

# ***Biocommunication*** and the ***Basic Biological Regulatory System*** the scientific basis

## **Introduction:**

### **BBRS Science and Medicine**

Before we continue with the new view of conquering cancer, I first mention about the important subject BBRS.

The discovery and description of the BBRS is inseparably linked to the therapeutic regulation medicine. Even modern medical insights in regulation medicine can only be understood if we become aware of this BBRS.

Regulation is the key word in the frontiers of medicine today.

The regulation medicine and all other forms of alternative medicine will be expressed in future as mechanisms of regulation in the light of this "BBRS-paradigm". This is my personal opinion today after my experiences with Hugo Nielsen from Denmark and his Parallel Acupuncture.

The BBRS Medicine and the Parallel Acupuncture in the form the Hugo Nielsen Institute (for the treatment of cancers) is offering for several decades, is a unity in theory and practice.

Hence, in my introduction to BBRS Science and Medicine, I have suggested that BBRS Science and Medicine and clinical science can play a valuable role in the synthesis of conventional and alternative medicine, especially in Denmark and also here in the Netherlands.

In 1983, the AAG (Association of Doctors Alternative Medicine), the umbrella organization of six alternative specializations in the Netherlands and the university transfer point for alternative and mainstream medicine in Utrecht announced this BBRS officially for the first time. (Van Wijk, Lamers, et al).

Today, we know that illness and healing processes are increasingly transferred through the nerves of the autonomic neural system, the hormones of the humero-hormonal system and the immunoglobulins of the cellular-immunologic system and Parallel Acupuncture with

ECIWO Acupuncture, in the right place used, is able to interfere with and direct the stem cells to the places where diseases or cancers occurs.

Together with the restoration of normal frequency relations inside the BBRS, the function impairments will be repealed. At least where it is still possible, there could be again a healthy state. Illness and cancer means disorder in a living organism, and life is always energy (informative) related. There is never only a sick body, but always the person as a whole.

It is not the most easy task to regulate and intervene within the BBRS. Moreover, especially in medicine only the result is of vital importance. As Hippocrates has said, "The physician has only one task: to heal. If he succeeds, it doesn't matter how he is doing it." The least one can say today, is that Hugo Nielsen has demonstrated how such a treatment with BBRS Parallel Acupuncture leads to a complete healing of cancer.

In the beginning it was a purely empirical matter. The scientific recognition followed later when he collect all the evidence on blood samples, x-ray and biopts of all of his cancer patients at the hospital in Denmark.

Later on in 2011, Bert Pijnenburg and Ron Zoet from the Netherlands visit the Hugo Nielsen Institute and connected his Parallel Acupuncture with ECIWO Acupuncture and Medicine (an Embryo Containing the Information of the Whole Organism).

They succeeded in demonstrating that this kind of BBRS Parallel Acupuncture for the treating of cancers can be objectively established. Disease and cancer is regarded as a disturbance at the base of the BBRS, as Ron Zoet says, as a disturbance in the environment around the cells and organs, where the finest ramifications of the autonomic nervous system and blood vessels end, especially in the "basic biological regulatory system", the "Transit Mesenchym" (unfortunately, the word - Transit - is usually omitted).

Organs and body cells are not directly connected to the blood, not even with the smallest blood vessels, or the smallest nerves that will end in the Transit Mesenchym or extracellular matrix. Those exchanges take place, according to Pisschinger, through the so called "ground system" of soft tissue and extracellular fluid, that includes about 60% of human tissue and in which, under the ultimate control of the entire nervous system, the humero-hormonal system and the cellular-immunologic system, the major operations of basic life will be regulated, such as its metabolism,

blood flow, temperature, respiration, energy metabolism and acid-base balance.

When the body shows a fault (cancer) somewhere in the organism, the priority is to take countermeasures via this ground system or Basic Bio Regulatory System (BBRS - Van Wijk, Lamers et al 1983) by applying BBRS Acupuncture (= Parallel Acupuncture combined with ECIWO Acupuncture). Here in the BBRS there will be the first signs of disruption leading to disease or cancers at the weakest spot(s) of the organism. Here within the BBRS, they are reduced, counteracted or neutralized.

The Vienna group from Pisschinger demonstrated that inflammation, injury, bacteria outbreaks, foreign bodies and scar tissue, will produce long lasting disturbances in the ground system or BBRS. This long lasting disturbances will not only cause local complaints, but may also affect the nearby organ and/or the entire body and therefore the weakest spots are more susceptible to illnesses of any kind, for instance cancers.

It is obvious that more of these adverse effects can no longer be tolerated. There will mainly arise those diseases in human beings, whose constitution is weakened, or have already ill organs or organ systems.

In some studies in these individuals with weakened constitution you could see clear differences between the two body parts according to the white blood cell count, temperature, oxygen and energy metabolism, abnormalities in skin resistance and bio-electric potential.

These differences appeared to be the result of failures and/or interference fields in the body parts. This could also be repealed by Cell Com Therapy, developed by Hugo Nielsen himself.

The results of Cancer treatments at the Hugo Nielsen Institute shows that a properly applied BBRS Parallel Acupuncture together with Cell Com therapy, is able to reach the root cause of many diseases and cancers and cure the body from the inside to the outside. It is obvious that 30 years of scientific research and clinical use of the BBRS Parallel Acupuncture in the Hugo Nielsen Institute in Gram – Denmark shows, in case of deep rooted diseases like cancer, associated with regulatory disorders of the BBRS, that it is possible to cure the body and get rid of the cancer. This healing process is fully monitored in the Hospitals to objectify this remarkable cures!

You can read about this on the website of the Hugo Nielsen Institute; [www.hni.dk](http://www.hni.dk). At this point it seems for me appropriate to make clear to you that many disease processes, in particular many chronic therapy resistant diseases are absolutely unique and individual (as the BBRS Parallel Acupuncture will show the acupuncturist), because people who suffer from



this kind of diseases show a very personal and private life path and disease history. Therefore you should examine and treat the patients in a very individual way. Evidence of a double - blind and statistical methods to such an individual disease process, can never rule this kind of therapy in practice if it can help or not.

We are in the age that medicine can't achieve further scientific progress as the disease model will not further be scientific extended and deepened. Specially BBRS Parallel Acupuncture therapy and Cell Com therapy as well as Complementary and Biophysical Medicine in general show themselves clearly enough, so this is now the main step which needs to be done. And this new scientific paradigms are usually often called by the physicians, who use complementary therapies and established it within the scientific community, as very valuable. This is what we will call "integrative medicine". East and West, together the best!

This part of the course has directly relevance for TCM therapists (acupuncturists) on a large amount of "hard to treat diseases" and their possible treatment with BBRS Parallel Acupuncture and Cell Com therapy.

### **HYPOTHESIS 1:**

Every part of the body, including all the molecules so thoroughly studied by modern science and the acupuncture meridians in traditional East Asian or Oriental medicine, together form a continuous semiconductor electronic network.

Each part of the organism, even the smallest part, experience and generates a constant stream of vibratory information. This is information about all activities which take place throughout the body.

### **HYPOTHESIS 2:**

Complete health corresponds to a fully interconnected, functioning circuitry. Accumulated physical and / or emotional trauma can damage the joints (Oschman & Oschman 1995). When this happens the body's immune system and repair system will weaken and disease gets a chance to anchor.

BBRS Parallel Acupuncture and other energetic therapies like Cell Com therapy, restore and balance the bio-electro-magnetic oscillation circuit, with deep and clear benefits for biocommunication. The immune system and repair systems of the body are very well able to repair itself.

**HYPOTHESIS 3:**

To administer (herbal) products, we should realize that they not only have NUTRITION value (macro elements) but also possess an INFORMATIONAL value (micro-elements)!

(Herbal) products with many "informative value" as (cell) differentiation promoters (eg. Ecdyson Tablets and Gemmotherapy) are capable to encourage the immunological-, neurological- and hormonal systems to improve mutual biocommunication, with recovery and repair as a result.

**THE MEDICINE OF THE**

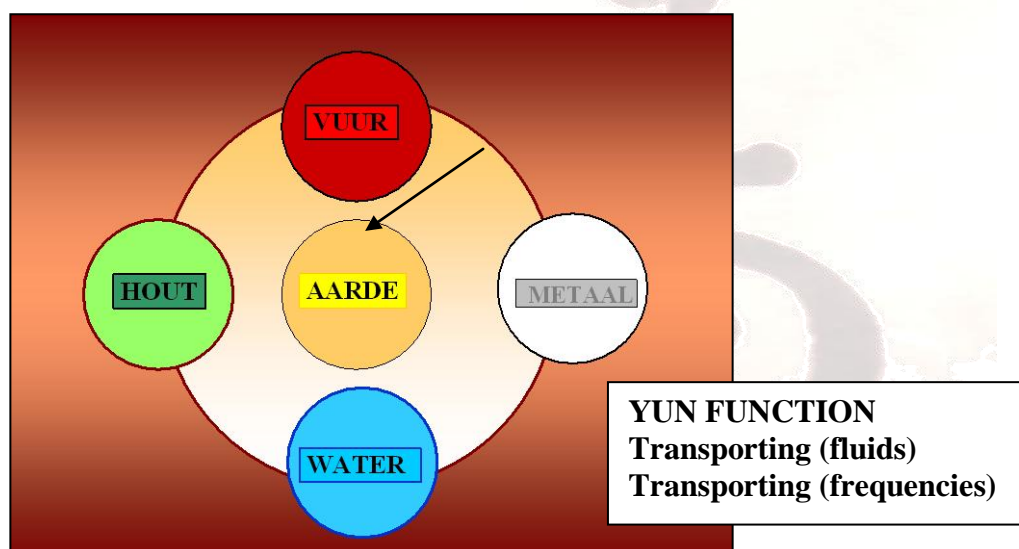
# **BASIC BIOLOGICAL REGULATORY SYSTEM**

The original "System der Grundregulation" by A. Pischinger is recently renamed by Dr. R. van Wijk of the University of Utrecht in the  
"BASIC BIOLOGICAL REGULATORY SYSTEM"

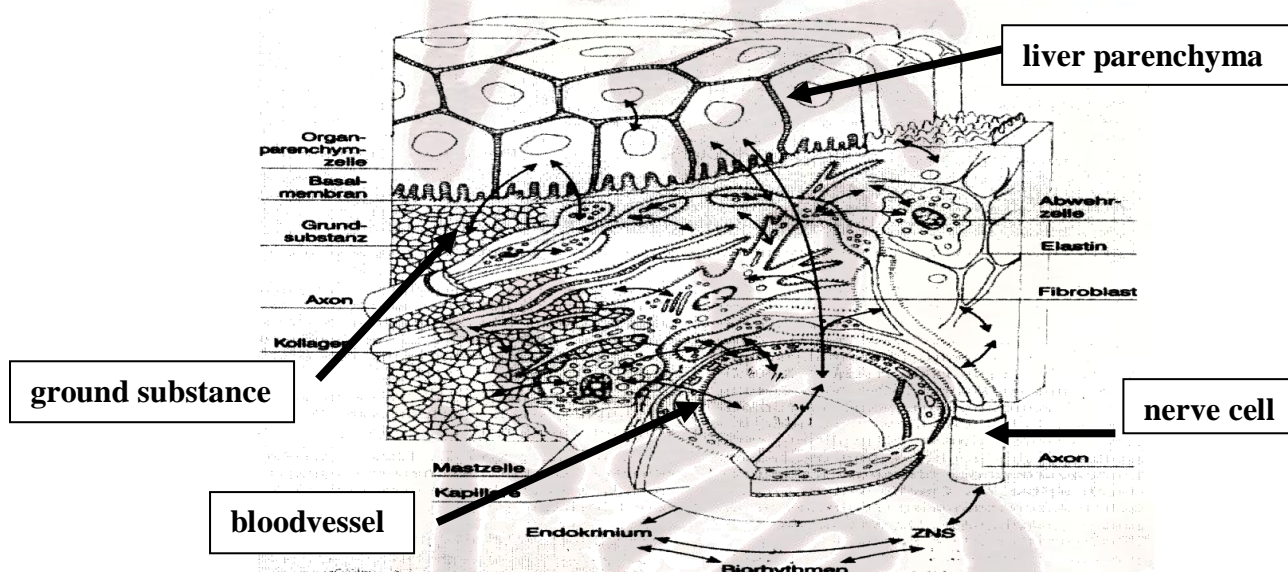
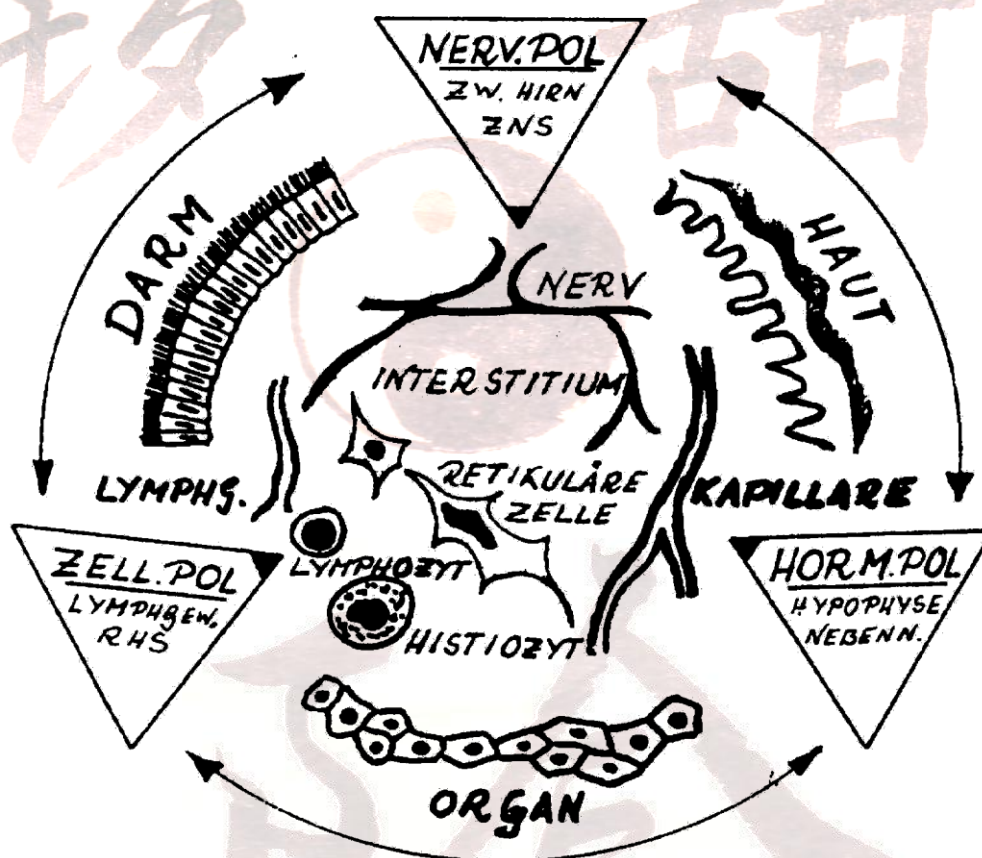
A new biomedical theory which is based on the synthesis between Eastern and Western views.

