

# The world's largest center for Auditory Brain Stimulation according to the principles of Prof. Tomatis.

Welcome to Atlantis, the world's largest center for Auditory Brain Stimulation according to the principles of Prof. Tomatis. This special method aims to help children and adults with a variety of problems.

Under the leadership of Jozef Vervoort, the official successor of Prof. Alfred A. Tomatis, and his daughter Astrid Vervoort, many families find help and support at Atlantis. The Auditory Brain Stimulation has an impact on the trinity that constitutes the human being: brain, psyche and body. We alternately stimulate the auditory and vestibular (balance) nerves, thus creating new connections in the brain. At the same time, the method strengthens already existing connections in the brain.

Using specialized filtering equipment, certain frequencies are amplified and others attenuated.

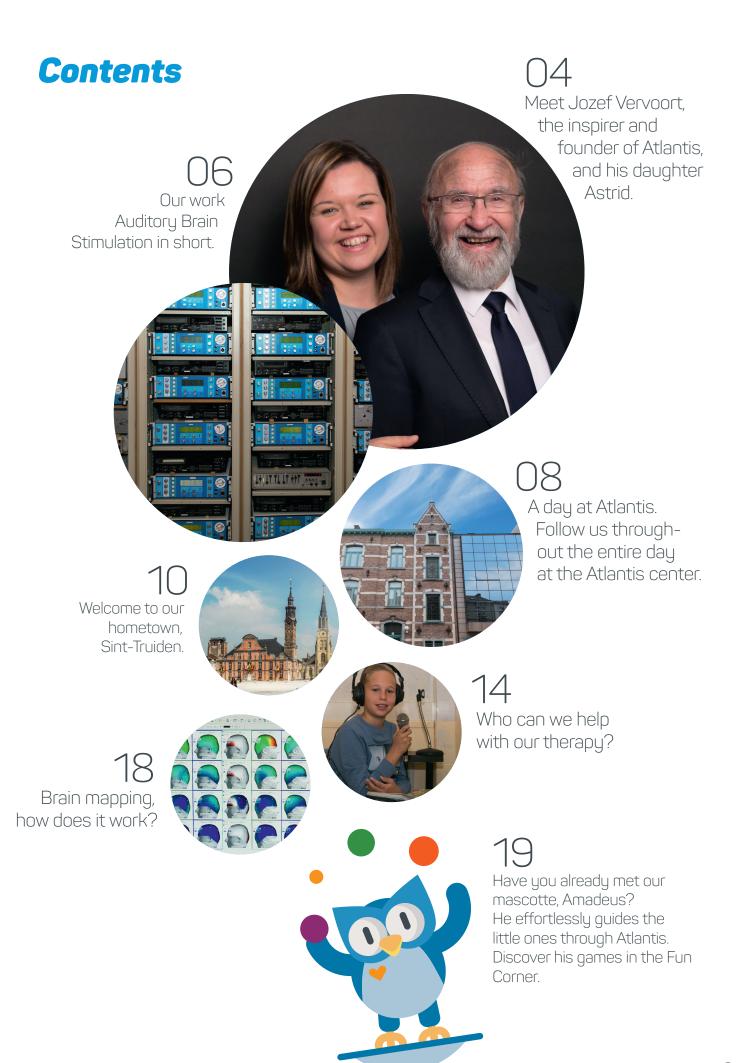
The irregular alternation of high and low frequencies acts as a kind of microgymnastics on the muscles of the middle ear. This action in turn stimulates the associated brain areas.

Thanks to our highly trained therapists and to a great number of stimulation devices and complementary therapies, we are obtaining amazing results.

The innovative brain research of QEEG technology (Brain Mapping) helps us demonstrate how this psychopedagogical method transforms the brain. Moreover, scientific publications, as well as cooperation with doctors and universities, provide a scientific basis and quidance to our work.



Atlantis<sup>vzw</sup>





Atlantis, a non-profit organization, was founded on the ideal of helping as many people as possible with the method that also helped Jozef's older son. At the Sint-Truiden institute, Jozef, Astrid, and their team apply a therapy that stimulates the brain via the ear.

