineuronal extracellular matrix for learning and memory performance in human beings.

In the CNS the rhythmic neuronal feedbacks are connected with the perineuronal extracellular matrix (PECM). Because the PG/GAGs of the PECM are involved in all brain activities, it can be shown particularly clearly here that the ground regulation works according to the principle of fuzzy logic “if-then” and not according to the linear decision logic “yes-no”. The PECM differs considerably from the peripheral ECM in that it does not contain any collagen and elastin, instead the chondroitin sulfate PG appican. The protein backbone of these PGs forms the amyloid-precursor protein which forms amyloid-beta [$A\beta_{42}$] after proteolytic fission which is pathognomonic for the plaques of Alzheimer Dementia (AD). Because neurons lack the essential enzymes of the citric acid

and fatty acid metabolism, they are supplied with it from the astrocytes which also form the PECM (“nurse function” of the astrocytes). With increasing age these nurse functions are disturbed with an increased attack of ammonia because of glutamine synthetase deficiency. The buildup of Alzheimer plaques is thereby accelerated. Therefore from a therapeutic viewpoint it would be absolutely necessary for AD patients to carry out an ammonia detoxification.

Fuzzy Logic as a Working Principle of the Neuronal Network

In this part the specific characteristics of the functional relationships of the ground regulation especially to the central nervous system (CNS) shall be explained.

Humans must learn from birth to control spiritual-psychological processes. Every form of culture is based on this. In most recent times, control of these processes is already learned in childhood through computers. Nevertheless the learning is increasingly faded out by experience, and overlooks the fact that the CNS does not work according to the computer rule of “yes-no” but rather on “if-then”. This is called “fuzzy logic” [14]. Fuzzy operations in a “fuzzy network” lead to considerably faster processing of information than linear “yes-no” decisions. Above all, similarities can be quickly differentiated with it, in order then to be answered differently in each case. This has great importance in the processing of sensations in the “fuzzy neuronal network” of the brain. The energetically open system of the organism works non-linearly (See Part 1), hence the fuzzy logic is also integrated into non-linear processes. This means that “if-then” operations must run feed back in order to sharpen information in such a way that it can be compared with already existing ones. Only in this manner convergences towards a certain goal originate and in the end makes decisions possible. This requires supporting (positive) and inhibiting (negative) feedback loops. Morphologically they are bound among other things to activating and inhibiting receptors on the cells, e.g. the excitatory and inhibitory [*receptors*] on the nerve cells. Hence, every change in a “fuzzy neuronal network” can be exactly regulated in the moment in which it appears [14].

The Importance of the Perineuronal Extracellular Matrix (PECM) for Learning and Memory Performance

In a newborn child the PECM contains considerably more hyaluronic acid (HA) than chondroitin sulfate (CSPG) and heparan sulfate proteoglycan (HSPG). Together these three represent the main part of the PG/GAGs in the CNS (Fig. 1). In adulthood the CSPG and HSPG then predominate, the strongly water binding HA decreases (in mice between the 7th and 10th postnatal days around approx. 50%) [1]. In the aged the sulphation of the PGs is reducing, also with it their functional qualities (Overview in [1]).

Among other things the myelination of the nerve pathways and with it the maturation of the brain depends on the sulphation of the PGs. With older people the PECM synthesis of the astrocytes decreases and on that basis increased proteolytic activities in the entirety, because the aged show a proinflammatory process [5, 7].

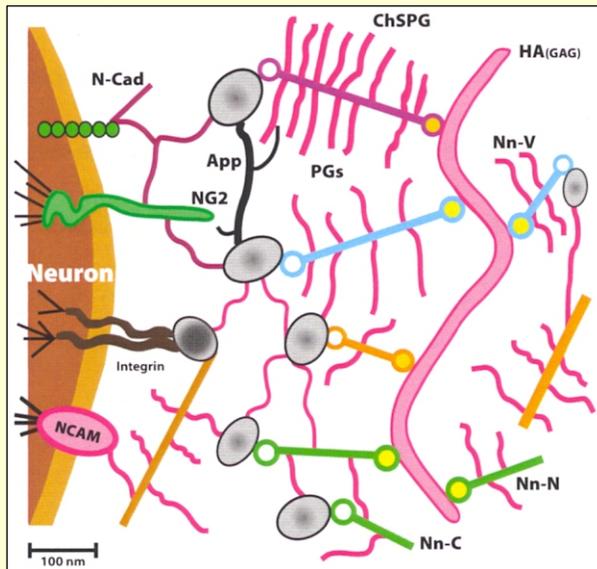


Figure 1: Perineuronal extracellular matrix. The PECM is formed from proteoglycans (PGs), glycosaminoglycans (GAGs; hyaluronic acid HA), matrix PGs (among others appican) and structural glycoproteins (black ellipses). The neuronal cell sugar surface film contains heparan sulfate PGs (NG2), integrins and cell adhesion molecules (NCAD or N-cadherin; NCAM or neuronal cell adhesion molecule). These molecules appear in connection with the cytoskeleton (short black lines). CSPG chondroitin sulfate protein, Nn-C, Nn-N, NnV are fission products from PGs (from [9]).

