



BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Patras	11 March 12	10.30 am	Conference and Culture Center of the University of Patras

TITLE: A School Day for the Brain. “ BRAIN PATH FINDER”

PROGRAM

1	Title of the talk / Presentation	« Our heart in our mind »
	Speaker / Presenter	Protypo Experimental Lyceum of the University of Patras
2	Title of the talk / Presentation	« What do our eyes see !»
	Speaker / Presenter	Protypo Experimental High School of the University of Patras
3	Title of the talk / Presentation	“Brain and Stress”
	Speaker / Presenter	High School of Kastritsi
4	Title of the talk / Presentation	“ Memory-Knowledge”
	Speaker / Presenter	9 th High School of Patras
5	Title of the talk / Presentation	«Brain Chefs »
	Speaker / Presenter	High School of Agios Vasilios
6	Title of the talk / Presentation	“ Mind Games ”
	Speaker / Presenter	Jubior, High School of Vrachneika
7	Title of the talk / Presentation	«Relationship between Sleep and learning/memory»
	Speaker / Presenter	3 rd High School of Nafpactos
8	Title of the talk / Presentation	«Relationship between Sleep and wellness»

ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
HELLENIC SOCIETY FOR NEUROSCIENCE

T.Θ. 13254, Πανεπιστήμιο Πατρών, 26504 Πάτρα,
P.O. Box 13254, University of Patras, 26 504 Patra
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	Speaker / Presenter	High School of Antirrio
9	Title of the talk / Presentation	« Brain waltz »
	Speaker / Presenter	2nd Primary School of Patras (Stroubio)
10	Title of the talk / Presentation	«Stroke..... Musical Shorting »
	Speaker / Presenter	Protypo Experimental Primary School of the University of Patras

Organizers:
Hellenic Society for Neurosciences
University of Patras
Protypo Experimental Lyceum of the University of Patras, Potypo Experimental High School of the University of Patras
High School of Vrachneika, 9 th High School of Patras, High School of Kastritsi, High School of Saint Vasilios ,
3 rd High School of Nafpaktos, High School of Antirrio
2 nd Primary School of Patras (Stroubio), Protypo Experimental Primary School of the University of Patras.

Responsible members of the Hellenic Society for Neurosciences	E-mails	Telephones
Marigoula Margarity	margar@upatras.gr	2610997430
Spiros Efthimiopoulos	Efthis@biol. uoa.gr	2107274890





Summary of the presentation

The activity included oral presentations, mini theatrical/ musical performances by students on various subjects concerning the human brain. The specified themes has been chosen by students from a list of various subjects, suggested by their teachers in collaboration with Dr. Marigoula Margarity and Dr. Spyros Efthimiopoulos

The students had the opportunity to visit the laboratory of Human and Animal Physiology of the University of Patras, during February or March. This visit was organized by Dr. M. Margarity and the post graduate student Alexandros Kokkosis and graduate students Antonina Kouli and Antigoni Katsikoudi. The visit included a “power point” presentation on the basics of how our brain works, observation of brain sections at the microscope, animal handling (mice) and an exhibition of the elevated plus maze and thigmotaxis test (behavioural test). Dr. Margarity still accepts students at the Laboratory of Human and Animal Physiology, Dept. Biology, in the context of the activity “the schools go University” (26 March - 6 April) introducing the topic “Brain, the most known unknown”

The current event was marked by the attendance of Assistant Rector Professor Pantelis Kyprianos and previous Vice Rectors, Associate Professor Anna Rousou and Professor Vassilis Anastasopoulos, Maier’s representatives, representatives of the 1st and 2nd Grade Education, many School Directors, teachers, parents etc.

This activity was co-organized by the Hellenic Society of Neuroscience and the University of Patras and was included in the activities of the University of Patras “The Schools go to the University”.

The postgraduate students of the Department of Biology C. Vasilopoulou, A. Telonis and A. Kokkosis participated in the event.

The aforementioned event was supported by the associations of the parents.

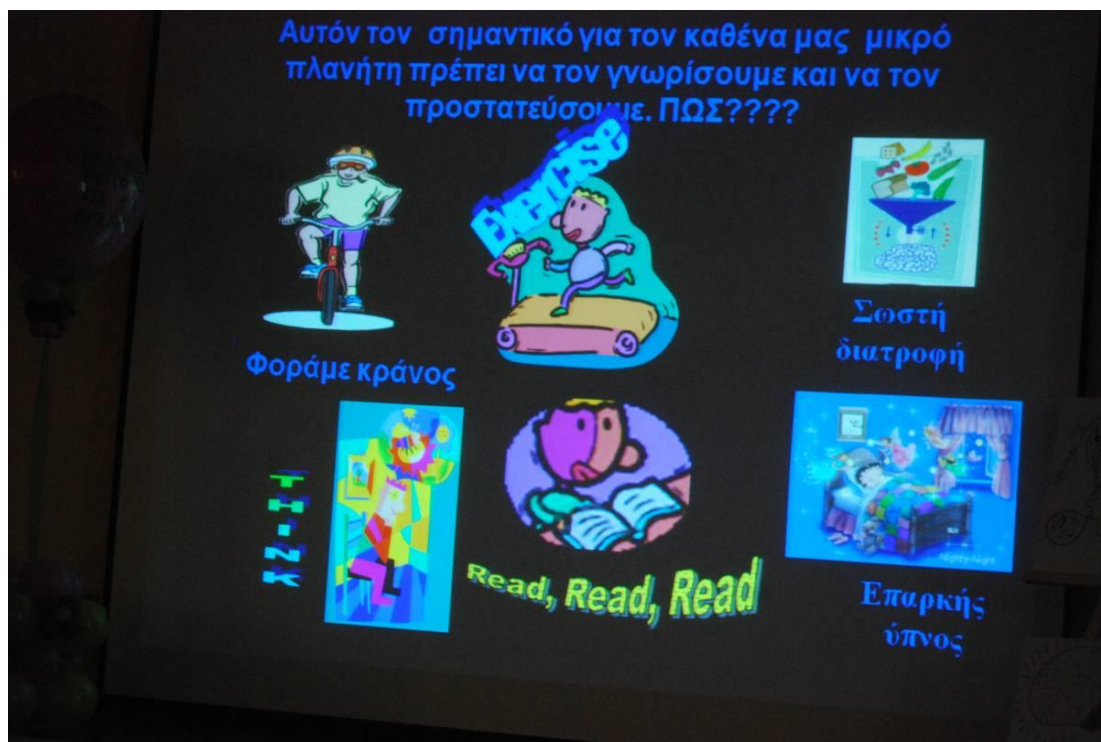
Sponsors: University of Patras, Hellenic Society for Neurosciences and Spiros Mylwnas.

The event was recorded by the Patras local channel, **LYXNOS** and view at regular intervals. Also, has been referred to the local daily press many times before and after its accomplishment and several photos have been published.