# "Jozef, this method is anything but ordinary. How did you discover this Auditory Brain Stimulation?"

My son suffered from oxygen deprivation at birth because he was stuck in the birth canal for too long during delivery. When he came into the world, his skin was all gray. My wife and I were terrified. The midwife managed to make him cry and reassured us that the pointy head and the weird color would soon disappear completely. Her statement turned out to be true, because after a few days Bart looked like a normal baby. We were very happy but unfortunately, our child did not develop as he should. We decided to have him examined by Professor De Clerck, neurologist in Ghent.

He diagnosed him with an oxygen deficiency in the brain. This was 1968, so the only advice we were given was to stimulate our child as much as possible. At that time there were not many therapeutic options, so we tried to make him crawl like other children, bend his arms and legs, etc. Unfortunately, Bart's development was very slow. At 5 and 1/2 he could only speak one word. I tried to give my son as much motoric stimulation

as possible, but I knew that I was quite limited. I often thought that, short of 'cutting open his skull' to gain direct access to his brain, I should not expect much progress.

I was the Principal of a Belgian military school in Euskirchen, Germany, and was the second youngest teaching staff member. This was a large school with 810 students. Bart was in kindergarten. I had taken special courses to guide children with developmental delay and (learning) disabilities.

I had to integrate these kids into the normal classes, as the government mandated at the time. Life was taking its normal course and Bart's teacher was happy to have him in the classroom. He didn't bother her, was a sweet and quiet boy with a vivid imagination, but he did almost nothing during class. Then, one day, the school psychologist gave me a book titled "Education and Dyslexia" by Professor Tomatis, a French ear, nose & throat (ENT) specialist, which described how he came up with a surprisingly simple method whose results were remarkable, to say

the least. After two months of reflection, we decided to go to France and implement the therapy during the holidays, in utmost secrecy.

As the school principal, I could not afford to lose face. They would have just fired me. Over time, we started noticing differences, but the deciding factor was when, on the third day after the vacation, Bart's kindergarten teacher stormed into my office and asked what I had been doing. She kept repeating the same question, and then said. "He reacts faster, he is more awake and he now participates like the other children. He is also more active in the games." I could now open up to her, because she had noticed the same effects my wife and

I, then, decided to delve deeper into the method that saved my son, so that I could help as many children as possible in the same way. After all, when directly concerned, one can best sense what people with problem children go through. I vowed to carry on the therapy in a positive way in order to spread it further. This is what I am doing today at Atlantis.

### "How is Bart doing now?"

Bart is doing very well. He had to repeat the first year, but in three years of therapy, he caught up with everything. He even speaks three languages fluently and is the father of twins. A hard worker who never asks for help!

# "Astrid, how do you fit into this story?"

I grew up at the center and I saw firsthand the effects of the therapy. So, I knew from a very young age that I absolutely wanted to work with this fantastic method and follow in my father's footsteps. Growing up here, I learned the tricks of the trade at an early age, and my father passed the 'virus' on to me.

Moreover, I was the very first Tomatis fetus, as my mother did the therapy during her pregnancy. Sometimes you are truly destined to pursue your life's work, and I have a feeling that's the way it was for me.

Born with the same 'helping syndrome' as my father, I derive immense satisfaction from helping children and adults reach their full potential.

I had the chance to meet someone who shares my burning passion. Didier, my husband, is our right arm. He is involved in the training and is responsible for the equipment and for our worldwide network of therapists.





Astrid Vervoort, Jozef Vervoort & Didier Punie



Alfred A. Tomatis, a French ear, nose & throat physician and professor of linguistics, was born in Nice (France) on January 1, 1920 and died in Carcassonne, on Dec. 25, 2001.