Within this BBRS the biological processes are regulated.

In TCM, this is the story of the Spleen (Yun-Hua function).

**FIVE ELEMENTS CYCLE PAST**

# Disruption of the Basic Bio Regulatory System (B.B.R.S.)



Both the neurons and the capillaries goes indirectly to the parenchyma via the TRANSIT MESENCHYM/EXTRA CELLULAR MATRIX  
 The Basic Biological Regulatory System explains the organic recovery processes on the biomolecular and intracellular levels.



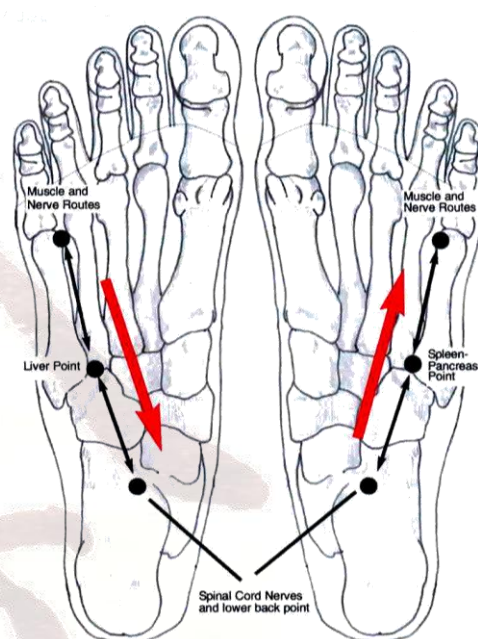
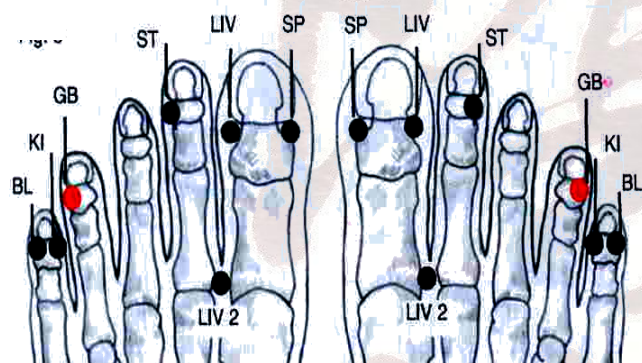
## KEYSTRATEGIES FOR THE REGULATION OF THE B.B.R.S.

### BBRS REACTIVATORS:

- PARALLEL ACUPUNCTURE
- E.C.I.W.O. ACUPUNCTURE
- CELL COM THERAPY
- ECIWO DIFFERENTIATION PROMOTORS

### **The BBRS Parallel Acupuncture from the Hugo Nielsen Institute**

Without the control system (BBRS), chaotic conditions would quickly occur, both locally or generally. Occasionally the BBRS fail, possibly due to an external attack (eg. infections, chemical effects from the environment, etc.) These external attacks cause faulty signals to occur, which in turn are incorrectly translated by the BBRS – confusion ensues, disease occurs.



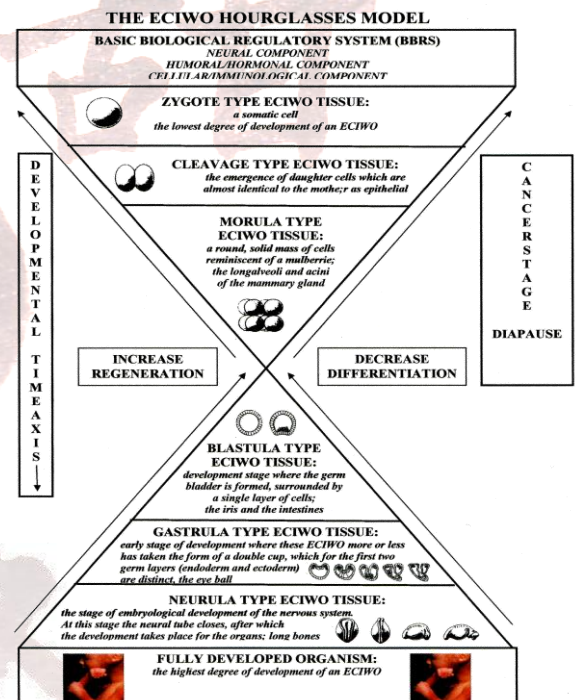
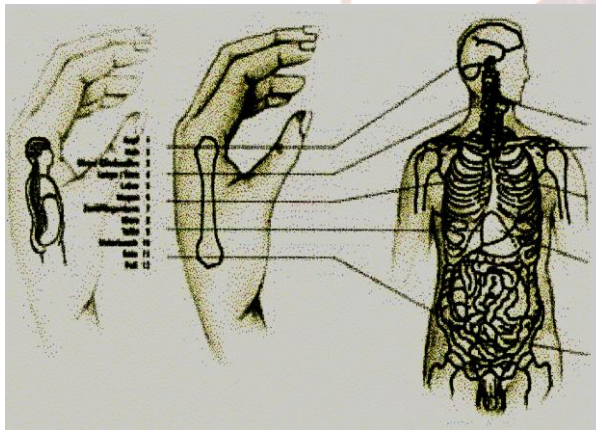
**The points on the left side** activate the biochemical processes in the organism

**The points on the right side** slow down the biochemical processes in the organism the brake on the biochemical processes in the organism

The idea behind the BBRS Parallel Acupuncture is to pick up the electric steering signals from the acupuncture points, in parallel, compare them with parallel needling. The acupuncture signal will be registered and the signals are sent inside the BBRS and influence the Cellular/Immunologic Pole, the Neural Pole and the Humero/Hormonal Pole. After correcting the BBRS the new corrected signals will sent around the body to restore the weakest parts of the body and the diseased areas.

## An Embryo Containing the Information of the Whole Organism “ECIWO Acupuncture” from Yingqing Zhang

A new biomedical theory which is based on the hypothesis that a living organism is composed of different, mosaic-wise, polarized levels of which each part is an ECIWO.



The ECIWO theory has a different approach to cancer therapy. Rather than killing the cancer, it tries to stimulate the cancer to develop beyond the cleavage/morula stages of embryonic development (diapause = cancerstage), causing the cancer cells to normalize.

Every long bone system and organ have a full set of corresponding points. However, all the points can be conveniently accessed on the hands. ECIWO acupuncture points are a very valuable method of cancer pain control to help you get through the healing phase by increasing cell differentiation because of increasing regeneration. After “opening” the BBS with BBS Parallel Acupuncture, ECIWO acupuncture offers you the most effective acupuncture technique known today for regeneration of tissue!

Occasionally, during treatment you may feel a strong sensation in the hand on the second metacarpal bone. You may experience some heat to the weak area of your body. This is caused by a strong reaction from the BBS. It usually means that you will heal quickly!

There is not a “crossover”; if the disease is on the left side of the body, the acupuncture point, the point on the left hand will be more sensitive. Work on the most sensitive points first, and always test both hands.



## THE CELL COM SYSTEM FROM HUGO NIELSEN

Every body cell (ECIWO of the lowest degree) contains all necessary information about almost everything that has happened in the body (memory). In the case of cancer development, the undifferentiated cells, which are needed for tissue repair, are not coming to development and stay in their Morulastage (ECIWO differentiation development).



Because of this, Hugo Nielsen felt the need to develop an instrument for home treatment between the acupuncture treatments in the clinic. This Cell Com Device is used not only for the relief or take away the cancer pain, but also improve the effectiveness of the BBRS Parallel Acupuncture and ECIWO Acupuncture therapy. It is an instrument that directly “communicates” with the cells and is able to restore or prevent a lapse that can lead to a deadly disease.

The basic principle of this Cell Com system is that all acupuncture points are areas with great activity on the human body field and exchange a lot of biological data. This total control of bio-information controls all mental and physiological functions inside the body and rebuild the energy pattern around in and round the human body, which is actually a reflection of what is going on inside the BBRS of the body.

Hugo Nielsen assumes, like Ron Zoet and Bert Pijnenburg, that everything in our body vibrates at a certain frequency (like everything in the universe). When we have a disease, like for instance a cancer, some of these frequencies are disturbed and they deviate slightly from the rest.

His Cell Com System consists of a small device that operates on a nine-volt battery. It contains a small computer. With the two electrodes, red (-) on the left side of the body and black (+) on the right side of the body, all frequencies in the body are being checked out and the wrong frequencies are picked out by the computer.

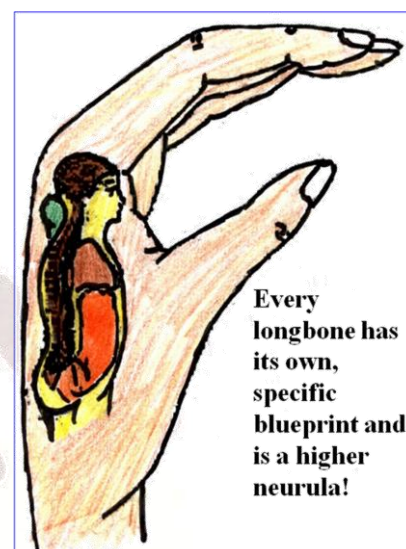
After the measuring phase, which takes approximately one minute, the good frequencies are sent directly from the Cell Com device through the electrodes and the corresponding acupuncture points, back to the body and the BBRs.

The practical use of this Cell Com device is relatively easy and most cancer patients use the Cell Com on a daily basis at home. Three times a day for a few minutes. In addition to this they are treated with the needles in the clinic, usually once or twice a week.

Several researchers like Prof. Svetoslav Danev from Bulgaria, already conducted research showing measurable and statistically significant improvements in biochemical parameters when patients are treated with the Cell com System.

Fourteen years ago the EU even granted the Hugo Nielsen Institute a subsidy for building a larger research center to further develop the system.

After working a lot of years with several professors and cancer specialists in Denmark, he is currently working together with Ron Zoet and Bert Pijnenburg from the Netherlands to develop a worldwide, scientifically based system for a new view on conquering cancer according to the ECIWO Medicine of late professor Yingqing Zhang from the Shandong University in Jinan, China.



## THE CELL DIFFERENTIATION PROMOTORS

During the last numerous years there have been many valuable therapeutic possibilities developed for cancer patients.

They include among others the standard chemotherapy, radiotherapy, surgical procedures, medicine that strengthen the Immune System (amongst other things levamisole), herbs from the western and eastern tradition, vitamins, minerals, antioxidants, proteolytic enzymes and substances from sharks (animals from which it is proven do not get cancer).

Chinese doctors and researchers have identified about 100 herbs that are suitable for use against cancer and numerous books have been published in the English language about the treatment of cancer using Chinese herbs.



Hence the confrontation with the choice of which of the many items should be used.

Besides this, it is expected (especially by malignant cancers) that the time duration in which a choice has to be made, is quite short. The last 10 years the western practitioner of Chinese herbs has regularly been placed in a dilemma, whereby due to his often limited experience with the treatment of cancer, he has been forced to make such a choice.

The first information to reach the west about the treatment of cancer with Chinese herbs was the information about the Fu-Zheng therapy, a method which both protects the patient and offers a resistance against the side-effects of the modern cancer therapies.

Within this type of therapy, the herbs which stimulate the Qi (energy) dominate, usually supported by other tonics, especially Yin enhanced herbs.

More recently the Fu-Zheng and Gu-Ben therapy are being used especially in the case of skin, breast and lung tumors. This therapy unites the first therapy of stimulating the Qi in order to raise the reduced resistance of the patient together with the strengthening of the root (the Jing or physical essence) Hereby arose a formula for the treatment of particularly lung and breast tumors on Chinese herbs based on ECDYSON.

### **ECDYSON**

Ecdysons are steroidal hormones that regulate the molting process of primitive animals. In contrast of the steroidal hormones of the higher ranked animals, which include humans, these hydroxy sterols even contain the integral 27C carbon skeleton of their biochemical predecessor: cholesterol.

Alfa-ecdysone regulates the molting and metamorphosis of insects.

Beta-ecdysone (20-hydroxy-ecdysone) is the molting hormone of lobsters.

Most insects synthesize ecdysone out of vegetable hormones, which their food richly provides. Lobsters on the contrary contain cholesterol.

If we add ecdysone to insects, then a "puffing" of the chromosomes takes place.

This means that the latent DNA (hereditary matter) becomes available for the transmission of hereditary matter to the so-called messenger RNA and as well as that the unexpressed hereditary characteristics can develop. In other words, ecdysone is a strong promoter of cell differentiation.



To the great surprise of the biologists, it appeared that lots of plants, especially conifers and ferns, contained a substantial amount of this animal hormone. (e.g. fresh oak ferns-roots 1%). A number of frequently used Chinese medicinal herbs contain likewise fyto-ecdysone: e.g. Achyranthes and Morus Leaf.

