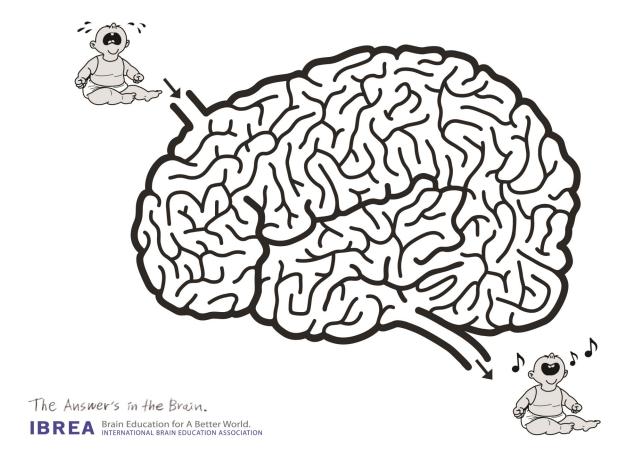
IBREA REPORT

The Era of Mental Health: A New Health Paradigm in Europe

Volume 10 | May 2018



IBREA, International Brain Education Association

IBREA understands that the science and technology of today came from the human brain and believes that the key to solving the crisis we face today also lies in the human brain. Based on this understanding, IBREA was established with the purpose of creating a better future for the humankind by sharing the philosophy, principles of Brain Education.

IBREA is a Non-governmental Organization associated with the United Nations Department of Public Information, and has participated in the UN Global Compact since 2009.

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The Era of Mental Health: A New Health Paradigm in Europe

The International Brain Education Conference was held in London, attended by over 300 people from 12 countries in Europe.

The Sustainable Development Goals (SDGs), which the member states of the United Nations agreed to in 2015, contain the 17 developmental goals for developing economic prosperity and environmental sustainability for the sake of the overall holistic wellbeing of human beings. Among the 17 goals, the third goal focuses on ensuring healthy ways of life and on promoting well-being for all at all ages through 9 detailed targets. This third goal clearly states commitment to "prevention and treatment of noncommunicable diseases (NCDs), including behavioral, developmental, and neurological disorders." As the former WHO Director-General Dr. Margaret Chan has said, the inclusion of NCDs, also known as chronic diseases, under the health goal is a historical turning point. Finally, health is recognized in the SDGs not as not only the absence of disease, but also as an individual's fundamental ability to realize his or her own potential fully and to contribute to societal development. In its constitution, WHO has defined health in an equivalent way, stating that "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Diabetes, heart disease, respiratory disease, cancer, and other common illnesses are included in NCDs.

Every year, 40 million people die from a noncommunicable diseases, which accounts for 70% of deaths in the world. The European region has been especially affected by NCDs, with the trend rapidly increasing every year.

WHO emphasizes integrated strategies for noncommunicable diseases and mental health.

While preparing for the Third United Nations General Assembly High-level Meeting on NCDs in 2018, WHO has emphasized integrated strategies for NDCs and mental health. Mental and neurological disorders (MNDs), such as depression, anxiety disorder, bipolar disorder, schizophrenia, and dementia, can be precursors to or a consequence of NCDs (http://www.who.int/ncds/governance/high-level-commission/synergies-beating-ncds/en/). They share many of the same genetic, biological, psychological, social, and environmental determinants and consequences. And they frequently occur in the same person. And these conditions also share overarching consequences, such as a negative impact on socioeconomic status and premature death.

A report presented to the European Brain Council in



the year 2011 estimated the total cost of brain disorders at around one trillion dollars per year. (Cost of disorders of the brain in Europe 2010 / Gustavsson, A. et al. Eur. *Neuropsychopharmacol.* 21, 718–779 [2011]). Disorders of the brain covered in the report included not only degenerative brain disorders like Alzheimer's disease and Parkinson's disease, but also disorders related to mental health, such as addiction, depression, insomnia, and migraines.

In 2012, the 53 member states of the WHO Regional Committee for Europe adopted a new European health policy framework, Health 2020. This policy framework proposes four priority areas for policy action. The first area among them is to empower citizens and to invest in health at appropriate times during the life span. If the support is provided at decisive times during the life cycle to help prevent and manage illnesses whenever that is possible (i.e., depression, diabetes, etc.), efficiency in fighting such diseases will be increased. To empower citizens, it is critical to improve resilience and the capability of individuals to prevent and manage illness in their daily lives.

WHO has defined a culture of well-being as one in which "every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make contribution to her or his community." To materialize health and well-being as it is defined here, people should be able to access easily diverse forms of healthcare. And, more importantly, citizens must be educated to improve their ability to manage and prevent illness.

With participants from 12 European countries, the International Brain Education Conference was held in London, UK.

In keeping with this principle, a meaningful international conference was held on the theme "Human, Brain, Earth" at The Drum at Wembley in London, UK. This conference, attended by over 300 people from 12 countries in Europe, provided an opportunity for Brain Education experts and others who have the interest in the brain health to network with each other and to engage in the conversations regarding current health paradigms in twenty-first century Europe.

The issue of the health of the intestines, which is now considered the second brain, received a lot of the interest in Europe, too. Thus, Belly Button Healing meditation, as a method to activate actual changes in the intestines, was a main topic of conversation at the International Brain Education Conference, too.

Ilchi Lee, the President of the International Brain



▲ The various scenes of the International Brain Education Conference which was held in London, UK.

Education Association, proposes "the era of living 120 years and the self-sufficiency of health management through the utilization of the brain" at the invitational lecture.

Ilchi Lee, the President of the International Brain Education Association, was invited to the International Brain Education Conference in London on April 17, 2018, to introduce a variety of concepts: the meaning of living 120 years; how to heighten the body temperature by 0.5 degrees for health; the method of raising the physical strength, the mental power, and the brain power; the brightness of the consciousness of the human beings; and the road to a new life that can be created through practicing Earth Citizens' lifestyle.