# Who was Professor Tomatis?

Tomatis was a visionary scientist who conducted experimental research on the connection between listening, the psyche, the brain, the voice and the body. He even developed a new branch of science. Audio-Psycho-Phonology. The son of an opera singer, Tomatis was fascinated very early on by everything to do with the voice and the ear. According to him, it is not just hearing but most importantly the act of listening that is the basis of communication with oneself and

with others. He was a true pioneer in the field of Auditory Brain Stimulation. His method can be applied to a wide range of problems originating in the brain, nervous system, body, and/or psyche. A scientific study published by Stanford University in 2016 confirmed Tomatis' claim that the voice of the mother, influenced by her state of mind, has a considerable effect on the intrauterine development of the child.



# The Auditory Brain Stimulation according to the authentic Tomatis principles.

It all starts with a psychological listening test, which is performed with an audiometer calibrated for the Auditory Brain Stimulation. This test informs us about the person's neurological, psychological, educational and physiological abilities.

From it, we design an individual therapy plan, which is, then, discussed with the person or their parents.

Specifically, the test is done via both air and bone conduction headsets. The air conduction (the blue line on the test) represents how we perceive the outside world, while the bone conduction (the red line on the test) is how we perceive ourselves. In an ideal listening test

these two lines are close together, and this is what we aim for when applying the method.

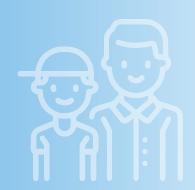
We use specialized electronic equipment to send (un)filtered music of Mozart, Gregorian chant, or the mother's voice filtered in the high frequencies. The sound is modified in order to train the person's listening abilities. This means that the high and low frequencies are alternately amplified and attenuated. High frequencies stimulate the auditory nerve (cochlear system), while low frequencies stimulate the organs of balance (vestibular system).

Each frequency is associated with a particular area of the brain.

Due to the irregular alternation of the relaxation and activation channels, new connections are created in the brain. At the same time, the existing connections are reinforced.

# Moritz's father

"Thanks to therapy, I got my family back. My son's behavior was unruly, which caused many tensions in our family. After our sessions at Atlantis we were able to resume life as a close-knit family."



# Sophie

"Due to my very demanding job, I was at my wits' end. Prolonged stress caused sleepless nights and mental exhaustion. Atlantis provided an effective solution to my difficulties and helped me recover..."

# Alexander's mother

"My son mixed up all the letters and had tremendous problems with language. After he was diagnosed with dyslexia, we came to Atlantis by chance. The filtered maternal voice quickly helped Alexander to make marked progress in spelling. Eventually, Alexander started to love reading and writing! The dyslexia label no longer applies to him."



# Olga's parents

"Our daughter was born with autism, which caused developmental delay. Reading, regulating her emotions, speech and eye contact, were her biggest stumbling blocks. At the Atlantis center, she experienced a true transformation. Eventually, she even started speaking her first words."







# A day at

# 07.30

In the morning, you can have breakfast in our cozy cafeteria. Enjoy tasty sandwiches with delicious toppings, hot coffee, or a glass of fruit juice or milk. You will be ready to face the day.

### 08.30

Walk in through our reception desk and sign in. You will then start with a psychological listening test, followed by a meeting with the therapist, who will go over the therapy plan with you and will guide you through your first session of Brain Stimulation.

### 10.00

The day is divided into 3 blocks of one hour and a half each. Group 1 starts at 8:30 a.m. and group 2 at 10 a.m. For best results, the intensive length of each listening session is 90 minutes of listening, followed by a 90-minute break.

### 11.30

During break time, we recommend to get as much physical exercise as possible. Children will have a great time in our outdoor and indoor playgrounds with ball pit pool. Adults can enjoy the many parks and rich cultural heritage offered by our city of Sint-Truiden.

# 13.00

It's time for your second listening block. You'll immerse yourself in the method as you rest or do creative crafts, painting, drawing, puzzles, or play a board game. We don't recommend activities such as reading, maths, writing, eating and drinking or speaking while listening.

# Atlantis

# 14.30

The breaks are just as important as the actual therapy. The brain and nervous system need to unwind.

Try to avoid using smartphones, laptops and watching TV as much as possible.



This is the last listening block. You can enjoy the many (free) complementary therapies throughout the day: Giger MD, therapeutic mechanical horse, Ball-A-Vis X, C-EYE, Skywalker, reading, and writing exercises, letter board, number board ....

