

# THE BRIDGE

### **Linking Practitioners of German Biological Medicine**

Volume 9, Issue #10, October 2013

Tuesday, 15 October 2013

Dear Colleagues and Friends of OIRF,

- ➡ Welcome to Issue #10 of "The Bridge" newsletter for 2013! In this Issue we continue with Part 5 of the seven part series of articles by the esteemed *Prof. Dr. Harmut Heine* on <u>The Ground Regulation System</u>. 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 in this Issue #10
- Part 6 Functional relations of the ground regulation with the central nervous system Scheduled to publish in Issue #12 in mid-December 2013
- Part 7 The Ground Regulation and the Circadian Rhythm
  - The Ground Regulation and Alzheimer Dementia

In the next Issue of "The Bridge" watch for another of the thought provoking and well researched articles from our Medical Advisor *Dr. Tony Scott-Morley* scheduled for publication in mid-November 2013.

- 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 #10.
- The Special 40th Anniversary Biological Medicine Tour to Germany program is all set. Do you have your tickets and your passport ready to go? If not, you won't be joining that elite group of practitioners registered to participate in this exceptional event. Carolyn will be departing for Germany on 17 October and will not

be back into the office until 13 November 2013. Elaine will keep the OIRF offices open during Carolyn's travels through Germany and Switzerland, and you can contact us by phone or email for our usual friendly and efficient service.

We will miss having you join us on our Germany Tour #40 adventures. To see what you are missing visit our website for full <u>Germany Tour details</u> and there is a full web page which has been devoted to <u>speaker bios & pics</u> along with the many other presentations we will hear.

→ Here are your newsletter items for this Issue #10:

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

# The Ground Regulation System (GRS)

# Part 5 – Contact, Restriction and Clogging-Up Cell Adhesion, Basal Membrane and Glycosylation

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

From an article in Naturheilkunde 2010; 4: 30-33. Reprinted in

<u>Der Weg zur Grundregulation</u>, Zaen Plus GmbH 2011, 275-280

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) and a structural analysis of the extracellular matrix was carried out (Part 4). The main focus of the current issue is devoted to an illness-promoting problem of the ECM: the potency of clogging-up. At the same time the formation of "glycation end products" (advanced glycation end products, AGEs) appears in the foreground which also throws a special light on classical detoxifying processes\*.

#### The ECM and Cell Adhesion

In order to be able to maintain all of the functional relationships between the cells and the ECM in a flowing balance (homeodynamic) mentioned up until now, a certain adhesiveness must be given between the ECM components on the one hand as well as between them and the cells. Adhesive interactions can be of remarkable strength. Nonconvalent interactions (i.e. there is no known chemical connection between the interactive partners) between two proteoglycans through formation of a common hydrate membrane (homophilic binding) can amount to 1/25 of the connection strength of a Carbon-Carbon (C-C-) connection. It was calculated from this that under physiological conditions one interacting proteoglycan pair can hold the weight of 1,600 cells. Because one cell possesses at least 1,500 such molecules on its surface, the strength of this interaction is very high [3].

The construction principle under which complicated mechanical structures can stabilize themselves under the effect of external forces is called Tensegrity (tension and integrity) [11]. Nevertheless it is essential that tissue tension, energy and mass are minimized by tensegrity. This is a natural principle which is found in all structural levels of animate nature [11]. The ECM therefore represents a pre-stressed tensegrity structure, in which the external and internal strength of balance is maintained. Tensegrity as a self-organizing stability therefore requires a certain viscoelasticity ("reversible shifting softness"), in order to have a shock absorbing effect, so that all reactants can be brought into the ECM in a function-appropriate molecular conformation as well as location with each other [1]. Cells therefore react rather to changes of this strength balance and less to the power appearing externally or internally. Small causes can thereby release very big effects and vice versa [11].

Therefore tensegrity as a self stabilization is determined by the functional working ability of the ECM (Overview in [1]). Nevertheless, the piezo electricity of the collagen fibers is important. This appears by twisting or stretching of the collagen fibers whereby the field strength in the micro-Tesla range originates, whose energy is sufficient in order to change synthesis capacity of the cells [2]. Likewise for unphysiological relationships an adjusted ECM is formed which through positive feedback ("build up") can then lead to tissue and organ damage.

