





# DANA foundation – FENS funded European Brain Awareness Projects

### Final Report 2015









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#### 1. Introduction

The Dana Foundation is offering financial support of up to 1,000 EUR to those who organise a brain awareness event during this period in March. The Dana Foundation has asked FENS to administer this support reserved for European organisations contributing to the Brain Awareness Week (BAW).

In 2015, the directors of The Dana Foundation once more approved a grant to FENS.

#### 2. Selection procedure

FENS distributed the Dana grants in a competitive procedure. A call for applications was launched and the best projects were selected by a committee composed of members of Dana, EDAB and FENS:

Malgosia Kossut (EDAB)

Kathleen Roina (Dana)

Pierre Magistretti (EDAB)

Colin Blakemore (EDAB)

Andreas Draguhn (FENS)

Juan Lerma (FENS)

#### 3. Selected projects

48 applications from 23 different European countries were submitted, 29 projects in 18 different European countries were selected and could be supported by the Dana Foundation Grants.

The following BAW projects (listed in alphabetical order by last name) were selected for funding:

- 1. Cavadas, Claudia (CNC.IBILI | CNC-Center for Neuroscience and Cell Biology & IBILI Institute for Biomedical Imaging and Life Sciences (CNC.IBILI), University of Coimbra, Coimbra, Portugal) The Brains Go Around the Town
- 2. Deli, Maria (Biological Research Centre, Hungarian Academy of Sciences, Szeged, **Hungary**) *The Secrets of Our Brain*
- 3. Dierssen, Mara (Center for genomic Regulation, Barcelona, **Spain**) *BAW 2015: 10 Years of Exciting Neuroscience*
- 4. Dose, Inken (Humboldt-Universität zu Berlin, Berlin, Germany) Brain Awareness Week Berlin
- 5. Echevarria, Diego (Instituto de Neurociencias. Universidad Miguel Hernandez de Elche, Sant Joan d'Alacant, **Spain**) Basic Research Model for Understanding Brain Function
- 6. Galvez-Pol, Alejandro (City University London, London, United Kingdom) Heroes of Neurons
- 7. Gasparyan, Arsen (Young Biologists Association NGO, Yerevan, **Armenia**) *Neurological diseases* around us; public campaign







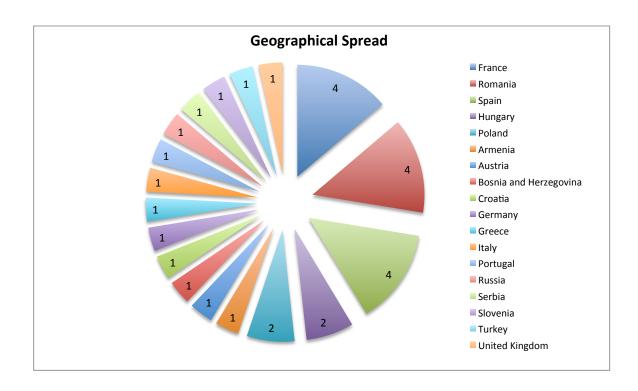
- 8. Gurzu, Cristian (National College Nicolae Balcescu, Braila, Romania) Fast Brains
- 9. Jeremić, Milica (Serbian Neuroscience Society, Belgrade, Serbia) A-Maze-ing Brain
- 10. Klimaschewski, Lars (Medical University Innsbruck, Innsbruck, Austria) The functioning of the brain
- 11. Kljajevic, Vanja (Univeristy of the Basque Country, Vitoria , Spain) Healthy brain across the lifespan
- 12. Kristan, Lea (SiNAPSA, Slovensko društvo za nevroznanost, Ljubljana, **Slovenia**) *Brain Awareness* Week 2015: Behind the scenes of sight
- 13. Kukić, Ismir (Faculty of Medicine, University of Tuzla, Tuzla, **Bosnia and Herzegovina**) *Brain and individuality*
- 14. Kurnaz, Isil (Gebze Technical University, Kocaeli, **Turkey**) MyBrain Brain Awareness Week 2015
  Activity for Nursery School and Elementary School students in Greater Istanbul Area
- 15. Labak, Irena (Department of Biology, J.J. Strossmayer University of Osijek, Osijek, Croatia) Connect to communicate communicate to connect
- 16. Madarász, Emilia (Inst.of Experimental Medicine of Hungarian Academy of Sciences, Budapest, **Hungary**) *The Brain Awareness Day in Budapest*
- 17. Menini, Anna (SISSA, Trieste, Italy) Trieste Brain Awareness Week 2015
- 18. Miu, Andrei (Babes-Bolyai University, Cluj-Napoca, Romania) Emotions: From Genes to Brain
- 19. Mogoașe, Cristina (Babeș-Bolyai University , Cluj-Napoca, **Romania**) *Mind your Brain! (second edition)*
- 20. Panagis, George (University of Crete, Rethymno, **Greece**) Brain awareness week activites of the Hellenic Society for Neurosciences
- 21. Podina, Ioana (University of Bucharest, Bucharest, Romania) My Curious Brain
- 22. Pyza, Elzbieta (Jagiellonian University, Krakow, **Poland**) *Brian Awareness Week 2015 in Krakow New achievements in brain research*
- 23. Radwanska, Kasia (Nencki Institute of Experimental Biology, Warsaw, **Poland**) *Brain Week 2015, Important questions for the XXI century*
- 24. Rovere, Carole (Institute of Molecular and Cellular Pharmacology (IPMC), Valbonne, France) Brain and Memory
- 25. Saiz, Daniel (Universidad Castilla-La Mancha (Medicine School), Ciudad Real, **Spain**) *Brain awareness week of Ciudad Real*
- 26. Salesse, Roland (INRA, Jouy-en-Josas, **France**) Representation of the play "L'Encens et le Goudron" ("incense and tar") + debates
- 27. Sukhotina, Irina (St.-Petersburg First State Medical University, St.-Petersburg, **Russia**) 2nd St.-Petersburg Brain Awareness Week "Brain Begins"







- 28. Thibert, Chantal (Institut Albert Bonniot INSERM U823, La Tronche Cedex, France) Electric brain...are you connected? (FR:Cerveau électrique... ça vous branche?)
- 29. Tillet, Yves (Intitut National de la Recherche Agronomique, Nouzilly, **France**) *Brain Awareness*Week 2015: Events in Tours



FENS warmly congratulates the grant winners!







#### 4. Reports of the selected projects

#### 1. The Brains Go Around the Town - Portugal

Dates and Duration: 14-26 March 2015

#### **Contact:**

Claudia Cavadas (CNC.IBILI | CNC-Center for Neuroscience and Cell Biology & IBILI - Institute for Biomedical Imaging and Life Sciences (CNC.IBILI), University of Coimbra)

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- a) "Brain Buskers" weekend (for families) Hands-on activities at the biggest shopping center of the Portugal center region: painting brain models; microscopic observations; construction of a neuron model, photos at a "scientific photoboot"; and electrophoresis. Number of persons reached: around 250.
- b) "Science for all" (for disabled students and elderly people) Lectures at the Portuguese Association of Parents and Friends of the Disabled Citizen, and in two "Senior Universities"; Nr of persons reached: 40
- c) "Neuroquiz" (for quiz players & occasional publics) We organized a public quiz that challenge the participants to explore brain-related issues through appealing themes like art and pop culture. Number of persons reached: 30
- d) "Neuroscientists go to Schools"; (for elementary, middle and high school students) 20 neuroscientists visited 8 schools and 2 science centers and gave lectures on brain related subjects. Number of persons reached: 690
- e) "Open Laboratories" (for students and elderly people): CNC's research groups organized visits to their laboratories. Number of persons reached: 70

Overall 48 researchers were involved, 1000 estimated audiences reached, where 755 were students.











