BRAIN AWARENESS WEEK 2017 - TRIESTE-GORIZIA

The Brain Awareness Week is a global initiative that celebrates the progress of brain research. Every year in March hundreds of universities, hospitals, groups of patients, associations, schools and institutes all over the world join efforts to give life to a campaign addressed to people of all ages. Founded in 1996 by Dana Alliance for Brain Initiatives, the Brain Awareness Week has involved up to now 4,100 partners in 99 Countries.

The local edition of the 2017 Brain Awareness Week is organised by the BRAIN Centre of the Department of Life Sciences of the University of Trieste and by the Interdisciplinary Laboratory of SISSA, in collaboration with the Science Centre Immaginario Scientifico and the Municipality of Trieste, with the support of the Federation of European Neuroscience Societies and the Italian Society for Neuroscience.

PROGRAMME

Monday, March 13th

From 5:30 p.m. to 7:00 p.m., at Auditorium del Museo Revoltella, Trieste
A play with music intermezzi
The Twilight of the Symbionts
Free entry

In an unspecified time in the future, the big Network that for centuries had kept people and computers connected collapses, causing the destruction of civilisation. The Symbionts - hybrid creatures between biology and electronics that used to receive orders from the big Network, thus acting in perfect synchronism - are left to their own devices and wander aimlessly. Symbiont Posthuma is at the limit of cognitive survival and looks back with nostalgia on the past. He lives with Amalia, one of the few non-hybrid women left, in a dilapidated building in the centre of a desolate city invaded by fugitives with their families and ferocious mastiffs who survived an explosion that destroyed a good part of the world and its climate. In vain, the Symbionts try to bring back civilisation.

Drama by Giuseppe O. Longo, emeritus professor of Information Theory at the University of Trieste. With: Giovanni Boni and Elke Burtul. Voice-over: Giuseppe O. Longo. Production: Giovanni Boni. The play will be followed by a debate with Giuseppe O. Longo, Paolo Gallina, scientist and author, and Paolo Battaglini, neurophysiologist at the Department of Life Sciences of the University of Trieste.

Tuesday, March 14th

From 6:00 p.m. to 7:00 p.m., at Seminario Vescovile, Trieste
Conference
Cognitivity and mood in advanced age. The styles of an active life
Free entry

The elderly are frail by definition, even when they do not suffer from medical problems. Frailty is a natural condition in aging organisms which react to stress less efficiently. In addition, difficulties are connected to a life that changes, thus requiring adoption of new habits and behaviours. In order to fight against physical and mental ageing, it is necessary to adopt specific resilience strategies. The promotion of active ageing is at the core of many healthcare and regulatory initiatives, organised also by our Region. Physical activity, healthy diets and social participation fall within strategies aimed at promoting active ageing and at supporting cognition and fighting against depression in the elderly. How much and when are these
strategies useful? Matteo Balestrieri, head of the Psychiatric Clinic at the Hospital of Udine and scientific regional head of the Association I.D.E.A. will introduce the theme and lead the debate with Paolo Battaglini, neurophysiologist at the Department of Life Sciences of the University of Trieste.

Wednesday, March 15th

From 5:30 p.m. to 7:00 p.m., at Antico Caffè Tommaseo, Trieste
Science Café
Little enemies to fight off immediately: the early use of vaccines
Free entry

Vaccines are the best weapons at our disposal to fight against serious and deadly diseases, thus important for the health of both the individual and the community. Not to be vaccinated means to exposing oneself and others to extremely high risks, especially at a very young age or if affected by diseases that cause immunodeficiency, autoimmune diseases or tumours. It is worth remembering that the only true and definitive victory that medicine has had over disease is the one against smallpox, exclusively owing to mass vaccination. Even extremely serious diseases, such as diphtheria and polio, have almost been overcome thanks to vaccines. Enrico Tonin, professor of Microbiology at the University of Trieste and Elisa Giannini, professor of Nursing Sciences at the University of Trieste and author of a dissertation on the topic, will discuss the theme, concentrating on those for the nervous system, reassuring the public on the use of vaccines for children’s health.