The fyto-ecdysones are real animal hormones. When we add them to, for example fly maggots, they directly start to pupate. For a long time now we have asked ourselves what the function is of these substances in the plant world. Nowadays it is the current meaning that ecdysone based plants protect themselves against excessive eating by the insect population by restricting their hormones. However some insects (e.g. the silk worm) has adapted itself and thrives well on a ecdysone rich diet of mulberry leaf.

### **ECDYSON AND CANCER**

In the western medicine cancer is presently considered as a disruption of the genetic matter through physical (e.g. radiation), chemical (e.g. cancerogenes) or biological (e.g. viruses) damage, with an uncontrolled and uncoordinated tissue growth as follows.

According to views of the traditional Chinese medicine, cancer is a result of stagnation of qi, blood, mucus and toxins, with tumors as a (possible) manifestation.

From the perspective of the so-called integrated medicine, which tries to reconcile the insights of the modern western and the traditional Chinese medicine, there nevertheless comes an unexpected new vision on the beginning of cancer: the ECIWO theory of Yingqing Zhang. (E.C.I.W.O. is an abbreviation which stands for: an embryo containing the information of the whole organism).

According to this theory, which the western embryology uses as an explanation for the working of the eastern medicine, the zygotes (a fusion of the sperm and ovum cell) as well as the somatic cells (body cells) go on during the process of various stages of tissue development (morula, blastula, neurula etc), whereby the morula stage with its cluster of non-developed cells like tissue which correspond with cancer. A cancer is according to Yingqing Zhang, therefore not a confused tissue, but an underdeveloped tissue - tissue which has remained in the morula stage.

Embryo's and other developed tissues (e.g. wounds and tumors) contain substances (e.g. alfa-fetoprotein, carcino-embryotic antigen, placenta-antigen, etc), which ensure that the morula stage quickly continues. Such substances, development promoters, prevent that a tissue remains in the cancer stage and are therefore natural anti-neoplastica (against tumor formation).

There are a number of hormones which belong to this group of substances, e.g. HCG (human chorionic gonadotropin), which enables amongst other things that the fertilized ovum (a morula!) leaves as quickly as possible the fallopian tube and is implanted in the womb for further development. As a follow on from such observations, people have extensively started to experiment with other development promoting hormones (e.g. thyroxine and T.S.H., oestrogen and glucocorticosteroids, prolactine and progesteron) as an alternative for radio and chemotherapy.

However, all of these substances practice their typical hormonal working and therefore form a cancer therapy with unwanted side effects.

However, ecdyson, as a natural non-human steroid hormone, does not show these side-effects. Ecdyson taken orally and administered through the peritoneum, promotes within a few hours the glycogenesis, the RNA-synthesis, the absorption of amino acids and the protein anabolism in the liver and kidneys (but not in the spleen), but on the contrary reduces cholesterol and blood lipids.

In the traditional Chinese medicine, one would describe ecdyson as a jing tonic (a stimulant for the basic essence). With respect to insects and lobsters the regulation of growth and development is an important aspect of jing or essence. With respect to people it stimulates the yin (protein anabolism) and yang (cell differentiation), qi and blood (glucogenesis, lipolysis) and it adstringents (increase of bodily weight)

In the western medicine, one could classify ecdyson under the anabolic steroids.

All in all, ecdyson as a jing tonic is a potentially important, natural and safe hormonal remedy against tumors, without the unwanted side effects. Moreover, injections of ecdyson, produce no local or hematological allergic reactions.

## **LUNG AND BREAST TUMORS**

According to the ECIWO theory, the macro-biological structures mirror their micro-biological structures or embryonic stage. Long bones (e.g. upper arm, the carpal bones, etc) are most highly developed neurula's, the iris of the eye is a macro-blastula, but the alveoli and breast glands because of their grape like structure, look extremely like morula's.

Therefore, lung and breast tissue type are sensitive to cancer.

This also appears to be so statistically because the high cancer percentage in men with lung cancer scores 22%, and in women with breast cancer scores 26%, the mortality rate due to lung cancer in men is 35% and due to breast cancer in women 18%.

In addition to this, out of the western embryological stand point, lungs as well as breasts differentiate from the ectoderm; the lungs are a so-called piece of folded in skin and the breast glands are histologically related to sweat glands.

From out of both the pathological as well as the histological perspective, there are therefore enough reasons to initially test a "molting hormone" as an anti-neoplasticum by the ectodermal cancers of the lungs and breasts.

## **A PRACTICAL HERBAL FORMULA**

The formula of the ECDYSON TABLETS consist of two sections: the first five herbs contain only ecdyson, the five other herbs are all traditional herbs, which are used for the treatment of lung and breast tumors and which have already proven their clinical value.

The global nature of this formula is cold. The response of this on the digestive system is, however, partially compensated by a stimulating action of the sweet herbs, whereby the formula can be well tolerated.

According to the basic principles of the traditional Chinese medicine, it is advisable to combine an Ecdyson formula with tonics in order to strengthen the defence energy (zheng-qi) of the body.

The addition of a defined amount of Ganoderma is simple and efficient. It strengthens the immunity and is a substance used against tumors. Broader than this is the combination with a qi and yin tonifying formula such as a **FIVE GINSENG TABLETS**.



This formula not only contains tonics, but also other detoxifying herbs (amongst others Polygonum) which work well together with the **Ecdyson Tablets formula**.

The **Ecdyson Tablets** will be produced on the basis of granulated herb extracts. Hereby, is the concentration of the active ingredients on average five times higher than those of raw herbs.

Each tablet contains 500mg herbal extract and 100 mg excipients. With a dosage of three times daily 4 tablets, one comes to an equivalent of 30 grams of raw herbs. This dosage can be doubled without any objection or danger.

## **Modular construction of a herbal formula for treating cancers with differentiation promoters based on ecdyson:**

### **1.The ecdyson basic formula (tuo-pi-mai-dong-ji-ben-wan)**

Note that in this new **ECDYSON basic formula**, only consist of those herbs that are containing **Ecdysterone** plus **Raphanus**.

By combining additives (extra modules) you can complete this formula according to the needs of the patient.

Like Traditional Chinese Medicine also indicates, the tumors will be influenced by five pathogens.

- *Heat*
- *Phlegm*
- *Stagnation of Blood*
- *Damp*
- *(latent) toxic heat*

### **2. Heat clearing additives (wei-tuo-pi-mai-dong-pian-jia-qing-re-yao)**

This module will be added to the **ECDYSON basic formula**, if the patient experience **excess heat symptoms**. This module consists of very cold, antipyretic herbs. **Andrographis**, **Taraxacum** and **Indigo** clear the heat out of the essence (Jing)

Other herbs and **Oldenlandia**, **Prunella** and **Sophora** are clearing heat and are detoxifying the body, besides of having strong anti-neoplastic properties. **Scute** clears Heat out of the body and removes the heat via the upper warmer.

### **3. Phlegm eliminating additives** (*wei-tuo-pi-mai-dong-pian-jia-qu-tan-yao*)

All these herbs have the property resolve Phlegm en removes it.

The choice of these herbs is very special.

They are all capable to break down the **Mucosaccharide shield**, by isolating the tumor from the surrounding tissue and blood.

The administration of this **Phlegm removing module** is recommended when the patient's shows overall symptoms of mucus accumulation and exhibits a slow metabolism.

Especially in cases where no other therapy proves to be successful.

The method of this combination may be compared with **Wobe enzyme preparations**.

### **4. Blood regulating additives** (*wei-tuo-pi-mai-dong-pian-jia-li-xue-yao*)

This **Blood regulating module** will be added to the **ECDYSON basic formula**, when the patient shows a constitutional tendency to **blood stagnation**.

Again, the choice of these herbs is determined by strong **détoxifying (Blood cooling) properties** of the **Blood moving herbs**.

### **5. Dampness eliminating additives** (*wei-tuo-pi-mai-dong-pian-jia-qu-shi-yao*)

Most of this formula consists of diuretics, which simultaneously support each other in clearing Heat-toxins (removes damp-heat and toxic-heat)

This module is added to the **ECDYSON basic formula**, when the diuretic capacity of the body fails and therefore dampness will accumulate.

This accumulation of fluid in turn, causes a blockage and / or hypofunction of the Fu organ, causing a further weakening of the excretory function of the body and thus also a reduction of the immune response.

### **6. Toxin eliminating additives** (*wei-tuo-pi-mai-dong-pian-jia-jie-du-yao*)

This module is a simple combination of herbs, which may very well eliminate toxins. This is possible through the active herbs such as those who are capable to clear the surface: **Bupleurum**, **Cimicifuga** and **Pueraria** are able to remove toxins and herbs such as Aloë and a **digestive détoxifier** as **Crataegus**.

***Please note that the effect of this combination can be intense, and often causes rash, damp heat and / or diarrhea!***

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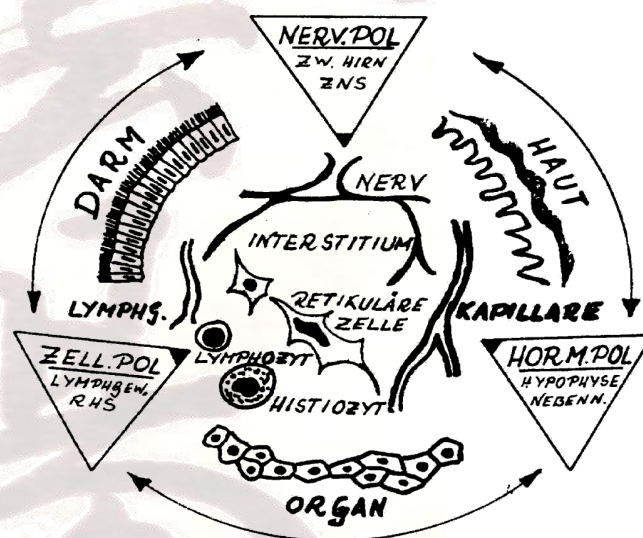
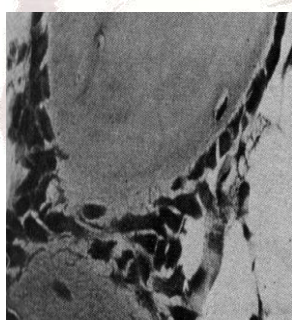
### Introduction Basic Biological Regulatory System (BBRS)

Extra-cellular Matrix tissue permeates the whole body and contacts more organs in the body than any other tissue. Its function in the transmission of nerve impulses, hormones and nutrients to the body's tissues has been overlooked in conventional medicine.

Its physiology can also explain the function of acupuncture points and some of the mechanisms of homeopathy and promises, in time, to validate the mechanisms of BBRS Parallel Acupuncture (According to the Hugo Nielsen Institute) diagnostic and therapeutical testings, which is an very important modern development of Acupuncture to treat e.g. cancers. The rôle of the Extra-cellular Matrix in the regulation of physiological function, problems of dysfunction from toxic deposition and the connection to possible mechanisms of acupuncture and related therapies is reviewed.

### THE BASIC BIOLOGICAL REGULATORY SYSTEM

#### Introduction:



The BBRS is een synthesis between:

- the Eastern philosophy and
- the Western science

with the aim:

- \* coming to integrated medicine
- \* to settle a theoretical basis for its physiology



The BBRS, present throughout the whole body (excluding the epithelium), consists of:

- **TRANSIT-MESENCHYM**  
(cellular fluid and soft connective tissue)
- **IS THE BIGGEST ORGAN OF THE BODY**
- **IS THE MEETING POINT OF THE VEGETATIVE NERVOUS SYSTEM AND THE CAPILLARIES**

### **THE BASIC PRINCIPLES OF THE BBRS**

- **Prof. Heine:** BBRS is the oldest information system of the oxygen breathing organisms
- **Yingqing Zhang:** ECIWO Pancybernetics and the embryonal recognition respons of biological similar tissue
- **H. Buchheit:** the Chinese (not-digestive) SPLEEN (Yi)
- **Drs. F. Ramakers:** Chinese Chong Mai

**The Embryogenesis is the “key” to Chinese medicine! (Buchheit)**

### **Terminology used for the Ground Regulation System**

Terms used to describe this system are as follows:-

- 1 **The Mesenchyme or Mesenchymal Tissue**
- 2 **Connective Tissue – a general and imprecise term**
- 3 **The Ground Substance – a term used by Pischinger**
- 4 **The Extracellular Matrix**
- 5 **The Basis Biological Regulation System (BBRS) – Dr. R. van Wijk**

This last term will be the most commonly used one!

### **Definition and Classification of the Basic Biologic Regulatory System:**

**Connective Tissue** includes a number of tissues which serve the general purpose of supporting and connecting the tissues of the body.

**They are divided in three main groups:**

- **The Connective Tissue proper**
- **The Cartilage**
- **The Bone**

## Several forms of Connective Tissue are recognised:

- **The areolar tissue**
- **The white Fibrous tissue**
- **The yellow Elastic tissue**
- **The mucous tissue**
- **The retiform tissue**

Is present in the body, except the epithelium.

Is a network of fixed connective tissue cells (fibrocytes).

Undifferentiated stem cells (fibroblasts) and toti-potential connective tissue cells.

### Free connective tissue cells:

resistance and plasma cells, histiocytes, mast cells, lymphocytes (which can move freely in a network of fibrocytes).

Elastic fibers (fine) and collagen fibers (coarse)  
The so-called amorphous mass of protein which provides the ground substance (gel occur)

Regarding the Basis Biological Regulatory System we are only interested in the "loose connective tissue, which almost includes the entire" Extracellular Matrix",

*Definities afkomstig uit Gray's anatomy*

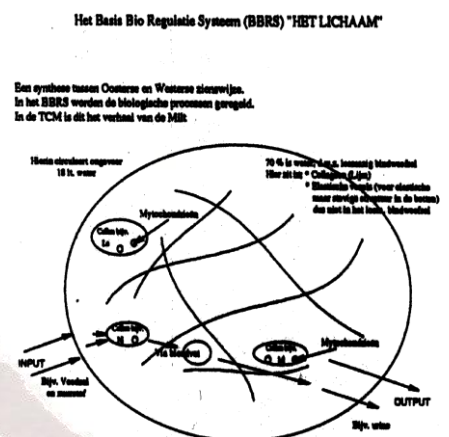
## BBRS: Intermediate meeting point of the vegetative nervous system and the capillaries.