#### 2. The Secrets of Our Brain - Hungary

Dates and Duration: 19 March 2015

#### **Contact:**

Maria Deli (Biological Research Centre, Hungarian Academy of Sciences)

Temesvári krt. 62., H-6726 Szeged, Hungary

Email: deli.maria@brc.mta.hu

The BAW event was held on 19 March 2015 in the Biological Research Centre. The program was announced on posters, leaflets and websites. More than 250 students arrived from secondary schools. The BAW playhouse was visited by 25 children and their parents. Two lectures were given by experts on the protection of the central nervous system in diseases and how fruit fly can be used as a model organism of brain research. A quiz was held connected to the presentations, and six students were awarded for the correct answers. An art competition 'How do you imagine brain research?' was announced for schools in Szeged. Submitted art pieces (35 in total) were installed in the hall of the centre and six winners were prized in two categories with gift parcels. RadioActive, a local rock band performed a concert, which was followed by the lab demonstrations. Cell cultures, cell viability experiments, atomic force, fluorescent, and laser dissection microscopy, and fruit fly research were shown.











#### 3. BAW 2015: Learn of Exciting Neuroscience - Spain

Dates and Duration: 16-22 March 2015

#### **Contact:**

Mara Dierssen (Center for genomic Regulation)

Dr Aiguader, 08003 Barcelona, Spain

Email: mara.dierssen@crg.es

#### a) Activities for General Public

Series of debates NEUROSCIENCIE AND... (in collaboration with the Academia Europaea and the Institut d'Estudis Catalans)

The Centre for Genomic Regulation (CRG) in Barcelona and the Spanish Society for Neuroscience organized a series of three debates "Neuroscience and ..."

"Ethics of discoveries in neuroscience"

Speaker: José Ramón Amor, Universidad de A Coruña

Place: Institut d'Estudis Catalans, sala Pere i Joan Coromines. C/ Carme 47, 08001 Barcelona

Date: 20/03/2015 from 7 pm to 9 pm

Advances in knowledge about the basic operation of the brain are guiding the development of increasingly sophisticated therapeutic tools to cure or at least relieve the symptoms of neurological and psychiatric disorders. However, these developments are not without risks and there are ethical dilemmas involved to which society must respond.

The Human Brain Project: highlights and lowlights of megaprojects

Speaker: Javier de Felipe, CSIC-UPM

Place: Institut d'Estudis Catalans, sala Pere i Joan Coromines. C/ Carme 47, 08001 Barcelona

Date: 20/03/2015 from 7 pm to 9 pm

Last year the European Union agreed to invest more than 1 billion euros in the Human Brain Project (HBP). The HBP will consist of 10 years of sustained work involving dozens of research institutions with







the aim of obtaining detailed simulations of the human brain from a biological standpoint. To achieve this, the project hopes to have the most powerful supercomputers that will be developed over the next decade. However, some scientists have questioned the project because it emphasizes on performing mapping-scale brain simulations using a "supercomputer", leaving aside the traditional research laboratory on a small scale.

#### "DESCONCERT"

Speakers: Mara Dierssen, Luis de Rojas and Roberto Román Music: From Lost To The River

Place: Club Cronopios, c/ Ferlandina 16, 08001 Barcelona

Date: 21/03/2015 from 9 pm to 11 pm

Fusion between music and neuroscience. Discover where creativity lies and what music does in your brain: How can we make music with brainwaves? How do we process sound information in our brain?

And how can this information affect our emotions?

#### SCIENCE BITES

Speakers: Mara Dierssen, Jordi Sala i Júlia Albaigès

Music: From Lost To The River

Place: Mutuo Centre d'Art, c/ Julià Portet 5, 08002 Barcelona

Date: 28/03/2015 at 8 pm

In the context of the Action festival, discover what music does to your brain and how you can make

music with brainwaves.

#### b) Activities For Schools

This program of activities for students from 8 to 18 years. This year we have expanded the range of activities (30 different activities and up to 44 sessions) by researchers who have joined. Have increased, especially activities for upper primary education (10-12 years). It has been a success, with a long waiting list. Neuroscientists-at-School! offers lectures at schools in which scientists from different scientific research centres in Barcelona visit schools to explain what is known of the effects of stress and hyperactivity in the brain, advances in the treatment of neurological disease, the influence of music and visual perceptions in learning ... Kids-in-the-Lab! offers workshops and visits to research centres in the hands of researchers to learn how to work in research centres and experiments in their laboratories.









#### 4. Brain Awareness Week Berlin - Germany

Dates and Duration: 16-20 March 2015

**Contact:** 

**Inken Dose** (Humboldt-Universität zu Berlin) Unter den Linden 6, 10099 Berlin, Germany

Email: mb-cooperation@hu-berlin.de

We offered a one-week program for different target groups. The week started on Monday morning with a three hour program for high school pupils at the Humboldt Graduate School: a talk on perception and perceptional illusions followed by seven different workshops to choose from, e.g. on pain, emotion and stress or the senses (120 participants). In the evening, a discussion on brain and diet with three experts was offered (40 participants).

On Tuesday morning, five doctoral candidates visited the Berlin Metropolitan School to talk about their research to the pupils (50 pupils). In the evening we showed the movie "Small World" dealing with dementia at the Urania, followed by a discussion on Alzheimer's (40 visitors).

On Thursday morning we offered the four-hour workshop "Computing Neurons" for high school pupils with a focused education in math at the Bernstein Centre for Computational Neuroscience Berlin. This was offered for a very small group since the pupils learned about modeling neurons and neural networks on computers (10 participants).

For younger children we organized a workshop "Autism – a special way of thinking" in the "gelbe Villa", a day care activity centre for kids aged from 4-12. In this three-hour workshop the kids aged from 6-11 years learned about autism and could do brain puzzles about illusions in a playful environment (25 participants).

In the evening, Veronika Engert gave a talk on stress and stress reactivity in a social context (65 guests). The talk at the Pop Science café unfortunately had to be postponed due to illness.

The symposium "Mind, Brain, Body", a one-day event on Friday, had international young neuroscientists as a target group. It was the only English-speaking event during this week (70 participants).

Our program was announced on TV at the university restaurants and in the Berlin underground TV system "Berliner Fenster" with more than 30 spots/day (and more than one million guests per day). Our online media partner, "dasgehirn.info", announced the program on their website, Facebook and Twitter. All other partner organizations promoted the BAW events on their own websites, the www.baw-berlin.de website and on Facebook. The programs for high school pupils were announced by writing







directly to biology and math high school teachers in Berlin. Special BAW flyers were printed and distributed through universities, public libraries, cafés and cinemas.

We are very grateful that the participation of our master's and doctoral students as well as our faculty members made this program possible.

We would like to thank FENS for their generous support. Without the FENS BAW grant we would not have been able to put up the program and advertise it with spots and flyers.





#### 5. Basic Research Model for Understanding Brain Function - Spain

Dates and Duration: 23-27 March 2015

#### **Contact:**

Diego Echevarria (Instituto de Neurociencias. Universidad Miguel Hernandez de Elche)

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Email: diegoaza@umh.es

This BAW edition at the Institute of Neuroscience in Alicante accounted with about 1000 visitors from Alicante and nearby provinces (300 more than last year edition).

The age of the visitors rage from 5-6 years old kids to retire

This BAW edition consisted in talks and exhibitions experimental models used in brain research

During BAW, visitors entered in our installations from 10:00 to 18:00.

First they received a set of talks and seminars about our institute structure, human brain function and importance of Basic Research in Spain for the increase in knowledge and the development of Health.







Thereafter they entered in a big hall prepare as big Lab Room with benches on which they interact with researches that explain different model systems such as living fruit flies, fish, chicken embryos, mice and human brains through different types of lab devises. We also add benches about the histological procedure to process those model brains for identification of neural population in the microscope, Molecular biology bench and sensory illusion and perception bench. More over qe had also a visit of a Magic man (a researcher who explained some of the tricks for understanding how brain can be cheated.

The target is to give the visitor a very clear idea of the importance of Basic Research in Neuroscience in Spain through these bench exhibitions and through several talks and seminars that will run throughout the BAW.