Protein deficient food, as is frequent above all for toddlers in developing countries, causes deficient sulphation of the brain PGs with disturbance of brain development (protein-calorie-deficiency syndrome, Kwashiorkor). Genetically conditioned disturbances underlie the mucopolysaccharidosis which mostly accompany mental retardation (Overview in [1]).

The importance of the PECM for the CNS becomes evident just from this because it occupies approx. 20% of the whole volume. It is spread out between all nervous elements according to the nonlinear principle of space filling by self similar structures (“fractal dimensions”, see Parts 1 and 2). The same functional conditions of tensegrity (tissue tension), water binding, ion exchange and storage capacity for biologically active substances are also valid for the PECM as in the peripheral ECM. Additionally in the PECM molecules are held in reserve, which as axon (neurite or neuraxon) guard proteins (axon guidance proteins) (among others netrin, semaphorin, ephrin, bone morphogenetic proteins) steer the correct “wiring” of the axons [11]. As a result CSPGs and HSPGs hold the neuraxon growth in check so that the axon guidance proteins can properly fulfill their function [8]. Whereas CSPGs are always bound to HA, the HSPGs however are anchored in the neuronal membrane and are in transmembranous contact with the cytoplasmic microfilament system (Fig. 1). In this way information from the PECM about signal transduction cascades is answered with suitable cell reactions [7, 8]. Together CSPGs and HSPGs can form homophilic bindings (common hydrate membranes), which are of

particular importance for the nurse function between the astrocytes and the neurons (see below). The neuronal integrins act like those on the peripheral cells; they also interconnect to the microfilament system. Outwardly they bind to the PECM components, which contain an RGD motif (arginine-glycine-aspartate, e.g. fibronectin) (Overview in [8]). Matrix interlinking glycoproteins like appican, fibronectin and tenascin mediate between the CSPGs and the HSPGs (Fig. 1).

Practically only formed by astrocytes on the CNS one restricted CSPG is appican (that protein backbone is the amyloid-precursor protein). It is virtually a substitute for collagen and elastin in the peripheral ECM, because neither structural glycoproteins can be formed by astrocytes. Appican is an interlinking CSPG, which is switched on between all structural elements of the PECM (Fig. 1). It represents one PG with a protein backbone from 695 to 770 amino acids long, which carries one polymeric chondroitin sulfate side chain each on the serine 637 and 660. These prevent the self aggregation of the molecules [10, 12]. Serine bindings are exceptionally sensitive to the serine protease plasmin, which can be generated from PECM bound plasminogen [2, 12]. As a result the split off [fissioned] short fragments of the protein backbones of appican form the amyloidogenic $A\beta$ proteins of the Alzheimer plaques [6, 7, 8, 12, 13] (Fig. 2).

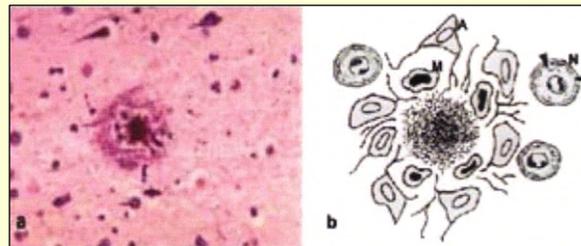


Figure 2:

- a) Cerebral cortex person. Alzheimer patient. Post mortal histological tissue processing. In the center of the picture an Alzheimer plaque. Haematoxylin-eosin staining. Magnification 180-fold.
- b) Light microscopic diagram of an Alzheimer plaque. Surrounding an amorphous center of $A\beta$ proteins and destroyed PECM components a courtyard of microglial cells (M) are located which follow astrocytes (A) outwardly. In with them irregular astrocyte processes. Peripherally neurons (N) in the process of destruction with intracellular tissue ("tangle") formation (arrow head) are located. Magnification approx. 500 fold.

The PECM is involved in all brain performance. Exemplarily this can be verified in the preservation of memories of fear-releasing events by the CSPG [4]. These are supported from earliest childhood to our classification in society and have an essential part in the socialization of human beings, above all for emotional learning processes for young people [3, 4]. Also the development of plasticity of cognitive development depends on the composition of the PG/GAGs in the PECM. The PECM is obviously of general significance in the development and change of neuronal circuits (Overview in [4]).