# 17.30

Your listening sessions have ended. That's it for today. It is important that you stay away from low frequencies as much as possible. So, avoid getting in a car, or a train for at least an hour, so that the method can do its work properly.

# 19.00

You can prepare dinner in your apartment. If you are in a hotel room, you may choose to eat in town or heat up a meal in your room. The institute is located in the city center, you have easy access to its many restaurants and bistros.

# 22.00

We also offer night therapy for children who won't wear the headset during the day or who need additional therapy.

This is trulu unique and makes the therapy

This is truly unique and makes the therapy accessible to all children.











# Haspengouw

Sint-Truiden lies in the middle of the fruit region, known for its fertile soils and its delicious apples, pears, cherries, and strawberries. In April the trees are in full blossom, attracting many tourists to the area. You can enjoy biking and hiking.

# Always a party

There is always something to do in our city. Festivities follow one another at a fast pace and you never get bored at the Grote Mark (the Great Market Square) and in the surrounding streets and squares. Restaurants and shops are well known to our customers. The city also pays special attention to the youngest, with activities specially designed for them.

# Monuments and churches

The townhall with its bell tower and carillon, and the numerous churches and historic buildings, are worth a visit. Sint-Truiden is a city steeped in history with an eventful past and a vibrant future.



# 

At home at Atlantis

Children feel at home in our underwater world, where they can play and indulge in manual activities.

For those who need more peace and privacy, we have separate listening rooms in our magical forest, where they can have therapy with their parents.



For adults, too, we provide an oasis of calm, where they can serenely experience the method.



# Atlantis has various pleasant listening spaces

# There's something for everyone!

On the ground floor (younger) children can listen together with mom or dad in "The Beach" themed therapy room.

For children who need to be in a separate room, we have individual listening rooms. These are located in "The Magical Forest" themed area.

You can listen in the hedgehog's room, the rabbit's, the ladybug's, the mushroom's, the squirrel's, or the deer's room.

In some rooms, two children can listen at the same time.



However, none of these rooms can be pre-booked. Our therapists allocate them based on availability.















Adults will feel at ease in the historic part of the center.

Relaxing on the veranda overlooking the garden promises optimal therapy results. They can sleep, do creative craft, or choose from one of the many puzzles.



The children center is located in the building's basement. In these two rooms, they can immerse themselves in the underwater world. Older children play together, do hand crafts, puzzles, paint, or even sleep. Parents are not needed here, because the therapists kindly look after the children.

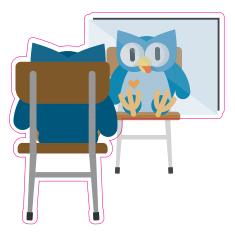
Our mascot Amadeus walks with you through the magic forest, scurries across the beach and shows you the way to the underwater world.

The rooms dedicated to the active phase of the therapy are located on the second basement level. This is where we practice voice exercises. Reading aloud, repeating words and sentences, and singing at the microphone give a huge boost to development. Upstairs, we have created new connections in the brain during the passive listening phase. At the same time, we have strengthened the already existing nerve connections in the brain. The active phase ensures that these new connections are trained! This is how our brain learns to apply the newly acquired skills to everyday life.











# Who is the therapy for?

Auditory Brain Stimulation has a positive effect on a wide range of conditions. When we start using filtered music and/or mother voice, we find that we achieve optimal results with various target groups. This method can benefit many people. The possibilities are almost limitless. At the beginning, we examine the potential and the expectations with the client, without losing sight of reality.