*On March 8, 2013, Dr. Marigoula Margarity had a **Radio interview** at the channel, **ERA Patras**. Dr. Margarity elaborated in the school workshop, that followed two days later, entitled “**. BRAIN PATH FINDER**” and stressed out the importance of knowledge transmission on the CNS functions in both the broad public and students.*

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Analytical description of the activity

Protypo Experimental Lyceum of the University of Patras

‘Our heart in our mind’

The team* of the cultural program** of Protypo Experimental Lyceum of University of Patras*** titled ‘Sound and music as an element of biological systems and as a means of representing them’ took part in the event by presenting their work titled ‘Our heart in our mind’. In their work they described**** the unbreakable bond between brain and emotion and highlighted the importance of emotional intelligence in our everyday life. In addition they creatively expressed themselves in an artistic way by constructing a video clip. They used images of common people’s faces in various emotional states and situations and combined them with music they originally conceptualized and performed in a manner that represents both negative and positive emotions. Moreover, they described the function of the neurons themselves in an abstract way using music and images too.

Coordinator: Arlapanos Georgios, Biology teacher

Director : Dimitrellos Vasileios

Students: Alexiou Areti – Maria, Vozaiti Niki, Delivorias Michalis, Zaggos Christos, Zaharopoulos Kostas, Kannavou Theoni, Lipka Alexandros, Stamatopoulou Theoni, Psomathianos Georgios, Aggelopoulou Eirini.

**The rest of our cultural program’s content (in greek) can be viewed at

<http://artspplp.blogspot.gr/>

***Our school’s website is at <http://lyk-aei-patras.ach.sch.gr/autosch/joomla15/>

****The students’ presentation (in greek) can be viewed at

<http://prezi.com/7bmsjbfsyxs/presentation/>





Protypo Experimental High School of the University of Patras

«What do our eyes see !»

The students presented an experiment, which is part of our cultural program "What do our eyes see!" and is performed with a poormann's eye – tracker which examines the colour and linguistic preferences of the participants (mostly students 12-14 years). To achieve our purposes we wander in the colour paths, into the human brain looking through our eye's gate to our beautiful world! We started with the



famous STROOP TEST, which shows that our brain, when one knows to read, reads the words faster than recognizing colors. We united the Biology of the Human Brain to Physics and Language and we presented our journey...

SUPERVISORS: AIKATERINI PLAKOUDA, Language, VOUTSINA LAMBRINI, Physics teacher, SALOUSTROU ELENH, Biology teacher

Director : Mesalas Nikolaos

PARTICIPATING STUDENTS:

- ☐ AGGELOPOULOS ARISTEIDIS
- ☐ DHMHTROPOULOU IOANNA
- ☐ ZAPANTES DIONYSIOS
- ☐ KAPOLOS DIMITRIOS
- ☐ KONSTANTINIDIS LEONIDAS
- ☐ LYKOTHANASI KLELIA
- ☐ MAGIAKI ANNA
- ☐ MPOUTRIS NIKIFOROS
- ☐ SOURIS NIKOLAOS
- ☐ SPYROPOULOU MAIRA





Kastritsiou Junior High School

"Brain and stress"

Initially, two students read some general information concerning our topic. Then, students presented from their own experience how stress affects and determines individual's behaviour at different age stages.

From the first experiential activity we realised how maternal stress hormones affect the child's behaviour, causing stress and hyperactivity.

During the second activity, we analyzed on an adult's stressful behaviour while trying to handle the modern lifestyle, daily stress of work and the struggle for survival.

At the third activity we focused on the gaps that occur in the memory and the adult's behaviour when the deterioration of the brain starts taking place.

For all occasions our "doctor" offers useful information for proper nutrition, techniques for handling daily anxiety, and ways to slow down the inevitable decline of the brain.

Responsible teachers: Lakoumenta Spyridoula (Biologist) Dimitrouka Theodora (musician) and Chalkiopoulou Antigone (Physical Education)

Director : Sarmonika Marianthis



EXPERIENTIAL ACTIVITY

1. HYPERACTIVE STUDENT

Persons: Mother, Lefterakis, Katerinoula

Nurse Elpiniki: There are many patients today...

Patient: I'm sorry Elpiniki nurse, has doctor, Mr. Neurodiavivastopoulos arrived?

Nurse Elpiniki: Of course! Who is next, please?

Mother: I am... I am...

Nurse Elpiniki: Come inside please! Mr. Neurodiavivastopoulos, Mrs Neuronidou, with her son (As Lefterakis enters the room his is bothering Katerinoula)

Mr. Neurodiavivastopoulos: Come in! How are you Mrs Neuronidou? You Lefterakis how are you? (Lefterakis is standing up on the chair! Going up and down...)

Lefterakis: Me... I am fine, fine...

Mother: Doctor...

Mr. Neurodiavivastopoulos: I see..., I see...

(Lefterakis is pulling her sisters hair and she is crying!!!)

Mother: Please stop it my dear for a minute so I can talk to the doctor!!!

Mr. Neurodiavivastopoulos: Let's not take too long because we only have **10 min!!!** As I can see from your child medical history, you had a difficult pregnancy, with a lot of stress, fights with your mother-in-law and problems at work. This contributed a lot to the way your little Lefterakis behaves today. According to **Mr. Miler** the professor of neurophysiology at the University of Munich, the exposure to the hormones of stress that the mother has, has as a result the stressful and hyperkinetic behaviour of the children. How is he doing in school... in home is everything ok?

Mother: There has been a slight improvement at school, according to the teachers, but at home he's like... a tornado!!! You can see it for yourself, he is always running around!!!

Mr. Neurodiavivastopoulos: Yes, yes Mrs. Neuronidou, I understand... You should insist on the things that we emphasized last time with patience and persistence!!! **NOT** a lot of time on the computer, television **ONLY** on the weekends, **A LOT** of practice with the basketball team and now and again he can go to the cinema with his friends!!! **LESS** stress about tests... it's not like he's sitting for the state exams!!!

As for you my dear Mrs. Neuronidou, keep on with the diet that you said. Steamed **broccoli, bananas** for a good mood, **vitamins** for the nerves, **sardines** for $\Omega 3$ and lots of **walnuts**... to boost his IQ.

Lefterakis: All of these before or after the burgers?

Mother: Thank you very much, doctor. I'll arrange our next appointment with the nurse!

2. STRESSED BANK EMPLOYEE

Persons: Mr. Kombiuteridis and his fiancé Maroulia

(Mr. Kombiuteridis is constantly looking at his watch saying: I have no time, I have no time!!!)





Mr. Neurodiavivastopoulos: Nurse the next patient please and quickly because I only have ten minutes

Nurse Elpiniki : Who is next please?

TWO OR THREE PATIENTS STAND UP BUT THE NURSE SAYS:

Nurse Elpiniki: : Mr. Kombiuteridis and your fiancé Maroulia please come in!!!

Mr. Kombiuteridis: Good morning doctor... This won't take long I hope, because I have an important meeting in half an hour and I have no time, no time at all...