Lee emphasized, "Now, there is no future for the Earth and the mankind unless the Earth becomes the center of all values. Saying that we should decide to live 120 years does not simply mean that we should live long, but it means that we should find ourselves and purpose to live long. And this is what I mean by Earth Citizen's life. If 100 million people live in that way, a new culture will be created. This will work if you choose it."

The attendees at the conference showed great interest in the Ilchi 120 School, which was presented by Lee. The book *I've Decided to Live 120 Years*, written by Lee, has been a steady bestseller in Korea and has been lauded as a book that contains the philosophy of long life, which is unique to the Korean traditional culture. And, in December of last year, it ranked as the number one e-book in the field of longevity aging on Amazon.com in the United States.

[Interview]

Jung Hee Jun, the Director of the Integrated Headquarters of the Body & Brain, Europe

Q. How is the present situation of Brain Education in the UK?

In 2002, the Body & Brain Center, which is a Brain Education center for adults, opened its door in Surrey, which is a suburb of London, UK. As of the year 2018, with London as the headquarters, six Body & Brain Centers have been opened in the UK, and diverse outreach classes for residents have been offered at local communities, as well. As people can travel across national borders without visa in Europe, people who got in touch with Brain Education in the UK have been publicizing Brain Education after going back to their countries. Brain Education has been presented in the diverse forms, including the opening of specialized Brain Education centers and the opening of classes at existing fitness centers. At the center of all this activity, there is London, UK.



▲ Jeong-hee Jeon, Director of the Integrated Headquarters of the Body & Brain in Europe, is speaking with Brain Education instructors gathered from the counties of Europe who are attending the Brain Education Conference.

Q. What is the health issue that most interests members visiting the centers?

Although they visit with diverse needs, the thing that connects with the overall problems of the British society is mental health, especially the problems of depression, anxiety, and dementia. People think that the specialist doctors prescribe pharmaceuticals too quickly, and they have a lot of interest in alternative medical treatments that do not rely on these drugs. The management of mental health that relies heavily on the drugs has been a great burden on medical welfare costs, too. Above anything else, the biggest problem is the fact that such an approach did not prove to be helpful to the promotion of mental health of the citizens. The costs spent by corporations due to degenerated mental health of workers reaches at least 33 billion pounds every year. And the number of people who lose their jobs due to their mental health illness reaches 300,000 people every year.

And another issue is the muscular skeletal disease. It is one of the main causes of absences and leaves of absences of workers in Europe. It is accurate to say that 20% of the Europeans have been affected by chronic pains. Although there is also damage of muscles due to accidents, there is a lot of damage due to bad life habits, including poor posture, prolonged use of only specific muscles, sitting down for a long time without moving, etc.

Q. I understand various types of yoga and meditation training have been popular in the UK. What

are the unique features of the Korean-style meditation that is practiced at a Body & Brain Center?

Regarding Korean-style meditation, there are many dynamic meditation methods that have been optimized for the modern people who have a hard time remaining in a sitting posture for a long time. In 2012, the University of London and the Korea Institute of Brain Science had jointly compared and researched the effects of Iyengar yoga, mindfulness training, and Brain Wave Vibration meditation. Although all of three improved stress and mindfulness, the Korean-style meditation was unique in its benefits to those suffering with depression and sleep latency.

And another unique feature is energy meditation. In mediation, people develop their bodily senses and train how to manage their concentration without being distracted by external stimuli through utilizing energy as a medium. This practice is from a unique holistic viewpoint of Brain Education, which was modernized from Korean traditional mind-body practice, which approaches a human brain through three levels: the physical, the energetic, and the spiritual dimensions.

And, Belly Button Healing that was introduced last year has been receiving great response in the UK. Public awareness of the importance of intestinal health is already high in the UK. But most of the methods usually used to improve intestinal health are related to managing food and diet. The concept of managing the intestinal health through exercise is accepted as a very new and innovative approach. In order to reduce dependence on the medical system and to raise public awareness of this holistic health management method among more people, we hold public workshops on Belly Button Healing regularly.

[Interview with a participating country I]

Katrien Boucique in Belgium

A side-effect of universal medical care is the excessive dependence on the medical system

Q. What opportunity led you to teach Brain Education?

I came around to knowing about Brain Education for the first time through a Body & Brain Center in the United States around 10 years ago. At the time, I had gone through a Brain Education instructor workshop called Brain Management Training, and I developed the dream that I would like to teach Brain Education to children. For me, who had taught would-be teachers at a university for 25 years, improvements in the education of children had been my biggest interest. Afterwards, I had taught Brain Education to the children in the Netherlands for two and a half years, and three years in my home country of Belgium.

Q. How do you run Brain Education classes in Belgium?

Four years ago, after coming back to Belgium, I opened a "Yoga for Children" course as an after-school class. After-school classes are activities selected by students individually, other than the regular school curriculum subjects. Children don't connect with their bodies. Their awareness is out of their body. I believed that, if the children get trained through Brain Education, the ability to concentrate on themselves will be improved, and they can learn how to become the owners of their lives. In Belgium, I had run Brain Education classes for children for around three years, but the response was not great.



Of course, it is obvious that children tend to prefer classes that are fun, like the sports, over yoga and meditation. I came to realize that it was not efficient to introduce Brain Education into Belgian education through after-school activities service. Teachers and administers must experience the benefits personally first, and then they will naturally apply Brain Education to the school curriculum. So, I needed to approach the adult audience first. I ended all of the after-school classes and began Brain Education classes for adults.

For a year, I ran the Body & Brain classes at civic centers or fitness centers in the neighborhood. I manage around 10 classes a week. Currently, the number of the members registered is around 100 persons.

