

# Second Neuroscience Day at the University of Malta

Giuseppe Di Giovanni

The second *Neuroscience Seminar Day @ the University of Malta* was held on the 5<sup>th</sup> and 6<sup>th</sup> of July 2011 at the Faculty of Medicine and Surgery. The principal aim of this day was to create a forum in which Maltese and Italian neuroscientists could meet. Academics involved in this field benefit substantially by meeting and interacting with international colleagues, and thereby developing new collaborations. This view is held not only by myself, but also by Professor Richard Muscat, Pro-Rector for Research and Innovation, who is always highly supportive of the development of the field of neuroscience and of research in general in Malta. My second objective in organising these neuroscience seminars is to offer the opportunity for our medical and science students and also the general public to get to know about new developments in the field of brain research achieved by both Maltese and foreign scientists.

This year is the 150<sup>th</sup> anniversary of the unification of Italy and it seemed most fitting therefore, to involve Italian academics from various universities across Italy to participate in the meeting. This was made possible thanks to the Cultural Agreement forged between the respective foreign ministries: the Farnesina in Roma and the Ministry for Foreign Affairs in Valetta. This agreement provides for the funding of the exchange of academics between the two nations. His Excellency Ambassador Efisio Marras and the Director of the Italian Cultural Institute, Bruno Busetti were of great help to me creating this event, which was listed as one of the official events commemorating the birth of Italy in Malta. Obviously, the workshop was also welcomed enthusiastically by the Maltese and it received the patronage of The Ministry of Health, The Elderly and Community Care, Malta Ministry of Foreign Affairs and Malta Council For Science And Technology (MCST).

The workshop represented a great opportunity to show Italy's relevance in neuroscience to the Maltese public. Italy has had and has many excellent researchers in this field. Three Italians have received a Nobel Prize in Medicine for research related to Neuroscience: Camillo Golgi (who worked at the times of the Unity of Italy and was also a senator of the Kingdom), Daniel Bovet and Rita Levi Montalcini.

Prof. Richard Muscat and I moderated the workshop. The dense program included fifteen talks on Brain Research, in physiological and disease states. The first part of the workshop was dedicated to Epilepsy. I started by presenting the data of the *Nature Medicine* paper that I published in collaboration with Prof. Crunelli in Cardiff, UK on absence epilepsy. After that colleagues from NEUROMED in Pozzilli, Italy presented some experimental evidence on the role of metabotropic glutamate receptors in absence epilepsy and on new anatomo-electroclinical findings in temporal lobe epilepsy surgery. Prof Pessia from the University of Perugia presented on autism, epilepsy and episodic ataxia associated with mutations in K

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channel genes. Dr Di Maio from the University of Pittsburgh talked about oxidative injury and epilepsy with data from in vitro and in vivo studies, considering novel therapeutic approaches. The second part of the conference was dedicated to brain stroke. Dr Valentino presented on two-photon microscopy- sequential imaging studies in live preparations, Dr Zammit spoke about a developmental study of white matter injury during sustained periods of oxygen-glucose deprivation in the rodent optic nerve and finally, Professor Fern from the University of Leicester, UK talked about the sources of extracellular glutamate in developing white matter. The third theme of the conference was that of drug of addiction. First, Prof. Cannizzaro from Palermo discussed the role of acetaldehyde and its possible involvement in alcohol addiction. Dr Pierucci spoke on the role of the lateral habenula and the serotonergic system in nicotine addiction and cessation and Dr Scerri described the effects of acute and chronic nicotine administration on the metabolism of amyloid precursor protein, and its role in spatial learning and neural cell genesis in the rat brain. Alpha-synucleinopathy and the role of polyphenols in prevention of neurodegeneration was the subject of Dr Caruana's paper. Finally, Dr Waiczies focused her talk on mechanisms in the pathogenesis of neuroinflammation.

I am pleased to report that the second Neuroscience Seminar Day has already produced important results, collaborations have started and there are already some ongoing joint research projects. I hope that these seminars

will help to strengthen neuroscience research in Malta, that more scientists will be attracted from abroad and that we will be able to create more possibilities for our students to study and carry out research in the field of neuroscience. Such opportunities will help us to form a new generation of Maltese scientists who will contribute to our knowledge of the brain and reveal its mysteries; therefore, providing for the development of new cures for its pathologies.

Given that 2012 will see the 8<sup>th</sup> Malta Medical School conference; the most important event in medicine in Malta, the third Neuroscience Seminar Day will be part of it as a satellite symposium.

To finish I would like to thank all my colleagues both Italian and Maltese who replied to my invite to participate with such enthusiasm. My thanks also go to Dean of the Faculty of Medicine, Professor La Ferla and the Rector of the University of Palermo who opened the proceedings. The help of Dr Alessandro Pitruzzella, the scientific secretary was invaluable. Finally, I thank Professor Josanne Vassallo and staff at the Malta Medical Journal for their help in organising for the proceedings of the conference to be published as a Special Issue.

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