#### 6. Heroes of Neurons - United Kingdom

Dates and Duration: 16-20 March 2015

#### **Contact:**

Alejandro Galvez-Pol (City University London)

10, Northampton Square, EC1V OHB London, United Kingdom

Email: Alejandro.Galvez-Pol.1@city.ac.uk

a) Rawing neurons, writing brains, painting minds: 16th







Emmanuel Pothos gave the inaugural speech to the BAW'15. Beatriz Calvo-Merino presented the main talk on Neuroaesthetics, which was followed by 2 neuroart exhibitions (shown during the whole BAW): "The Eyes of the Skin: The neuronal Underpinnings of the Bodily self" by Alejandro Galvez-Pol and "Drawing neurons. Writing brains. Painting minds" by Albert Barque-Duran.

#### b) Speed-science: 18th

The public participated in an unprecedented and engaging Q&A session with 4 heroes: Eduardo Alonso on artificial intelligence, Peter Ayton on decision-making, Carolyn McGettigan on language and communication, and Elliot Freeman on perception.

#### c) Heroes of Neurons: 20th

Semir Zeki and Stefano Sandrone shared with us the critical figures of the history of neuroscience. From ancient times to the modern Nobel prizes. A journey that has been fulfilled with misfortunes, enlightenments and breakthrough discoveries that have defined the way we understand ourselves.

View the whole program here



#### 7. "Neurological diseases around us" public campaign - Armenia

Dates and Duration: 16-22 March 2015

#### **Contact:**

**Arsen Gasparyan** (Young Biologists Association NGO) 45 apt., 40 Charents str., 0025 Yerevan, Armenia

Email: info@yba.am

On March 16-22, "Young Biologists Association" NGO, in collaboration with the Yerevan State University Student Scientific Society, organized "Neurological diseases around us" public campaign in the frame of "Brain Awareness Week 2015". The "Neurological diseases around us" public campaign was aimed to raise public awareness about neurodegenerative (e.g. Alzheimer's disease, Parkinson's disease etc.)







diseases. The stand-up banners were exhibited on March 16-22, 2015 in the central building of Yerevan State University. Each banner presented one public figure or celebrity, who has been touched with neurodegenerative disease (e.g. Alzheimer disease, Parkinson disease etc.) and the necessary information about disease. The educational materials and posters were distributed among the students. The quiz-contests on neurological disorders were organized via Young Biologists Association's Facebook page and the seven winners received the prizes (books etc.) and certificate of participation. On 18-20 of March, the movie screenings, discussions and presentations in YBA office was organized. Topics of presentations were Parkinson's, Amyotrophic lateral sclerosis and Alzheimer's diseases. The "Neurological diseases around us" public campaign will be continued during next weeks in other universities of Armenia. The next university will be the European Regional Educational Academy of Armenia. The stand-up exhibition will be presented and seminars as well as movie screenings will be organized.

#### Video report

https://www.youtube.com/watch?v=USZP5EgAZzs&feature=youtu.be



#### 8. Fast Brains - Romania

Dates and Duration: 16-21 March 2015

#### **Contact:**

**Cristian Gurzu** (National College Nicolae Balcescu) Alexandru I. Cuza 182, 810045 Braila, Romania

Email: cristian.gurzu@yahoo.com

On 16<sup>th</sup> march was organized the poster exhibition Brain Facts with translated posters from Brain Facts.org web site. Posters were placed on a panel dedicated to BAW event and presented by students about:

Human DNA enlarge mouse brain







- How different drugs change young brain
- Why cocaine addicts keep making bad decisions
- Your brain on games
- Many brain disorders affect the same
- A brain-computer interface that works wirelessly
- Marijuana and the young brain

On 17<sup>th</sup> march, was organized Neuroset competition – a live neuroscience competition for 7<sup>th</sup> grade students about anatomy and physiology of human brain, sense and brain disease.

On 18<sup>th</sup> march, was organized BAW neuromodels. Students presented functional models made by themselves about neural pathways in brain and spinal cord: the limbic system, lemniscal pathway, dopaminergic pathway, serotoninergic pathway, cholinergic pathway, reward and punishment system

On 19<sup>th</sup> march was organized the lecture Brain in the news with short presentations made by students about latest researches and discoveries in neuroscience, published in *Brain in the news* journal from Dana Foundation.

On 20<sup>th</sup> march was organized the symposium How faster is brain processing? The students presented their own studies about visual speed processing in empathy capacity and how using smartphone could improve the motor skills.

On 21<sup>th</sup> march was organized Romanian Brain Bee competition where the winners of local Brain Bee competition attended the live neuroscience competition for 9<sup>th</sup> to 12<sup>th</sup> grade students. The winner is Andra Stefan and she will attend the International Brain Bee 2015, held in Cairns, Australia.









#### 9. A-Maze-ing Brain - Serbia

Dates and Duration: 16-22 March 2015

**Contact:** 

**Milica Jeremić** (Serbian Neuroscience Society) Bulevar Despota Stefana 142, 11000 Belgrade, Serbia

Email: milica.jeremic@neuronauke.com

With a tendency to enrich and enhance interactive program with every year, in 2015 BAW audience will be able to: cook and taste a food for brain, participate in the discussion forums, peek into the history and future of neuroscience, visit the exhibition which combines arts and sciences, learn more about the impact of learning a foreign language has on brain, find a way out of maze and solve the big puzzle called brain!

Target audience of BAW Serbia consists of people of different ages, always curious to learn something new, and program has been systematically created and divided into units of the age of visitors.

**Interactive exhibition "History meets Future"**, loc. Gallery of Science and Technology SANU: Exhibition of posters, models, lectures and interactive following program – brain sections under microscope, computer games, educational videos etc. Educational posters are on the topic of great neuroscientists. The idea of this exhibition is to present the work of these scientists through the story of their lives. The visitor of the exhibition will then also be introduced to current projects in neuroscience and perspective for the future.

**Workshops for children** (age 8-11 and 11-15), loc. Children Cultural Center "Majdan": Through the interactive program of the workshop, with drawing and coloring neurons and brain, looking through a microscope and making their own little projects, "young scientists" acquire basic knowledge about brain, how does it look, what's it made of and how it works. The workshops are held by University Students of Biology and Medicine.

Visits to laboratories for students: Open lab days are meant to show current research in neuroscience in Serbia to general public and perhaps make neuroscience more attractive to young researchers. Labs participating are: The Centre for Laser Microscopy, Faculty of Biology; Neuroscience Lab at the Institute for Biological Research "Siniša Stanković"; Center for epilepsy and sleep disorders, Institute of Neurology, School of Medicine, University of Belgrade; Laboratory for human molecular genetics, Institute of Molecular Genetics and Engineering, University of Belgrade.

**Debates** (age 18+), loc. Centre for Promotion of Science: Concept of these debates is to provide valid information and develop critical thinking on current hot topics in the science of brain and brain disease







and disorders. Participants are Neurologists, Professors of Faculty of Biology and Medicine, and experts in the field of Psychology and Psychiatry.

**Lectures** (general public), loc. Belgrade Cultural Centre: Lectures are held by Neurologists from the Institute of Neurology, School of Medicine, University of Belgrade. Topics are Alzheimer's and Parkinson's disease, headaches, sleeping disorders, epilepsy etc.

**Language class** (16+), loc. Goethe Institute, Belgrade: In cooperation with Goethe Institute of Belgrade, Serbia, there will be held a German language class for beginners, followed by a lecture on how learning a foreign language influences the brain.

**Cooking workshop "Food for Brain"** (general public), loc. Cultural Centre "Grad": Workshop is consisted of a lecture, given by a molecular gastronomist, followed by a cooking class, held by students of neuroscience, with degustation.











#### 10. The functioning of the brain - Austria

Dates and Duration: 16-22 March 2015

**Contact:** 

Lars Klimaschewski (Medical University Innsbruck)

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The "BAW 2015 in Innsbruck" was a full success. Over 200 people visited the daily lectures in the Biocenter Innsbruck. 230 pupils attended seminars in their schools covering a variety of topics from brain anatomy (Dr. L. Klimaschewski), neurosurgery (Dr. W. Eisner), drug addiction (Dr. H.G. Knaus), Alzheimer's disease (Dr. C. Humpel), epilepsy (Dr. C. Schwarzer) and mechanisms of learning (Dr. G. Obermair). Fifty children took part in the afternoon workshop.