- 3 normal attitude types:
- a) **neural pole**
  - b) **cellular pole**
  - c) **humoral pole**

The BBRS regulates the homeostasis of the internal environment. Metabolism, blood flow, temperature, respiration, acid-base balance, redox potential through the preservation of:

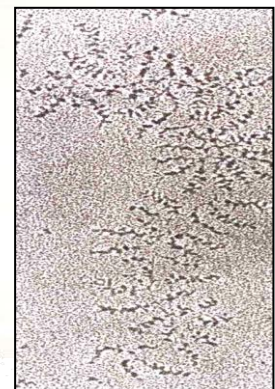
- iso-ionia
- iso-osmie
- iso-tonia

BBRS regulates the homeostasis of the internal environment.



### Grondregulation

- Humoral medicine
- Basic Bio Regulatory System
- University Utrecht



A micro recording of a proteoglycan

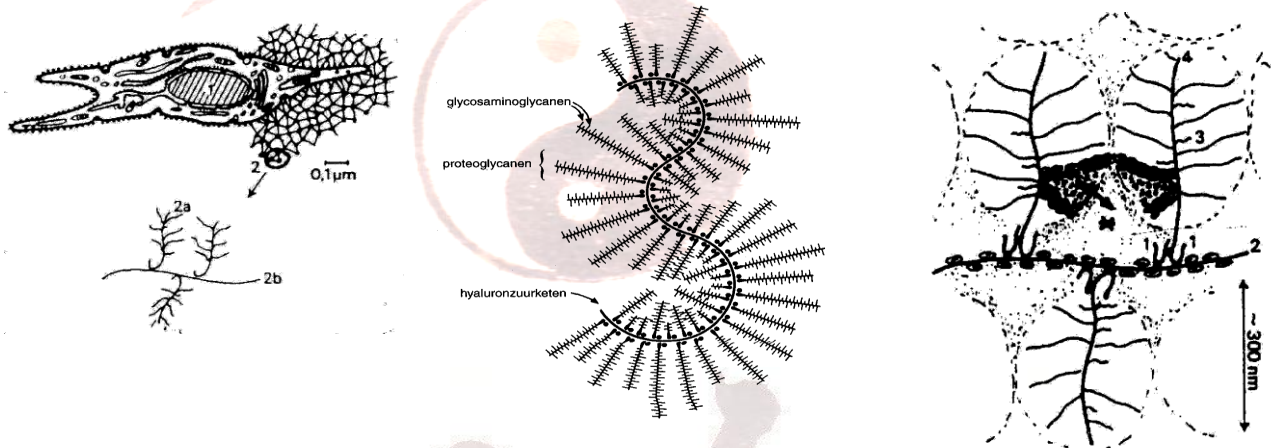
**Prof. H. Heine: University of Witten:**

A: ground substance of the BBRS is not so amorphous

B: appears to be gel-like

C: mainly consists of multi-polymeric protein compounds

D: the proteoglycans are bound to a framework of hyaluronic acid



The nervous cells as well as the capillaries are going indirectly to the parenchyma through the TRANSIT MESENCHYM.

**Prof. H. HEINE says about this BBRS:**

The BBRS is the oldest information system of the oxygen breathing organisms, which allows a plurality of body components are behaving as one unit.

**Through this system it is possible that all the the cells of the organism:**  
Make contact with all other cells of the same organism.

**Regulating the BBRS has three basic principles:**

1. Tonifying by stimulating the self-regulatory capacity.
2. Improvement of biological processes by improving information transfer.
3. Treatment without harmful side effects.



### **Structure of the Extra-cellular Matrix (Ground Substance)**

In a lot of the connective tissues, the extra-cellular Matrix molecules are secreted by cells called fibroblasts. These molecules assemble into the extra-cellular Matrix once they are secreted.

The extra-cellular matrix is made up of two classes of macromolecules.

**The first class** is called **glycosaminoglycans**, which are polysaccharide chains. Members of this class are usually found to be covalently linked to protein in the form of proteoglycans. The proteoglycans are bound to a framework of hyaluronic acid in the extra-cellular matrix.

**The second class** is made up by **fibrous proteins**. There are two functional types of fibrous proteins: the ones that are mainly structural, like collagen and elastin for example, and the ones that are mainly adhesive, like fibronectin and laminin for example. Members of both classes come in a great variety of shapes and sizes.

The members of the **glycosaminoglycans** form a highly hydrated, gel-like substance, in which the members of the fibrous proteins are embedded. Collagen fibres strengthen and help to organize the matrix, while elastin fibres give it resilience. Collagen also has recently been shown to have important semi-conductor properties.

Adhesive proteins help cells to attach to the extra-cellular matrix. Fibronectin, for example promotes the attachment of fibroblasts and other cells to the matrix in connective tissues via the extra-cellular parts of some members of the integrin family, while laminin promotes the attachment of epithelial cells to the basal lamina, again via the extra-cellular domains of some members of integrins.

**Fibronectin** was the first well-characterized adhesive protein.

It's build up of multiple domains, each with specific binding sites for other matrix macromolecules and for receptors on the surfaces of cells.

Fibronectin is a large glycoprotein that is found in all vertebrates.

In experiments with chopped up fibronectin molecules it was shown that one domain binds to collagen, another to heparin, and yet another to specific integrins on the surfaces of various types of cells.

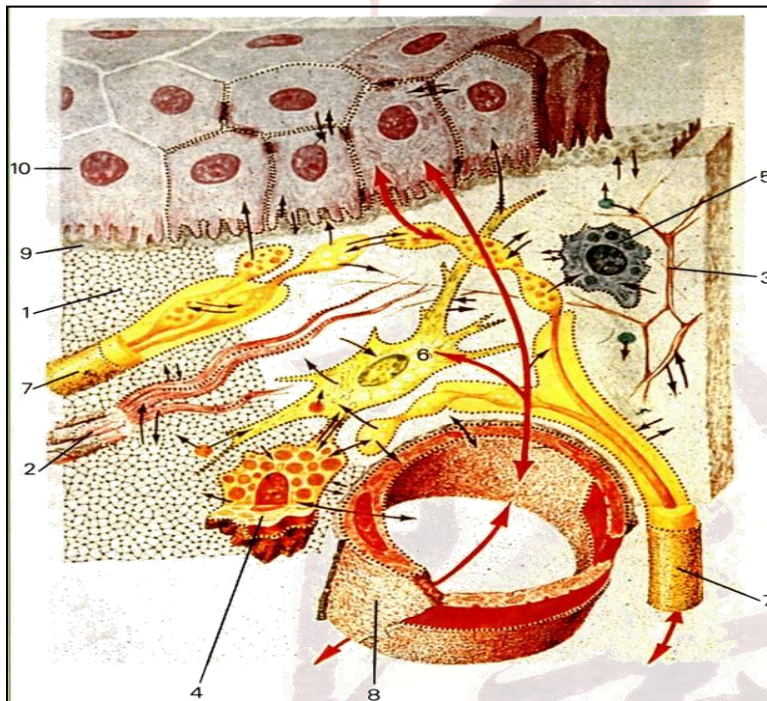
## SUMMARY BASIC BIOLOGICAL REGULATORY SYSTEM:

De cellular physiology of R.Virchow was a crucial turning point in the history of Western medicine.

Most faculties finally turned their backs on the humoral medicine.

What is the cell without its environment?

Mutual relations (arrows) between capillaries (8), collagen vessels (2), mast cells (4) immune cells (5), fibrocytes (6), terminal autonomic axons (7), organ parenchym cells (10), basic membrane (9)



*Diagram of the  
Extracellular Matrix  
or the  
Basic Biologic  
Regulatory System*

The fibrocytes (6) are the regulatory center of the BBRS.

Only this type of cell is capable to synthesize the extracellular matrix and nerve components together. The main mediators and filters of information are proteoglycans, structural glycoproteins and sugar coating to the cell surface (glycocalyx-edge of all cells, collagen and elastin).



## HOW IS THE BASIC BIOLOGICAL REGULATORY SYSTEM WORKING?

The most Forgotten organ (theoretical based)

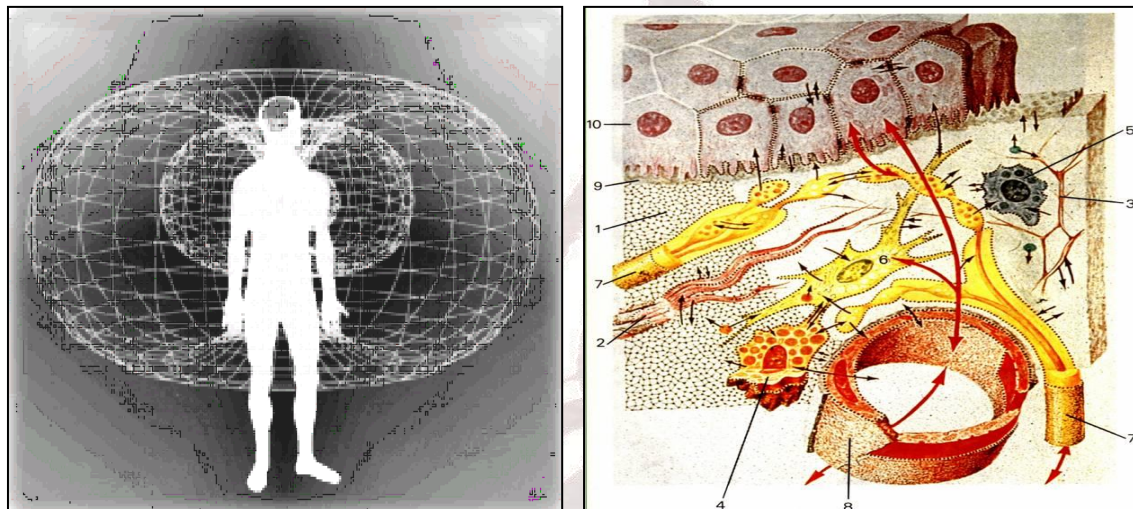
“LIFE” IS SELFREGULATING, ORGANISED ENERGY

**Self regulation and organisation will be possible though information exchange.**

**For “life” there is needed:**

1. **MATERIAL**
2. **ENERGY**
3. **INFORMATION (EXCHANGE)**

## THE BBRS WORKS VIA INFORMATION TRANSFER!



## IT IS POSSIBLE TO TRANSFERE INFORMATION IN 3 DIFFERENT WAYS:

- \* **BY NERVES OR A NEURAL ROUTE** (Brains and Nervous System)  
(There will be nerve endings in the soft tissue)
- \* **BY BLOOD OR A HORMONAL ROUTE** (Pituitary and Adrenals)  
(There will be blood vessels in the soft tissue)
- \* **BY (BIO) ELECTROMAGNETIC FIELDS OR IMMUNOLOGICAL ROUTE** (Lymphoid tissue and Reticuloendothelial Histiocytic System)

There is evidence that (bio) electromagnetic fields are essential important for maintaining life.

- Dr. F. Popp calls them BIOFOTONES!



## Triple Helix of Collagen



**Collagen is made out of the three polypeptide chains bound in the triple helix.**

In the form of fibers, the triple-helix will merge molecules, both from head to foot as the sides, together to form long fibers and bundles of fibers, so they will change into merged thicker fibers.

### Collagen

The collagens are a family of fibrous proteins found in all multi-cellular animals. A characteristic of these collagens is their long, stiff, helical structure. These basic structures organize the extra-cellular matrix and give it resilience.

The above is true for the volume filling material between cells, but beneath epithelia (skin & mucous membrane) the extra-cellular matrix is organized as a thin sheet called the basal lamina (40-120 nm thick).

Molecules of this type of collagen have a more flexible structure than their fibrillar counterparts. They form a flexible, sheet-like multilayered network.

Recent research by Mae Wan-Ho<sup>2</sup> and others has shown that the ECM has important semi-conductor and communication properties.

The clue to the intercommunication function of connective tissue lies in the properties of collagen which makes up to 70% or more of all the proteins of the connective tissue.

There are many kinds of collagens - all sharing a general repeating sequence of the tripeptide, (X-Y-glycine), where X and Y are usually proline or hydroxyproline. They also share a molecular structure in which three polypeptide chains are wound around one another in a triple-helix (rather like an electric flex) with the compact amino acid glycine in the central axis of the helix, while the bulky amino-acids proline and hydroxyproline are near the surface. In the fibrous forms, the triple-helical molecules aggregate head to tail and side-by-side into long *fibrils*, and bundles of fibrils in turn assemble into thicker fibres, and other more complex three-dimensional liquid crystalline structures.

Some collagens assemble into sheets constructed from an open, liquid crystalline meshwork of molecules.

All these structures are formed by *self-assembly*, in the sense that they need no specific 'instructions' other than certain conditions of pH, ionic strength, temperature and hydration. The process is predominantly driven by hydrophilic interactions due to hydrogen-bonding between water molecules and charged amino-acid side-chains of the protein. Hydrogen bonds are a special kind of chemical bond in which a hydrogen atom is shared between atoms such as oxygen and nitrogen. It is the most important and ubiquitous chemical bond in living systems. A water molecule is made of one oxygen atom and two hydrogen atoms and each of the two hydrogen atoms can make a hydrogen bond with another the oxygen belonging to another water molecule or a protein molecule, while the oxygen atom of the water molecule can accept two other hydrogen atoms in hydrogen-bonds.

But collagens are not just mechanical fibres and composites. Instead, they have dielectric and electrical conductive properties that make them very sensitive to mechanical pressures, pH, and ionic composition and to electromagnetic fields<sup>2,i</sup>. The electrical properties depend, to a large extent, on the bound water molecules in and around the collagen triple-helix. X-ray diffraction studies reveal a cylinder of water surrounding the triple-helix which is hydrogen-bonded to the hydroxyproline side-chains.

