

## TITLES OF THE EVENTS

1. RALLEIO LYCEUM MEETING 2010
2. IN SEARCH OF AN ALGORITHM: MIND, BRAIN, BEHAVIOUR
3. STEM CELLS: FROM BRAIN DEVELOPMENT TO ADULT BEHAVIOR AND THERAPY OF DISEASE
4. ΠΑΓΚΟΣΜΙΑ ΗΜΕΡΑ ΣΠΑΝΙΩΝ ΠΑΘΗΣΕΩΝ: ΑΣΘΕΝΕΙΣ ΚΑΙ ΝΕΥΡΟΕΠΙΣΤΗΜΟΝΕΣ ΣΥΝΟΔΟΙΠΟΡΟΙ ΓΙΑ ΤΗ ΖΩΗ
5. THE PATHOLOGICAL FEATURES OF ALZHEIMER'S DISEASE AND CURRENT THERAPEUTIC APPROACHES
6. BRAIN PERCEPTION AND PAINTING
7. THE EFFECT OF STRESS ON LEARNING AND MEMORY
8. BRAIN: SO BEAUTIFUL AND SO MYSTERIOUS
9. THE TRAPS OF DEPRESSION

## TIME-TABLE AND PROGRAM OF THE BRAIN AWARENESS EVENTS

**February 20, 2010**

**“SOCIETY MEETS MODERN BIOLOGY”  
RALLEIO LYCEUM MEETING 2010**

### PROGRAM

*Title of the talk:* "Stem cells in the brain: their role in stress, learning and psychiatric disorders",

Speaker: **Christina Dalla**, Lecturer in Pharmacology, Medical School of Athens.

*Title of the talk:* "Subjective perception: is it all in the brain?"

Speaker: **Irini Skalióra**, Research Assistant Professor, Biomedical Research Foundation of the Academy of Athens.

**February 25-27, 2010**

### LOOKING FOR THE EQUATION: MIND, BRAIN, BEHAVIOUR

The brain is often compared to a machine, where mental functions are the outcome of computations performed by neuronal networks. How close is his analogy to our

current knowledge and understanding about the brain? Does it help to think of the brain in mechanistic terms? If the brain and the mind are indeed types of machines or computing devices what are the rules of operation?

The symposium began with the movie: "Curious: Mind/Brain/Machine", and was followed by two talks: "Studying the Brain Machine" by Dr Irini Skaliora, and "Studying the Mind Machine", by Dr Thanassis Protopapas: Discussion with the speakers completed the symposium which was co-organized by CAID-Societas, Scientia et Ars and Panteion University, and took place at Panteion University.

**February 27, 2010**

**STEM CELLS: FROM BRAIN DEVELOPMENT TO ADULT BEHAVIOR  
AND THERAPY OF DISEASE** ΕΠΟΓΡΑΜΜΑ:

**PROGRAM**

1. Speaker: Rebecca Matsas, Researcher A, Hellenic Pasteur Institute  
Title of the talk: "Stem cells: The foundations of brain development and the prospects for neurodegenerative disease therapy"
2. Theatrical play by the students of the third gymnasium of the city of Nafpaktos.  
Title: "Ethical issues arising from the use of stem cells/Two thieves from the future"
3. Speaker: Christina Dalla, Lecturer, Medical School, University of Athens  
Title of the talk: "Stem cells in the adult brain: their relation to stress, learning and psychiatric disorders"
4. Cartoon presentation and musical play by the students of the high school of the city of Antirrion. Title: "Louky Look in the country of "never drink"

The event took place at Papaharalampeios Hall in Nafpaktos. It is co-organized by the Hellenic Society for Neurosciences, the municipality of Antirrion, the Municipality of Nafpaktos, the High School of Antirrion (Director Heleni Harakida), and the 3rd High School of Nafpaktos (Director Petros Pitsiakas)