In Belgium, the concept of self-management of health

is not yet popular. Some time ago, I heard the story that a certain person went to a hospital to see a doctor, and it only took 4 euros. The operational costs, too, are cheap. Who would intend to manage his or her health by exerting effort when it takes so little money to receive a prescription for medicine after going to a hospital? The governmental medical care policy has been progressing toward lowering the costs for receiving the medical examinations at hospitals. Of course, the medical benefits for the marginalized must continue to be widened. But, a side-effect of universal medical care is that people become dependent upon medicine and doctors, without making any effort to take care of their own health by themselves. Services provided by the medical system show quick, short-term effects, and they hide symptoms rather than cure the illness So, eventually, the individual continues to depend on the medical system, rather than managing their health by themselves.

Q. What are the changes that you want to create through Brain Education in Belgium?

Through Brain Education, I would like to make people realize how deeply they can heal themselves. At a businessmen's gathering I have been attending periodically, I have introduced assorted topics related to Brain Education. At the gathering, there is the time for introducing one's own business for one minute. The thing that remains in my memory the most when

introducing the concept of Brain Education is the following: "What do you do when you are ill? You take a pill for the pain. It is the same as driving with the headlights turned off when driving at night. If you intend to drive at night, you have to make sure the headlights are working. In the same way, in order to cure your sick body, you have to listen to your body." Brain Education is a technique that awakens the senses of the body and recovers the communication between your body and brain.

Together with the people who were connected through the Body & Brain classes for the last year, I invited Ilchi Lee and hosted a lecture with the theme of "Technology for the Life of 120 Years" in Belgium on March 25. Around 70 people were present at the lecture. At the lecture, Lee emphasized, "I have my body to make myself healthy. I have my body to make myself happy. I have my body make myself at peace." This is the most important message to human beings in the twenty-first century. In order to do it, one's own brain must wake up. That is, indeed, the core of Brain Education."

After the lecture, I organized a 120 Year Life Book Club together with the people attending. Because I have felt a space where I can communicate with likeminded people regularly, I plan to open the first Body & Brain Center in Belgium this year.

[Interview with a participating country II]

Aleksandra and Peter Mason of Poland

Belly Button Healing, a brain health method addressing intestinal health, receives positive reviews on a TV show in Poland



Poland's economy represents one of the most successful transitions from a socialist-style planned economy to a market economy among post-communist countries. Currently, it is the sixth largest economy in the European Union. However there has been enormous pollution and biodegradation of the environment in Poland as the consequence of industrialization. This environmental pollution is linked to the deterioration of citizens' health.

Aleksandra and Peter Mason are a married couple

who opened the first Body & Brain Center in Poland in 2016. They had been publicizing the effects of Belly Button Healing through a Polish broadcast when Belly Button Healing was introduced in 2016. Currently, there are about 50 members who have been attending classes at the center on a regular basis. And, from the year 2017, they host the Brain Management Workshop there, a basic 6-day course to become the Brain Education instructor in Europe. They do regular Belly Button Healing classes and Brain Education classes for adults, children, and seniors.





▲ Belly Button Healing, which is based on the principles of Brain Education, was features on a TV show in Poland.

Wanting to convey a method of healing oneself.

Alexandra Mason was the manager for Middle and Eastern markets for a Swedish company in London. She was working for many hours in with high levels of stress. Very quickly, she felt her health getting worse. So, she was looking for some kind of technique that would bring her back into harmony. That's how she started practicing Belly Button Healing. After getting married to Peter Mason, she decided to return Poland to teach Belly Button Healing.

Peter Mason used to be an officer for the Royal Air Force of the United Kingdom. He said that his life was all about helping others even before he decided to open a Body & Brain Center. His last job was as a survival instructor, where he taught people how to survive in extreme conditions and while experiencing high levels of stress.

Peter and Aleksandra Mason introduced in a TV show recently that Belly Button Healing is one of the easiest ways to influence the condition of the brain since it is connected to the brain. "We try to educate people that we can heal ourselves," he commented during the TV show, "and we can feel good in our bodies in a very easy way. All you need is your thumb and your belly button."

Also, Peter Mason said, "Poland is a beautiful country, but it's being destroyed. The health of our people, our ecosystem, and our economy need a drastic action." He expressed his vision for Poland: "Poland's history is fraught with hate, distrust, and separation, within communities and at a national level. There is a high level of fear evident in the society: fear of lack, fear of loss, fear of external influences. But you can see in the eyes and the hearts of people here that they don't want this, and they desperately need an alternative. Together we can create a society based on tolerance, respect for self and others, and oneness with nature." Alexandria and Peter Mason are pioneering ways to change how people use their brains to change their personal lives and their entire community.

Q. In Poland, how are people reacting regarding the health of the brain or the utilization of the brain?

Poland is a country in which the distinct regional characteristics are strong. Rybnik is a city located in the western part of Poland. Generally, responses to alternative medicine, natural therapy, and energy healing for well-being are very good. Acupuncture therapy has been popularized as well.

But, people have fear of terms related to the brain. This is related to the attitudes of people in this region regarding mental health. In Rybnik, there is the biggest psychiatric hospital in Poland. So, there are strong prejudices and stigma regarding mental health



▲ Aleksandra and Peter Mason with their members at the International Brain Education Conference in London

and the brain health. If somebody hears, "You need training for your brain," he or she interprets it as the words, "Since you have a mental problem, you must go to a psychiatric hospital."

The negative attitude toward the term "mental health" gets expanded into concepts like the management of stress and mental well-being, too. And, the idea that the brain and the body are connected and that brain health can be managed through the body is unfamiliar to them. The fact that the brain has influence on my body gets accepted like a science fiction novel.