A special highlight was the "Human Brain Project (HBP)"-Day. HBP-Vicedirector Dr. Karlheinz Mair presented a lecture with the title ,Synthesis of the brain – brain-inspired computing'. About 230 people came and got inspired by the significance and benefits of the HBP project, related brain research and future computing. Prof. Meier held a very charismatic speech – so the participants used the chance to ask a lot of questions.

Advertisements for all events appeared on Austria's TV-programs, radio-programs and in various print media. The press conference the week before was very well visited – also our campaign on Facebook was quite successful – we generated 35411 impressions at our FB-Event.









#### 11. Healthy brain across the lifespan - Spain

Dates and Duration: 16-20 March 2015

**Contact:** 

Vanja Kljajevic (Univeristy of the Basque Country) Unibertsitateko Ibilbidea 5, 01006 Vitoria , Spain

Email: vanja.kljajevic@ehu.es

The project "Healthy brain across the lifespan" consisted of three events: a round table discussion that took place on the 16<sup>th</sup> of March (6:00-8:00 pm) at Koldo Mitxelena library in San Sebastian, and 2 exhibitions of posters on a brain-related topic prepared by local research groups. The round table participants were 5 local experts on brain/cognition, who discussed common neuromyths. The audience asked many questions, one of which was: "Is it true that alcohol can cure Alzheimer's disease?" The audience's comments on the event were "very interesting" and "informative". The posters were displayed at the Central Library in San Sebastian and on the UPV/EHU Vitoria campus (Lascaray), from 10:00 am on March 16<sup>th</sup> till 5:00 pm on March 20<sup>th</sup>. The posters addressed topics such as: neuroglia, neuroimaging techniques, schizophrenia, Alzheimer's disease, autism, post-stroke aphasia, dyslexia, bilingualism, among others. We also distributed various flyers at each site.



#### 12. Brain Awareness Week 2015: Behind the scenes of sight - Slovenia

Dates and Duration: 16-20 March 2015

Contact:

Lea Kristan (SiNAPSA, Slovensko društvo za nevroznanost)

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BAW 2015 was the 12<sup>th</sup> consecutive BAW event organised in Slovenia. In commemoration of this occasion, we organised events in nine towns across Slovenia, with the majority of the events taking







place in the capital Ljubljana. The programme followed the previously established format with lectures, discussions, workshops, movie projections and round tables. Before BAW we organized the press conference on Wednesday. Monday was again dedicated to the opening of the events, and basic lectures on this year's theme – Sight. Workshops for children and adults took place on Tuesday. On Wednesday we presented the "Top 7" research in neuroscience in the previous year. On Thursday clinicians from different fields presented clinical themes regarding vision and insight, while the round table took place on Friday. Each day was also accompanied by movie projections and talks explaining the movie from a neuroscientific point of view (8 altogether). In preparation for BAW we organised an art competition for schools that started in December 2014 and a concluding ceremony which will take place during exhibition 1001 inventions. Special issue of eSinapsa (neuroscientific magazine which is being published by Sinapsa) was presented during BAW and included articles about vision and sight.



#### 13. Brain and individuality - Bosnia and Herzegovina

Dates and Duration: 16-22 March 2015

#### **Contact:**

Ismir Kukić (Faculty of Medicine, University of Tuzla)
Association of Students "MEDICUS", Medical Faculty, University of Tuzla

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"Tuzla Brain Week - TBW" is the term that we use to mark the Week of the Brain, here in Bosnia and Herzegovina. This year we celebrated the second Week of the Brain in BiH, that took part in globaly determined period from March 16th to 22nd. The preparations of the Project lasted almost a year, and the content covered all age groups, starting from pre-school age, through all levels of education, to senior citizens (retirees), and we also had a special part of the Program for persons with special needs.

90 members of the Section for Neuroscience took part in the organization of the Project. This Section operates within "Medicus" - the Association of Students of Faculty of Medicine in Tuzla. General topic of TBW 2015 was "The brain and individuality". Approximate number of participants, that were included in a total program content, was over three thousand citizens. Through the Project, a special attention was drawn to "Scientific café", which we have organized throughout the week, where we had the opportunity to listen to lectures of our colleagues from the medical faculties in the region - Zagreb, Rijeka, Osijek, Mostar, Sarajevo.

During the week, a total of 40 workshops were held in various educational institutions and social - pedagogical living communities, as well as 10 sessions with different thematic, all within the main topic.

TBW is a Project of the exceptional importance, achieved regional cooperation also goes in it's favor, which speaks for itself when we talk about defining and promoting common and clear objectives, with the tendency for improvement and more promising future.

The kindergarten team has eight members. Each member participated in creation and realization of four workshops: "Let's draw, dance and brain!", "When I grow up, I'll be a brain", "My brain if full of colors and music" and "I am my own brain!". Workshops were designed for children ages 4-6 years and each workshop predicted from 15 to 20 participants, including members of the team. The main goals of the workshops were introducing basic structural and functional aspects of the brain to the children, stimulating creativity and individuality through all sorts of activities contained in the workshops and developing positive social and individual skills of communication and interaction among children.

The team for special school consists of six participants. We conduct two workshops with children who have been categorized under the moderate and mild mental retardation, aged 7-14 years. Following two workshops we conduct with the elderly population aged 20-40 years, also categorized under moderate and mild mental retardation. The aim of the workshop is to assess the intellectual capacity of each individual and then group functioning, thinking and expression of creativity.

Team for elementary school is consistent of seven members. Our target groups are students at the age of 7-15. We attend to work in groups of maximum 20 students, because we believe that in larger groups workshops wouldn't be that affective. The main goals of our workshops are to develop individuality among students. We try to encourage them to think and make decisions on their own. Also we try to







explain them that it's not wrong to have opinion opposite of the others, because that's the thing that helps them to stand out of the crowd. With a variety of games, quizzes, music and pictures we try to adapt the complex substance to young children, and we believe, based on their interest, that we managed to perform that.

In our workshop team we have 9 members. We work with high school students, third grade exactly, 17 year old kids. Because they are in puberty and so hyperactive we attend to work with maximum 10 students and hope to maintain their attention as much as we can. The main goal of all our workshops is to manifest specific individuality among students, and also to encourage them to believe in their own instinct and to make their own decisions. We want to concede situation in which they feel safe in making decisions because neither one opinion is wrong. Besides that we want for kids to have fun, to laugh, to become more social and confident about themselves, and we want to achieve that with a variety of games, quizzes, pictures and music based and made for their age. We hope we will succeed.

College team is consistent of five members. Target group are students at the age of 18-24. We will work with groups of maximum 25-30 students because we believe that we do not have enough time for a larger group since our aim is to include all students interactively, so that the workshops will be much more successful. The main goal of all our workshops is to bring closer students to the term individuality, and let them know that the individuality is something that makes difference between all of us, but it is positive because it allows us to distinguish oneself. Also, our goal is to emphasize team work as the way to improve our individuality. Different opinions are important because they help us to look the problem or situation from different angles and that way as a team we can bring much better solution of a problem/situation than on our own. Through a variety of games we want to reach our goal and encourage students to think in their own way.

Explain them that the differences between us are not something that separates us but on the contrary it helps us to stand out of the crowd.

Retirement home team is consisted of eight members. Our aim group are pensioners, people in third life age. Number of participants is around thirty. Through different workshops like painting, jewelry making, baskets making, dance we want pensioners to use creativity, be individual and be part of a group. Our aim is also to motivate them to use our advices in future and do some of those activities, which are helping them to prevent dementia and also to keep them vital.