Sponsors: Danna Alliance for Brain, Hellenic Society for Neurosciences and Specifar Pharmaceuticals

**Κυριακή 28 Φεβρουαρίου**

**WORLD DAY OF RARE DISEASES: PATIENTS AND NEUROSCIENTISTS  
FELLOW-TRAVELERS FOR LIFE**

**PROGRAM**

The Pan-Hellenic Society for Rare Diseases, the Hellenic Society for Neurosciences and the Eugenides Foundation organized at the Hall of the Eugenides Foundation on

Sunday February 28<sup>th</sup>, 2010 a special activity entitled: World day for rare diseases: Patients and neuroscientists fellow-travellers for life”

It included lectures by  
Professor Christo Bartsoka “The fight of the family against the rare disease”

Dr Dimitra Magoura “Rare diseases: Targets and research”  
Mr Giannis Xanthoulis, writer “A kid stares at disease”

The activity was under the auspices of his Excellency, the president of the Greek Democracy Karolos Papoulias

**March 2, 2010**

### **BRAIN PERCEPTION AND PAINTING**

Title of the talk: **"Perceiving the world through the brain"**

Speaker: ***Irini Skaliora***, Neurobiologist, Research Assistant Professor, Biomedical Research Foundation of the Academy of Athens

Title of the talk: **"Brain and Painting"**

Speaker: ***Eleni Dimitriou***, Social Anthropologist, Social Politics' Scientist and postgraduate student of “Sociobiology, Neuroscience and Education” Master’s Program at the Faculty of Primary School Education at the National and Kapodistrian University of Athens

The event took place at Drakopoulos Hall in the central building of the University of Athens.

**March 6, 2010**

### **THE EFFECT OF STRESS ON LEARNING AND MEMORY**

**Title of the talk:** «The effect of stress on learning and memory »

**Speaker:** Fotini Stylianopoulou, Professor of Biology, Department of Nursing, University of Athens

This event took place at the House of Oration & Art, in Patras. It was co-organized by the Hellenic Society of Neurosciences, the University of Patras, the Municipality of Patras, the High School of Vrahneika and the 14<sup>th</sup> and 21<sup>st</sup> High Schools of Patras. At the beginning of the event, the students sang songs related to the brain and presented paintings of the brain. The students of the singing chorus of the 14<sup>th</sup> High School of Patras had created T-shirts with various brain arts. The event continued by an oral presentation by Professor of Biology F. Stylianopoulou, Faculty of Nursing, University of Athens. Following the end of the presentation, a vivid discussion with the students of the High Schools and the general public took place.

**February 6-March 14, 2010**

## **BRAIN: SO BEAUTIFUL AND SO MYSTERIOUS**

It included several events coordinated by M Margariti (member of the Hellenic Society for Neurosciences and Assistant Professor in the Department of Biology at the University of Patras. The main event took place at the Cultural and Conference Center of the University of Patras on March 14, 2010.

**February 6, 2010**

### **“Motherhood and the brain”**

Dr. M. Margariti, Assistant Professor of the Department of Biology, University of Patras, visited the 21<sup>o</sup> High-School of Patras where she gave a lecture to the pupils of the 3rd grade regarding structure and function of the brain. The post-graduate student, A. V. Ferlemi performed a demonstration of mice’s behaviour, using the passive avoidance test and the Elevated plus maze test apparatus. Advertising material regarding the School Conference entitled “Brain: So beautiful and so mysterious” of March 14th, 2010 was allocated to the pupils.

The pupils were to join the School Conference presenting aspects of brain function under the title: “Motherhood and the brain”

**February 10, 2010**

### **“The playful brain” -**

Dr. M. Margariti, visited the 14<sup>o</sup> High-School of Patras where she gave a lecture to the school chorus pupils regarding structure and function of the brain. The post-graduate student, C.Vasilopoulou performed a demonstration of mice’s behaviour, using the passive avoidance test and thigmotaxis test. Advertising material regarding the School Conference entitled “Brain: So beautiful and so mysterious” of March 14th, 2010 was allocated to the pupils.