Since Belly Button Healing was introduced two years ago, people have started to understand, little by little, the fact that the body influences on the brain, thanks to the book *The Mind-Gut Connection* by Dr. Emeran Mayer, which has been published in Polish. But people need to take a big leap to accept the fact that the

brain influences on the body. We want to widely spread the awareness that physical and mental health must be integrally managed through Brain Education.

The medical system of the country insufficiently funded. The biggest problem caused when the management of the mental health relies only on the medical system of the country is that people will eventually rely on cheap medicines. But, the medicines do not cure the problems; rather, they just hide the symptoms.

Q. How do you teach the idea that the body and the brain (the mind) are one?

We teach regular classes with unique themes each day of the week. They have been divided into "vitality" for Monday, "stretching" for Tuesday, "vibration" for Wednesday, "Ki-gong" for Thursday, "meditation" for Friday, "rejuvenation" for Saturday, and "energy accumulation" for Sunday. All these themes emphasize "making the roots go down into my body"—in other words, physical strength. This is because, if there is no physical strength, the undulations of the emotions and the thoughts are extreme. The beginning of all changes begins with the physical strength.

Overall, response to Belly Button Healing has been very good. After participating in a Belly Button Healing workshop, people feel confidence while thinking, "Ah! My doing the exercise can have an influence on my emotions." I explain to the members that through Belly Button Healing they can influence the vague nerve system, which facilitates communication between the body and the brain.

We show to the members a simple experiment in kinesiology that was used by Dr. David Hawkins, a psychiatrist who developed the Map of Consciousness. Through this experiment, people easily understand, and get surprised by, the fact that the positive and

negative thoughts strengthen and weaken the muscles of the body.

Q. What are the plans for the future?

Next year, we plan to open the second center in Wrocław, the biggest city in the western part of Poland. Although alternative medicine has been getting popularized in Poland, people still rely on doctors.

And, practical methods for taking care of one's health by oneself have been insufficient. Even natural therapies eventually make people rely on their products. We want to spread Brain Education, through which everybody can manage their health, by themselves, without the need for resorting to anything else except their own brain and body. We believe that Brain Education can completely change our country.

[Interview with a participating country III]

Sang-woo Park in Russia

Brain Education is an educational system designed to develop the potential of the brain that has not been realized yet.

Q. With what issues do people come to the Body & Brain Center in Russia?

Now, in Samarra, the Body & Brain Center has been in operation for 12 years. Because Russians frequently drink strong liquor due to the cold climate, a lot of people have been suffering from disorders related to the heart and the blood vessels. And there are many people who have chronic back pain for which the causes are indistinct besides slipped disks or inflammatory diseases. It seems that the dissolution and the collapse of the socialism of the former Soviet Union in 1991 brought enormous psychological stress to the Russian citizens. It is said that, at around this time, illnesses related to the heart and spine increased a lot.



The symptoms of chronic back pain caused by psychological factors or poor circulation have been improved quickly through meditation and breathing practices.

Q. How do you explain the term Brain Education?

Russia is a country where the various kinds of the sciences, from space science to brain science, have been developed. But, the concept of looking at one's own brain introspectively is strange. It seems that this is because, after receiving education in the socialist system for a long time, they have become accustomed to follow what authorities tell them to do. And they have antagonism toward the fact that individuals, not the government, educate the brain. So, I often use the phrase brain development instead. I explain, "Brain Education is an educational system for developing the potential of the brain that has not yet been realized. When they are ready to complete Power Brain Meth-

od, which is one of Brain Education programs, the sense for looking at one's own brain is developed bit by bit.

Q. What contribution do you want to make through Brain Education?

Although GDP may be lower here than in other developed countries, the Russian people that I have met are rich in their hearts and have a lot of community spirit. But sadly, while experiencing the process of the collapse of the socialism, the whole society has fallen into the confusion and the depression. And, still, an alternative for the recovery on the social level has not yet been presented. I believe that the answer is within our brains. I want to help everyone experience the creative power that his or her brain possesses and to create an alternative future in which all of us recover self-confidence and are happy, together with our members.

[Interview with a participating country IV]

Jan Sladek in Slovakia

Discovering my own value is the most important life skill to create a happy and fulling life.



▲ Jan Sladek (right in picture) with the Brain Education instructors who work at his center in Slovakia.

Q. How did you get around to knowing about Brain Education?

It was in 2000 when I was in Chicago in the United States to study hotel management. I was looking for a place where I could learn yoga or tai chi. I found a Body & Brain Center. After attending for around two years, because my internship ended, I had to return to Slovakia. Because there was no such center there, I was quite sad to return. Later, because Slovakia became a member of the European Union (EU) in 2004, travel between the countries became free. And, there-

fore, I was able to go through a Brain Education instructor training course in London, UK. At last, in May last year, I opened a Body & Brain Center in Zilina in the northwestern part of Slovakia.

Q. What was your main reason for opening the center?

The biggest change I obtained through Brain Education in Chicago was that I discovered my own value. It was not a materialistic success nor anything like recognition from others, but something I, myself, appreciate. I felt composed and totally in control, and that feeling that comes from the center of my inside became the source of my abundance and happiness, which does not waiver in my life. I wanted to share this important technology so everybody can apply it to their lives.

Q. In Slovakia, are mind and body practices like meditation and yoga popular?

Slovakia is mountainous, so people used to do a lot of mountain-climbing and hiking. It helped people stay fit. But, things have changed a lot in the last 20 years. To the extent it is a country of quick economic growth, it seems that the stress, too, has been heightened, and, especially, in the recent few years, burnout syndrome has become a social issue, and obesity, heart diseases, the diseases related to the digestive system have increased a lot.