Thursday, March 16th

From 6:00 p.m. to 7:30 p.m., at Sala della Piccola Fenice, Trieste
Conference
A diet for the brain: the Mediterranean diet
Free entry

Fiorenzo Conti, professor of Physiology at the University Politecnica of the Region of Marche and head of the Italian Society for Neuroscience will explain the need for a correct diet for wellness of both body and brain. Particular attention will be paid to the Mediterranean diet, common in Italy up to a couple of decades ago, but now substituted by more expensive and less healthy food. The conference will be introduced and led by Paolo Battaglini from the Department of Life Sciences of the University of Trieste.

Friday, March 17th

From 9:00 a.m. to 1:30 p.m., at SISSA, Trieste
Workshop
2017 Stem Cell Day: The long and fascinating journey of stem cell research
Entry reserved to students enrolled in the upper secondary education

An event for the spreading and dissemination of biomedical science, with particular emphasis on stem cells. Addressed to students of the upper secondary education, the workshop will give them the opportunity to learn and debate on the theme. The event will also give the possibility to reflect on cultural expectations linked to research, on scientists’ everyday lives and on mechanisms at the basis of training and knowledge. Every year, UniStem (Inter-Department Centre for Stem Cell Research at Università degli Studi of Milan) organises this event, which is the most important awareness campaign on stem cells and regenerative
medicine in Europe. In 2016 the event was held at the same time in 46 Universities across Italy, Spain, Ireland, Sweden and the United Kingdom. The edition held in Trieste is organised by Antonello Mallamaci, head of the Laboratory for Cerebral Cortex Development of SISSA, and Giampiero Leanza, neurophysiologist at the Department of Life Sciences of Trieste.

From 9:00 a.m. to 2:00 p.m., at the Educational Centre of Valmura, University of Trieste, Trieste

Neuroscience Olympiad

The regional phase of the International Brain Bee. A cultural competition among upper secondary students

Entry reserved to students that passed the local phases

The five best students selected from 13 upper secondary schools in Friuli Venezia Giulia will participate in the Neuroscience Olympiad regional competition, which follows the local one held at the various schools in February. During the contest, three students will be selected for the national competition, which will be held in Enna at the beginning of May. The main aim of the initiative is to stimulate interest in neuroscience, increasing the youngsters’ awareness concerning the “most noble” part of the body. The winner of the national competition will represent Italy at the International competition (International Brain Bee) that will be held in Washington D.C. (USA) in the summer.

From 6:30 p.m. to 7:30 p.m., at Caffè Teatro, Gorizia

Science Café

Do we really use it all? Drugs for boosting the brain between neuroscience and fiction-neuroscience

Free entry

The belief that we use only 10% of our brain (a notion incorrectly attributed to several scientists including Albert Einstein) is a metropolitan legend rooted more in popular folklore than in scientific proof. In truth, science seems to prove the opposite: even when we sleep, our brain is involved 100%. However, it is true that there are many ways in which the brain can, more or less naturally, work better. So what are its true limits? Is it possible to boost its abilities? If so, what are the risks? The topic will be discussed by Giuliana Decorti, pharmacologist, and Giampiero Leanza, neurophysiologist at the Department of Life Sciences of the University of Trieste with a scientific analysis that will range from neurophysiology to neuropharmacology, also with a wink at Hollywood which is always ready to transform the most recent medical-scientific discoveries into gripping plots. The event will be led by Massimo Avian from the Department of Life Sciences of the University of Trieste.