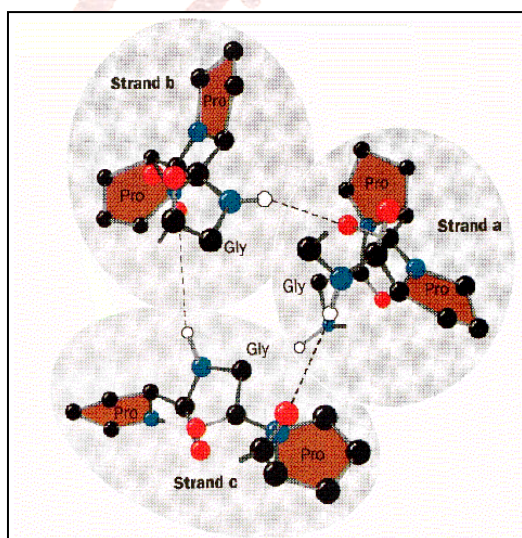
Nuclear magnetic resonance studies and Fourier Transform InfraRed (FTIR) spectroscopy have both provided evidence of *three* populations of water molecules associated with collagen. These are *interstitial* water, very tightly bound within the triple-helix of the collagen molecule, and strongly interacting with the peptide bonds of the polypeptide chains; *bound* water, corresponding to the more loosely structured water-cylinder on the surface of the triple helix; and so called *free* water filling the spaces between the fibrils and between fibres. Typically, there is a layer of water some 4 to 5 molecules deep separating neighboring triple-helices. This biological water is integral to the liquid crystallinity of collagens and other composites such as the extracellular matrix, the cell membrane and the 'cytoplasm'.

The existence of the ordered network of water molecules, connected by hydrogen bonds, and interspersed within the protein fibrillar matrix of the collagens is especially significant, as it is expected to support rapid jump conduction of protons, i.e. hydrogen atoms without its electron, which constitute positive electric charges. This jump conduction is a kind of semi-conduction and is much faster than ordinary electrical conduction or conduction through nerve fibres.



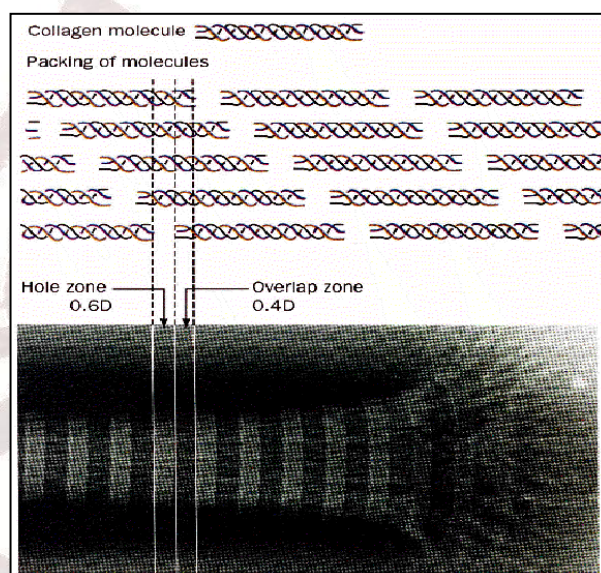
That is because it does not actually require any net movement of the charged particle itself. It is passed rapidly down a line of relatively static, hydrogen-bonded water molecules.

### A look inside the Triple Helix Axis of Collagen:



- \* The dashed lines draw the hydrogen connections;
- \* The collagen fibers have electric- and dielectric properties to incentives to conduct, making them susceptible for all types of stimuli
- \* There is a cylinder of water Surrounding the triple helix, which is a hydrogen link with the side connections hydroxyproline;
- \* This aqueous structure of hydrogen compounds and proteins, support the swift leap guides of protons;

The band structure of collagen fibers, shown in the following electron microscopic pictures, comes from the schematic, zig-zag structure of collagen molecules.



### Jump conduction of protons

in collagen has been confirmed by dielectric measurements.

The conductivity of collagen increases strongly with the amount of water absorbed (from 0.1 to 0.3g/g collagen). It is estimated that conductivity along the collagen fibres is at least one-hundred time that across the fibres.

A major factor contributing to the efficiency of intercommunication is the structured, oriented nature of collagen liquid crystalline fibres. Each connective tissue has its characteristic orientation of fibrous structures which are clearly related to the mechanical stresses and strains to which the tissue is subject. This same orientation may also be crucial for intercommunication.



Aligned collagen fibres in connective tissues provide oriented channels for electrical intercommunication, and are strongly reminiscent of acupuncture meridians in traditional Chinese medicine. As collagen fibres are expected to conduct (positive) electricity preferentially *along* the fibres due to the bound water, which are predominantly oriented along the fibre axis, it follows that these conduction paths may correspond to acupuncture meridians.

By contrast, acupoints typically exhibit 10 to 100-fold lower electrical resistances compared with the surrounding skin, are located in gaps in the fascia and may correspond to singularities or gaps *between* collagen fibres, or, where collagen fibres are oriented at right angles to the dermal layer.

The actual conducting channels may bear a more subtle relationship to the orientation of the collagen fibres, as conductivity depends predominantly on the layer(s) of bound water on the surface of the collagen molecules rather than the collagens themselves.

So-called free water may also take part in proton conduction as the result of induced polarization, particularly as water molecules naturally form hydrogen-bonded networks.

This would be consistent with the observed increase in conductivity of collagen as hydration increases to a level well beyond the bound water fraction, around 0.15g/g; and with the fact that the normal hydration level of tendons is about 65%.

The hydrogen-bonded water network of the connective tissues is actually linked to ordered hydrogen-bonded water in the ion-channels of the cell membrane that allow inorganic ions to pass in and out of the cell.

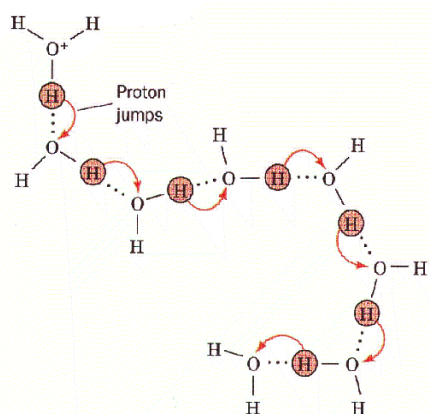
There is thus a direct electrical link between distant signals and the intracellular matrix of every single cell in the body, leading to physiological changes inside the cells, including all nerve cells.

This electrical channel of intercommunication is in addition to and coupled with the mechanical tensile interactions between the connective tissues and the intracellular matrix of every single cell, a continuum that always changes as a whole.

Any mechanical deformations of the protein-bound water network will automatically result in electrical disturbances and conversely, electrical disturbances will result in mechanical effects.

## Proton Jump Conduction I:

A hydronium ion  $\text{H}_3\text{O}^+$  can lose the + charge by the move from the proton to an adjacent  $\text{H}_2\text{O}$ , hydrogen which is linked to other  $\text{H}_2\text{O}$  molecules. This happens very fast along a chain of hydrogen compounds of water molecules.



This flow of charge can take place along the ranked energy collagen fibers and may thus explain the information which is passed through the acupuncture meridians.

Acupuncture points have a lower electrical resistance than the skin and may correspond to the gaps between the collagen fibers, or correspond to places where collagen fibers are perpendicularly located relative to the skin layers.

The hydrogen bonded water network of the BBRS is actually associated with the required hydrogen ion-bound water in the orbits of the cell membrane, which then allows the inorganic ions go in and out the cell.

This creates a direct electrical connection between the external signals and intracellular matrix of every cell in the body, which leads to physiological changes within cells, including the nerve cells.

Proton jump-conduction is a form of semi-conduction in condensed matter and much faster than conduction of electrical signals by the nerves. Thus the “ground substance” of the entire body may provide a much better intercommunication system than the nervous system.

Lower animals which do not have a nervous system are nonetheless sensitive, so the conductivity of the BBRS could explain this hitherto mysterious phenomenon. At the other end of the evolutionary scale, we must pay attention to the alarming rate of hypersensitive reactions which occurs in human beings, or how rapidly they can respond to an emergency. There is no doubt that a body consciousness exists prior to the “brain” consciousness associated with the nervous system.

## Brain- and Body Consciousness:

Sentience, intercommunication and memory, the hallmarks of consciousness - is distributed throughout the entire body. Brain consciousness associated with the nervous system is embedded in body consciousness and is coupled to it.

Under normal, healthy conditions, body and brain consciousness mutually inform and condition each other. The unity of our conscious experience and our state of health depends on the complete coherence of brain and body.

Traditional Chinese Medicine based on the acupuncture meridian system places the emphasis of health on the coherence of body functions which harmonizes brain to body.

This makes perfect sense if one recognizes the brain as part of but not the sole governor of the body. Western medicine, by contrast, has yet no concept of the whole, and is based, at the very outset, on a Cartesian divide between mind and brain, and brain and body. Because there is no concept of the organism as a whole, there is, in effect, no theory of health, only an infinite number of disease models, each based on the supposed defect of a single molecular species. There is an urgent need to develop a theory of health for proper delivery of healthcare in the new millennium.

*From a lecture presented to the British Acupuncture Society by Dr. Mae-Wan Ho, October 1999*

## Head- and Heart Interactions:

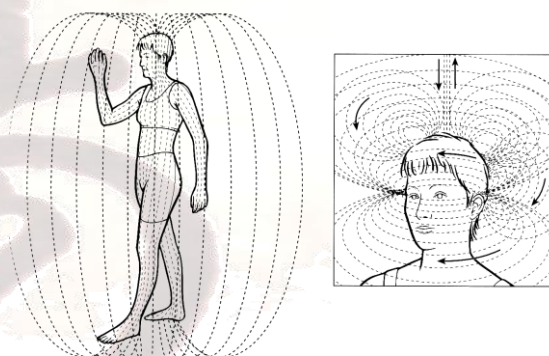
The Heart communicates with the brains and the body in four ways:

- **Neurological communication** (through the nervous system)
- **Biofysical communication** (through pulse waves)
- **Biochemical communication** (through the hormones)
- **Energetic communication** (through electromagnetic field)

The electromagnetic field of the Heart, the far most powerful rhythmic field of man, radiating in all directions of space around us (The zero point field!

Lynne McTaggart: The Field).

The cardiac field can, even at some distance from the body, measured by sensitive equipment.





## The Heart as a governor:

Studies at the “Heart Math Institute” shows us that the efferent signals from the Heart during positive emotions will influence the Heart in different ways:

- Lower frequencies of brainwaves
- Increased Cardiac synchronization Brains
- Significant improvement in cognitive performance with changes in perception, increased mental clarity and heightened intuitive awareness.

Discoveries of Professor Diana Mossop (Heart Lock Theory) supports the observations that the heart tissue is significantly involved in memory stores.

These findings support the modern TCM viewpoint that the Heart is the "governor" of the body and gives housing to the Spirit (Shen, Spirit, Consciousness).

## The Liquid Crystallinity of Living Organisms & the BBRS:

Research by various scientists indicates that living organisms possess a liquid crystalline structure. These are described in detail especially in the second edition of *The Rainbow and The Worm* <sup>5</sup> perhaps the most suggestive evidence for the coherence of the organism is the discovery, in 1992, that all living organisms are liquid crystalline<sup>6</sup>.

What was actually discovered was a novel non-destructive imaging technique that reveals living, moving organisms to be liquid crystalline. The technique is based on the polarized light microscopy<sup>7</sup> that earth scientists have used to study mineral crystals and other materials, such as liquid crystals, which have a certain degree of molecular order. But crystals, even liquid crystals, have static order, so how can living moving organisms be crystals? The answer is that organisms are so dynamically coherent at the molecular level that they *appear* to be crystalline<sup>8</sup>.

This means that living organisms have a structural coherence of an infinite form of information storage and communication capacity. This cohesion spread out to molecules, cells and tissues to the entire body to it.

Visible light vibrates one hundred zillion times a second (1 followed by 14 zeros), at least ten thousand times faster than the molecules can move coherently together.

So long as the motions among the molecules in the cells and tissues are sufficiently coherent, they will appear to be statically ordered, or crystalline, to the light passing through. This is analogous to the ability of a very fast film to capture the image of a moving object as a sharply focused 'still' picture. This imaging technique is telling us that the living organism is coherent beyond our wildest dreams, with dynamic order that extends from the molecules, the cells and tissues right up to the entire organism.

There is a dynamic, liquid crystalline continuum of connective tissues and extra-cellular matrix linking directly into the equally liquid crystalline interior of every single cell in the body.

**Liquid crystallinity** gives organisms their characteristic flexibility, exquisite sensitivity and responsiveness, thus optimizing the rapid, noiseless intercommunication that enables the organism to function as a coherent, coordinated whole.

In addition, the liquid crystalline continuum provides subtle electrical interconnections which are sensitive to changes in pressure and other physicochemical conditions; in other words, it is also able to register 'tissue memory'. Thus, the liquid crystalline continuum possesses all the qualities of a highly sensitive 'body consciousness' that can respond to all forms of subtle energy medicines<sup>9</sup>.

### **Paradigms in Medical Thinking:**

#### **a) Virchow's Cell Theory**

From his work on cellular pathology, **Virchow**, (1858) had limited the concept of disease to disturbances in the structure of individual cells. His concept is that each human cell is an "elementary organism", existing primarily for itself alone but playing its part in the function of the whole organism.

The consequence of this linear cause-effect thinking, is that organisms are seen as cellular functioning units, like technical machines, which can be repaired when defects are present. In the end, this amounts to a matter of finding the disease causing molecule or microbe in the cell.

This of course leads to the "magic bullet" approach to health problems and has wide-reaching consequences in the therapy scheme of conventional medicine.