Prof. Dr. Hartmut Heine

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➡ Follow this link to our website to see Issue #11 in print/PDF format.

➡ **Conferences and Conventions:** Please watch for announcements of the speakers, venues and details of these exciting OIRF activities and events for the year 2014:

➤ **NorthWest Naturopathic Physicians Conference**, Vancouver, BC, Canada, April 25-27, 2014: OIRF will host an exhibit/demonstration booth. Follow this link for details <http://www.nwnpc.com/>

➤ **Med-Tronik BioResonance Distributors' Meeting**, Friesenheim, Germany, April 25-27, 2014: OIRF will be represented by Carolyn Winsor-Sturm at this important meeting.

➤ **Biological Medicine Symposium 2014**, Vancouver, BC, Canada, September 12-14, 2014: Will feature top practitioner/researcher lectures. Co-Sponsored with Prevention and Healing (Dr. Simon Yu). Details to be announced shortly.

➤ **Biological Medicine Tour #41 to Germany**, October 27-November 3, 2014 (dependent on dates for 48th Medicine Week Congress).

➔ **November Instrumentation Features** (prices for Canada/USA delivery only):

**OXYGEN ION 3000
VNS DIAGNOSIS 3000
By CS Tronic**



Inhaled Ionized Oxygen Therapy
According to **Prof. Dr. Ivan Engler**

Order both units as a set for \$11,000

**BIOPHOTON LIGHT THERAPY
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Therapy with Energy



A modern overall therapy of the future using
biophoton (hyper red) light delivered
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**The MORA NOVA
By Med-Tronik**



The professional model with down-loadable
upgrades for extensive remedy software.

Order Base model for \$28,000

**The "M 3"
By BioKat**



Mr. Andre Rasche with the newly introduced
"M 3" BioResonance Device.

Contact OIRF for order and pricing information.

➔ **Updates, Reminders and Announcements:**

➤ For those of you who missed that great **MORA Nova training seminar/workshop in St. Louis, MO in June 2013**, high quality professional video recordings of some of the sessions are now available. The guest instructor was **Nuno Ruivo, DO** from Med-Tronik, Germany who is a long time MORA user and one of the technology and software developers of the Nova device. Order the 5 DVDs for \$100 and then deduct it from your MORA Nova order.

➤ I took nearly 400 pictures during the Germany Tour #40 through Germany and Switzerland. I will be able to pick out the best photo memories to include in my annual report. Watch for this report to publish on the website. Dates for next year's Tour #41 have been tentatively announced for October 27 through November 3, 2014 (dependent on the Medicine Week Congress dates).

➤ **Updates, Reminders and Announcements** (Continued):

- Time to renew your subscription to “The Bridge” newsletter! Call Elaine today to arrange the \$35 fee and don’t miss any of the 2014 issues.
- Watch for the 2013 Issue #12 of the “The Bridge” newsletter to arrive in your Inbox around mid-December. For sure this time we will feature another article from our well respected Medical Advisor, **Dr. Tony Scott-Morley**. As a long time acknowledged expert in **EAV testing procedures** and the **application of MORA Therapy**, I am looking forward to seeing his scholarly and erudite contribution for this year. Part 7 of **Prof. Dr. Heine’s** articles on the **Ground Regulation System** will publish in that same Issue #12 of “The Bridge” in mid-December, 2013.
- Descriptive and pricing information for the “**M 3**” and “**M 5**” BioResonance devices from **BioKat GmbH** will be available shortly. Contact Elaine or Carolyn for advance details.
- **MORA Nova** devices were featured at the recent 47th **Medicine Week Congress** in Baden-Baden, Germany. These proven devices are available for immediate delivery and the professional level model provides immediate “out-of-the-box” therapy applications while you take the time to familiarize yourself with the many possibilities of BioResonance Therapy. Contact Elaine or Carolyn for ordering details.
- Part 6 of **Prof. Dr. Heine’s** articles on the **Ground Regulation System** will publish in Issue #12 of “The Bridge” in mid-December, 2013.
- Visit our **Facebook** page – will you be our friend?
- For a complete [listing of resource materials](#), including publications, reports, books and videos please follow this link to our website. There are full descriptions of all printed and recorded materials online.
- For a complete [listing of recommended instrumentation](#), including diagnostic, therapeutic and BioResonance devices please follow this link to our website. There are full descriptions of all instrumentation online.



I trust you have found much of interest in these pages. We look forward to meeting you during our 2014 activities and programs. As always your comments are welcome. Remember that this is your newsletter – your suggestions, article contributions, critiques, FAQ’s and compliments – are gratefully accepted.

Yours in health . . .

Carolyn

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