The cell membrane has contact with the ECM through special receptors. The most important ones are integrins, stretch-sensitive ion channels and cell membrane-bound heparan sulfate PGs, e.g. Syndecan. It reaches through the cell membrane and comes into contact with the microfilaments in the cytoplasm (Overview in [1]). The integrins are also membrane glycoproteins. They push through the cell membrane and likewise step into connection with the microfilament system. Cellular kinases like the MAP-kinases (mitogen activated protein kinases) are activated through the mentioned ECM receptors,

which for their part activate the transcription factors in the cell nucleus, on which the transcription and translation machinery of the DNA and RNA is begun (mechanostress-signal transduction) [10].

The integrins family are formed from heterodimer glycoproteins (one each  $\alpha$ - and  $\beta$  - peptide chains) of the cell membrane. Over their connection to the cytoskeleton the integrins are involved in cell adhesion, cell migration, mitoses, many intracellular signal paths and practically in all biochemical cell reactions [12]. Only the erythrocytes lack integrins. Integrins lead information bidirectionally, not only into but also out of, the cells in the ECM. At the same time receptors are changed in their connection to the ECM and thereby the behavior of the ECM [10]. Up to now 14  $\alpha$  and 8  $\beta$  subunits of integrins are known.

Among other things the  $\alpha_2\beta_1$  binds the protein backbone of the PGs to ECM components with RGD motif (arginine-glycine-aspartate\*\*) like collagen, fibronectin, laminin (in the basal membrane) [2, 15]. Thereby a considerable influence is exerted on the tensegrity of the ECM. It turns out that the  $\alpha_2\beta_1$  integrins bind to the matrix metalloproteinases, which are formed from many cell types by proinflammatory processes. Collagen and PGs can thereby be split and the cell motility is increased. Integrins on leucocytes essentially control those of the endothelial diapedesis, i.e. the crossing over to the capillaries in the inflamed tissue area (Overview in [1]).

Integrins can also form complexes with neighboring membrane glycoproteins (e.g. cell adhesion complexes), by which certain localized GTP (guanosine 5'-triphosphate) bound proteins (G proteins) can be activated on the cytoplasmic side. G proteins transmit the signals of many hormones, neurotransmitters (among others noradrenalin, acetylcholine), from chemokines as well as autocrine and paracrine active factors (e.g. cytokine) to the intracellular signal network. For example the receptors of metabolic enzymes, ion channels and membrane transporters are thereby controlled and with it among other things also transcription, cell motility, contractility and secretion. Faulty integrins signals form the basis of many illnesses from cancer to arthritis [13].

#### **Basal Membranes**

The entire ECM is restricted practically everywhere against the epithelium and endothelium by a basal membrane (the exception is the absence of the blood-brain-barrier of the circumventricular organs of the brain) (See Figure 1 on next page).

The basal membrane consists of an approx. 1  $\mu$ m fine layer on the ECM components. It can be differentiated into a basal lamina (ca. 0.3  $\mu$ m) and a lamina fibroreticularis (ca. 0.7  $\mu$ m). The latter anchors the basal lamina in the ECM.

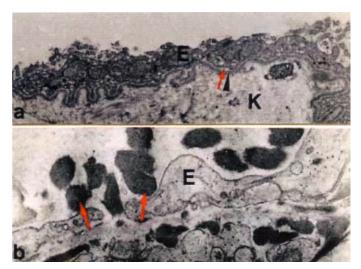


Figure 1: Basal Membrane
a) Normal basal membrane with brighter lamina rara (arrow) and darker collagen rich lamina dens (arrow head) under capillary endothelium (E). Cross cut collagen fiber (K) in the ECM.
Magnification 9,400 fold.

b) Melanoma. The edematous capillary endothelium (E) underlying the basal membrane is extensively destroyed. Between the arrows wide open interendothelial gap with through passage of fibrin (arrow) in the underlying ECM. Magnification 94,000 fold. (from Heine 2007).