But, public awareness of yoga, meditation, and natural therapies is not high yet. Many people still oppose them from a conservative religious perspective, which caused a strong opposition movement against yoga and meditation around 5 years ago. So, I explain key neuroscience concepts relevant for ancient mind-body practices like yoga and meditation to people visiting the center. And I introduce Brain Education as a holistic approach to manage body and brain together





to maintain the positive state of mind such as the feeling of happiness and the peacefulness. If people listens to only my explanation in words, they may not understand them clearly. However, after attending the first class, through experience, they are able to understand what it means when we say that the body and the brain are connected with each other.

I opened up the center in May last year, and there are already over 80 regular members. I have a goal to open 10 centers by 2020, and I plan to open a retreat center within 5 years from now.

Q. I heard that you opened a Brain Education class for kids at a kindergarten.

In September last year, one member asked me to open a Brain Education class for kids with special needs, such as kids with ADHD and learning disorders, at her kindergarten. In the beginning, we started a class for kids aged from 5 to 6 years old. Because the responses were good, I made another class for kids aged from 3 to 4 years old in January of this year.

Brain Trainer, a state certified certification by the Korean government, has generated great interest in Europe.



▲ Hyung Chul Roh, the Director of Brain Trainer Center is measuring brain waves in real-time with Smart Brain, while the volunteer is practicing Belly Button Healing. Smart Brain is a brain wave measurement device to assist brain training developed by the Korea Institute of Brain Science. At the conference, the Brain Trainer booth was busy with visitors who wanted to check the change in their brain waves before and after Belly Button Healing with their own eyes.

The interest in Brain Trainer, a brain training certification certified by the Korean government, is picking up in Europe. This past March 18, the Brain Trainer Center concluded MOU its collaboration for the cultivation and the increase of experts in brain training with organizations from the United States, the United Kingdom, and the Middle East at the Drum at Wembley auditorium in London, UK. As an organiza-

tion that operates certification programs for Brain Trainers, the only state certification in brain-related field, the Brain Trainer Center is an affiliated organization of the University of Brain Education.

The Brain Trainer Center made an agreement for collaboration to spread Brain Education to wider audience with Brain Power Wellness, Power Brain Educa-







▲ Brain Trainer Center consecutively concluded the MOUs with Brain Power Wellness of the United States, Power Brain Education UK of The United Kingdom, and the BE-ME organization of Qatar.

tion UK, and Brain Education Middle East (BE-ME) respectively after the International Brain Education Conference in London, UK.

Hyung Chul Roh, the Director of the Brain Trainer Center; Dave Beal, the Director of Brain Power Wellness of the United States; Anna-Lisa Drew, the Program Director of Power Brain Education (PBE) UK of the United Kingdom; and Mohammed Abu Zeinab, the Representative of BE-ME in Qatar attended the MOU signing ceremony.

Brain Power Wellness has supplied Brain Education programs to schools in the US to help students enhance their ability to use their brains well for teambuilding, emotional wellness, self-confidence, citizenship, etc. Since 2007, Brain Power Wellness has trained over 400 schools, 15,000 teachers, and 250,000 students through its on-site trainings. In September 2016, Ellenbaekskolen School in Denmark invited Brain Power Wellness to host their first Brain Education teachers workshop for their teachers and administrators.

PBE UK first started Brain Education classes for children and adolescents at Body & Brain Centers in the UK in 2016. It also provides brain exercises and meditation classes as after-school programs to elementary schools. In 2018, it launched a research project on the

positive effects of Brain Education on students' mental health.

BE-ME was established in Doha, the capital of Qatar in November 2017. BE-ME strives to fulfill the fast-growing demand for Brain Education in diverse domains, including children's education, adult training, corporate training, online education, etc., in the Middle East region.

The three parties expressed high expectations for utilizing Brain Trainer certification, its training programs, and brain training assistance devices such as iBrain or Smart Brain, to enhance the expertise of Brain Education instructors in their countries. Brain Education was born and developed in Korea about 40 years ago, and the Korean government is the first in the world to recognize brain training as a new, emerging profession and to certify the qualification of professionals in that area with state-certified certification.

Brain Trainer Center had concluded an MOU with U-DAP Solution China, Chinese Brain Education provider in China in February 2018.

A special lecture by Ilchi Lee, the President of the International Brain Education Association

The key to a healthy 120-year life is the utilization of the brain.



It was 16 years ago that the first Body & Brain Center opened in the United Kingdom and Brain Education was introduced in Europe. Body & Brain invited Ilchi Lee, the President of the International Brain Education Association, to speak at the International Brain Education Conference at The Drum at Wembley in London on March 17, 2018.

The theme was "human, brain, earth." The conference was attended by over 300 people from 12 countries in

Europe, including the United Kingdom, Poland, Russia, Belgium, etc. Ilchi Lee introduced a new paradigm of health for mankind that can be summed up as follows: "self-sufficiency of health through the utilization of the brain."

What does utilizing the brain well mean? At this conference, he explained the meaning in three steps: concentrating on the body, awakening to one's own brain, recovering self-confidence as the owner of the



brain, and choosing to use the brain proactively.

He guided the attendees' experience of 1-minute exercises to raise the body temperature through finger vibration exercises and clapping-hands-and-stamping feet exercise. After the exercises, he explained, "Through such movements that make one concentrate on the body naturally, the body temperature goes up. Once the body gets warm, we naturally feel good and our self-healing power is recovered. Managing and utilizing concentration like what we've just done is what I mean by utilizing the brain well."

Next, he asked the audience, "All of you, did you bring your brain?" He went on, "In order to utilize the brain well, one must be self-aware of the fact that I am the owner of my brain." He pointed out that although a lot of knowledge about the human brain has been generated through the advances in modern science, no one teaches that we own our brains and that it is up to us to utilize it."