(He looks at his watch)

Mr. Neurodiavivastopoulos: Calm down, relax...I am here to put everything in its place!!!

Mr. Kombiuteridis: I can't doctor, I just can't... There's too much pressure at work, with the financial crisis too and all. The fear of getting fired, the banks are merging and I have taken a loan to marry my Maroulia but no such luck...(Maroulia gives him a kiss on the cheek) papers come and go, bounced cheques, I count the money 1.101.101 and 10euro and when I count my money I am short!!! I used to smoke a cigarette with my cup of coffee, but no more!!! How can I calm down? I haven't got the time to calm down, just no time at all...

Mr. Neurodiavivastopoulos: Calm down, relax...There are ways to fix the damage of stress. Have you heard of meditation, the physical exercise, anti-stress techniques? You will begin those every time you feel stress at work. How is your sense of humor? Do you have any hobbies? Take Maroulia and go for a trip and leave at home cell phones and laptops!!!

Mr. Kombiuteridis: I'll try, doctor, I'll try. Oh my God, I'm late, I have no time at all. I'll miss the meeting, and I have to find a place to park my broken down car!!!

Mr. Neurodiavivastopoulos: Didn't we say to stay calm? As professor Miler said at the age of 22 we have the climax of our brain power that keeps for a half a decade!!! From then on the declivity begins. Every day we all face psychological challenges. We all live with stress to do well in school to have a good position on the school team and later in our jobs! When our stress is controlled it's good, if not... it is catastrophic and it prevents us from living well. This is how the decline of our brain begins and it continuous on through our adult life! You are 30 years old and you must take care yourself for your old age. More over our brain has an age of its own. It grows with us!!! Well we will say more at our next appointment, because now I don't have time, I don't have time...(He looks at his watch)

Mr. Kombiuteridis: Doctor, calm down...

Mr. Neurodiavivastopoulos: Yes, yes of course!!!

3. ELDERLY COUPLE

Persons: The couple Gerontomaselaki : Madam Stamatina and Mr. Gianni Stamatina: ... Katina who Gianni? My name is Stamatina... Stamatina. But, if you remembered we wouldn't be here now...

Nurse Elpiniki: Please come inside.

Mr. Neurodiavivastopoulos: Good morning Mr. Gianni

(Mr. Gianni looks left and right)

Mr. Neurodiavivastopoulos: Good morning Mrs Stamatina how are you? Are we feeling better?





Stamatina: Well doctor. I solve 5 crosswords per day. I play two or three card games, I walk from my house to square twice a day. I eat healthy, I drink one to two glasses of red wine daily. Everything you told me to do! Gianni, on the other hand doesn't do anything!!!

Mr. Neurodiavivastopoulos: Why Mr Gianni? Why don't you follow the instructions that I have given you? We said to drink a lot of water, dehydration makes the brain smaller and it affects the memory.

Stamatina: Water? The only thing he drinks is wine and beer and he's got his prostate! He's sitting on the couch like a potato all day long and he doesn't know what he has seen!

Giannis: Stop it Katina!!! Bla-bla all day long... I will divorce you!
(Mrs. Stamatina is pulling her hair in frustration)

Stamatina: Can you see what I have to deal with? He'll open the door one day and he will forget to come back. We'll be on the news and **Silver Alert!** The other day I opened the fridge and guess what I found for God's sake? The pressure meter!!!

Mr. Neurodiavivastopoulos: Mr Gianni didn't we say you should go for walks with your wife, that you should do crossword passwords, to help the brain? Ohhhh...I am going to get mad!

I explained to you that the brain doesn't display wrinkles, but it does need to be looked after. As we said at the age of 65 losses begin. Our memory begins to abandon us. We forget names and sometimes "we put the coffeemaker in the fridge"

At this stage of our life we lose brain cells from our hippocampus (the **part** of the **brain** that is involved in memory forming, organizing, and storing). And the our memories are gone...!!!

No one gets older in the same way Mrs. Gianni! It is better to be cheerful and bright, than to be a forgetfull old man!!!

Giannis: And what should I do? Should I start Knitting like Stamatina?

Stamatina: At least you remembered my name!!!

Mr. Neurodiavivastopoulos: So Mrs Stamatina! Keep on giving him NOOTROP, as you have already been doing. Be careful with his diet, **less fat, more fish, fruits, and vegetables**. Oh!!! And cut down on wine and beer. Just 1 to 2 glasses of red wine, the most. No stress, no tension. Relaxed and calm people stand fewer possibilities to suffer from ania. Maybe, in this way you could make up for your sins that you did when you were young...!!!

Stamatina: Thank you doctor! We will see you again!

(Looking at and gently pushing Mr Gianni)

Come on keep walking old man !!! I have given you the best years of my life!!!

(Mrs Gianni looks around like he is lost and leaves the stage)

Mr. Neurodiavivastopoulos: nurse Elpiniki!!! Have I got any more appointments?

Nurse Elpiniki: No Mr. Nevrodiavivastopoulos! Tomorrow again!!!

Mr. Neurodiavivastopoulos: Oh my!!! I don't have time I don't have time!!!

Nurse Elpiniki: Doctor, Doctor you forgot your crossword puzzles!!!

The dialogues were written by the teachers: Lakoumenta Spyridoula (Biology) Dimitrouka Theodora (music) and Chaliopoulou Antigone (Physical Education)









9th High School of Patras

“Memory - Knowledge ”

Knowledge is the procedure through which we obtain knowledge about the world about us.

Memory is the procedure through which our knowledge about the world obtained through knowledge is coded, restored and later is being recalled.

Important structures in the brain are:

- Hippocampus for the memory
- Cerebellum which is important for learning skills and amygdale for learning emotions.

The memory stages are:

- Sensational
- Short term
- Long term

How efficiently do we learn?

Our efficient knowledge is affected a great rate by our emotional state – we tend to remember events particularly connected to happiness, sadness or hard experiences.

We learn better:

- In a peaceful environment
- When:
 - We get enough sleep



- We are careful
- Eating healthy food
- Through:
 - repetition
 - regular exercises
 - good blood circulation

Also the team produced a pantomime performance where showed how the correct sleep affects our lives. Two students have fallen asleep in the evening, one calm and early time while the other was with the headphones on her ears disturbed by noises. The next morning the first student starts the day quietly, going to school on time and participating fully in the learning process. The second student leaves home running, forgets things and the worst can not track her teacher at the school

Responsible teacher: Maria Skliris

Director : Pouliou Dimitra



High school of Agios Vasilios

« *Brain's chefs* »

The school presented a project entitled “Brain’s Chefs”. The project was presented as a distinguished dietician’s interview by a team of some journalists and some viewers. By asking the right questions and with the use of PowerPoint was made known to everyone the significance of the nutrition (eg. food rich in carbohydrates and vitamins and antioxidants), the importance of sufficient water intake and the physical exertion and intellectual training as well for the good function and health of the brain.