The basal lamina shows two layers: the lamina rara (20-50  $\mu$ m wide), which electron-optically presents itself brightly. On it the electron-thick lamina densa (20-300  $\mu$ m wide) follows outwardly. The l. rara is pushed through from the PGs, primarily heparan sulfate PGs (HSPGs), which on the one hand the cell membrane puts through and on the other hand reaches up to the l. densa. Besides PGs the interlinking glycoprotein laminin is found in this. This is structurally determined for the l. densa typical collagen IV molecule which is linked with the neighboring mat-like molecules. An elastic working network originates from it which among other things allows the phenomenon of diapedesis, i.e. wandering of the leucocytes through the capillary endothelium. In some organs the basal laminae of the capillary endothelia and the adjoining epithelia (alveoli of the lungs, the renal corpuscles and the blood brain barrier in the CNS) merge. This is understood in the sense of a fast effective metabolism.

The HSPGs enable the connection capability and the stockpiling of calcium ions for the reactions of the overlapping and underlying cells. In addition the basal lamina forms a reservoir for Vitamin C, so that radicals from the always inflammation-ready ECM can be defused before they reach the cell associations (Overview in [1]). Any unphysiological change of the basal membranes results in the most severe organ damage (e.g. adult respiratory distress syndrome with destroyed basal membranes, sedimentation of antigenantibody complexes and complement in the renal corpuscles).

Between the molecules of the basal membranes and the downstream cells, there exist informative feedbacks which have crucial importance for differentiation and function of the connected cells [6]. To be precise, the basal membrane not only has important barrier and sieve functions but also "skeletal functions" for the capillaries, as well as also undertaking the adaptation of the rhythmics of the epithelial and endothelial cell

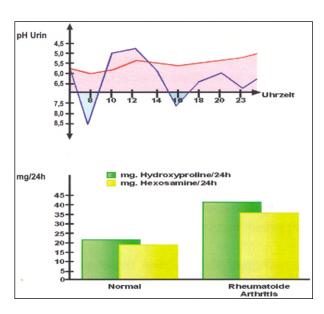
functions with the ECM. This effect, to adapt a natural frequency to the oscillations of another or to be able to undertake the rhythmics, is known from all energetically open systems and is called "entrainment" [14].

In this context it is of great importance that there are no regular [control-like] basal membranes in tumor tissues (Fig. 1). From an individual point in time the tumor problem is therefore connected with an irreversible disturbance of the entrainments between the cells, ECM and capillaries [7]. It is noticeable there that where tumor cells approach a basal membrane and then break through, there is no more Vitamin C provable [1]. Obviously this leads back to the high production of radicals by the tumors. Therefore a daily supply of several grams of Vitamin C (by infusion) absolutely makes sense for tumor patients (Overview in [1]).

#### Clogging Up Phenomena in the ECM

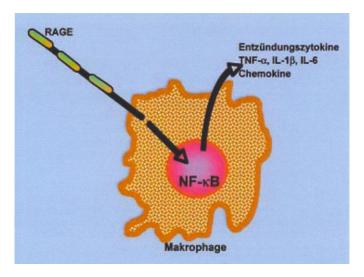
Like every other sieve, the molecular sieve of the ECM can also clog up. The concept of "clogging up" is rejected by school medicine without knowing that what they call by "non-enzymatic glycosylation" (advanced glycation end products, AGE) means the same thing. Heavy metal ions and toxic organic substances from the environment (above all polychlorinated biphenyls, organic nitro compounds and organohalogen compounds) can also be involved in it. They can enter irreversible connections with AGEs. AGEs primarily originate through the combination of stress, akinesia [mainly lack of exercise] and too high caloric food (too much white flour, white sugar and saturated fatty acids). Thereby the catabolism, the body temperature and the acute phase proteins (among others C-reactive proteins, inflammation supporting cytokines and proteolytic enzymes) are increased.

**Figure 2:** Acid-base floods in the urine pH for healthy people (blue line) and for chronic illnesses (rheumatoid arthritis, red line). Proof of collagen by-products (green rectangle) and proteoglycan by-products (yellow rectangle) for healthy people and ill patients (from Heine 2010).