**Virchow, (1858)**

- Each human cell is an “elementary organism”, existing primarily for itself
- Playing its part in the function of the whole organism.
- Organisms are seen as cellular functioning units, which can be repaired when defects are present.
- This leads to the “magic bullet” approach to health problems and has wide-reaching consequences in the therapy scheme of conventional medicine.

**b) Pischinger's Ground Regulation System Theory <sup>1</sup>**

**Alfred Pischinger** was professor of Histology and Embryology at the University of Vienna. In 1975 he presented his concepts about "The Ground Regulation System" which was concerned with the means by which extra-cellular matrix (ECM) can communicate with an entire living organism.

The entire field of activity and information transfer between the peripheral vascular system, extra-cellular matrix and nervous system takes place in the extra-cellular fluid and is drained by the Lymphatic System.

It is the largest system, which completely penetrates all parts of the organism. It takes care of the nutrition of the cells, the removal of waste from them, and is involved in all inflammation and defense processes. It is thus responsible for all basic vital functions.

The nerves and blood vessels do not come into direct contact with the functioning cells at any point in the body, so the extra-cellular matrix is the mediating member, the bearer of nervous information and nutritional flow, with the reciprocal effects passing through it everywhere.

Only the extra-cellular matrix has direct contact with all parts of the body. All organ cells depend on the function of this system.

Proton jump conduction in collagen fibres may be an important means of communication within the organism. Organic disease originates with dysfunction of this system and its connections throughout the organism.

Researchers in Vienna have for forty years investigated the effects of chronic disease, heavy metals, stress, and general toxicity on the Ground System. These researchers attribute effective and lasting success in the treatment of often-intractable chronic diseases to knowledge of the reaction processes in this system.



**Pischinger (1975), Mae Wan-Ho (1998) en Anderen**

- The Extracellular Matrix is more than filling a role, it mediates between nerves, blood vessels and functional cells.
- Has both nourishing and regenerative functions and is a mediator of nerve impulse information to the cells throughout the whole body.

**General characteristics of the BBRS:**

- Information transfer takes place in the extracellular matrix, nerves and blood vessels have no direct contact with the functional cells (parenchym tissue).
- Proton Jump Conduction in the collagen can be very important in terms of biocommunication in the organism.
- It is the largest system, which penetrates fully and throughout the organism, in all parts of the body.
- It provides nutrition and biocommunication with the cells.
- Is involved in all inflammatory and immune processes.
- It is responsible for all vital functions of the body.
- Organic diseases frequently arise from a dysfunction of this system and its connections throughout the entire organism.

**Functions of the Basis Biologic Regulatory System (extracellular matrix):****Storage of Information and Bioresonance <sup>1</sup>**

These sugar polymers are suitable for information transmission and storage due to their high water binding and ion exchange capacity, and they also have the property of behaving as molecular sieves, controlling the flow of substances. The matrix has piezo-electrical properties, which means it can generate an electrical current every time that it is stretched.

The tiny fibres of the matrix are spun in such a way as to form oscillating coils which can set up self perpetuating resonance patterns. This has an obvious application in Bio-resonance therapy, Homeopathy and subtle energy therapies.

The liquid crystalline structure has obvious implications for tissue memory and the nature of the proton jump system could explain acupuncture and related therapies.

**Cell Structure, Function and Physiological Responsiveness <sup>10</sup>**

Research has demonstrated the effect of BBRS geometry on liver cells, showing a dramatic reorganisation of the cytoskeleton, adoption of in vivo-like morphology and polarity and expression of a wide variety of liver-specific functions.

**BBRS and Differentiation to Specialised tissues <sup>11</sup>**

Mesenchymal cells differentiate to form various musculoskeletal and connective tissue, including bone, cartilage, muscle, fat, marrow stroma, tendon and ligament.

**Modulation and Regulation Functions of the ECM <sup>12</sup>**

BBRS includes a large number of proteins that regulate cell adhesion, migration, proliferation and differentiation.

These include cell adhesion proteins that can cause cells to change their shape or differentiate, and certain growth factors that are tightly bound to BBRS.

Cells must invade or degrade the BBRS during processes such as embryonic implantation into the uterus, invasion of tissues by lymphocytes during inflammation, angiogenesis, and wound repair.

**Summary functions BBRS:**

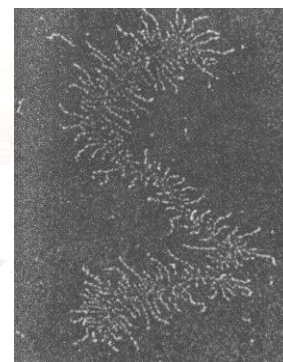
- Storage, transport and retrieval of information (storage and memory tissue).
- Bio-energy application for Acupuncture and related therapies.
- Bioresonance - application for Homeopathy and subtle energy therapies.
- Organize cell structures and allows for propagation of specific organ functions, controls the electrolyte balance in the body.
- Tissue and Organ Development - breast, bone, cartilage, marrow, ligament.
- Contains proteins that the cell adhesion, migration, proliferation and differentiation provide
- The activity of the extracellular matrix is less during the process of embryonic implantation in the uterus, the invasion of tissues by lymphocytes during an inflammatory process, angiogenesis and wound repair.

**The functions of the BBRS summary, we propose that:**

The soft connective tissue and cells can store vibrational patterns which affect the functioning of the organism.

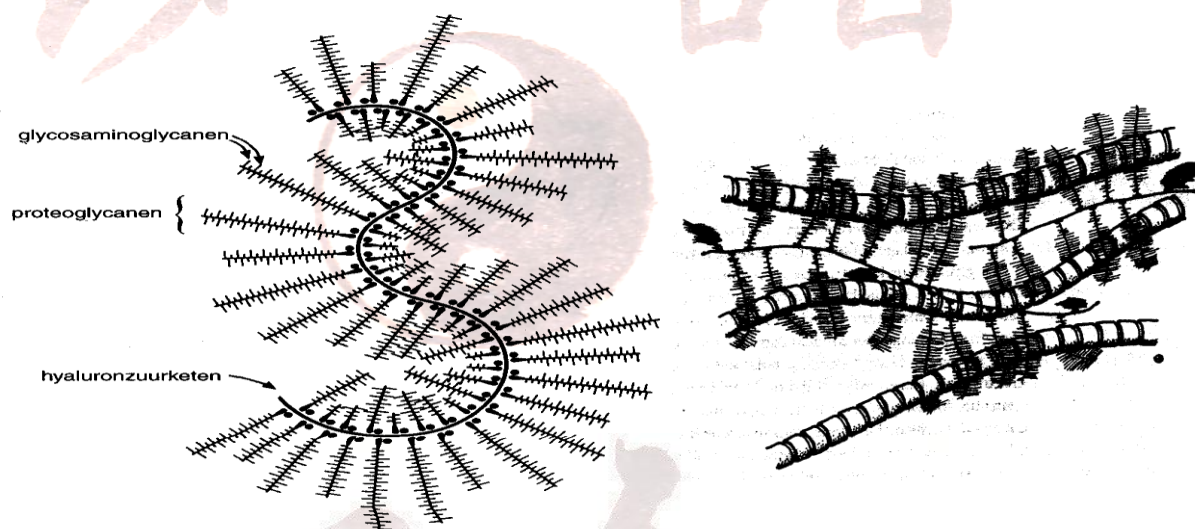
On the basis of our lives, is an energy field that controls our body.

Whether this works depends to a large extent on our soft tissue!



Within the BBRS there is an extensive network of proteoglycans and glucosamine-glycans which sugar-protein chains. These chains can act as a kind of superconductor for the transport of information.

### PROTEOGLYCANS AND GLUCOSAMINE-GLYCANS:



In our body we can observe:

$10 - 18^e = 10.000.000.000.000.000.000$  reactions per second!

All coordinated and consistent!

This is only possible with a high-speed communication system and / or with the existence of an underlying energy field

### For good health we need:

A fast and accurate data transfer.

This is only possible with a clean BBRS

### A dirty BBRS means:

- \* a charge of electromagnetic field.
- \* an impaired biochemistry by an altered gel state of the soft connective tissue.

The effect is a disruption in the transport within the **transit mesenchiem**, which adversely affects the functioning of the organism.

### A clean BBRS means:

- \* Free of biochemical contamination: such as heavy metals
- \* Free from electromagnetic pollution, those can be of a very different nature.

This gives a positive impact on the functioning of the organism.



### For good health cleaning is essential.

Cleaning the body tissues and shen (spirit)!

Our shen also produces vibration which can harm the electromagnetic pattern (pollution) and then become part of our energy.

### Data transfer takes place in BBRS:

#### Electromagnetic:

through biophotons;

(bio) electromagnetic fields;

*These should be done with BBRS Parallel Acupuncture.*

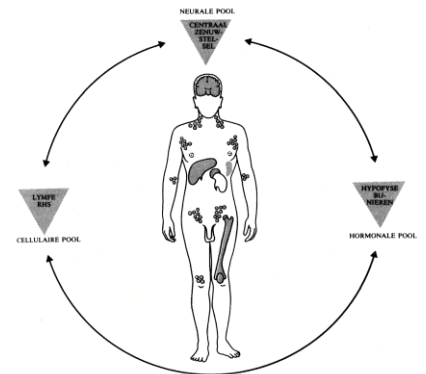
#### But ultimately, always:

#### Biochemical

through hormones;

*For these reasons, we need sufficient nutrients i.e. differentiation promoters, , vitamins, minerals, enzymes and fatty acids.*

*These should be taken more often, for example in the form of (mineral-)gemmotherapie or orthomolecular supplements.*



### Conditions for a healthy BBRS are:

- Absence of toxic load, such as heavy metals,
- sufficient nutrients,
- No blocking loads of medicines
- no geopathic stress,
- no sources and interference fields,
- No viral, bacterial or parasitic load



### Pathologies and the Extracellular Matrix:

- \* Blocking the BBRS
- \* Blocking biological processes by blocking the biocommunication

- 1) Neuro-vascular blockade: first rib blockage; there is no possibility applying ear acupuncture!
- 2) Lesions and interference fields: chronic, purulent inflammation, bacterial, viral, purulent inflammation.
- 3) Energetic blockade: any impact on the neuro-humoral groundsystem.
- 4) Biochemical blockade: any impact on the neuro-humoral ground system.

- BBRS involved in pathologies such as expansion of Myocarditis and cardiomyopathies.
- Abnormal interactions with epithelium, can cause tumors.
- Scientific research shows that changes in the activities of an Extracellular Matrix enzyme (MMP-2) is a possible etiology for Keratoconus (KC - keratectasie), which is an eye disease characterized by thinning of the cornea and a severe form of irregular astigmatism.

### **Lifting the Barriers:**

#### **BBRS regulation has three principles:**

- 1) Promoting and strengthening the self-regulating capacity;
- 2) Improvement of biological processes by improving information transfer;
- 3) Treatment without harmful side effects;

All care should be directed to run the BBRS smoothly!

Home treatment with **Cell Com**: often applied by the patient him/herself:

### **Regulating the BBRS:**

Therapy of the Basic Biological Regulatory System is based on individual changes that occur within the organism and within the BBRS (Sous Terrain)

### **Every Neuro-humoral load of the ground system (BBRS) can be treated from Wai ké with:**

1. BBRS Parallel Acupuncture
2. ECIWO Acupuncture
3. Extra-meridian Acupuncture
4. Somatotopic (micro-)acupuncture (qi- and blood stagnation)

### **Every Neuro-humoral load of the ground system (BBRS) can be treated from Nei ké with:**

1. Algae therapy, green clay therapy
2. Gemmotherapy (differentiation promoters! – Pol Henry)
3. Organotherapy (differentiation promoters! – C.E.I.A.)
4. Mineral-gemmotherapy (cristallogenic! – Pol Henry)
  - a. schüsslersalts (transmutation promoters! Dr. Schüssler)
  - b. oligotherapy (transmutation promoters! J. Ménétrier)
  - c. lithotherapy (transmutation promoters! M. Tétou)

## **Pathology of the Extracellular Matrix**

### **Epithelial-BBRS Interactions in Cancer**<sup>13</sup>

The contribution of epithelial-BBRS interaction to normal development and neoplasia has become a subject of increasing interest to research scientists because of recent progress in deciphering the molecular signals that mediate this interaction. The referenced volume highlights the state-of-the-art of knowledge of the molecular mechanisms by which epithelial and mesenchymal collaborate, and the abnormalities in these mechanisms that may lead to the development of cancer.

### **Role of BBRS- Epithelial Interactions in Mammary Gland Development**<sup>14</sup>

The Mammary gland is derived from epidermal tissue and develops as a result of reciprocal BBRS- epithelial interactions. According to Cunha and others, disturbance of this interaction in adulthood may play a role in mammary carcinogenesis.

### **BBRS and Cardiac Inflammation**<sup>15</sup>

Researchers have found that anti-laminin antibodies were found in 73% of patients with myocarditis and in 78% of patients with DCM (Dilated Cardio Myopathy). In infective myocarditis antibodies to collagen and other proteins of the BBRS were found. It can be deduced from these data that the altered structure of the BBRS in these diseases may induce auto or natural antibody formation with chronic inflammation.