## 14. MyBrain – Brain Awareness Week 2015 Activity for Nursery School and Elementary School students in Greater Istanbul Area - Turkey

Dates and Duration: 16-20 March 2015

#### **Contact:**

Isil Kurnaz (Gebze Technical University)
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In this event, faculty members from different universities have visited TED Istanbul College Nursery (80 students), Cekmekoy Small Hands Nursery (~40 students), and Cekmekoy Utopya Elementary School (~70 students) to talk their research area, including brain imaging, cognitive, neuroscience, neurobiology, and learning. Prof. Dr. Isil Kurnaz (project coordinator) is a Molecular Neurobiologist at Gebze Technical University and has talked to students about "neurons" (with their "hair" or dendrites, and their "arms" or axons) and neuron networks. Assoc. Prof. Fuat Balci is a cognitive psychologist at Koc University, and talked to students about the lobes of the brain, what each lobe does, and how brain can be "fooled" in optical illusions. Asst. Prof. Esin Ozturk Isik is a Biomedical Engineer at Bogazici University, and showed the kids what brain imaging is, what those big machines do, and how the doctors "take pictures or movies" of the brain. Asst. Prof. Aysun Oztuna is in Science Education, and has talked to kids about how our brain learns, what some brain conditions such as dyslexia is.

Students were given brief presentation appropriate to their level of study, followed by various activities, such as crossword puzzles, playdough, optical illusions, coloring, "I am a neuron" drama and so on (the activity photos are attached to this report). We discussed what brain and neuron are, how we "see" inside the brain, what brain means to us and how it helps us "jump, swim, dance, learn, play chess". With elementary school children at Utopya, Cekmekoy, we have also discussed how sports, jigsaw and crossword puzzles, and juggling help improve brain connections, using both you-tube videos







(<u>www.youtube.com/watch?v=qi7Tg0WKW\_M</u>) and hands-on juggling exercise. Both elementary school students, nursery kids and their teachers were also interested in watching the video "10 Mind-blowing Optical Illusions" (https://www.youtube.com/watch?v=-IWk5NkxQF8) that contained not only some infamous optical illusions, but the relatively new craze, the "Blue Dress"...

Our team of professors and graduate students Basak, Zeynep, Melis and Merve who halped with the activities, felt very proud to have relayed what we wanted to, surprised and amused at some of the questions (Is a dinosaur brain heavy? Does God have a brain? Are the neurons as fast as The Flash [TV series]?) We were greeted with "Good brains!", "Brain teachers!" and other funny greeting phrases...



#### 15. Connect to communicate – communicate to connect - Croatia

Dates and Duration: 16-22 March 2015

#### **Contact:**

**Irena Labak** (Department of Biology, J.J. Strossmayer University of Osijek) Ulica cara Hadrijana 87A, 31000 Osijek, Croatia







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Brain Awareness Week (BAW) in Osijek has been held from March 16<sup>th</sup> till March 22<sup>nd</sup> of 2015 in the organization of Student Section for Neuroscience of the Faculty of Medicine Osijek and Education and Teacher Training Agency of Osijek. Other Faculties and Departments of J. J. Strossmayer University of Osijek have participated in the BAW: the Department of Biology (Association of Biology Students, ZOA), the Faculty of Education, the Faculty of Economics, the Faculty of Law, the Academy of Arts and School of Applied Arts and Design.

53 workshops (of which 3 took place at Department of Biology, directed by I. Labak) and 38 lectures (including 13 organized by I. Labak) were held during BAW Osijek. They were held by teachers from J. J. Strossmayer University of Osijek and elementary schools, educational advisors and students from various faculties (medical, biology, economical, law, psychology, computer engineering). More than 5000 students attended BAW events. 1 theatrical performance, 1 science café, 1 students' art exhibition and 1 expert meeting for teachers also took place during BAW Osijek. There were 98 different events in total, which gave audience insight in brain parts in charge for communication, consequences of their malfunction due to stroke or trauma and animal and human communication. Different aspects of communication, both verbal and nonverbal, have been mentioned and trained. Every teacher that participated in expert meeting at March 20<sup>th</sup> got certificate for professional advancement by Education and Teacher Training Agency (ETTA). All events were announced one month in advance by the ETTA so everyone interested in the topic could apply for participation.









#### 16. The Brain Awareness Day in Budapest - Hungary

Dates and Duration: 20 March 2015

#### **Contact:**

Emilia Madarász (Inst. of Experimental Medicine of Hungarian Academy of Sciences)

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The visitors could distribute their time and interest among three main program packages:

- a) "The brain in pictures": exhibition of pictures explaining the macro- and microscopic structure of the brain, the main routes of contemporary brain research, and the methodology of behaviour studies
- b) "Playground of behavioural studies": active experimental practices for visitors at 12 work-benches supervised by scientists. The experiments on mice and rats included observations of animal behaviour in open-field tests, Skinner-boxes and labyrinths. Self-tests of human reactions could be studied in human brain-computer interface experiments, audiometry, tremorometry as well as in optical and audio illusions.
- c) Scientific lectures on
  - The aggressive behaviour (Dr. József Haller; IEM-HAS)
  - Offspring care (Dr. Dóra Zelena; IEM-HAS)
  - The biology of selfishness and unselfishness. (Dr. József Topál; RCNS-HAS )
  - The ethics of behavioural studies. (Dr. Ferenc Oberfrank; IEM-HAS)

The "It's Mindboggling!" and the "More Mind-bogglers" booklets were fascinating to secondary school pupils, in part for checking their English understanding. The key-holders and pens with Brain Awareness logos were very popular and were used as presents for those visitors who put extremely good questions or showed skill in active experimentation. The role of FENS and also DANA Alliance was clear for all participants.

All together, the event (pictures attached) was a real success. We had more than 300 visitors of various ages, from 6-year olds to pensioners. Nearly all of them asked for the date of the next Brain Awareness Day. Secondary school leaders and university teachers offered place and organizing work for the next BAW event.











#### 17. Trieste Brain Awareness Week 2015 - Italy

Dates and Duration: 16-21 March 2015

**Contact:** 

Anna Menini (International School for Advanced Studies - SISSA)

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Trieste BAW was jointly organized by SISSA and the University of Trieste. The program included a variety of events to engage different targets, from secondary school students to adults: laboratories, science cafes and more. SISSA in particular organized the following events:

**Flavour and brain: a journey through the world of senses.** A seminar-laboratory for secondary school students with Prof A Menini, Dr S Pifferi and the interactive travelling exhibition Flavour SenseNation to explore the role of our senses in the perception of flavour and foods.

**Neurogastronomy: How the Brain Creates Flavor.** A seminar-laboratory organized as the one above for the general public.

**Senseless.** A public round table on blindness and phantom limbs to discuss the origin and challenges of sensory loss with Prof F Conti, Dr D Zoccolan and M Aggravi and an interesting combination of talks, audio and video material.

Neurocomic. Presentation of the graphic novel with the neuroscientist and illustrator M Farinella.









#### 18. Emotions: From Genes to Brain - Romania

Dates and Duration: 16-21 March 2015

**Contact:** 

**Andrei Miu** (Babes-Bolyai University) Republicii, 400015 Cluj-Napoca, Romania

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The first lecture was focused on gene-environment interactions in stress reactivity, and was followed by a scientific documentary on the same topic. The second lecture focused on the impact of emotions on neuroplasticity and was followed by a workshop on emotion regulation. On the third day, a neuroscientist, a neurosurgeon, a psychiatrist and a writer discussed scientific and cultural perspectives on emotions. The next lecture described the interplay of hormone- and age-related brain maturation during adolescence, and was followed by a Q&A session. The Open Day at the Cognitive Neuroscience Laboratory illustrated behavioral, neurophysiological and molecular biology methods used in emotion research. "Ask a Neuroscientist" was an open facebook page on which anyone could post questions and have them answered by a neuroscientist. As part of an art contest titled "Brain Selfie", three prizes were awarded, consisting in personalized T-Shirts and popular neuroscience books.



#### 19. Mind your Brain! (second edition) - Romania

Dates and Duration: 16-21 March 2015

Contact:

**Cristina Mogoașe** (Babeș-Bolyai University ) Fântânele 30, 400327 Cluj-Napoca, Romania

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We started the planification of the Brain Awareness Week in Cluj-Napoca as soon as we were anounneed we obtained the funding. We decided what informational materials we should prepare and established the final schedule of events. We recruited a team of volunteers from undergraduate psychology students in Babeş-Bolyai University and have several work meetings with them.