The proinflammatory situation resulting from it leads to unphysiological exchange processes in the capillary area, insulin resistance, glucose utilization disturbances and increased formation of oxygen radicals (Overview in [1]). Nevertheless, a surplus in glucose is most dangerous (diabetics). The molecule can immediately bind to all sugar components in the ECM and to cell surfaces. The ECM reacts to it with a loss of buffer substances and an increased attack of more acidic proteolytic fission products in the urine. This "acid development" can be measured through the pH value of the urine (See Figure 2 on previous page). This first becomes apparent in the condition disturbances.

Finally the first subclinical proinflammatory situation can further develop into organ diseases, chronic illnesses and tumors [4, 9]. Though AGEs are constantly formed in our body, they can however be controlled by macrophages. Then RAGE, receptor for AGEs, are found on macrophages, dendritic cells and endothelial cells (See Figure 3). With too high an in-flooding of AGEs macrophages are stimulated over RAGE for emission of inflammatory cytokines (TNF-α, IL-1, IL-6) and proteolytic enzymes. In such a situation endothelial cells react across RAGE, among others with development of a subendothelial edema [4, 5]. This means that an inflammatory reaction can be accentuated across RAGE. In addition to that, AGEs are also supplied by way of food to the ECM, because they originate among other things with storage of food as well as in deep fried and grilled foods (Overview in [4]). This throws a special light on the classical detoxifying processes which are more than ever of current interest [8].



**Figure 3:** Macrophage. Formation of inflammation supporting cytokines across the receptor glycation end products (RAGE, receptor of advanced glycation end products). The receptor pushes a signal cascade which leads to the activation of nuclear factors-kappa B (NF- $\kappa$ B) in the cytoplasm. NF- $\kappa$ B migrates in the cell nucleus and activates as a transcription factor gene, which encodes tactical factors (chemokines) for inflammation cytokines (TNF- $\alpha$  [tumor necrosis factor alpha]) and corresponding interleukin (IL-1 $\beta$ , IL-6) as well as macrophages (from Heine 2010).

### Physiological Leukocytosis

This phenomenon is always overlooked, however it is of extraordinary importance for the GRS (Overview in [7, 1]). By elimination of all artifact possibilities, 300 lysis forms come on 5,000 leukocytes per mm³ of blood. Nevertheless it concerns cells which are neither necrotic nor apoptotic. They "sacrifice" themselves for the regulation of the homeodynamic. The neutrophilic granulocytes appear in focus. Per second about 1.2 million leukocytes seem to dissolve under normal circumstances. As a result up to approx. one half gram of leukocyte ingredients are released (cytokines, growth factors, colony stimulating factors, chemokines, heat shock proteins, DNA, RNA, histones, proteases, prostaglandins, leukotrienes, among others).



Prof. Dr. Hartmut Heine

#### **Translator Notes:**

\* Translation of the German word "Ausleitverfahren" is shown here as "detoxifying processes". The general meaning or usage of the German word signifies methods of detoxifying, eliminating or even purging (although often purging is included as one of the detoxifying methods). These procedures include such methods as: cupping, fasting, bloodletting, leeches, sweating cures, alkaline baths, purging, laxatives, diuretics, drinking cures and so on. Although a fairly common terminology in the German literature, there doesn't appear to be an exactly translated or direct equivalent in English.

\*\* The tripeptides Arg-Gly-Asp of the RGD motif are also listed as arginyl-glycyl-aspartic acid which are the -acyl radicals of these three components

