

**Room 311 13:30 - 18:00**

## **“Protein Kinase C: A key molecule from Kobe University”**

Protein kinase C was found in Kobe University in 1977. This is a key molecule in the various cellular responses such as proliferation, differentiation and neuronal functions. We focus on the progress of PKC research in this symposium and promote the collaboration between Kobe University and various EU universities.

### **PROGRAMME**

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| 13:30 | Assoc Prof Fabienne Willems, Université Libre de Bruxelles | “Regulation of dendritic cell function by protein kinase C”                                     |
| 14:10 | Prof Isabel Merida, Spanish National Council (CSIC)        | “Diacylglycerol kinases put the brake on diacylglycerol-based signals.”                         |
| 14:50 | Prof Yasuhito Shirai, Kobe University                      | “Role of PKC $\epsilon$ in the keratinocyte differentiation ~focusing on its binding to Ral A~” |
| 15:30 | COFFEE BREAK   |   |
| 16:00 | Prof Naoaki Saito, Kobe University                         | “PKC $\gamma$ and its involvement in neuronal diseases”   |
| 16:40 | Prof Matthijs Verhage, VU Medical Center                   | “PKC-dependent pathways in synaptic plasticity of CNS nerve terminals”                          |
| 17:20 | Prof Godefridus Peters, VU Medical Center                  | “PKC $\beta$ as a target and modulator for novel cancer therapies”                              |



Protein kinase C (PKC) was found in Kobe University in 1977 by Prof. Nishizuka and his colleagues. The discovery of this enzyme created a new scientific field and attracted many scientists all over the world to this new “signal transduction”. In this symposium “Protein kinase C: a key molecule from Kobe University”, four

scientists from EU countries and two from Kobe had lectures about recent research about PKC.

First speaker was Dr. Fabienne Willems from Université Libre de Bruxelles. She presented new data that specific PKC subtype is individually involved in specific cytokine release from dendritic cells. Prof. Isabel Merida from Spanish National Council demonstrated the interaction of PKC and diacylglycerol kinase in T cells. She focused on the diacylglycerol, a PKC activator, and showed its spatio-temporal function in T cell synapses. Prof. Yasuhito Shirai from Kobe University showed the role of PKC $\epsilon$  in keratinocyte differentiation and demonstrated that RalA is a possible binding partner for PKC $\epsilon$  in differentiation. In the second part, Prof. Naoaki Saito from Kobe presented his recent studies of PKC in neuronal diseases. His talk was focused on PKC targeting mechanism at a single molecule level. Dr. Matthijs Verhage from VU Medical center

(Amsterdam) revealed the importance of PKC in synaptic plasticity of nerve terminals. He demonstrated the evidence that phosphorylation of Munc 18-1 by PKC is necessary for the presynaptic plasticity using various knock-in mice. The final speaker, Prof. Godefridus Peters, talked about more clinical science. His finding using PKC $\beta$  inhibitor clearly showed that PKC $\beta$  can be a target for new cancer therapy. There were not so many audiences but all of them were very interested in the symposium. They were from UK, Belgium and other EU countries and discussion was active. Some of them, including MRCT, already proposed us to collaborate. The symposium was very fruitful to show the high quality of science in Kobe University and also our earnest interest in collaboration with EU universities as well as exchange of young researchers.