We modified and updated the informational materials used during BAW. We created a blog dedicated to the event (www.bawcluj.wordpress.com ).

All of the planned activities were implemented, with slight modifications. First, we gave up to one of the lectures (Demystifying Brain). Also, due to some logistic constraints, we modified our strategy for promoting the event in that we did not organized an informational stand in a public square, but instead distributed informational materials, flyers and ballons in several locations in the town (see the table above). The "Sleeping Brain" lecture was converted to an workshop about sleep in the elderly – as we had the opprotunity to establish a collaboration with the Foundation for Elderly Care in Cluj-Napoca. In addition, we established an unforeseen collaboration with a local non-guvernamental organization, namely NeuronKid - in partnership with them, we organized a session of sport activities & games addressed to children.

We prepared flyers with the BAW schedule (about 2500) and distributed them in the public spaces, universities, public libaries etc. We also prepared event posters and roll-ups, placed at the location of the events, in universitary campus, etc. We prepared and print two informational brochures (one on dementia, the other one on depression), and three leaflets (one about sleep in young people, one about sleep in elderly, and the other one containing "Did you know.." facts about brain & brain funtioning). We distributed about 1000 brochures and leaflets, and around 500 ballons. Informational materials can be accessed <a href="here">here</a>.

We used movies purchased last year for projection with educational purposes during the BAW. These movies will be kept within Institute and will be used for future educational activities.

The event was popularized in media (see links below) and online, on our <u>Facebook page</u>, on our partners' Faceebok pages, as weel as on the <u>Babes-Bolyai University page</u>.

In terms of problems encountered (and solutions found), our main problem was to get central locations for the activities outside of University/ outside of the Faculty of Psychology (as we intended to spread the khowledge not only among psychology students, but to the general public). We thought we'll get rooms at Casa de Cultura a Studentilor (a central location, administered by the City Hall), but they refused to give us the rooms and motivated that rooms are kept for students' activities. To resolve the problem, we contacted the Psychology Students'Association and asked them to be our partners in implementing BAW. Their request for rooms has been accepted. However, on March 11<sup>th</sup> and March 13<sup>th</sup>, the rooms have been extra-crowded (despite our efforts to obtain larger rooms, we did not







succed). That why, for future projects, we seriously take into consideration the possibility of renting the spaces we need for activities implementation.

Overall, the BAW in Cluj was a succes. We received many positive feedback, participants were very interested by the topics and asked us to organize similar events.

A video with the sport activities at NeuronKid can be found here.



#### 20. Brain awareness week activites of the Hellenic Society for Neurosciences - Greece

Dates and Duration: 16-22 March 2015

#### **Contact:**

George Panagis (University of Crete)

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#### New data on the pathogenesis and treatment of Alzheimer's disease

Alzheimer's disease...

... Is a neurodegenerative brain disease characterized by progressive loss of memory and other cognitive functions, as well as failure to respond to the demands of daily life. It affects 7% of the population aged 65 years old and more than 35% of the population aged over 85 years. Patients fail progressively to







meet the needs of everyday life and require constant and continuous care and monitoring. Therefore, it is a major scientific, medical, social and financial problem, especially considering that the number of patients with Alzheimer's may triple in the next 30 years because of life expectancy growth. About 5% of cases less than 65 years old constitute the hereditary form of the disease, due to mutations in specific genes. 95% of cases occur randomly in families and constitutes the sporadic form of the disease. In this case, genetic changes (polymorphisms) in combination with other factors predispose to the disease. The lifestyle can contribute significantly, not only in the appearance of the disease, but also in delaying its onset. Public awareness of Alzheimer's disease can lead to diagnosis at early stages of the disease and to adjust lifestyle accordingly. To this direction operate scientific associations, institutions and patients' and carers' organizations that exist in many cities in Greece under the auspices of the Hellenic Association of Alzheimer Disease and Related Disorders.

#### Epilepsy is not what you think

Epilepsy is one of the most common brain disorders, which affects 1% of the world's population. It has great impact on the quality of life of affected persons, particularly those whose seizures are not fully controlled.

Epilepsy has a multifactorial origin and a multifaceted expression. It is caused by clusters of nerve cells in the brain, which sometimes signal abnormally, causing seizures. Anything that can disturb the normal pattern of neuronal activity—from illness to brain damage or even to abnormal brain development—can lead to seizures. Epilepsy may develop because of: brain wiring abnormalities, imbalance of nerve signaling chemicals called neurotransmitters, changes in important features of brain cells called channels, or a combination of these and other factors.

Depending on the brain area affected and its physiological role, these disturbances of neuronal activity that occur during seizures may cause strange sensations, emotions, and behaviors. They also sometimes cause convulsions, abnormal movements, and loss of consciousness. In some people, seizures happen only occasionally. Other people may experience hundreds of seizures during the day. There are many different forms of epilepsy, and symptoms vary greatly from one person to another.

About three-quarters of the individuals diagnosed with the epilepsies can control their seizures with medication or surgery. However, about 30% of them will continue to experience seizures even if receiving the best available treatment. In some cases, people experience a type of seizure lasting for so long that can cause brain damage and may be life-threatening.

Having a single seizure as the result of a high fever (called febrile seizure) or head injury does not necessarily mean that a person has epilepsy. Only when a person has two or more seizures is he/she considered to have epilepsy. A measurement of electrical activity in the brain and brain scans, such as magnetic resonance imaging or computed tomography, are the most common diagnostic tests for epilepsy.







Research efforts need to be stepped up to better understand pathophysiologic mechanisms and to develop more effective therapies. Equally important is to raise awareness on the nature of epilepsy through public education, so that the lives of people with epilepsy are not adversely affected by stigma, prejudice, and discrimination, neither these persons face restrictions in their human rights, due to unjust legislation concerning employment, marriage, and daily activities, such as driving.

#### **Good morning Mr. Brain**

Lecture/Briefing, School Program

Power point presentation about the brain (structure, function etc), presentation of a short video about the brain and painting by the students (ages 5-6).

#### **Emotions-From literature to neurobiology and addiction**

The event included 5 short presentations (15min each) followed by an open discussion with the audience. The approach was interdisciplinary covering a wide range of subjects related to emotions. Namely:

- The neurobiological base of emotions.
- The mechanisms by which we understand the emotions of other people.
- The reward system and its implication in addiction.
- The importance of emotions for psychoanalysis.
- · Emotions in literature.

More than 450 people attended in person the event and there was also the possibility to follow the event through a webcasting. Moreover, the event was digitally recorded and it is freely available in the following link:

http://www.blod.gr/lectures/Pages/viewlecture.aspx?LectureID=1980

#### **Addictions and Dependencies**

Lecture followed by a theatrical play "To vatrahaki pou pidise sto valto" that the pneymonologist Dimitra Mpousiou wrote.

#### Brain...The known unknown

The event included speeches, posters, power point and prezi presentations, video projection and short plays on the human brain presented by students. The choice of subjects was done by the teachers in collaboration with the Assistant Professor Margarity Marigoula of the Biology Department of the University of Patras, member of the Greek company for the Neurosciences.

Students had the opportunity to visit the Laboratory of Human and Animal Physiology in the Faculty of Biology and to watch: presentations in relation to the structure and functioning of the brain, microscopic preparations of the nervous system and behavioural experiments by Dr M. Margarity. The postgraduate







students Alexander Kokkosis, Vasiliki Panagiotakopoulou, Anni Kaplanian and Georgia Tsapara and the undergraduate student Anthi Krontira were participating in this activity.

On March 11 Dr M. Margarity, the Director of Secondary Education of Ilia Mr. Basilios Dimitrellos, the headmasters of the participating schools: Mrs. Lella Andromache, Mr. Komiotis George and Mr. Voudouris Dimitrios and the teachers Nika Helen, Gkiouleka Theodora and Charmpali Julia gave a press conference in the local media (in channels: ORT and COSMOS, in newspapers: Patris and Proini) on the school conference stressing the importance of the transmission of knowledge about the functions of the nervous system to both the general public and the students.