#### Literature

- 1. HEINE H. Lehrbuch der biologischen Medizin. 3. Aufl. Stuttgart: Hippokrates 2007
- CHIQUET M. Regulation of extracellular matrix gene expression by mechanical stress. Matrix Biology. 1999; 18: 417-426
- DAMMER U, POPESCU O, WAGNET P et al. Binding strength between cell adhesion proteoglycans measured by atomic force microscopy. Science 1995; 267: 1173-75
- FATH R. Wie toxisch sind "glykierte Endprodukte" für unseren Körper? Dtsch Med Wochenschr 2008; 133: 396-307
- GEBHARDT Ch, RIEHL A, DURCHDEWALD M et al. RAGE signaling sustains inflammation and promotes tumor development. J Exp Med 2008; 205: 275-285
- GRIMAUD JA, LORTAD-JACOB H. Matrix receptors to cytokines: From concept to control of tissue fibrosis dynamics. Path Res Pract 1994;190:883-890
- HEINE H. Grundregulation Eine Synthese medizinischen Denkens. Dtsch. Ztschr. f. Akup. 2004; 47: 6-19
- HEINE H. Brauchen wir heute noch die klassischen Ausleitverfahren der Naturheilkunde? CO'MED 2010 (im Druck)
- 9. HEINE H, HEINE E. Befindensstörungen Chronische Krankheiten Altern. CO'MED Verlagsgesellschaft, Hochheim 2009
- 10. HYNES R. Integrins, bidirectional, allosteric signaling machines. Cell 2002; 110: 673-87
- 11. INGBER DE. Architektur des Lebens. Spektrum Wissenschaft 1998; Heft 3: 32-40
- MARTIN KH, SLACK JK, BOERNER SA. Integrin connections map: to infinicy and beyond. Science 2002; 296: 1652-1653
- 13. NEVES SR, RAM PT, LYENGAR RG. Protein pathways. Science 2002; 296: 1636-39
- 14. NICOLIS G, PRIGOGINE I. Die Erforschung der Komplexe. München und Zürich: Piper; 1987
- 15. SCHMIDT RE, BURKHARDT HE. Bindegewebe. In: SIEGENTHALER W. (Hrsg): Klinische Pathophysiologie. 8. Aufl. Stuttgart: Thieme Verlag; 2001: 978-1018

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- Follow this link to our website to see Issue #10 in print/PDF format.
- Conferences and Conventions: Please watch for announcements of the OIRF activities and events for the year 2014.

**Germany Tour Registration deadline was September 30!** This event is taking place over the next few weeks. Here is what you are missing, and we will miss having you join us for this special anniversary tour program!



# Occidental Institute Research Foundation

### 40th Biological Medicine Tour to Germany

Theme: Tools, Techniques and Applications

Part 1, Oct. 25-29, 2013 - <u>Tools</u>: Visit or hear from five quality and effectiveness proven instrumentation companies with practical demonstrations of their latest innovations and introduction of the latest research and development.

Part 2, Oct. 29-Nov. 4, 2013- <u>Techniques</u>: Visit and participate in the famous Medicine Week Congress in Baden-Baden

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Visit three very famous clinics including the <u>Paracelsus Clinic</u> in Switzerland with a lecture from *Dr. Thomas Rau* on Live Cell Therapy. See these Biological Medicine "Tools and

- Our private lectures present the latest information and research in our field, with ample time for questions and hands-on.
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- Hear from a well known German pharmacy of biological remedies
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Techniques" in practical everyday application.

- Tour prices includes full tour program, single room accommodations and most meals
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#### SPACES ARE LIMITED AND ADVANCE REGISTRATION IS RECOMMENDED.

**Biological Medicine Tour #40 information and Register here** 

For more details contact: Occidental Institute, <a href="www.oirf.com">www.oirf.com</a>; E-Mail: <a href="mailto:support@oirf.com">support@oirf.com</a>
PO Box 100, Penticton, BC V2A 6J9 Canada and register at 800-663-8342 or (250) 490-3318

## **Summer Specials on Instrumentation** have come to an end − sorry!

Please contact our offices for current pricing on all OIRF recommended instrumentation. There are full descriptions on our website at <a href="www.oirf.com">www.oirf.com</a> and we are well informed to discuss your practice needs. Remember that as a non-profit research organization, we are **not** allowed to sell you instrumentation on a commercial basis! Rather, we are here to educate and inform our members and to make instrumentation recommendations based on our years of research. Then, on a not-for-profit basis as a fund raising activity, we can assist you with a purchase that will work best in your practice for the most reasonable price. Call today.