# TARGET GROUP 1



# **TARGET GROUP 2**



# TARGET GROUP 3

### Children

- developmental delay: linguistic, motor, psychological
- premature birth
- school and learning difficulties: reading and spelling, dyslexia, dyscalculia, concentration, language and speech
- unusual behavioural patterns: emotional withdrawal, anxiety, lack of self-awareness, restlessness, hyperactivity (ADHD), attention deficit syndrome (ADD), aggressiveness, low tolerance to frustration, lack of motivation, high sensitivity
- vestibular disorders: balance, coordination, body image, gross and fine motor skills, posture
- integration difficulties: after adoption, divorce, trauma
- diverse syndromes: Down's syndrome, West's syndrome, Prader-Willi, Angelmann, ...
- brain injuries as a result of a difficult birth, accident, fall, ...
- foreign language integration
- autism spectrum and Asperger's

# **Adults**

- auditory perception and communication
- psychosomatic problems
- sleep disorders and/or stress
- back problems
- balance disorders: e.g., Meniere's disease
- exhaustion / burn-out
- rehabilitation: after sudden (temporary) hearing loss, tinnitus, after a stroke, after an accident
- weak memory
- sensitivity to noise
- high sensitivity
- concentration and attention
- voice, and vocal improvement: e.g., intonation and expression
- lack of self-confidence
- eating disorders (anorexia, bulimia)
- depression
- pulmonary (COVID)
- neurodegenerative diseases
- autism and Asperger's
- cancer after treatment
- learning a new language

# The elderly

- revitalization
- optimization and stabilization of residual hearing
- improving balance
- working on memory (dementia) and executive mental processes
- working on long-term symptoms after a COVID infection (long COVID)





Professor Tomatis asked Jozef Vervoort to carry on his life's work. The Mozart Brain Lab Institute was founded with the aim of guaranteeing the quality of the method through scientific studies, training, equipment, research and development.

The training courses ensure the strict adherence to quality standards. The electronic equipment garanties the excellence of the method. In 2002 the sister institute of Atlantis was opened in the presence of Lena Tomatis. Its core tasks are to provide therapy, research, training, and sales of the specialized devices, as well as organizing and overseing the international MBL network.

# Therapy

The Mozart Brain Lab building is located across from Sint-Truiden's train station and a 15-minute walk from Atlantis, the mother institute. Here, we apply exactly the same

method and daily schedules are arranged in the same way. It is quieter than Atlantis and the focus is slightly more on the treatment of adults.

# Research

Scientific studies published under the auspices of MBL can be found on our website. We want to show that the effects of the therapy do not appear randomly. Thanks to cooperation with doctors (Dr. Zastrow, ENT specialist) and universities (Frankfurt Oder, Bielefeld, Beijing) we build bridges between the medical world and our specific Auditory Brain Stimulation. To this end, several school projects are carried out in order to quantify the effects of the therapy on children's academic results.

# Training

MBL offers training courses for therapists abroad to properly prepare them to practice the method. In the pursuit of the highest quality that Professor Tomatis requested, it is crucial that centers work with the best equipment. In addition to the basic training course, MBL offers biannual advanced training modules for continuing education.

# Network

Thanks to our international network, we keep the Tomatis family united and offer both technical and professional support to the therapists. Every two years, MBL organizes an international conference, making Sint-Truiden the mecca of Auditory Brain Stimulation for a weekend.

# Additional therapies at Atlantis





# **GIGER MD**

Children listen while exercising on this "inverted bicycle". The prefrontal lobe, motor (reflex) arc, and cerebellum get an enormous boost from this workout. As a result, (fine) motor skills, coordination, structures of time, space, rhythm and order (mathematics) improve.

# Mechanical Horse

Improves posture and increases muscle tone. Balance improves significantly and back pain can be greatly reduced. The mechanical horse is used in combination with auditory brain stimulation for optimal results.

# Bal-A-Vis X

Here, we simultaneously train balance and auditory and visual systems. These exercises also enhancehand-eye coordination and concentration.

# Skywalker

This device trains motor memory for standing up and walking.

# C-EYE

Stimulates the brain through exercises that use the visual system. You solve various tasks with just your eyes. The system can also be used as a communication tool for people with speech impediment.