The students who took part in the project:

3rd Class

Kaouris Panagiotis
Kapota Marianna
Kudoniati Katerina
Andriopoulou Anna-Maria

2nd Class

Giannopoulos Alexandros
Kudoniati Ourania
Loukopoulou Aggeliki
Mermela Christina
Stremenou Euaggelia
Teloni Alexandra

1st Class

Bouzouka Panagiota
Papadopoulos Alkinoos
Sotiropoulou Eleni

The teacher in charge: Seggouni Nikolitsa.

Director: Lotsaris Andreas



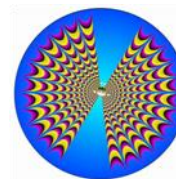




Junior Vrachneika High School

« *Mind Games* »

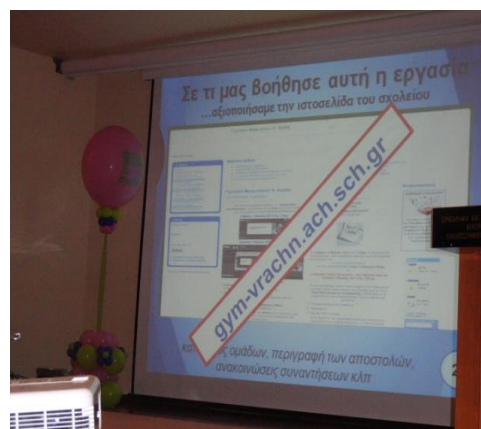
Using color effects, rescheduling images, utilizing light's effect or other environmental variables can lead to a series of impressive visual illusions. Using IT tools and internet a set of well known visual illusions were **collected**, **organized**, **stored** and **analyzed** having in our mind that optical illusions are not only for fun but they can reveal the way our brain functions as well.



Junior, Vrachneika High School
(<http://gym-vrachn.ach.sch.gr>)

Responsible teacher : Cristakoudis Christos

Director : Palaskas Kwnstantinos



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2nd Primary School of Patras (Stroumpeio)

Brain Walts / The Waltz of my Mind



Presentation by **Mr. Koufos**, *Head of Cultural Affairs A / Secondary Education / unloading Achaia*

Mr Kyprianos,
Lady Roussos,

ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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President of the Society of Neuroscience,
Dear colleagues, parents and students

I am delighted to be here today and I warmly congratulate all the contributors of this effort.

I think given the students a great opportunity.

The opportunity to come first in contact with the Neuroscience and the "magical" world of the human mind.

But the opportunity to be the conciliator with expert scientists to visit laboratories, introduced in experimental research .. But to build knowledge and practice in learning. To strengthen their means of expression, confidence and extroversion, to translate scientific knowledge creation, expression and joy.

Importantly, no, I think that opened in front of them, the horizon of science and school interfaced with the scientific community of the University of Patras. The benefits of this educational process will enjoy today.
Thank you

Address by *Mrs. Marketou, Director of Second Elementary School of Patras*

Ladies and Gentlemen,

As the director of the second elementary school Patras (Stroumpeiou) feel the need to thank the Greek Society for Neuroscience, the Department of Biology of the University of Patras and especially Mrs Marigoula Margarity, Assistant Professor of Department of Biology who through action 'schools go university "gave an opportunity to the students of our school for the second consecutive year to participate in this model educational program that waited with great enthusiasm.

Through visits to the University, discussions, screenings. Theatrical performances, our students understand how the brain is perhaps the most important organ of the human body, controlling our every move, thought and feeling. Watched, observed and finally discovered that proper diet, rest and spiritual exercises play an important role in the proper functioning of our brain counteracting the stress of everyday life but so much we hurt.

We know that the function of the brain determines human civilization and our whole life. I think sciences of the brain must be scope for social, philosophical and existential sensitivity!

Our students have learned, discovered, took conclusions, escaping from the confines of the classroom and the use of modern Greek and English. in these "brain scans" are the drivers and fellow teachers Mrs Evi Pesmatzoglou teacher of sixth grade and Mrs. Lena Maloina, teaching English. **Finally**, I congratulate the syndioOrganotes this innovative educational activity that promotes the institution of modern and open school as requested by all involved with education!

Good luck in today's conference.

Lecture on the subject of Mr. **Pesmatzoglou and Maloina**





Faithful and this year in our appointment by week information for the brain. Our students last year following an unprecedented cognitive paths first came into contact with neuroscience and the "magical world" of the human mind and how it works.

This knowledge was extended to Mrs. way you care by giving appropriate physical but spiritual food and keeping him away from excesses and abuses.

Proper nutrition is very important for the brain and contain mainly antioxidant foods, such as the vitamins found in fruits and vegetables.

This year we decided to combine one of my favorite functions of the brain, the dance, with the right diet. Dance means fun, pleasure, euphoria, emotional expression, creation, freedom, life. Proper nutrition from the other strengthens the brain and generally our organization.

Our students expressed through dance and also learned what to eat to strengthen their brain. All this we tied the waltz in our minds!

Enjoy and you along with our young students!

The children come on stage dancing the *Second Waltz* (Waltz No. 2) of *Dmitri Shostakovich* dressed highly nutritious foods such as bread, strawberries, pineapple, pomegranate, banana, etc. During the dance couples recite quatrains about food and exercise the brain.

1)

In my mind waltz dance
The feed and charm,
Fruits and vegetables
Paints and aromatic herbs!

2)

I know that orange brain wants
Vitamins, exercise and honey.
Read and think,
On every day of my delight!

3)

We STRAWBERRY
In the brain do hugs.
Aroma and sweetness give,
With vitamins and valuable to dress up!





4)

All helping the mind.
I do good pineapple.
Give fruit juice give,
I'm perfect food!

5)

I am the beloved,
The famous banana .
All ages with preference
The brain commands me to taste!

6)

Sweet and savory
All measures needed to correct.
I bread
I have a mind and body!

7)

Well they told us the ancients,
Asclepius, Hippocrates and other great:
"A healthy mind in a healthy body"
What more right than she's saying?

8)

Well our said Rene Descartes, the French
4 centuries ago, the great philosopher:
"I think, therefore I am"
That my brain must practice!

9)

Apple I know that I must have healthy
Heart, mind and spirit.
Only thus can
This world belongs to me!

10)

In my mind's Waltz
All swirling
In the melodic rhythm
Food and magnetized brain exercises!

11)

I am blessed pomegranate
With grain, color, aroma filled.





My only or with friends
The brain and body do nicely!

12)

My brain is protected and coach,
Every moment, every minute,
Why I love him too,
I have forever friend buddy!

13)

You must eat healthy foods
Protecting the mind and heart.
Neurons me want glucose and oxygen,
So fruits, fish, olive oil and nuts consume!

14)

Polyunsaturated and monounsaturated fats are the good fats,
I take care to firmly
So when I grow up
Health problems would not have much!

15)

Life needs thought, understanding, patience,
The brain sends a command.
In my mind's Waltz
The love outweighs!