The pupils were to join the School Conference presenting aspects of brain function under the title: “The playful brain”

**March 3, 2010**

### **“@rtbrain: graffiti” Visit of Human and Animal Physiology lab**

The pupils of the 3rd grade of the Vrachneika High-School, accompanied by the Director of the School, Mr Dimitrellos V. and the responsible teacher Mrs Vagena S. visited the Laboratory of Human and Animal Physiology of the Department of Biology at the University of Patras. This was organized by Dr M. Margariti and the post-graduate students Z. Linardakis C. Vasilopoulou and A. V. Ferlemi. The visit has 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 test, thigmotaxis test and force swimming test.

At the end of the visit a light welcome reception for the students occurred at the library of the laboratory.

The pupils were to join the School Conference presenting aspects of brain function under the title: “@rtbrain: graffiti”

**MARCH 14 , 2010**

**BRAIN: SO BEAUTIFUL AND SO MYSTERIOUS**

**PROGRAMM:**

- 11:00** Event Opening: Marigoula Margarity, Assistant Professor, Dept. Biology, University of Patras and member of the Hellenic Society for Neurosciences.
- 11:00-11:30** Welcome Remarks
- Προεδρείο:** Helen Harakida: Gymnasium of the city of Antirrion, Sofia Vagena: Gymnasium of the city of Vrahneika, Dimitrios Bekos: 3rd Gymnasium of the city of Nafpaktos, Angeliki Karali: 14<sup>th</sup> Gymnasium of the city of Patras, Maria Dimitriou: 21<sup>st</sup> Gymnasium of the city of Patras, Ekaterini Plakouda: Experimental Gymnasium of the University of Patras and member of the Hellenic Society for Neurosciences, Konstantinos Tsahrelis: 2nd General Lyceum of the city of Egio
- 11:30-11:50** “In the paths of the Brain” 2nd General Lyceum of the city of Egio (Director: Konstantinos Tsahrelis. Responsible teacher: Konstantinos Tsahrelis.
- 11:50-12:10** “Lucky Luk in the city of “pote pote” (never drinck)” Gymnasium of the city of Antirrion (Director: Helen Harakida) Responsible teachers: H. Harakida, I. Platanioti, A. Harakida and N. Holevas.
- 12:10-12:30** Break
- 12:30-12:50** “Musician Brains: When the Just Cause met Sofoklis” Experimental Gymnasium of the University of Patras » (Director: E. Stergiopoulou) Responsible teachers: E. Plakouda and P. Hatziantoniou.
- 12:50-13:10** “@rtbrain: graffiti” Gymnasium of the city of Vrahneika (Director: V. Dimitrellos) Responsible teachers: S. Vagena
- 13:10-13:30** “Ethical issues arising from the use of stem cells/Two thieves from the future” 3rd Gymnasiu of the city of Nafpaktos (Director: P. Pitsiakas) Responsible teachers: D. Bekos, K. Karakostas and A. Dalla.
- 13:30-13:50** “Motherhood and the brain” 21<sup>st</sup> Gymnasium of the city of Patras (Director: G. Avgeris) Responsible teachers: M. Dimitriou & I. Bardi.

**13:50-14:10** “The playful brain” 14<sup>th</sup> Gymnasium of the city of Patras (Director: G. Botsakis) Responsible teachers: A. Karali and V. Megalou. Participation of the student K. Amtzopoulos of the 10<sup>th</sup> Lyceum of the city of Patras.

**End of the event.** S. Efthimiopoulos (Secretary of the Hellenic Society for Neuroscience) and M. Margariti.

## **RECEPTION**

Commemorative photographs and distribution of commemorative materials.