# Individual exercises

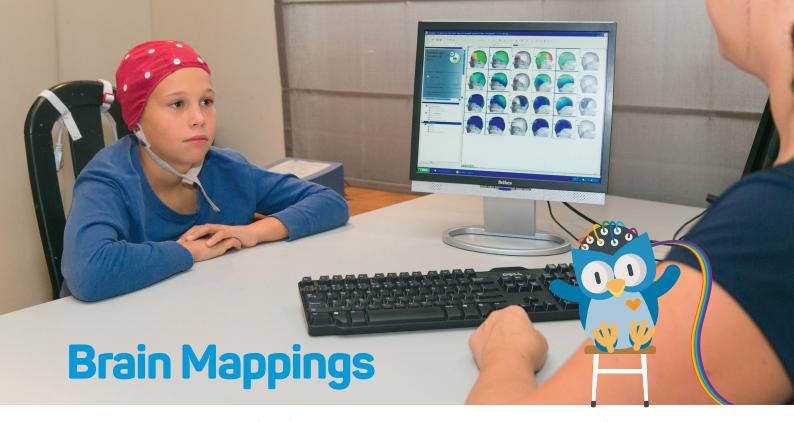
The center offers various types of individual tutoring. We use the alphabet board to improve reading and writing, thanks to a thorough analysis and synthesis of sound. The number board helps with arithmetic tasks and number recognition. With oral-motor exercises we work on pronunciation and control of the muscles in and around the mouth. Occupational therapy exercises promote handwriting motor skills.

# Accompanying program for parents

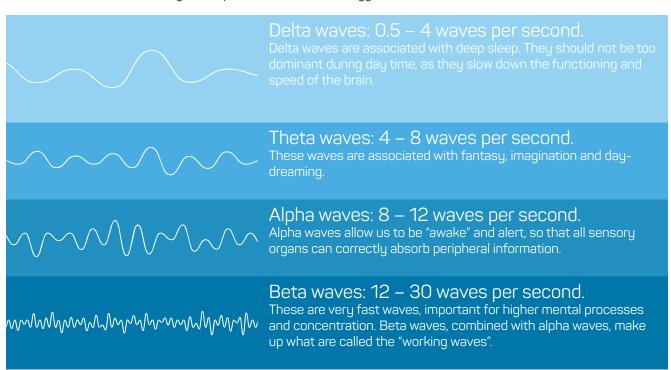
Mom or dad may experience the effects of the Auditory Brain Stimulation themselves. The free accompanying program helps reduce stress and provides a mental boost.







We have been doing brain research (QEEG) at Atlantis and MBL since 1997. Also called Brain Mapping (a 3D cartography of the brain), this method of investigation is part of functional neurology.



A diagram obtained from a QEEG shows the levels of functioning of the brain, with distinct colors indicating good functioning and less efficient functioning, compared with that of a normally-functionning person of the same age (statistics). The difference between the two is shown in color. Information is obtained for the different areas of the brain.

This way, the therapist immediately knows which areas are weaker and need to be stimulated, and can establish a precise objective therapy plan. A new brain mapping is done six months later in order to analyze the progression. Thanks to this innovative research, MBL is able to publish scientific studies verifying the effectiveness of the method.

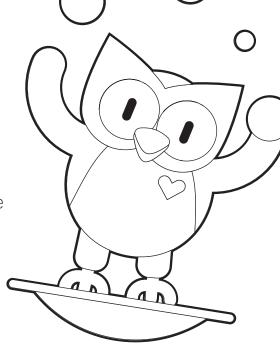


Amadeus Fun Corner

Amadeus has lost his headphones! Will you help him look for them?



Can you give Amadeus a nice colour?



Amadeus is taking a trip on his plane. Can you spot the 5 differences?



How many times did you see Amadeus in this brochure?



# Did you kow?

The method is also used in many schools across Belgium, Germany and

Every day, students get a one-hour session of Auditory Brain Stimulation. This helps them with concentration, mathematics, reading and writing. It also increases their well-being.

One school in Dolgelin, Germany has even changed its name to "The Jozef Vervoort Grundschule" (the Jozef Vervoort Elementary School) to honor and thank Jozef for his commitment to child development!



# Atlantis in numbers



since 1983









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Visit our websites and discover our options for treatment and accommodation.