Also on March 13 Dr. M. Margarity and the teacher Mrs. S. Savvopoulou attended the live broadcast "Afternoon Together" on the local TV channel ORT.

For this event there was a lot of reporting in the local media and several photos were published.

The opening of the central event at the Apollo Theatre held the Director of Secondary Education of Ilia Mr. Vasilios Dimitrellos who stressed the importance of this action on the level of students. The event was attended by His Grace Bishop of Oleni, Athanasius, the town councillor of the municipality of Pyrgos, Theodore Kordas, the Vice President of the Medical Association of Pyrgos-Olympia Vangelis Papageorgiou, the Governor of KEAT of 117 Combat Wing, Brigadier (I) Theodore Ligres, priests of the Diocese Ilia, headmasters, teachers, parents and students.

#### Alcohol, adolescence and the brain

The event took place in the auditorium of the 1<sup>st</sup> Lyceum of Rethymno. Students of the 1<sup>st</sup> class participated in the event. The introductory lecture was made by George Panagis. The aim of his talk was to inform the students about alcohol, adolescence and the brain. He referred to the characteristics of adolescent behaviour and its differences compared with adulthood, in relation to the anatomical and functional organization of the adolescent brain. He reviewed the effects of alcohol on the brain and behaviour after acute and chronic administration. Special emphasis was given on the fact that both animal and human research clearly implicates alcohol use as a cause of brain damage during these critical years.

Next, the students were divided into 4 groups of 15. There was one facilitator for each group. The students worked on special topics related to alcohol consumption and presented their knowledge and experiences on alcohol consumption.

Finally, each group presented their topics and experiences to the whole group. Dr Panagis discussed with the students their questions about alcohol and the brain.







#### Addictions and the brain

The event took place on Wednesday 18/03/15 at Centre of Rethymno Labor Unions Hall in Rethymno. The aim of the event was to inform the public about the multidisciplinary field of Neurosciences and the relationship between drug addiction and the brain.

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 placed on the fact that nowadays addiction is considered to be a chronic brain disease.

Andreas Kastellakis reviewed the endogenous cannabinoid system, cannabis and how cannabinoids affect the function of the brain and human health.

Dimos Fotopoulos reviewed the changes that take place in the brain of chronic drug users and their relationship with rehabilitations and treatment.

#### Brain... in the quest for its secrets

During February or March the students of the partner schools had the opportunity to visit the laboratory of Human and Animal Physiology at the University of Patras,. This visit was organized by Dr. M. Margarity (Assistant Professor of Human and Animal Physiology at the Department of Biology at University of Patras) and included a "power point" presentation on the basics of how our brain works, observation of brain sections at the microscope and animal handling (mice).

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" introducing the topic "Brain, the most known unknown."

The postgraduate students A. Kokkosis, C. Vasilopoulou, C. Atsopardis, V. Panagiwtakopoulou, A. Kaplanian, G. Tsapara and graduate students A. Krontira, C. Koutourlou, G. Diamantopoulou, Ph. Mourka, O. Giwrgatos were participating in this activity.

The main event 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 event was marked by the attendance of Deputy Rector, Professor G. Aggelopoulos, representatives of the 1st and 2nd Grade Education, many University Professors and School Directors, teachers, parents etc.







This activity was co-organized by the Hellenic Society of Neuroscience, the University of Patras, the Neuroscience Network of the University of Patras and the activity Researchers' Night. Also was included in the activity of the University of Patras "The Schools go to the University" and was supported by the associations of the parents of the partner schools.

#### **Little Brain-Researchers**

The young pupils had the opportunity to watch a short oral presentation about our brain and see a plastic model of the brain (*Dr Margarity Marigoula, Assistant Professor of Human and Animal Physiology, Univ. of Patras*), to construct nerve cells and brain figures by using plasticine or marker pens on paper or smale stones { *Dr Margarity Marigoula, Michalis Melahrinoudis & Dimitris Doulis ,(teachers) and Anatoli Vrocharidou (Head of School Activities of Chios Island)}.* Also on a cloth imprint of the brain, the pupils placed at the correct area, paper figures (eyes, lips, ears, smiles, etc.) in the effort to learn where are located the important regions which are responsible for vision, speech, hearing and emotions.









#### 21. My Curious Brain - Romania

Dates and Duration: 16-22 March 2015

**Contact:** 

**Ioana Podina** (University of Bucharest) Panduri St., No. 90, 50663 Bucharest, Romania

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"My Curious Brain" comprised of 8 lectures and 8 workshops with approximately 500 participants. This event was a premiere for its hosting institution. It was visible online via <a href="Facebook">Facebook</a> – totaling 912 likes & <a href="Wordpress">Wordpress</a>.

News about the event were published in the General Press, on the web page of the <u>University of Bucharest</u> and the <u>Faculty of Educational Sciences and Psychology</u>. The materials provided by the www.dana.org were used as template for the event's promotional materials.

Given the high visibility of "My Curious Brain", we can definitely state that the participants have a better understanding of what FENS represents.

#### 22. Brian Awareness Week 2015 in Krakow - New achievements in brain research - Poland

Dates and Duration: 16-22 March 2015

Contact:

**Elzbieta Pyza** (Jagiellonian University) Gronostajowa 9, 30-387 Krakow, Poland

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During the BAW 2015 in Krakow we have organized seven open lectures for a general audience. Each lecture was 1 hour-long and attended by 500 – 1000 people. The lectures were given by distinguished Polish neurobiologists on the following topics: neurobiology of death, brain tumours, stress and brain plasticity, GPS in the brain, sleep, brain and video games, modern brain therapies using stem cells. Each lecture was followed by 1 hour-long discussion. Articles based on the BAW 2015 lectures were published in a popular science journal "Wszechswiat" (Universe). The Organizers and lecturers have given several interviews for national and local broadcasting stations. Beside the lectures we organised an exhibition of paintings by Iwona Siwek-Front entitled "Brain in the Cave". The artist's impressions on the brain were exhibited in a medieval cave "Piwnica pod Baranami", a famous centre of culture and arts in the centre of Krakow.









#### 23. Brain Week 2015, Important questions for the XXI century - Poland

Dates and Duration: 16-22 March 2015

#### **Contact:**

Kasia Radwanska (Nencki Institute of Experimental Biology)

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During the Brain Week in Warsaw we organized workshops and 6 lectures- all open for the general audience.

Lectures: We invited top neuroscientists, psychologists and doctors to give 6 talks – all about "Neuro"-neurobiology, neurocognition, neuroethics and neurodegenerative disorders.

Workshops: on Sunday we conducted workshops open for the audience of age 5 to 105:

- Histological workshops
- How do we investigate the brain of a mouse?- behavioral workshop
- Green mouse- what is it for?- workshop on microscopy and fluorescent dyes
- The brain labyrinth- virtual reality workshop
- Eye tracking workshop
- EEG/EKG workshop
- Roboroach workshop

We also conducted art contest and contests for the best presentation, meme and game for school children. We assess that over 700 people took part in all activities organized during Brain Week 2015 in Warsaw.

http://tydzienmozgu.nencki.gov.pl/index.php









#### 24. Brain and Memory - France

Dates and Duration: 14-22 March 2015

#### **Contact:**

**Carole Rovere** (Institute of Molecular and Cellular Pharmacology (IPMC)) 660, route des Lucioles, Sophia Antipolis, 06560 Valbonne, France

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Between March 14<sup>th</sup> and 22<sup>nd</sup>, senior neuroscientists and PhD students gave lectures, and organized public debates, open talks, movies projections, scientific workshops and animation in museums on the brain and memory, the brain anatomy, the brain and pain, the brain and taste, the brain and smell... All speakers appeared on a voluntary basis and all of the events were freely open to the general public and high schools students in Nice, Cannes, Valbonne, Antibes, Grasse and around in the French Riviera with more than 3000 people reached.

Among the major events, we organized three public lectures with eminent neuroscientists. Our aim was to give the opportunity for these renowned scientists to present their fundamental or clinical research on memory to the public.