16)

Whatever we feel we owe it to the brain
So you must take care and love him.
All through the swirling waltz melody
Coexist with joy and harmony!

Children renewed appointment to the brain **for next year** by making a surprise in Mrs Margarity, singing along with the teachers as follows:

But not all
I tell you there is not finished
waltz in my mind would crawl
neurons and horizons again.

This action is posted on our school website (<http://2dim-patron.ach.sch.gr/>), in thebest.gr

(http://www.thebest.gr/news/index/viewStory/185203?fb_action_ids=1040632797867)



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[55&fb_action_types=og.likes&fb_source=aggregation&fb_aggregation_id=246965925417366](#))

and published in the *local newspaper "Peloponnese"*.

Responsible teachers:

Lena Maloina

Evi Pesmatzoglou

Director

Mary K. Marketou







Protypo Experimental Primary School of the University of Patras

«Stroke..... Musical Shorting »

The students of **Experimental primary School of the University of Patras** sang five songs (*ROMANCE, KEMAL WHAT I LOOKING FOR, LITTLE MONSTERS, MY REASON*). **The last** song, was composed the last yaer by the school teacher of music.

MY REASON

(Lyrics in Greek and music by **Maria Rentit**, teacher of music at the Model Experimental Primary School of the University of Patras, rendered into English by **Maria Paroussi**, teacher of English at the Model Experimental Primary School of the University of Patras)

Since I was too young, adults kept telling me
how important it was to have a smarty brain
To exercise it I tried hard
and I feel I have already reached the edge.

You can imagine how my story went next
I learnt a lot of things that you can name best
To be fluent in English and (in) French
and use computers efficiently
to be fluent in English and French



and speak the German language quite well.

*Oh, my reason, my reason
with goods and wealth I've nourished you
Oh my reason, my reason
Back off. Let me through!*

To tell you the 'truth' right here
a 'notion' that is not always clear
with all this I have learned through love or threats
I've made an impression one could call intense.

But still there are days we all know well
that something is missing
And I'm afraid that neither English nor French
gives solution whatsoever my (dear) friends
Indeed reason or smarty brains
give no solution in the end.

*Oh, my reason, my reason
Let me through! Back off!
Oh my reason, my reason
come to me, but don't stay for long!*

So time goes by, years, months
and I have failed a solution to provide
'cause here comes my undisciplined heart
while logic demands my yielding, at the same time
This struggle is going to be eternal
I've been brought up with it, I'm telling you
reasoning solutions provokes
but heart feelings and emotions evokes

And if you see me sing
I do confess it, it is the Day of Heart
and if you see me feel free
I take my oath on it, it is the Day of Heart!

Responsible teachers : Rentit Maria , Kripapoulou Antigone.

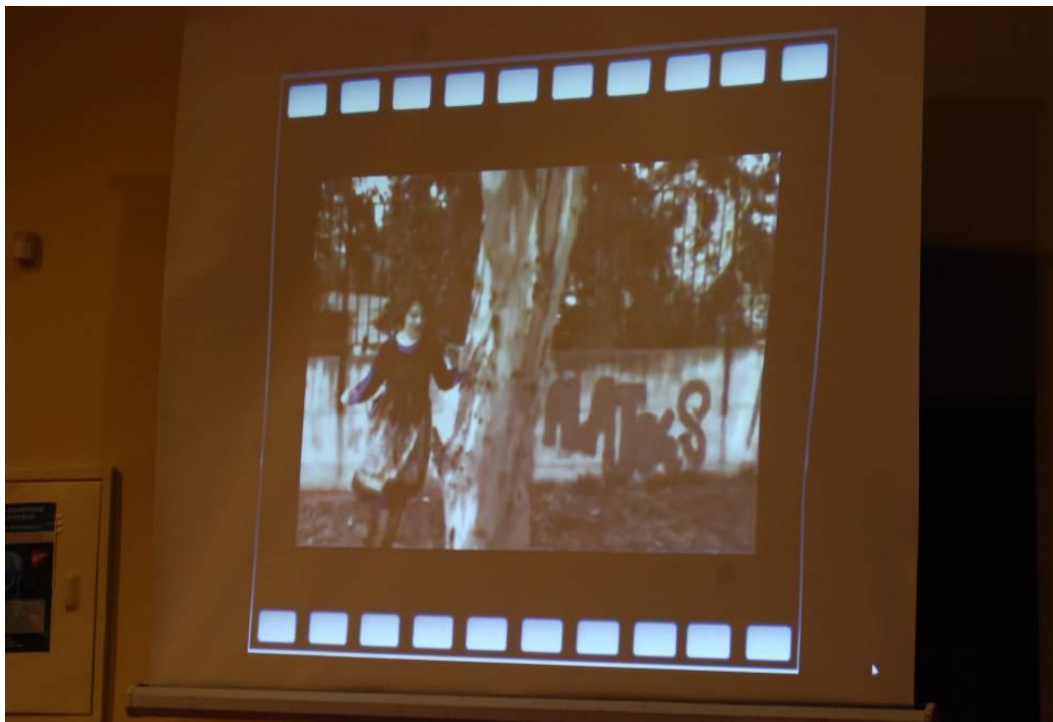
Director: Alexopoulos Charalampos



The students from 3rd High School of Nafpaktos and High School of Antirrion participated also in the event by presented the actions they presented in Nafpaktos relevant event

High School of Antirrion

«Relationship between Sleep and wellness»







3rd High School of Nafpaktos

«Relationship between Sleep and learning/memory»







BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Athens	March 1, 2013	7 pm	Bookstore “Free thinking Zone”

TITLE:

The Plasticity of the brain and its role in learning and memory

PROGRAM

1	Title of the talk/ Presentation	“Every brain can learn”
	Speaker/ Presenter	Efthymios Skoulakis , Researcher A, Neurobiology section at Fleming Research Institute
2	Title of the talk/ Presentation	“Plasticity and Learning at different ages”
	Speaker/ Presenter	Irini Skaliora , Researcher at the Foundation for Biomedical Research of the Academy of Athens
3	Title of the talk/ Presentation	“The linguistic plasticity of the human brain”
	Speaker/ Presenter	Athanasios Protopapas , Associate Professor, Department of Methodology, History and Theory of Sciences at the university of Athens

Organizers:

Hellenic Society for Neurosciences



ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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Panhellenic Society of Bioscientists
People's Magazine

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Summary of the presentation-description of the activity

Fotographs





BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Nea Smyrni	April 3, 2013	11:45	Evangeliki School

TITLE:

Brain, Sleep, Learnig and Memory

PROGRAM

1	Title of the talk/ Presentation	“Brain, Sleep, Learnig and Memory”
	Speaker/ Presenter	Spiros Efthimiopoulos , Associate Professor, Department of Biology at the University of Athens

Organizers:

Hellenic Society for Neurosciences

Experimental Lyceum and Gymnasium of Nea Smyrni

School Advisors Mrs A. Trikaliti & P. Gialouris

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**ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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Summary of the presentation-description of the activity

Fotographs







BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Lavrio	March 21	12 am	Lavrio Lyceum Hall

TITLE: Brain Path Finder

PROGRAM

1	Title of the talk / Presentation	Brain: Our known unknown».
	Speaker / Presenter	Margarity Marigoula Assistant Professor of Human and Animal Physiology, Department of Biology, University of Patras
2	Title of the talk / Presentation	«Training the brain». Interactive presentations
	Speaker / Presenter	Students of Lyceum of Lavrio

Organizers:

Hellenic Society for Neurosciences

University of Patras

Lyceum of Lavrio

Responsible members of the Hellenic Society for Neurosciences	E-mails	Telephones
Marigoula Margarity	margar@upatras.gr	2610997430





Description of the activity

The activity included two power point presentations of the students entitled “The Nervous System” and “Brain Structure and Function”. Besides, students prepared and gave out a leaflet with games, puzzles and advises for brain stimulation. The above work was done with the supervision of the teacher Dr A. Rontoyianni.