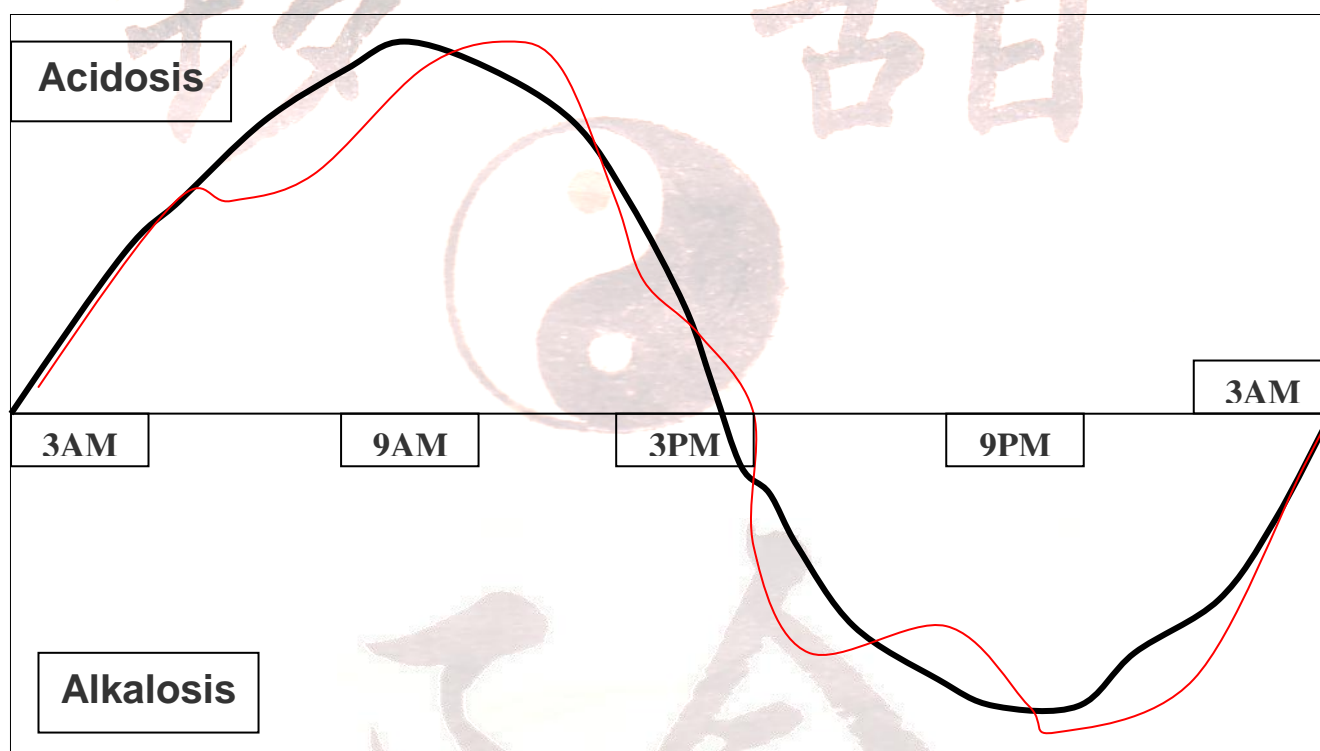
### **Keratoconus and Altered Matrix Enzyme Activity**<sup>16</sup>

Keratoconus (KC) is an eye disease characterised by corneal thinning and severe irregular astigmatism. Research shows altered activity of an enzyme called matrix metalloproteinase-2 (MMP-2) as a possible etiology for KC. This was based on the following reasoning: a) approximately 75% of corneal cell cultures from KC patients studied had increased gelatinolytic activity and b) MMP-2 seemed a likely candidate to cause KC since it is a constitutive corneal enzyme which can degrade a variety of corneal extracellular matrix components.



## Clinical and Practical Aspects of the BBRS Theory

### Circadian Acid/Alkaline Metabolic Change<sup>17</sup>:



The BBRS is subjected to a circadian or daily cycle where the pH changes from a condition of neutral at about 3 a.m. to acidic at 9.00 a.m. to alkaline at 9.00 p.m. and so on. This cycle is perturbed by the alkaline tide from metabolism of foods. The most important effect of this cycle is the swelling of collagen fibres and the shrinking of the BBRS in acid conditions which activates the enzyme hyaluronidase. The hyaluronidase dissolves the Proteoglycan matrix with the release of toxins.

The acid conditions also activate thyroxin and adrenaline activity in the BBRS, which means that these hormones have an important role to play in this daily detoxification.<sup>18</sup> The BBRS is the body's dump for endogenous and exogenous toxins which cannot be eliminated due to deficiencies in the liver, kidney, lung, bowel, lymph, thyroid or adrenal function. For those who use EAV (Electroacupuncture according to Voll) testing it will often be found that a bad reading for the Connective Tissue will be accompanied by a bad reading for thyroid and/or liver function. Our experience from EAV also indicates that liver function depends on proper thyroid function (which is not reliably diagnosed by conventional thyroid function tests).



### **The Effect of Toxicity and Acidity on the BBRS.**

The regulation function of the BBRS is adversely affected by toxicity, especially heavy metals and also by lack of nutrition. Another factor is the consumption of excess acid residue foods, or lifestyles which cause acidity (smoking, coffee, stress etc.) because it prolongs the acidic inflammatory phase of the circadian acid/alkaline cycle.

Ionizing radiation (X- rays, gamma rays & microwaves) and electromagnetic fields (alternating electric current) also affects the BBRS.

Pischinger discovered in the 1930's that synthetic pharmaceuticals cause dysfunction in the BBRS. This is especially true of steroids because they block the inflammatory detoxification stage.

The ground substance swells in alkaline conditions and dissolves in acid conditions, releasing toxins. In a healthy person there is a daily change from acid to alkaline conditions and back again. In a situation of hyperacidity due to excess acid foods or chronic stress this cycle is disrupted and the toxicity is not eliminated.

This toxicity of the ground substance interferes with the effectiveness of acupuncture treatment and it is therefore helpful to detoxify a patient using gemmotherapy, nutrition and homeopathy during acupuncture.

It is the experience of many practitioners that the combination of acupuncture, homeopathy, nutrition and dietary detoxification can improve the efficacy of treatment significantly.

The importance of these metabolic changes cannot be over-emphasised; disruption of these processes can result in a great variety of chronic illnesses.

#### **Summary:**

The following factors have an adverse effect on the functioning of the Basic Biological Regulatory System:

- Environmental Toxins, specifically heavy metals and agrochemicals  
Consumption of an excess of acid forming food rest disrupts the acid / base cycle;
- Inadequate consumption of pure water;
- Excess stress, relaxation deficit
- Taking pharmaceutical drugs, specifically steroids
- Ionizing radiation (X-rays, gamma rays, microwaves waves) & electromagnetic fields (alternating electric currents)



Toxicity of the BBRS has adverse effects on the effectiveness of an acupuncture treatment. Therefore it is advisable to apply gemmotherapy, homeopathy, nutrition and detoxification together with acupuncture!

### **Febrile Processes and the BBRS:**

Streptococci of various types produce hyaluronidase which has been called “the spreading factor” because it can break down the BBRS tissue and it is believed that it does this to facilitate the spread of the infection through the organism. It is possible and even logical that the Streptococcus is helping detoxification of the BBRS by softening the hyaluronic acid matrix of the BBRS, and is furthermore stimulated by these toxins.

Also of note is the discovery that collagen fibres have a maximum proton conductivity around 40°C., and that the triple helix structure of collagens begins to dissociate and realigns again on cooling<sup>20</sup> This dissociation may also allow the release of toxins and realignment may improve conduction properties, and this could explain the health promoting effects of physical exercise.<sup>21</sup>

These facts support the theory that febrile infections are homeostatic biologically oriented processes resulting in detoxification and tonification of the organism.

#### **Summary:**

- Streptococci produce hyaluronidase which softens the Extracellular Matrix, which allows it to release toxins.  
This is possibly one of its biological properties.
- Collagen fibers have their maximum proton conductivity around 40 ° C. and the triple helix structure breaks loose at this temperature. This will allow toxins are released and the restoration of the fibers by cooling will enhance its functionality.
- These factors support the theory that fevers and fever infections homeostatic biologically oriented processes that eventually result in tonifying and detoxification of the organism.

### **Musculo-Skeletal Problems:**

In cases of musculo-skeletal problems, often after trauma, the cause can be identified by testing the **Fibroid Degeneration Points** (connective tissue) by EAV. The problem is often caused by toxins (commonly dental materials) in the BBRS, or focal infections affecting the BBRS.

The resulting block in function results in lack of communication to the muscles ligaments and cartilage and chiropractic manipulations will generally not hold (personal observations).

The spine as a structural support system depends on the muscles and ligaments and their nourishment by the BBRS. Emotional traumas and memories also play an important part in BBRS dysfunction. The liquid crystalline nature of collagen could explain memory storage in tissues.

### **Odontone Theory and the BBRS:**

It is known that toxicity or infections in teeth can affect organs and systems in the body (**Odontone Theory**). It is theorised that this can happen in three possible ways:

1. Micro-organism including Bacteria, Viruses or Fungi in the teeth produce toxins which migrate to and affect other parts of the body. Some of these toxins, especially from viruses and viroids can cause auto-immune disease. For example, a virus related to Rubella causing Rheumatoid arthritis.
2. Micro-organisms which can find a safe haven in the teeth can travel to other organs and infect them.
3. An energetic disturbance in a tooth from dental material or Micro-organism affects the function of a target organ through the acupuncture meridians. BBRS theory gives a possible mechanism for this and also for acupuncture therapy.
4. Consumption of refined sugar has been shown to reverse the lymphatic flow in the dentine tubules and this can prevent recovery from a dental infection<sup>22</sup>.

### **The procedure is according to several phases:**

- 1) Elimination of interference with thermoregulation diagnosis and Fische Reticulo Endothelial Differentielle - FRED:

Disruption of BBRS override:

Qi deficiency with a hypersensitive immune system

Causes of disruption:

inflammatory lesions, prolonged exposure to physical and chemical stimuli.

- 2) **Conversion to organic whole foods:**

Use differentiation promoters

Mild “umstimmung” by dietary changes.

**3) Purification of the intestines and restore the intestinal flora:**

Not to irritate oral sanitizer  $MgSO_4$  (English salts) and series of café lavements.

Later, high colonic irrigation.

Use a micro-biological compound such as Hylak forte.

In gut dysbiose - Pulsatilla Clearing Tablets.

**4) Source remediation: removing the hot spots in the mouth and throat area:**

Dental infection places, paradontosis

tonsils sources

Osteitis sources (root remains and chronic inflammation)

Heavy metal load (amalgams)

**5) Therapy of residual toxins:**

Earlier infection (absence of fever or fever suppression)

Hereditary toxins: TBC, lues, vaccinations (sub-symptomatic infections).

**Detection via:** Prognos System, NES Health System, ECIWOgraph, EAV (according to Voll), VAS (vascular autonomous signal), kinesiology.

**Elimination via:** corresponding BBRS Parallel Acupuncture, Cell Com System, NES infoceuticals, PTD (Personal Therapy Device), ECIWO acupuncture, nosodes, fever shot (umstimmung).

**Cell Com therapie and the elimination of interference fields:****6) Scar tissue:**

Micro-chronic inflammation characterized by alteration of membrane potential of cells in the loose connective tissue (enzymatic change in accumulation of toxins, neural disturbances pool).

Myelogelosen; pavements in muscle by i.e. muscle rheumatism.

**7) Elimination of harmful environmental factors:**

Biochemical, chemical and physical interference (toxicity of food and air)

Stimulants such as tobacco and alcohol

Intense sunlight

Telluric (earth) radiation

Electromagnetic radiation

Heavy metal loads (cadmium and lead poisoning)

mercury load (amalgams)



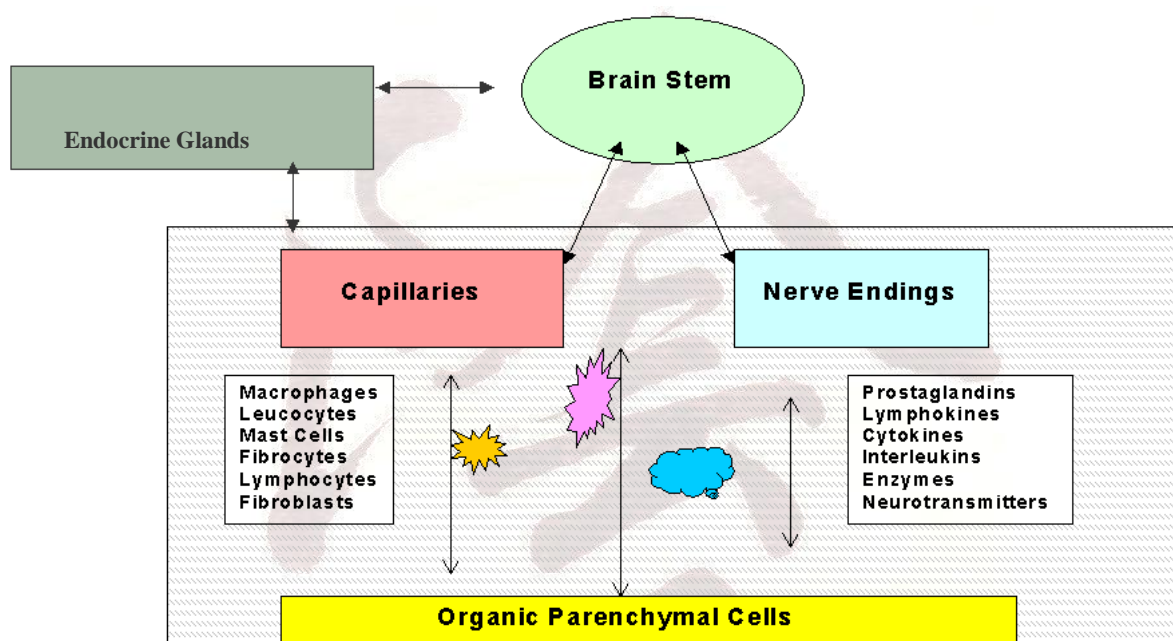
- 8) **Elimination of psychic influences:**  
Negative psychological effects  
such as conflict, stress, worries, fears, anger
- 9) **Elimination of secondary damage:**  
**Mesenchym therapy:** elimination of interference fields and excrete toxins.  
**Elimination:** ozone and fever therapy, specific stimulation using substances BBRS for instance substances as Mes-Acton and Elpimed  
**Substitution of dietary supplements:** herbs for promoting digestion, digestive enzymes, Pasco pancreas tablets  
**Substitution of minerals, trace elements and vitamins such as:** antioxidants, multivitamins, mineral supplements, Schüssler salts, trace elements and mineral gemmo's.  
**Frequency therapy:** Cell Com System, PTD, NES system, Prognos.
- 10) **Drainage measures:**  
Optimization of the detoxification mechanism Liver, intestine, kidney and skin;  
Liver Drainage (Juniperus communis gemmotherapy);  
Drink plenty of water, draining teas (linden tea, green tea, rooibos tea, pu-erh tea, etc.);  
Herbal and homeopathic drainage appliances;  
Sauna and Turkish baths, fever shot.
- 11) **Support for the Neuro-vegetative nervous system:**  
BBRS Parallel Acupuncture  
Psychotherapeutic support  
Cell Com System  
**PTD** – Personal Therapy Device  
ECIWO acupuncture  
Neural therapy with procaine or derivatives  
Immunotherapy  
Constitutional therapy  
Extra Acupuncture Meridians

***“THERE IS IN MEDICINE AN UNWRITTEN LAW, THAT THE CONCEPT OF THE NATURE OF A DISEASE DETERMINE THE THERAPY” (M. Bottu)***

### More treatments of BBRS problems:

- First identify the toxins, nutritional deficiencies, focal infections, scar foci, perverse energies, and emotional memories affecting the BBRS and identify suitable antidotes.
- Also identify the eliminative channels (liver, lymph, bowel, kidney and lung) which may be dysfunctional and identify suitable remedies.
- A good general remedy for the BBRS is Sodium sulphate tissue salt, which maintains the BBRS in a regular array and stabilises and anchors the GAG,s, which can block the drainage to the lymphatic system, whatever may be necessary.
- Use Thyroid, Adrenal and liver treatments, as the bodies which were considered to exhibit a hypofunction.