This activity was co-organized by the Hellenic Society of Neuroscience and the University of Patras. It was held at the Conference and Culture Center of the University of Patras on the 14th of March, with the participation of seven schools: (1) the High School of Antirrion, directed by H. Charakida (investigating “the effect of alcohol on the CNS”); (2) the 3rd High School of Nafpactos, directed by P. Pitsiakas (“Ethical issues in the use of stem cells in medical research”); (3) the High School of Vrahneika directed by V. Dimitrellos (“@rtbrain: Graffiti”); (4) the 21st High School of Patras, directed by G. Augeris (“Mother care and brain”); (5) the 14th High School of Patras directed by G. Botsakis (“Our brain”), (6) the Experimental Gymnasium of the University of Patras » directed by E. Stergiopoulou (“Musician Brains”) and (7) the 2nd General Lyceum of Aigio (“Brain pathways”).

This event was included in the activities of the University of Patras “The Schools go to the University”. It was supported by the associations of the parents, the Patras catering and the company “Lux-Marlafekas”. In the organization participated the postgraduate students of the Department of Biology D. Avgoustatos, C. Vasilopoulou, Z. Linardaki and Dr. M. Papandreou.

Sponsors: University of Patras, Danna Aliance For Brain, Hellenic Society for Neurosciences και Specifar Pharmaceuticals

The event took place at the conference and cultural center of the University of Patras.

### **« In the paths of the Brain»**

The director ( Tsachrelis K.) of the 2nd General Lyceum of the city of Egio gave an oral presentation on brain optical illusions. The dance group of of the 3rd grade of the school danced for the audience.

### **« Musician Brains: When the Just Cause met Sofoklis»**

The music group of the Experimental High School of the University of Patras set music to the lyrics a text: “Hymn to man” from the play “Antigoni” written by

Sofoklis. Created a song aiming to explain how do the human beings managed to tame the wild nature, to construct buildings, just by using their brains...only one thing the human brain hasn't managed to tame...death! They played this "song" as well as other song of theirs.

From the Experimental High School of the University of Patras participated:

**Teachers:**

School Director: Stergiopoulou E.

Responsible teachers: Plakouda Aik. and Chatziantoniou P.

**Pupils that contributed :**

Demartinos Nikos (vocals),

Zaxaropoulos Konstantinos (guitar),

Karatzias Antonis (drums),

Liakopoulos George (bass),

Lotsaris Konstantinos (vocals),

Xatzis Lampros (guitar)

« @rtbrain: graffiti »

This video clip will be uploaded to the webpage of the Hellenic Society for Neurosciences so that many more people see it and to give ideas for similar activities to other schools or organizations

The students of the 3rd grade of the school of Vrachneika painted a wall of the interior of the school. The work is in GRAFFITI STYLE and the standard subject is the word **ARTBRAIN**. This artwork is made up of pictures from the Brain –Bow mice experiment which had a great impact on the students. The Graffiti was presented on a video clip which consists of photographs that depict the evolving procedure leading up to the final stages of the project's creation. The musical theme accompanying the video presentation is the Rapunzel's Novak. It narrates two vital human senses that of sight and hearing and explains how images and sounds are transformed into paintings, colour and shades.

From the Vrachneika high School participated:

**Teachers:**

School Director: Dimitrellos Vasilis.

Responsible teacher: Vagenia Sofia.

**Pupils that contributed :** All the pupils of the 3rd grade of the school

«The playful brain»

The school chorus of the 14<sup>th</sup> High School of Patras, sang songs related to the brain, while the student, named Konstantinos Amtzopoulos, of the 10<sup>th</sup> Lyceum of Patras, sang a Rap song, that he composed, about the functions of the brain. In addition, the

“dancing team” of the 14<sup>th</sup> High School of Patras, performed a dance related to the brain function.

From the 14<sup>th</sup> high School of Patras participated:

**Teachers:**

School Director: George Botsakis

Responsible teachers: A. Karali and V. Megalou.