Hereupon, Assistant Professor M. Margarity gave the talk “Brain: our known unknown” and the postgraduate student Mrs A-B. Ferlemi presented some techniques for testing brain activity used on laboratory animals.

The activity attended 50 students and 10 teachers of the school.











BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Thessaloniki	February 28, 2013	20:00	Alaca Imaret

TITLE:
Intellectual Portrayals

PROGRAM

1	Title of the talk/ Presentation	Brain as the creator of artworks
	Speaker/ Presenter	Stavros Panagiotakis , Painter and instructor, Thessaloniki, Greece
1	Title of the talk/ Presentation	BAW activities in Greece and worldwide Science and art as brain functions
	Speaker/ Presenter	Anastasia S. Tsingotjidou , Ass. Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece

Organizers:

Hellenic Society for Neurosciences

Municipality of Thessaloniki





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Anastasia S. Tsingotjidou	astsing@vet.auth.gr	2310999941

Summary of the presentation-description of the activity

This event was an art exhibition where 20 artists presented their work (paintings, sculptures, videos etc.) having THE BRAIN (and generally the head) as their theme. Different artists, seeing art from a miscellaneous perspective created artwork in different sizes using diverse methods.

The exhibition took place in the unique environment of Alaca Imaret, dated since 1484, and lasted till the 13th of April, 2013.

The opening ceremony greeted the Vice Mayor of Culture Mrs. Elli Chrysidou, how as an artist herself, pointed out the beauty of creation through various brain functions. At the same mode was the brief talk of the painter Mr. Panagiotakis who curated the exhibition, making special reference to dreaming, even during daytime, which make people move and continue their lives even in difficult situations such the one that we are all going through.

Dr. A. Tsingotjidou made a short presentation of the BAW activities in Greece and worldwide and mentioned the necessity of the collaboration between science and art.



Photographs







BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Thessaloniki	March 1, 2013	09:00	Theatre of Hellenic French School “Kalamari”

TITLE:
Brain Events - Wanderings

PROGRAM

1	Title of the talk/ Presentation	An introduction to BAW activities in Greece and worldwide
	Speaker/ Presenter	Anastasia S. Tsingotjidou , Assistant Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece
2	Title of the talk/ Presentation	Brain. Our unknown yet trusted friend
	Speaker/ Presenter	Marigoula Margarity , Assistant Professor of Human & Animal Physiology, Biology Department, University of Patras
3	Title of the talk/ Presentation	Can the brain be repaired?
	Speaker/ Presenter	Ioanna Dori , Assoc. Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece

Organizers:



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Hellenic Society for Neurosciences
Hellenic-French School of Thessaloniki
Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki

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Summary of the presentation-description of the activity

This event was a one-day in depth presentation of the brain. Two hundred-fifty students attended/ participated at the event; they were from 3 different grades (6th elementary level, 1st and 2nd high school level). After a short introduction from Dr. A. S. Tsingotjidou to the BAW activities worldwide, Dr. Marigouli, from the University of Patras, who has organized 7 consecutive years a BAW event in different Greek cities, presented a talk about brain, its main functions and characteristics. Dr. Dori, at last talked about our ability to repair the brain using new scientific discoveries. Students from the 1st Elementary School of Ag. Pavlos that were hosted at the event by the Hellenic-French School, presented paintings they have created with the help of their teachers.

The students had also the opportunity to view specimens of brain structures (e.g. cerebellar cells, hippocampus etc) using microscopes from the Lab. of Anatomy and Histology, Fac. of Vet. Medicine in Thessaloniki, along with real-fixed brains of different domestic animals (e.g. horse, cattle, pig, dog etc.). The histological specimens were presented by Dr. Ioanna Dori and Dr. Ioannis Grivas, both faculty members of the Lab. of Anatomy and Histology, Fac. of Vet. Medicine in Thessaloniki and E. Parinos and N. Papadopoulos, D.V.M. at the Greek Army doing their residency in histology at the Lab. of Anatomy and Histology, Fac. of Vet. Medicine in Thessaloniki. Formalin-fixed specimens were presented to the students by C. Bekiari, post-graduate student at the Lab. of Anatomy and Histology, Fac. of Vet. Medicine in Thessaloniki.

The event was held in the Hellenic-French School in Thessaloniki, Greece.

Photographs



**ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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ΕΚΕΦΑΛΙΚΕΣ ΠΕΡΙΗΓΗΣΕΙΣ

Εκδήλωση στο πλαίσιο της Εβδομάδας Ενημέρωσης για τον Εγκέφαλο
(Brain Awareness Week)

Ομιλητές
Ιωάννα Δωρή
Μαριγούλα Μαργαρίτη

Παρασκευή 1 Μαρτίου 2013
9.00 π.μ. – 13.15 μ.μ.
Θέατρο της Ελληνογαλλικής Σχολής Καλαμαρί

Γεωργικής Σχολής 44, 55102 Πυλαία Θεσσαλονίκη
Τηλ. 2310 472.115, 2310 472.050, e-mail: info@kalamari.gr

Συνδιοργανωτές
Εργαστήριο Ανατομικής και Ιστολογίας Κτηνιατρικής Σχολής Α.Π.Θ.
Ελληνική Εταιρεία για τις Νευροεπιστήμες
Ελληνογαλλική Σχολή Καλαμαρί

Ελληνική Εταιρεία για τις Νευροεπιστήμες
Hellenic Society for Neurosciences



Καλαμαρί
ΕΛΛΗΝΟΓΑΛΛΙΚΗ ΣΧΟΛΗ





BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Thessaloniki	April 10, 2013	18:00	Theater of Multivariate Use at Town Hall