And, while explaining that human beings are distinguished from other animals in the power to choose and create, he said, "Creativity starts from the will to find what is needed for me, for my family, and for people in this time and age."

But, what are the impediments that block the exercise of the creative power of the brain? He explained the reason using the Map of Consciousness, which was developed by Dr. David Hawkins. He said, "People in the modern society live while experiencing negative emotions like shame, guilt-consciousness, sadness, and pain under endless competition. At the very least, it takes courage to be able to say that I will choose the things that are needed for myself and the society. According to the Map of Consciousness, courage is at Lux level 200."

He emphasized that going up from negative consciousness to positive is not something thing that must be worked for, but rather is simply a matter of choice. And he said that he makes ceaseless efforts to develop new simple ways that people can practice experiencing the potential and power that their brains possess, which they can then use with confidence. Belly Button Healing was born from this effort, as well. It's a very quick method that can recover people's confidence that they can create conditions for optimal physical health and emotional well-being on their own.

He said that he started the 120 Year Life Project to experience the changes that occur in the brain and in life when one chooses to be the owner of one's life by oneself. "Our bodies are like automobiles. A person who buys an automobile and drives it thinking, 'I will drive this car only for 10 years,' and a person who drives an automobile thinking, 'I will drive this car for 30 years,' have different mental attitudes toward managing a car. This is the same with health, too. One's own health cannot be protected by a hospital or institution, but one must manage it on one's own."

Now, in the era when we are living longer than ever before thanks to advances in science and technology, he insisted that we must proactively choose to live 120 years, instead of living by inertia. He urged the attendees to participate in the global movement of raising public awareness of the value of the human brain.

Recently, the Ilchi 120 School was opened in the US based on his proposal. It is a kind of lifelong learning community to learn principles and skills to live life of completion instead of life of material success to real-

ize one's own value. In his book *I've Decided to Live 120 Years*, he stated how the proactive choice to live 120 years and setting a new plan for the latter half of life can change the crisis that human beings and our planet are confronted with now.

"Through the first half of our individual lives, we experience how destructive it can be to pursue only possessions, control, and conquest. It is the responsibility of the senior generation to share that wisdom so it can become the guiding wisdom of all society. By teaching the values of completion to young people still in their period of success, we can prevent human life and nature from being spiritually impoverished."

* The original article was published in Brain Vol. 69.

Understanding the brain-gut connection will bring about a paradigm shift in approaching health.

Interview with Dr. Emeran Mayer

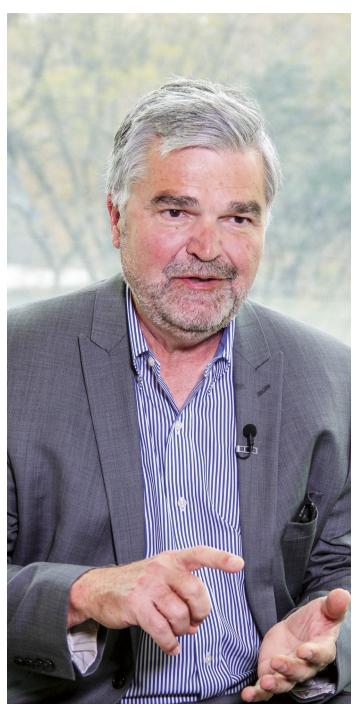
Dr. Emeran Mayer, an internationally known expert on the brain-gut connection, visited Korea to chair and speak at APNM (Asian Postgraduate Course on Neurogastroenterology and Motility) 2018 from April 6-8, 2018. The APNM, which had met for the seventh time this year, is a representative academic society in the field of functional disorders of the digestive system in the Asia-Pacific. The APNM 2018 meeting this year was held with over 500 experts from the 16 countries, including Europe and the United States, centered on the functional indigestion, the gastroesophageal reflux disease, the irritable bowel syndrome, the chronic constipation, and other diseases.

Mayer has studied brain-gut interactions for more than 35 years and has been proceeding with his research funded by the National Institutes of Health of the United States in the past 25 years. And he is both a pioneer and a world-class authority in the field of the interactions between the microbiota within the brain and within the intestines and the field of the chronic, internal organ pains. He is a professor in the David Geffen School of Medicine at UCLA, executive director of the G. Oppenheimer Center for Neurobiology of Stress and Resilience.

He had a meeting with Ilchi Lee, the President of the International Brain Education Association, at a seminar in LA in the United States in 2016. The meeting allowed him to visit Korea for the first time and to give a special lecture at the University of Brain Education that year. After his visit to Korea, his representative book *The Mind-Gut Connection* was translated into Korean with the title *The Connection* last year. Professor Antonio Damasio, a world-class scholar, and Dr. Michael Gershon, a representative researcher on "the second brain," recommended the book, further bolstering his reputation as a great researcher in the field.

Q. I am glad to have you back in Korea. This is the second time meeting you since your first visit in 2016. Interest in the roles of the microbiome within the intestines is gradually generating in Korea, too. Could you tell us about the topics you made a speech about at the society?

The APNM is one of the representative academic societies in the field of the functional disorders of the digestive system in the Asia-Pacific, which is held every



two years. I got invited to chair the seminar and speak at a session. The title of my presentation was "The sex -related alteration of the brain function in the FGID: The evidence from the fMRI."

It was about the 6 related differences on brain-gut, microbiome interactions. It's one of the topics of interests of our research center. We study how the communication between the brain, the gut, and the microbiomes differ between men and women. In my

session at the seminar, I introduced the general concept of this bi-directional communication between the brain and the gut, and the application, both in terms of chronic digestive problems and irritable bowel syndrome, and in terms of control of food intake and obesity. And I spoke about differences between men and women in both of these areas, and how the system operates.

