



# EPI CURE

## Latest News

**January 2008:** More than 100 delegates gathered in Malta for the second annual meeting of **EPI CURE** participating partners. Representing research laboratories in 13 European countries, as well as the International Bureau for Epilepsy and CF Consulting, this was the opportunity to reflect on the work of the previous twelve months, to present reports on advances made to date and to set the programme for the coming year. Welcoming delegates, **Hon Louis Deguara**, Minister of Health and Community Care in Malta said: *"I was pleased to note the focus of your project. Epilepsy remains the most serious neurological disorder across the globe – worldwide, as you know, it affects about 50 million people. We estimate that there are more than 3,000 people who have epilepsy in the Maltese Islands"*.

**EPI CURE** is facilitating important collaboration between independent research laboratories working to improve knowledge on the functioning genomics and neurobiology of epilepsy.

### How EPI CURE began

**Prof Giuliano Avanzini**, project coordinator tells how the project began: *"A network of laboratories in Europe was already collaborating on research but wished to improve coordination of activities on epileptogenic mechanisms with particular regard to genetic mechanisms. An expression of interest was*

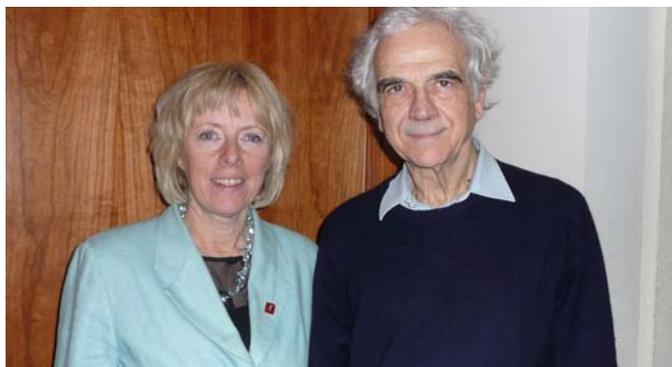
*submitted to the European Union 6<sup>th</sup> Framework Programme and the 4<sup>th</sup> Call for Applications was related to the topic proposed"*.

Much has been achieved since the **EPI CURE** Kick Off meeting in Venice in January 2008. In plenary session in Malta, collaborating centres presented interim reports to an audience that included **Dr Patrizia Tosetti**, European Commission Officer Neurosciences, and **Profs Laurent Fagni** and **Ley Sander**, experts invited by the European Union as observers. Several centres also prepared posters to explain the focus of their research during 2007.

### Progress to date

*"Several integrated lines of research aimed at advancing the problem of preventing epileptogenic process and at understanding the role of genes in different types of epilepsy have begun and during the first year some preliminary results have been obtained,"* reports **Prof Avanzini**. *"Twenty potentially interesting genes have been identified during this first year and their interest was discussed in Malta. Some molecular mechanisms responsible for the epileptogenic process in experimental models of post traumatic epilepsy have been analysed. In this and other epilepsy models the role of inflammatory molecules has been highlighted, opening new perspectives to the prevention of the epileptogenic process."*





Prof Giuliano Avanzini (Project Coordinator) with Mrs Susanne Lund, IBE President (Project Dissemination)

### Prospects for 2008

So what does **Prof Avanzini** expect will happen in **EPICURE** during 2008?

*"Specific projects for the next year have been agreed upon - mostly to verify the working hypotheses generated by the first year's work,"* says **Prof Avanzini**.

**EPICURE** will run for a further 3 years. During this time the collaborating partners will continue to work together to bring the project to fruition. Informal meetings will be held each year and some staff exchanges are also planned. But the main arena for reporting will be the annual meetings that will be held each January. Asked which three targets he hopes **EPICURE** will have achieved at the end of the project, **Prof Avanzini** is quick to respond:

1. *To define the role of genetic mechanism not only in epilepsies that are primarily genetic in origin, but also in acquired epilepsies whose development could be influenced or affected by genes.*
2. *To develop strategies aimed at preventing the development of an epilepsy whenever risk factors are present with particular regard to childhood epilepsies.*
3. *To understand genetic and environmental mechanisms responsible for the evolution of an epilepsy toward a condition of intractability. And to develop means of preventing such evolution.*

*"I would hope that we will have visible results from EPICURE that can be translated to the public within three or four years"* concludes **Prof Avanzini**.

### ABOUT EPILEPSY IN EUROPE

As many as 6 million people in Europe have active epilepsy with associated implications not only for their health but for independent living, education and employment, mobility, relationships, and insurance. It is estimated that 1.5 million of these are children under the age of 12 years. The resulting economic burden is estimated at 18 billion euro annually.

### ABOUT EPICURE

**EPICURE** is one of the most exciting European research projects involving 30 collaborating partners from 13 European countries, undertaking ground-breaking research over a period of 4 years, funded by EU FP6 research funds. **EPICURE** will identify the disease-causing genes and their functional role for both inherited acquired epilepsies, which are being investigated in animal models and human tissue with a focus on drug resistant temporal lobe epilepsy, and epilepsies due to developmental cortical abnormalities. A main effort of **EPICURE** is devoted to investigating developmental aspects of epileptogenesis that account for the high frequency of epilepsies in children and for their often severe prognosis.

### EPICURE Partners:

- Italy:** Fondazione IRCCS, Istituto Neurologico 'Carlo Besta'  
Università degli Studi di Verona  
Fondazione Istituto Neurologico Casimiro Mondino  
Università degli Studi di Ferrara  
Istituto di Ricerche Farmacologiche Mario Negri  
Istituto Giannina Gaslini  
CF Consulting Finanziamenti Unione Europea srl  
Azienda Ospedaliero Universitaria Meyer
- France:** Institut National de la Santé et de la Recherche Médicale  
OZ Biosciences  
Neurokin SARL
- Germany:** Friedrich Alexander University of Erlangen-Nurnberg  
Universitaetsklinikum Bonn  
Charité Universitätsmedizin Berlin  
Universitätsklinikum Ulm  
Johannes Gutenberg Universität Mainz  
Philipps-Universität Marburg  
Klinikum der Universität zu Köln
- Hungary:** Magyar Tudományos Akadémia  
Kísérleti Orvostudományi Kutatóintézet
- Sweden:** Lunds Universitet
- Netherlands:** Universitair Medisch Centrum Utrecht
- Finland:** Helsingin Yliopisto  
Kuopion Yliopisto
- Turkey:** Istanbul Üniversitesi  
İleri Tıp Teknolojileri Dan. Hizm. San. Tic. Ltd. Şti
- Spain:** Fundación Jiménez Díaz UTE
- Austria:** Medizinische Universität Innsbruck
- UK:** University College London
- Denmark:** Ns gene A/S
- Ireland:** Brainwave on behalf of International Bureau for Epilepsy

### EPICURE Advisory Board Members:

Susanne Lund, International Bureau for Epilepsy;  
Mary Baker, UK; Hanneke de Boer, Netherlands;  
Janet Mifsud, Malta

### CONTACTS:

**Project Coordinator:** Prof Giuliano Avanzini - [avanzini@istituto-besta.it](mailto:avanzini@istituto-besta.it)

**Project Management:** CF Consulting - [carla.finocchiaro@cf-consulting.it](mailto:carla.finocchiaro@cf-consulting.it)

**Project Dissemination:** Brainwave on behalf of International Bureau for Epilepsy - [ibedublin@eircom.net](mailto:ibedublin@eircom.net)

[www.epicureproject.eu](http://www.epicureproject.eu)



Funded by the European Union  
Sixth Framework Programme  
Project LSH-037315