TITLE:
Approaching Brain

PROGRAM

1	Title of the talk/ Presentation	An introduction to BAW activities in Greece and worldwide
	Speaker/ Presenter	Anastasia S. Tsingotjidou , Assist. Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece
2	Title of the talk/ Presentation	Can we change the brain?: Psychotherapy and brain function
	Speaker/ Presenter	Philip Kouniakis , M.D., Ph.D., Psychiatrist
3	Title of the talk/ Presentation	Can we fix the brain?: The use of stem cells
	Speaker/ Presenter	Anastasia S. Tsingotjidou , Assist. Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece
4	Title of the talk/ Presentation	Cell therapies in neurology, with special reference to multiple sclerosis



ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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	Speaker/ Presenter	Nikolaos Grigoriadis , Assoc. Prof., B' Neurology Clinic of AHEPA Hospital, Univ. of Thessaloniki, Thessaloniki, Greece
5	Title of the talk/ Presentation	Recent advances in Neurosurgery
	Speaker/ Presenter	Nikolaos Foroglou , Assis. Prof., A' Neurosurgery Clinic at AHEPA Hospital, Univ. of Thessaloniki, Thessaloniki, Greece
6	Title of the talk/ Presentation	An experimental approach to therapy of brain malignancies
	Speaker/ Presenter	Dimitrios Giakoumettis , M.D., postgraduate student

Organizers:
Hellenic Society for Neurosciences
Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki
Municipality of Thessaloniki

Responsible members of the Hellenic Society for Neurosciences	E-mails	Telephones
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Anastasia S. Tsingotjidou	astsing@vet.auth.gr	2310999941

Summary of the presentation-description of the activity

This event was a seminar on subjects relevant to brain, its physiological aspects, and its approach during illness as well. The event took place at the theater of Multivariate use at Town



ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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Hall, where any citizen of Thessaloniki could attend it and subsequently get familiar with brain issues.

The seminar started with a brief greeting from the Vice-Mayor of Social Security and Solidarity and a short introduction to BAW activities in Greece and worldwide by A.S. Tsingotjidou. Then, Dr. Kouniakos presented the ability to change brain functions using recent psychotherapy methods. After a general introduction to use of stem cells in an attempt to repair brain damage by Dr. A. Tsingotjidou, Dr. Grigoriadis presented cell therapies for many neurological diseases with special reference to multiple sclerosis. Dr. Foroglou presented the latest discoveries in the field of Neurosurgery and the seminar finished with the presentation of D. Giakoumettis of an experimental study for brain malignancies. Following the presentations there was a discussion between the audience and the speakers.

Photographs







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BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Thessaloniki	March 14, 2013	09:00	Lab. of Anatomy and Histology, Vet School, Univ. of Thessaloniki

TITLE:

Brain Events - Wanderings

PROGRAM

1	Title of the talk/ Presentation	An introduction to BAW activities in Greece and worldwide
	Speaker/ Presenter	Anastasia S. Tsingotjidou , Assistant Professor, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece
2	Title of the talk/ Presentation	Brain. Our unknown yet trusted friend
	Speaker/ Presenter	Ioannis Grivas , Lecturer, Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki, Thessaloniki, Greece

Organizers:

Hellenic Society for Neurosciences

Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki



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Ioannis Grivas	janos@vet.auth.gr	2310999908

Summary of the presentation-description of the activity

This event was a one-day in depth presentation of the brain. Forty students of the 5th elementary level of the 1st Experimental Elementary School of Evosmos, Thessaloniki visited the Lab. of Anatomy and Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki. The students were accompanied by their teachers Ulysses Knavas and Argyris Drougkas. After a short introduction from Dr. A. S. Tsingotjidou to the BAW activities worldwide, Dr. I. Grivas, presented a talk about brain, its main functions and characteristics.

The students had also the opportunity to view histological specimens of brain structures (e.g. cerebellar cells, hippocampus etc) using microscopes at the Microscope Hall of the Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki, with the help of Dr. Grivas, and Dr. Ioanna Dori, Assoc. Prof. at the Lab. of Anat. And Histology, Fac. of Veterinary Medicine, Univ. of Thessaloniki. Students had a hands-on experience with real-fixed brains of different domestic animals (e.g. horse, cattle, pig, dog etc.) with the help of Dr. C. Bekiari, post-graduate student at the Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki and were presented different specimens of brain structures at different levels of the brain by Dr. A. S. Tsingotjidou, Assis. Prof. at the Lab. of Anatomy and Histology, Fac. of Vet. Medicine, Univ. of Thessaloniki.

Photographs





ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΓΙΑ ΤΙΣ ΝΕΥΡΟΕΠΙΣΤΗΜΕΣ
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BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Nafpaktos	March 9, 2013	6:00 pm	Papaharalampeios Hall

TITLE: The importance of stress and sleep for the adolescents

PROGRAM

1	Title of the talk/ Presentation	“The child, the teenager and the importance of sleep and stress in their lives”
	Speaker/ Presenter	George Chrousos: Professor of pediatrics at the Medical School of Athens, University of Athens
2	Title of the talk/ Presentation	“The importance of sleep for learning and memory”
	Speaker/ Presenter	The Pupils of the 3rd High School of the city of Nafpaktos
3	Title of the talk/ Presentation	“The importance of sleep to wellness”
	Speaker/ Presenter	The pupils of the High School of the city of Antirion

Organizers:

Hellenic Society for Neurosciences

Municipality of Nafpaktia





Gymnasium of the city of Antirion
3rd Gymnasium of the city of Nafpaktos

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The activity was sponsored by a grant from **mr Spyros Mylonas**

Summary of the presentation-description of the activity

STRESS AND THE IMMUNE AND INFLAMMATORY REACTION vs. THE WAKEFULNESS AND SLEEP SYSTEMS

GEORGE P. CHROUSOS, First Dept of Pediatrics and UNESCO Chair on Adolescent Health Care, Athens University, Athens, Greece

Sleep is essential for life in mammals and, us humans, spend approximately one third of our lives sleeping. Sleep and wakefulness are linked to the circadian clock and its zeitgebers and function diurnally in succession and mutual opposition of each other. Like other vital systems of the organism, the systems that subserve sleep and wakefulness are both located in the central nervous system (CNS), particularly the hypothalamus and the brainstem. Wakefulness is attained by the Arousal System, ie the Locus Caeruleus (LC) and the reticular formation, which together with the autonomic system and the hypothalamic-pituitary-adrenal (HPA) axis, are also components of the Stress System, that is activated when any stressor exceeds a certain threshold. The need of the organism for sleep is expressed as somnolence (sleepiness, sleep propensity), while the need for tissue rest and recovery from exertion is expressed as fatigue. Somnolence and fatigue are frequently confused with each other, however, they are different feelings subserved by different neural pathways and substrates. Cytokines and adipokines, such as TNF- α and Interleukin (IL)-6, are both somnogenic and fatigogenic, while Stress System mediators, including the key neurotransmitter of the LC and sympathetic system norepinephrine, as well as corticotropin-releasing hormone (CRH) and cortisol, are stimulating wakefulness and arousal. Thus, states associated with hypercytokinemia, such as infections, inflammatory disorders and central obesity, are