Researchers, post-doctoral and PhD students also visited high schools to present their research projects and research careers in neuroscience with the help of pedagogic material and high school teachers. They interacted with students to stimulate their curiosity and interest for neuroscience and encourage scientific careers of young students.









#### 25. Brain Awareness Week of Ciudad Real - Spain

Dates and Duration: 16-20 March 2015

#### **Contact:**

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The V Brain Awareness Week has been carried out both in the Medical School and the open classroom placed in the center of the city to the whole population of Ciudad Real. We have welcomed 203 primary and 180 secondary school students. They have participated in the workshops "Drawn your lobes", "Build your neuron" and "Synaptic transmission" and have visited the five free access research exhibitors







(biochemistry, physiology, brain anatomy, molecular cell biology and neuropathology) placed in the Medical School. Two minisymposium (How works the human brain? Can microorganisms visit my brain?), one inaugural conference (Present and future of Huntington's disease), one special lecture (Brain and visual system) and the closing conference with open discussion (Parkinson: multiple approaches) have been performed. We have organized a workshop (The brain and feelings) to test the olfaction characteristics of the participants. In addition, an open photography exhibition "InvestigArte" has been available to visit it during the BAW. Finally, we have awarded best and secondary prizes of photography, drawing (children's and general) and tale competitions.

#### http://www.uclm.es/cr/medicina/baw/index.html



# 26. Representations of the play "L'Encens et le Goudron" ("incense and tar") + debates - France

Dates and Duration: 12-21 March 2015

**Contact:** 

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The play displays a woman in a hospital, waiting for her husband's recovery. He was the victim of a brain stroke and seems quite unconscious. However, odors are diffused from time to time to evoke memories of their previous life. While telling a story, the plot allows the actress to give some information about brain stroke and its possible cures. The "Etoile du Nord" is a small theater in the north of Paris; the mean attendance was to the show + debate was 75 persons (a total of 302 persons for the free events related to the BAW).

Four debates: 12<sup>th</sup> March "Brain healing after stroke"; 14<sup>th</sup> "perfume and mind"; 19<sup>th</sup> "Olfactory creation: philosophical and neurobiological crossed viewpoints"; 21<sup>st</sup> "Odors, from the laboratory to the stage".







People have been most interested in an unusual theater form. Many questions arose about brain function and dysfunction, and healing. Smell neurophysiology has been at the center of many concerns, and how odorants could elicit emotions and memories.

### 27. 2<sup>nd</sup> St.-Petersburg Brain Awareness Week "Brain Begins" - Russia

Dates and Duration: 16-21 March 2015

#### **Contact:**

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BAW lasted for 6 days with events started every evening at 6 pm (2 fundamental lectures, 3 seminars of practitioners, a lab visit, and social events - an exhibition and movie evening, see Program). Main achievements:

- ca. 450 listeners attended lectures, from 60 to 120 daily;
- ca. 10 institutions were represented;
- wide audience: undergraduates (65.4%), PhD students (6.8%), psychologists (9.0%), children caregivers (4%), and general public.

BAW "Brain Begins" reached its objectives to provide knowledge on the first steps of brain development (lectures 1,2); to explain what happens in brain when early disruptions occur (seminars 2-4; lab visit talk; after-movie discussion); to help parents and caregivers to understand possible ways to deal with the problem (seminars 3,4).

In sum 73% of visitors considered BAW lectures useful. Statistics and presentations have been uploaded on *brainweekspb.org*. The contribution of FENS and DANA Foundation has been acknowledged in all printed materials.











#### 28. Electric brain...are you connected? (FR: Cerveau électrique... ça vous branche?) - France

Dates and Duration: 16-20 March 2015

#### **Contact:**

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This year, the executive committee has proposed an original program about "Electric brain...are you connected?" to inform about current research findings, to explain what we know about the brain and to interact with citizens. Each event included a debate with the audience, a selection of books proposed by the bookstore "Les modernes" and address several themes (see appendix 3):

- On Monday, a conference about "Meditative brain" by A. Lutz (Pasteur Inst., Paris) followed by an initiation to meditation with B. Bedu (Professor UJF).
- Tuesday evening was dedicated to local scientists ("My neighbour is a researcher" with M. Villaz (CNRS, Grenoble) and M. Congedo (CNRS, Grenoble) to explain that oscillations exist from cells to neuron network.
- On Wednesday, a meeting was held at "Centre des arts de Meylan" between scientists and the artists of the closing show of the Week.
- Tuesday evening the science-fiction movie "Transcendance" of Wally Pfister (2014) was projected at "Mon ciné" (Saint Martin d'Hères, Grenoble) followed by a debate with a David Rudrauf (Researcher, Grenoble).
- On Friday evening, the show "Fromage de tête" which explore thought processes was presented by the n-1 compagny at Hexagone of Meylan.

Flight training of drone planes by recorded brainwave activity were performed at public hospital CHU and at J. Fourier University campus. Several animations highlighted the importance of modulations of







brain activities during various tasks. Neuroscientists organized the trial with the public and answered the questions.

Furthermore, every evenings, the bookshop "Les modernes" proposed a selection of books related to the themes of the evening.

This week was a great success: 150 to 350 peoples have participated to each event, adds-up to at least 2000 people for the whole week. Several TV shows, radio interview and articles in local newspapers were done about the Brain Awareness Week in Grenoble. Most of the debates have been recorded and were placed as podcasts in the following university website: <a href="www/semaineducerveau.fr/Grenoble">www/semaineducerveau.fr/Grenoble</a>



#### 29. Brain Awareness Week 2015: Events in Tours - France

Dates and Duration: 16 March - 2 April 2015

#### **Contact:**

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During the 2015 Brain Awareness Week, we organized different events summarized in the table below:

Date	Event	Event title	Attendance	
16/03	Lecture	The musician brain	General	140
		- Le cerveau des musiciens est-il différent ? par le Dr	public	
		Mathilde Groussard, Inserm Caen		
		With the participation of the students and teachers of		
		the Conservatoire Francis Poulenc (CRR) of Tours		
		(student's band).		







17/03	Lecture	Music Training for the Development of Speech Segmentation Pratique musicale, Neuro-éducation et Neuro-réhabilitation par le Dr Clément François, Univ. Barcelone. Winner of the Young Investigator Prize of the Fondation Planiol pour l'étude du Cerveau. Alcohol-Related Brain Damage in Humans Comment l'alcool modifie notre cerveau : un travail effectué sur des cerveaux post-mortem par le Dr Amaia Erdozain (Univ. P. et M. Curie, Paris) Winner of the Young Investigator Prize of the Fondation Planiol pour l'étude du Cerveau.	General public	100
18/03	Moovie	Gut-Brain relationship Le ventre, notre deuxième cerveau, realised by Cécile Danjean, 2013. After the projection, there was a discussion with two researcher of IMAD (Institut des Maladies de l'Appareil Digestif) from Nantes – Insermand Hospital.	General public	150
20/03	Brain and literature - Meeting in a bookshop	Meeting with an author in a book shop "La Boite à Livre", in Tours with the Dr Roland Salesse (INRA Jouy en Josas, France) for his book "Faut-il sentir bon pour séduire?" (Edit Quæ 2015).	General public	50
25/03	Lecture	Jail of Tours- Addiction  Comment les drogues modifient le fonctionnement du cerveau ? Dr Sylvie Chalon (Inserm U930 - Tours).	Prisoner	10
From 17/03 to 02/04	Workshop for children	Discovering the brain A la découverte du cerveau 2H00 long workshop (drawing, memory game, microscope observation) 12 sessions (primary school pupils 9, public 3)	Children 7-12 years old	260
	Debate with children	Discovering the brain – Secondary school "Fernand Léger" in Vierzon A la découverte du cerveau 1h30 long workshop	Children 12-12-13 years old	166
From 17/03 to 17/04	Exhibition	Gut Brain relationship Entre science et art, notre ventre dévoilé, realised by the "Institut des Maladies de l'Appareil Digestif (IMAD) - Nantes.	General public	>450







More than 1 320 persons attended to the events

About thirty scientists (Professor, researcher, students...) were involved in all these events.

The number of people attending to the different events is higher than in 2014.