**Pupils that contributed :**

**Chorus**

Antonopoulou Eleftheria
Ventafrinta Mikela
Giahali Nikolia
Marinou Antonia
Panagiotopoulou Christina
Intze Stauroula
Kamperi Paraskevi
Plota Evagelia
Tsilipani Despina
Anesiadou Spiridoula
Zisi Kiriaki
Michalopoulou Olimpia
Roumelioti Martha
Simeonidi Kiriaki
Tsilipani Evangelia
Anesiadou Anastasia
Domenikou Konstantina
Zisi Kiriakoula
Lampiri Nikolitsa

and K. Amtzopoulos of the 10<sup>th</sup> Lyceum of the city of Patras.

**Dancing team**

Roumelioti Martha
Zisi Kiriaki
Milona Ioanna
Zervou Ioanna

**«Motherhood and the brain»**

The students of the 21<sup>st</sup> High School of Patras, performed a power-point presentation on the basic structure and function of the brain, and on learning and memory with the use of passive avoidance test and elevated plus maze. They also described the effects of maternal care during the first trimester of rat life on brain development.

From the 21<sup>st</sup> high School of Patras participated:



**Teachers:**

School Director: G. Avgeris

Responsible teachers: M. Dimitriou & I. Bardi.

**Pupils that contributed :**

Zotou Danae

Kalogianni Helen

Karagianni Katerina

Karapiperi Angeliki

Kapnisis Dimitris

Magiaki Christina

Manousopoulou Marianna

Barbaritsa Maria

Nikolakopoulou Danae

Papadopoulos Leonidas

Papakonstantopoulos John

Spiliopoulos Konstantinos

Tsokanas Nick

Tsomakou Lina

Filippopoulos Alexis

Xrysikopoulou Antonia

**«Ethical issues arising from the use of stem cells/Two thieves from the future»**

This theatrical play will be uploaded to the webpage of the Hellenic Society for Neurosciences so that many more people see it and to give ideas for similar activities to other schools or organizations

From the 3rd high School of Nafpaktos participated:

Teachers:

School Director: Petros Pitsiakas

Play writer: Kostas Karakostas

Biology Teacher: Dimitrios Bekos

Pupil-Actors:

Thief A: Kostas Alexopoulos

Thief B: Thanos Athanasopoulos

Stem Cell B1: Daria Vlahopoulou

Stem Cell B2: Anthi Apostolopoulou

Stem Cell B3: Zoi Driva

Teached by: Ada Dalla

**Pupils that contributed :**

Angeliki Alexopoulou	Nikoleta Zaverda
Spyridoula Driva	Heleni Kalpakiori
Eleftheria Zisimopoulou	Dimitrios Kapetzonis
Alexandra Theofani	Dimitra Katsaba

Athanasios Thomopoulos	Evalbia Klitsika
Vasiliki Karambouli	Ioannis Kouskoulis
Panagiota Katsinopouloou	Elena Mara
Stamatia Mitsiou	Anastasia Melista
Konstantina Ntotsika	Labrini Ntetsika
Angeliki Papapoliti	Christos Ntetsikas
Georgia kapetzoni	Andreas Petrou
Denis Spiri	Spyridoula Pexou
Loulieta Hazizi	Ioanna Prapa
Kassiani Agelopoulou	Konstantina Stergiou
Athanasios Athanasopoulos	Konstantina Tsopana
Konstantinos Alexopoulos	Elpiniki Tsouma
Evanthia Georgakopoulou	Fotios Tsotas
Efthimios Glavas	Florian Hazizis
Konstantina Dimitropoulou	Christos Dimitropoulos
Zoi Driva	Fotini Georgakopoulou
<b>Responsible Teachers:</b> Dimitrios Bekos, Kostas Karakostas	