frequently associated with excessive daytime sleepiness (EDS) and fatigue, while states associated with Stress System activation, such as situational apprehension, anxiety disorders and melancholic depression, are frequently associated with sleep disturbances, including insomnia, early morning awakening, frequent awakenings, etc. We have shown that lack of sleep in normal individuals is associated with elevated circulating somnogenic cytokines, such as IL-6, while stress is associated with elevated CRH, catecholamines and cortisol, all of which promote wakefulness and disturb sleep. We have also shown that patients with central obesity and insulin resistance, or even lean patients with polycystic ovaries and insulin resistance, suffer from sleep apnea, have increased circulating cytokines/adipokines, and suffer from EDS and fatigue. Thus, sleep apnea and EDS and fatigue appear to be components of the Dysmetabolic Syndrome. In contrast, we have shown that patients with idiopathic insomnia have Stress System hyperactivity with elevated CRH, catecholamine and cortisol production throughout the 24h, with the highest difference from normal controls observed in the evening hours. Interestingly, in the same patients, the plasma levels of inflammatory cytokines are also elevated, especially in the evening. In these patients we have the seemingly paradoxical combination of insomnia with fatigue, apparently because both arousal and somnogenic/fatigogenic mediators are elevated. We conclude that sleep disorders share biological markers with metabolic, inflammatory and stress states.

Fotographs



















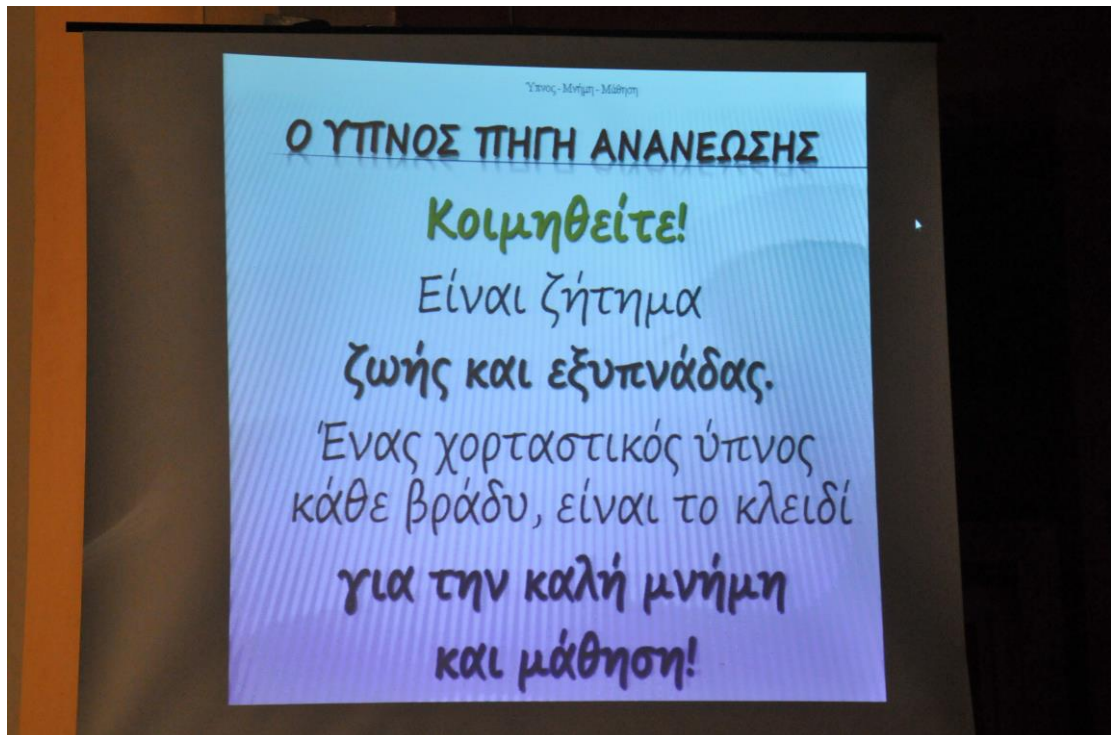














BRAIN AWARENESS ACTIVITY IN NEUROSCIENCES

City	Date	Time	Hall
Rethymno, Crete	13 March 2013	6.30 pm	Xenia Hall, Rethymno

TITLE: THE MENTAL HEALTH TODAY: THE ROLE OF THE BRAIN

PROGRAM

1	Title of the talk/ Presentation	“On the role of the brain in drug addiction”
	Speaker/ Presenter	George Panagis , Associate Professor of Biopsychology in the Department of Psychology of the University of Crete
2	Title of the talk/ Presentation	“What happens in the brain during depression”
	Speaker/ Presenter	Andreas Kastellakis , Associate Professor of Physiological Psychology in the Department of Psychology of the University of Crete
3	Title of the talk/ Presentation	“Schizophrenia: A brain disorder (?)”
	Speaker/ Presenter	Stella Giakoumaki , Assistant Professor of Clinical Neuropsychology in the Department of Psychology of the University of Crete
4	Title of the talk/ Presentation	“ The Brain in time”
	Speaker/ Presenter	Antonios Liodakis , Psychiatrist, Director of the Center of Mental Health of Rethymno



Organizers:
Hellenic Society for Neurosciences
University of Crete
Center of Mental Health of Rethymno

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Summary of the presentation-description of the activity

The event took place on Wednesday 13/03/13 at the Xenia Hall in Rethymno. The aim of the event was to inform the public about the relationship between mental health and the brain, to present newer findings on the prevention and aetiology of complex disorders such as drug addiction, depression and schizophrenia and to answer questions about major social issues that are connected with brain function.

George Panagis referred to the progress made in the recent years on the understanding of the neural substrate of addiction by psychoactive drugs. He highlighted the neuroanatomical and neurochemical background of addictive drugs as well as the changes that take place in the brain of chronic drug users. He also presented the consequences of these changes in the continuation of addictive behaviours and in the frequent relapses observed after drug abuse discontinuation. Special emphasis was given on the fact that nowadays addiction is considered to be a chronic brain disease.

Andreas Kastellakis referred to depression, a complicated and multi-faceted disorder. He presented the sociodemographic, genetic and environmental factors connected with depression. Finally, he highlighted the role of brain neuroanatomical and neurochemical and neuroendocrine processes in depression.

Stella Giakoumaki reviewed schizophrenia-related processes in the brain, its symptomatology, genetic and environmental aetiological factors and the involvement of brain areas and neurotransmitters in the manifestation of the disorder. She emphasised the fact that schizophrenia is a neurodevelopmental disorder, and although its onset is most often associated with puberty, it can affect brain function as early as foetal life.



Antonios Liidakis reviewed how the brain controls and perceives time and referred to the cases where time perception is distorted.

Photographs



George Panagis presenting the relationship between *brain and addiction*.



Andreas Kastellakis presenting the relationship between *brain and depression*.



Stella Giakoumaki presenting the relationships between *brain and schizophrenia*.



Antonios Liodakis presenting *how the brain controls and perceives time.*



View of the audience.