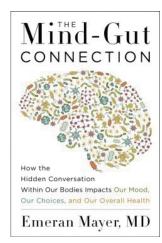
Q. It seems that interest in this field is expanding globally. I wonder how this topic is perceived and received in the medical field.

Yes, I've been studying brain-gut interactions for more than 35 years, and generally there was not a big interest in it. The Brain was not considered, for gastroenterologist, which is my specialty, an area of interest. And for psychiatrists and neuroscientists, the gut was not of interest. But the discovery of the microbiome made this interestingly related to the body. And now, it generates tremendous interest on various levels among scientists. The public media also has been very fascinated with this topic.

There is another group of people who are interested, too. They are the whole supplement industry, people who sell supplements, probiotics, and prebiotics. It has obviously boosted their business a lot because now people can say, even without scientific evidence, "If you take certain probiotics, it will improve your mind, decrease depression, and make you feel better." I would say this change started slowly 7 years ago. Now interest has been accelerating. And there are also many books that have come out on gut health and gut microbiome health, including the gut cookbook.

Q. What are the main differences in composition and function between the gut microbiome in the past and now?

The main influences on the diversity and the abun-



"After a long period of neglect, the enteric nervous system has been recognized as the 'second brain.' Dr. Emeran Mayer, a true expert of this topic, has now written the best lay-public guide yet to this spectacular part of ourselves. Recommended reading."

(Antonio Demasio, author of Descartes' Error, The Feeling of What Happens, and The Self Comes to Mind)

"I have known Emeran Mayer for years and have learned to pay attention to what he says and writes. *The Mind-Gut Connection* is a delight. Both scholarly and fun to read, I highly recommend it to anyone interested in learning more about how the mind and gut communicate." (Michael D. Gershon, MD, author of *The Second Brain*)

dance of microorganisms are diet and environmental factors. Not really genetics that much. And in terms of environmental factors, food and diet are very important, but also other things like chemicals that we ingest, including particularly antibiotics. And there is a range of components of so-called processed food, like artificial sweeteners, emulsifiers, preservatives, and food colors. Microbes convert those chemicals into substances that in many cases are not good for us in the long term. I would say, if you look at it, the main change in the composition started to happen from 100 to 500 years ago. We used to eat a very different diet before, very high in plant-based food.

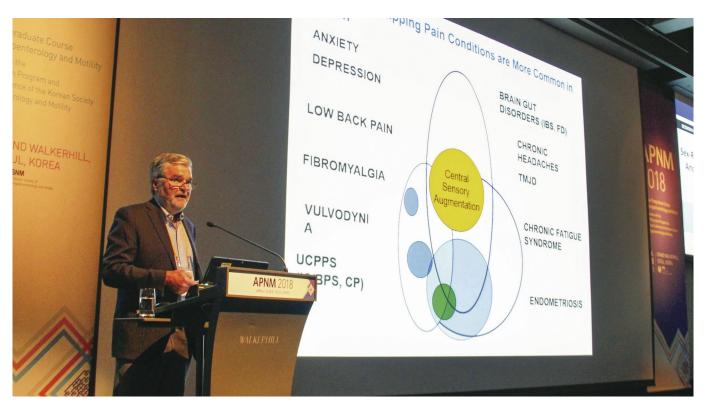
It was a lot of fiber. There was much less meat because it was too expensive. People basically ate a predominantly plant-based diet. Because, in a plant-based diet, the calorie density is not as high as with meat or with fat because you eat a lot of fiber. The diet also increases abundance and diversity. But if you look at it today, it's been going down, step by step, every decade. There is less abundance and less diversity in the gut microbiome. But still with some people in the world, like the native Americans, people in Amazon rain forest, or some natives in Tanzania, Africa, when you look at their gut microbiome, it's very high in diversity. It varies over the seasons, be-

tween the rainy season and the dry season, depending on how much meat they acquire from hunting. When they switch to a diet that has a lot of meat in it, the diversity of their microbiome decreases, to the same level as ours in the rest of the world. When they switch in another season to a high plant-based diet, the diversity comes back. In our case, for people living in the developed world, the diversity does not come back. It keeps going down. The diversity and abundance of microorganisms in the gut in developed countries has irreversibly decreased, which puts us at certain risks for diseases. It's an ecosystem that is compromised just like an ecosystem around us in nature. If there are negative effects from infections, there is a high risk of negative effects on the host.

And I think the same thing is happening in Asia. The traditional Asian diet was also a diet high in plant-based food that didn't have as much meat, fat and sugar as it has today. Now the diversity is decreasing in Korea and Asia as well.

Q. The role of gut microbiome seems more important now than ever for the modern human. Why is it related to our overall health status?

I would say the whole interaction between the brain,



▲ Dr. Emeran Mayer giving a presentation at the APNM 2018 academic society.

the gut, and microbiome is essential for our wellbeing, and for our health. A diverse, abundant healthy microbiome has always been important for our health. What's happening now is the decrease in the diversity, the health and the resilience of the gut microbiome.

We are prone to a lot of diseases, which have been increasing in the last 7 decades due to decrease in the diversity, health, and resilience of the gut microbiome. For example, inflammatory bowel disease has been increasing since 1950. Studies showed the increase both in the West and also in China. Obesity, metabolic syndrome, and many other diseases, like colon cancer, have been increasing too. It seems that there is a direct relationship between intake of red meat and fat and the likelihood of developing colon cancer. It's an interesting and important trend. Colon cancer was rare among young people in the past, but now, in an age of better detection of colon cancer, we are seeing it in younger and younger people. It's the same with the obesity. Before, diabetes was mainly in

the older people. Now we see it in children. That's an indication of how important it is to have a healthy gut microbiome, and how negative the consequences can be when the diversity decreases.