**« Lucky Luk in the city of “pote pote” (never drink) »**

This cartoon presentation will be uploaded to the webpage of the Hellenic Society for Neurosciences so that many more people see it and to give ideas for similar activities to other schools or organizations

From the high School of Antirrhion participated:

Teachers:

School Director: Heleni Harakida

I. Platanioti, A. Harakida, N Holevas

Pupils:

Andriani Papadimitriou

Konstantinos Karadimas

Christos Kalavrouziotis

Giannis Konstantopoulos

Petros Dakos

Christos Papadopoulos

Pavlos Raftopoulos

Ioannis Anastasopoulos

Apostolis Raftopoulos

Theodoros Padelidis

Vasilis Kremmydas

Ioannis Anastasopoulos

Dimitra Konstantinou

Music

Harmonium - Reed: Kalliopi Mantelou

Percussion instruments: Theodoros Padelidis

Songs

Angeliki Kaloudioti

Dimitra Kvnstantinou

Katerina kondyli

Katerina Anastasopoulou

Efi Mylona

Andriani Papadimitriou

**March 17, 2010**

**THE PATHOLOGICAL FEATURES OF ALZHEIMER'S DISEASE AND  
CURRENT THERAPEUTIC APPROACHES**

“Musician Brains: When the Just cause met Sofoklis” Music group of the  
Experimental Gymnasium of the University of Patras (Director: E. Stergiopoulou)  
Responsible teachers: E. Plakouda and P. Hatziantoniou.

Title of the talk: **“The pathological features of the brain of Alzheimer’s disease  
patients”**

Speaker: **Spiros Efthimiopoulos**, Associate Professor, Department of Biology  
University of Athens

Title of the talk: **“Current therapeutic approaches for Alzheimer’s disease”**

Speaker: **Paraskevi Sakka**, Neurologist-Psychiatrist, President of the Athens  
Alzheimer’s Association.

Title of the talk: **“Caregivers burden”**

Speaker: **Eleni Margioti**, Psychologist, Athens Alzheimer’s Association.

Discussion moderator will be professor Emeritus of Physiology at the Medical School  
of the University of Patras Dr Elias Kouvelas

The event took place at the Hall of Eugenides Foundation. It was co-organized by the  
Hellenic Society for Neurosciences and Eugenides Foundation.

**22 March 2010**

**THE TRAPS OF DEPRESSION**

**Title of the talk: “The traps of Depression”**

Speaker: **Dr Alexandra Pentaraki**, PhD, CPsychol, Dr of Psychology & Psychiatry, University of London, Honorary Visiting Research Fellow of The Institute of Psychiatry, King’s College London; Clinical and Research Fellow of the Psychiatric Department of Hippocraton General Hospital of Thessaloniki.

The activity took place on March 22, 2010 at 19:00 am at the Bookstore IANOS, Aristotelous 7, Thessaloniki.

Depression is one of the most frequent mental disorders. According to the World Health Organization depression is ranked as the fourth serious disabling illness in the Western world. In a few years depression will be ranked as the 2<sup>nd</sup> most disabling condition. According to epidemiological data, 20-25% of women and 7-12% of men will experience clinical depression at some point during their life time. In Greece, about 25% of men and 33% of women suffer from mild to serious depression. During Brain Awareness week (15-21 March 2010) Dr Alexandra Pentaraki PhD, CPsychol (University of London, King’s College London) (Honorary Visiting Research Fellow of The Institute of Psychiatry, King’s College London; Clinical and Research Fellow of The Psychiatric Department of Hippocraton General Hospital, Thessaloniki) organized and gave a talk on “The Traps of Depression”. The talk took place at IANOS bookstore (Aristotelous 7, Thessaloniki) on the 22<sup>nd</sup> of March 2010 at 19:00 am. The aim of the talk was to inform the general public about depression, its symptoms and causes as well as the ways of preventing and managing this disabling condition. The talk was under the auspices of The Hellenic Society of Neurosciences and DANA Foundation.