From 6:00 p.m. to 7:00 p.m., at Lovat Bookstore, Trieste

Panel discussion

Will we survive populisms and technocracy? Consent creation between neuroscience and social media

Free entry

From journalism to politics, from institutional communication to marketing, the relationship among media, propaganda, fake news and populisms is increasingly controversial. What does scientific research say on these themes? The debate will highlight how cognitive science can help understand the mechanisms for building political consent in modern democracies on the one hand, and what the analysis of social networks shows concerning mechanisms for forming opinions and using social network contents on the other. The theme will be debated by Gabriele Giacomini, researcher in cognitive neuroscience and philosophy of mind, councillor in charge of innovation and economic development at the Municipality of Udine and author of “Psicodemocrazia: quanto l’irrazionalità condiziona il discorso pubblico” (Mimesis, 2016) [Psycodemocracy:
how much does irrationality condition public debate?”), and Fabiana Zollo, head of research at the University Ca’ Foscari of Venezia and expert in computational social sciences. The meeting will be led by Nico Pitrelli, co-director of the Master in Science Communication "Franco Pratico" at SISSA in Trieste.

Saturday, March 18th
From 10:00 a.m. to 1:00 p.m., at SISSA, Trieste
Visits to laboratories and interactive experiences

The neuroscience of time and language
Seating is limited. Registration is mandatory at 040 3787 549/401 from Monday to Friday from 10:00 a.m. to 1:00 p.m. or writing to ilas@sissa.it up to seating availability.

What defines the meaning of a word: a sound, a symbol or context? What is time? Are we sure that events unfold at the same subjective speed for each individual? Cognitive neuroscience today enables us to understand the mechanisms through which our brain learns how to read, speak and “keep time.” Domenica Bueti and Davide Crepaldi will open their laboratories at SISSA giving the opportunity to follow a varied and interactive path owing to which it will be possible to “listen” to the electric symphony generated by the network of neurons and modulate it so as to understand phenomena at the basis of our everyday lives. The interactive experience will highlight processes through which we perceive linguistic sounds, it will explain how the meaning of a word depends on a variety of sources of information, it will show how the brain processes the passing of time... and much more.

From 5:00 p.m. to 6:00 p.m., at Lovat Bookstore, Trieste
Educational laboratory
Playing with words
Age: from 8 to 11 years old. Free entry

The first traces of written language date back to about 5000 years ago, in ancient Mesopotamia. Compared to the history of the world, it is a recent invention. Our abilities, though, are such that we can read up to 300 words a minute. Our brain learns which groups of letters appear together more often, becoming capable to “predict” the letter or word that will follow another. Kids will have the opportunity to play on this theme with Valentina Pescuma and Davide Crepaldi, neuroscientists at the “Language, reading and learning” laboratory of SISSA in Trieste, through an amusing creative laboratory that will involve participants in the triple function of writers, readers and, why not, young experimenters.

From 6:00 p.m. to 7:00 p.m., at Lovat Bookstore, Trieste
Panel discussion
Keeping an eye ... on artificial intelligence
Free entry

Ranging from face recognition to vehicles that drive autonomously, from search engines to predictive models for fighting against crime, from vision to learning, artificial systems that try to reproduce or outdo some of our abilities are becoming more and more numerous. But how do they work? How reliable are they? Are they really better than us? These themes will be covered by Davide Zoccolan, head of the Visual Neuroscience Laboratory at SISSA in Trieste and Teresa Scantamburlo, head of research at the University Ca’ Foscari in Venice, expert in ethical and social implications of Big Data. The debate will highlight how neuroscience helps understand how our brain is capable of processing an enormous amount of information, and the ethical and social implications of several recent applications of artificial intelligence.
The meeting will be led by Chiara Saviane, project manager of the Science Communication Master “Franco Prattico” at SISSA.

Addresses:
Trieste:
Antico caffè Tommaseo, Riva 3 Novembre 5
Auditorium del Museo Revoltella, Via Armando Diaz 27
Libreria LOVAT, Viale XX Settembre 20, c/o stabile Oviesse, terzo piano
Polo didattico di Valmara, Università di Trieste: Piazza Valmara 9
Sala della Piccola Fenice, Via San Francesco 5
SISSA, Via Bonomea 265

Gorizia:
Caffe teatro, Corso Italia 1

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