→ And here are our special feature items for October 2013:

Are you testing your patients with an EAV (Electro-Acupuncture according to Dr. Voll) type of approach? Or, are you working with the new MORA Nova which has multiple diagnostic programs based on the EAV approach? Beyond the Diagnostics Seminar videos with the late *Dr. Walter Sturm* here are the resource materials that will guide you to correct and effective point and medication testing. Content details and ordering information can be found on our website at the links below.

1) SPECIAL REPORT ON MEDICATION TESTING: Dr. Fritz Kramer of Germany has given us the most complete, step-by-step guidelines available for learning "Voll"-type medication testing on your own, as well as suggested the preparations to start with. This is based on his (at that time) seventeen years of practice and teaching. Report is over fifty pages. Preparations are not included. Available in digital PDF or print formats for \$35 plus shipping.



2) The OICS 'Voll' <u>ELECTROACUPUNCTURE DESK REFERENCE MANUALS</u>
Between early 1978 and mid-1981, the research staff of the OICS Alumni Association planned, researched and made available to its Members a comprehensive, yet simplified "EAV" Program. It was our intention to produce an organized, refined, yet simplified EAV 'Desk Reference Manual' based on the literature and research of Dr. Reinhold Voll and many of his contemporaries.

**PART I**: Each page of the Manual has a separate diagram showing the exact location of one EAV point, along with a verbal description of its location along with the energetic relations, usually treated disorders, commonly tested medications and often special comments, point measurement hints or cross-reference diagnostic information. All of the EAV points are given by sections according to their respective organ or tissue system 'categories', to facilitate clinical usefulness in diagnosis/treatment.

**PART II**: It contains two complete transcripts of EAV seminars to introduce the System to those who were unable to attend them (including relevant technical information on EAV, medication testing, and instrumentation).

Recently, every page, point and detail has been carefully scanned, reviewed, edited and revised. Newer and better diagrams have been prepared so that points are shown more clearly and precisely. Everything has been reformatted into 21st century data files. All of these files are now available in PDF format, which means you will be able to use standard Adobe search engines to locate information and diagrams! This entire two part manual is available on CD. You can order a printed copy (for \$200) or the disc for the special feature price of \$175 plus shipping.

3) "HOMEOPATHY RESEARCH – AN EXPEDITION REPORT: An old Healing System Gains Plausibility": by *Prof. P.C. Endler*, Graz, Austria. This English language edition was published in 2003, under the auspices of the "Boltzmann Institute for Homeopathy" (Graz), the Austrian Ministry of Education and Science, as well as the European Commission's "Leonardo da Vinci Projects". It carries Prefaces by Dr. Peter Fisher, Royal London Homeopathic; and George Vithoulkas, Alternative Nobel Prize Laureate. The pedigree alone, makes this a "must read" work! (The book also explains how you can earn an internationally recognized EU-Master's Degree in Complementary Medicine via a distant learning program.)

From the Forward by **Peter König**, Austria (a medical practitioner of homeopathy): "
'Research' has to do with 'asking questions'. P.C. Endler is a 'new' researcher – one who not only answers questions, but also raises new ones . . ."

The fact that a reliable method which has been developed and applied over the course of 200 years and which has endured and withstood changes in the social, political and philosophical spirit of the times like no other kind of so-called 'alternative medicine' should still be discredited by members of podium discussions or among professionals, is incomprehensible to us, and such a book as the one written by Chris Endler is a response to this situation. Lack of information, lack of knowledge, claims that no serious basic research has been carried out in the field of homeopathy and that such 'crazy dilutions' are simply charlatanism should no longer exist after this book has been read."

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### **Updates, Reminders and Announcements:**

- ➤ For those of you who missed that great MORA Nova training seminar/workshop in St. Louis, MO on June 7-9, 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.
- ➤ Watch for the 2013 Issue #11 of the "The Bridge" newsletter to arrive in your Inbox around mid-November. 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 6 of *Prof. Dr. Heine*'s articles on the **Ground Regulation**System will publish in Issue #12 of "The Bridge" in mid-December, 2013.



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

See you in Germany . . .

# Carolyn

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