The one question that I don't have good answer for is if brain diseases, such as depression or anxiety or autism, are related to the decrease in microbiome diversity. There are studies going on about this. Autism has been increasing dramatically. Depression has been more stable, but a connection is conceivable. It doesn't have to start like autism. Some diseases start earlier on in life, diagnosed in the first two years of life. There are cases that start during pregnancy. Even the microbiome of the mother, the pregnant mother, could have a negative influence on the health of infant.

Q. You mentioned Korean traditional food is good for our health in the Korean edition of *The Mind-Gut Connection*. What do you like about Korean food?

That's a good question. I cannot tell you one specific item, but what I like about Korean food is the multitude of little dishes. Each of the side dishes are a different kind of fermented food, either fish or plant. I am not sure if there are good studies on this, but I would imagine that each of these different fermented foods has a different group of bacteria. I find that it very intriguing that Korean people, from childhood on, have this constant intake of a very large variety of microbes, which must have an effect.

I just asked the organizing professor of this conference if there are good studies comparing the gut microbiome of Koreans with Westerners. He wasn't sure if there are, but I predict that the diversity of the microbiome in people who eat the traditional Korean diet is probably healthier. And I think the way you eat it is an important part of a healthy diet, as well. Everybody shares the dishes. You will never order 30 side dishes and sit at home alone and eat alone. You always share it with other people. I think this social interaction also contributes to gut health.

Q. I heard that you have experienced Korean style mind-body training in LA. How was it?

Yes, it was a very good experience. I invited an instructor from a Body & Brain Center in San Fernando Valley to UCLA. She came to our center, and we had a session with all the scientists and employees participating in it.

It was a very good experience because the class had both the exercise part and the mindfulness part. One idea that we had after the session was to do this on a regular basis, so people come once a month. Everybody really enjoyed it. It's truly a mind-body practice. It's a good workout and relaxing at the same time.

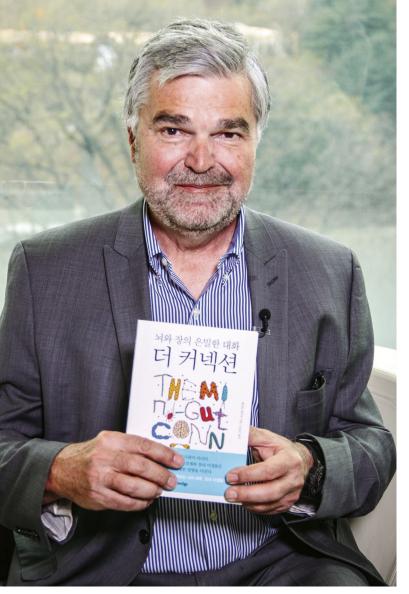
Q. Theses days, many people still think that the gut microbiome affects our health only to the ex-

tent of helping digestion and boosting immunity. However, you go further to say that gut-brain relationship has implication even for our emotional well-being and our lives. This is a refreshing concept. Is this point generally shared in the US?

There are now a couple of books published in the US, one is my own, that talk about this concept. And the concept was started with studies on animals like mice or rats. I think it is clear in the studies that the gut microbiome composition and the presence of gut microbes are important for emotional behavior. That has lead to our interest to look at this in humans. We have a study using a brain imaging shown there is a relationship between.

For example, if you use herbs to grow your microbiome with a daily intake of probiotic mix or cocktail, that could change the brain response to an emotional stimulus. It was not as traumatic as in the mice. People did not feel the difference. But you could see clearly there is this communication to the brain if you tested it while looking at the brain activity. The big question is on what degree that really influences on depression or anxiety. I personally think it is a lot more complicated in humans than in mice. The mouse depression-like behavior is clearly very different from human depression. And one topic I talked to people at the conference about is if this regular intake of many different microbes and probiotics will have an effect on the brain. Of course, this assumption is not a scientific issue yet; it is just anecdotal. You would see the same thing when millions of people receive antibiotics. Some people take antibiotics even for a long period time. For example, people with acne may go on an antibiotic course for months. So, if the microbes in the adult person are central like in the mice, you would predict something happens to the emotions. Generally, that's not been the case.

So, our concept is that it plays the biggest role early in



▲ The Korean edition of The Mind-Gut Connection

life, in the first 3 years of life, when the microbes are first put together. When the microbiomes are assembled, any influence on that process, such as through the use of antibiotics or through consumption of unhealthy food, will effect of brain development, which happens at the same time, in the first few years of life.

The early stage in life is a very important phase for the baby and the pregnant mother. The diet of the pregnant mother, her stress level, and her antibiotic intake all these affect the mother's microbiome, which has an influence on the baby, both the new-born and the infant. If you have pets or farm animals, it is a good thing for developing the microbes, too. So, summarizing this, I don't believe that the mouse studies will completely change psychiatry, but I do believe they will have a big influence of how mothers and the

health care system focus on this early phase of microbiome programming. And that could play a role in autism, because its developments starts during pregnancy. I think we are ready to ask questions about many neuro-developmental diseases, like anxiety.

Also, there is more room for intervention. For example, mothers during delivery typically get antibiotics to prevent any post-delivery infections. Many infants are born prematurely and end up in the new natal intensive care unit. They get very high doses of antibiotics over a period of time. On the average in the US, the child has already taken 4 or 5 doses of antibiotics by the age of 2. I think those are the things that could really play a role in the kind of brain and mind diseases that we see today. It was a footnote, not a main topic, 10 or 20 years ago. This is a big change.

* The interview was organized by Rae Hyuk Chang, the Editor-in-chief of *Brain*.



International Brain Education Association
11 Apgujeong-ro 32-gil, Gangnam-gu, Seoul 06023, Korea
Tel +82 (2) 3452 9046
Fax +82 (2) 3452 5894
prmir@ibrea.org
www.ibrea.org