### Homeostatic Regulation of the BBRS:



The Extracellular Matrix is connected to the endocrine system via the blood capillaries, and to the central nervous system via the peripheral vegetative nerve endings, with both systems connected to each other in the brain stem. Higher control centers can therefore be influenced by the extracellular matrix or BBRS.

In addition, connective tissue cells (macrophages, leukocytes, mast cells, etc.) produce hormones and enzymes (prostaglandins, lymphokines, cytokines, proteases, etc.) that are mutually "informative" to the whole system. The result is a vast complex, intermeshed humoral system whose historical scientific predecessors are to be found in the classical vital juice theory.

### The Mesenchymal Reaction Index; Dr. Helmut Schimmel

Quantify the toxic stress in the transport route between the nerve endings (axons), the capillaries and parenchymal cells.

*Dr. Helmut Schimmel* devised a set of 21 test ampoules to test the mesenchymal regulation capacity known as the **Mesenchymal Reaction Index (MRI)** also known as the **Biological Index**.

The MRI consists of potentised mesenchymal stages 1-21 and quantifies the toxic stress in the transit route between the nerve endings, capillaries and parenchymal cells.

Use the test ampoules in 21 stadia.

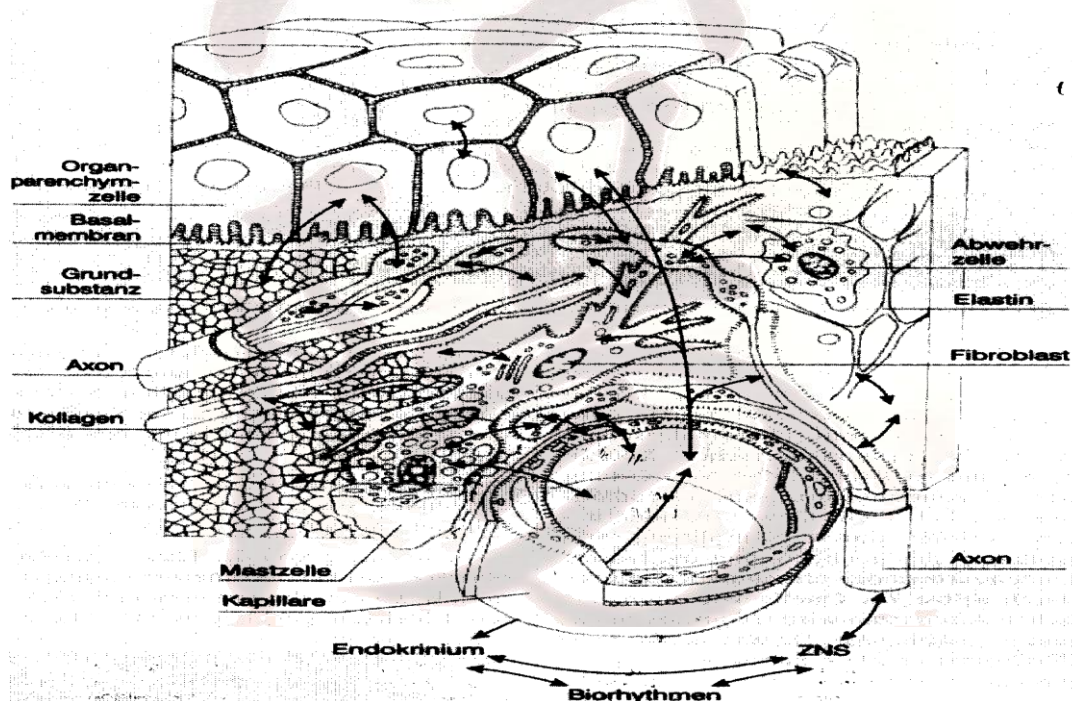
- Stages 1-6 Mesenchyme essentially not toxic.
- Stages 7-10 Functional disorders indicating a pré-clinical phase.
- Stages 11- 21 Increasingly clinically detectable disorder, and also micro and macro malignancies.

Testing for these different stages can be useful for monitoring the progress of treatment.

The Set of Biological Index test ampoules can be obtained from the Vega-Test agent

### Possibilities and perspectives of the theories of ECIWO en BBRS:

In the above, we made it clear that the two basic theories offer new opportunities in the field of a fruitful synthesis between the humeral and cellular pathology and between the eastern and western medicine.





### Based on the philosophical background:

- Body medicine field by Béchamp Antoine and Claude Bertrand  
Antoine Béchamp was a major opponent of Louis Pasteur:  
The Microbe is nothing, the terrain is everything!

The body site: Constitution and Temperament (classical & modern)			
CHINESE	GREEK	J. MENETRIER	R. VINCENT
WOOD shaoyang & jueyin	choleric temperament	I.allergic- arthritic Mn	acid & reduced
FIRE (fire pathologies)	sanguineous temperament	III dystonic Mn-Co	alkalised & reduced
EARTH yangming & taiyin		V desadaptation Zn-Cu ; Zn-Ni-Co	central value
METAL yangming & taiyin	lymphatic temperament	II hyposthenic Mn-Cu	acid & oxidated
WATER taiyang & shaoyang	melancholic temperament	IV anergic Cu-Au-Ag	alkalised & oxidated

### Based on the diagnosis:

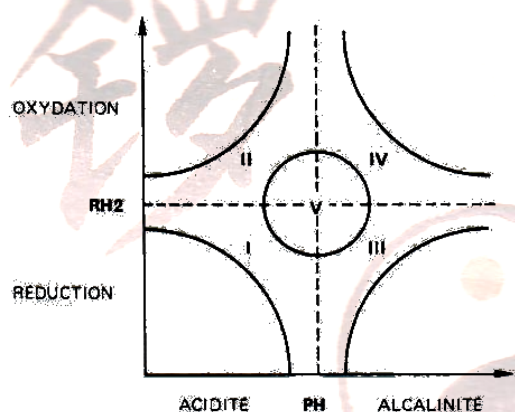
- Bioelectronics, according to R. Vincent R. Voll (EAV)
- Diatheses according Ménétrier  
(Y. Requena, Terrains and Pathology in Acupuncture)
- Neuro-hormonal typology according to C. Duraffourd,  
L. D 'Hervicourt & J.-C. Lapraz
- Hippocratic-Galenic and traditional Chinese diagnosis
- Biotypologische diagnosis according Y. Requena

### Based on the pathology:

- Cancer
- Degenerative processes

### Based on the therapy:

- Umstimmung (biomodulation, drainage);
- Source remediation (neural therapy, odontogenetic therapy,  
Cell Com System);
- Integration of macro-and micro-acupuncture systems;  
(BBRS Parallel Acupuncture);
- Biocybernetische (mineral-)gemmotherapy and organotherapy  
(analog biotherapy);



*Schematic overview of Bioelectronics according to Vincent and Diatheses of Ménétrier.*

## Morphological Structure of the Acupuncture Point

### The Heine Cylinder

**Professor Hartmut Heine** (1987), discovered that neurovascular bundles penetrate the superficial fascia at the acupuncture points that he investigated and are surrounded by a cylinder of extracellular matrix- the "Heine Cylinder".

The Vascular Nerve Bundle "Heine Cylinder", is sheathed in the loose mesenchyme (ECM). A nerve runs between the artery and the vein passing through the fascia in the adventitia of the vascular walls, with terminal axons containing Substance P (SP) and calcitonin-gene related peptide (CGRP). In the subfascial branch of the nerve, transmitting axon reflexes occur between the mast cells and SP containing terminal axons.

### Histophysiology of the Acupuncture Points

An acupuncture point connects the skin and outer environment to the body's muscles, internal organs, spinal cord, higher nervous centers and the endocrine system through the vascular nerve bundles. In this way a regulative coupling is established between the exterior and the interior. Other facts supporting this thesis are as follows:-

The artery walls in the perforation areas around an acupuncture point are much more profusely supplied with vasomotor nerves than elsewhere in the body.

It seems that the circulation supply is much greater in the acupuncture point area than elsewhere in the body.

The nerve axons do not only conduct impulses to the central nervous system, but also conduct impulses from the CNS which can cause the release of cytokines such as Pain Substance which can antagonise the sympathetic nervous system and relieve pain. This is of particular importance because the sympathetic nervous system is involved in all pathological processes in the body.

Acupuncture stimulation can also release calcitonin-gene related peptide (CGRP), which has the effect of modifying the production of reactive oxygen intermediates (ROI's) and nitric oxide, thereby moderating inflammatory responses.

The meridians of acupuncture follow the reflex or kinetic chains of the muscles and tendons. The different texture of the superficial fascia around the acupuncture points may also be a factor in the meridian links.

### **Functional Properties of the Point (Acupuncture) Organ**

According to Professor Heine, this is a multifunctional organ:

- From the mechanical point of view, it is a visco-elastic system responding to physical pressure.
- The proteoglycan network of the point close to the surface is capable of electrical oscillation and thus capable of reacting to electrical, electromagnetic and magnetic stimuli.
- A network of electrically sensitive filaments provides a storage system for electric charges.
- Because of their electrical lability, proteoglycans react to every type of stimulus with electric depolarization and can transmit this in the BBRS as a chain reaction to distant parts of the body.

### **Variations in Acupuncture Point Organ Structure**

Of the 361 classical Acupuncture points, 82% are structured as in slide 34, with a vascular nerve bundle penetrating the superficial fascia.

At locations where there is no superficial fascia, such as the face, scalp and the extremities, the same principle occurs in a modified form. In the face, the Haversian canals of the facial bones serve as a tunnel for the vascular nerve bundles to the skin. On the head, the sutures of the skull-bones provide space for vascular nerves that run from the dura mater through the scalp. At the extremities, the acupuncture points are represented by Vater-Pacini corpuscles, which are likewise transected by vascular nerve bundles.



## **Ear Acupuncture**

There are many nerves going to the ear. In the areas of the ear points there are balls of collagen fibres perforated by fine blood vessels and nerve fibres. Collagen has piezoelectricity, pyro-electricity, proton jump conduction and electromagnetic properties and this explains how seed pressure, laser and needles activate the ear points. If organs are stressed the corresponding ear points can be painful.

## **Electro-dermal Testing or Electroacupuncture Testing – EAV**

The connective tissue or matrix around the vascular nerve bundle of an acupuncture point is an excellent conductor of electricity. Since this matrix is connected with the entire body we have another important information pathway to pathological complaints which are reflected by changes in the matrix components. **Dr. Reinhold Voll** fully explored this possibility with his electro-dermal testing techniques.

A full explanation of the mechanism of EAV testing may not be too far in the future; a lot has already been discovered and explained.

The EAV (Electro-acupuncture according to Voll) test points for the Connective Tissue and Extracellular Matrix are on the medial side of the 3<sup>rd</sup> toes on the right and left side. Voll termed this the Fibroid Degeneration Meridian.

## **Acupuncture Points of the Ren Mai and Du Mai Meridians**

These acupuncture points have special features. Uniquely among the acupuncture points, the nerve bundle passing through the superficial fascia branch to the spinal nerves connected to both sides of the body.

## **Immunological Defences of the Extra-cellular Matrix**

The metabolically active centre of the extra-cellular matrix is the fibroblast, which reacts to all incoming information (hormones, neurotransmitter, micro-injury from acupuncture, metabolites etc., with a synthesis of matrix components according to each individual situation.

The fibroblast and other cells of the immune system including macrophages, monocytes, B and T lymphocytes, are capable of quickly destroying exogenous agents (antigens or homotoxins). The reaction of this area is important in determining whether a disease process will proceed to a degenerative or cellular phase (negative vicariation), or revert to an inflammation and excretion phase (positive vicariation).

This is where acupuncture and antihomotoxic medicine can have a major effect on the outcome of pathological processes.

### Summary

The extra-cellular matrix in living organisms, particularly in mammals, is widespread and reaches into all parts of the organism. The structure and properties of this matrix is such that it is involved in homeostatic control of many of the organism's processes, possibly more than the nervous system, but certainly complementing the nervous system and endocrine and immune system in its functions.

Its properties also explain the physical and therapeutic reality of the meridian system which underpins the principles of acupuncture, and it supports the view that such a system is an innate diagnostic and treatment network which will have a major implication for the future direction of medical treatment when the allopathic model will be finally relinquished as a child of the heroic age of reductionist scientific developments.

The human organism has evolved to incomprehensible complexity over millions of years. It is time to recognize that such organisms have the capacity and the systems to ensure continued survival without man-made interventions.

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