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Frankfurt am Main, September 30, 2009

## **Frankfurt scientist Prof. Amparo Acker-Palmer awarded the 2010 Prize for Young Researchers**

Frankfurt am Main. The 60,000 euro Paul Ehrlich and Ludwig Darmstaedter Prize for Young Researchers 2010 will be awarded to the Frankfurt-based biologist **Prof. Amparo Acker-Palmer**, 41, of the Macromolecular Complexes Center of Excellence at the Goethe University, Frankfurt, for her “fundamental contributions to the understanding of the role of Ephrins and Eph receptors and their importance for neural and vascular network formation”. The decision to confer the award on her was made by the Board of the Paul Ehrlich Foundation.

The Paul Ehrlich and Ludwig Darmstaedter Prize is among the most prestigious international prizes awarded in the Federal Republic of Germany in the field of medicine. The award ceremony will take place at the Paulskirche in Frankfurt on March 14, 2010, the birthday of Paul Ehrlich (1854–1915).

### **Similar mechanism within neural and vascular network formation**

Blood vessels and nerve fibres course throughout the body in an orderly pattern, often alongside one another. One exciting discovery of the last decade is that the wiring or neural and vascular networks is controlled by similar mechanisms involving a fine-tuned guidance by attractive and repulsive cues. Prof. Amparo Acker-Palmer research interest is to understand the common molecular transduction mechanisms within neural and vascular network formation and remodelling. Neurons communicate with each other via Synapses. These sites of contact are formed, stabilized and disappear constantly and this plasticity underlies learning and memory processes. Ephrins are membrane bound ligands for Eph receptors and are important molecules for the maturation and stabilization of synapses. The ephrinB ligands transduce intracellular signals and Prof. Amparo Acker-Palmer has focused her work in the last years to understand the molecular transduction pathways activated by ephrinB ligands at the synapse. She has not only shown the molecular mechanism how ephrinB ligands control maturation of synapses but also recently discovered how these ligands directly regulate synaptic function by controlling the internalization of AMPA receptors, the main transducers of rapid excitatory transmission in the brain. Moreover, Prof. Acker-Palmer has now started to expand her observations from the nervous system to blood vessels and discovered a parallelism in the molecular pathways used by ephrinB ligands to control the internalization and activation of receptors important for vessel guidance during tumor angiogenesis.

**Prof. Dr. Amparo Acker-Palmer**, was born in Sueca, near Valencia, Spain, on September 10 1968, and studied biology and biochemistry at the University of Valencia. She spent the years 1992 to 1996 working on her doctorate “Characterization of the proteasome in different subcellular locations” at the Instituto de Investigaciones Citologicas in Valencia and in 1997 won the University of Valencia’s prize for the best PhD submitted. She then embarked on a course of postdoctoral study at the European Molecular Biology Laboratory (EMBL) in Heidelberg and in 2001 switched to the Max Planck Institute of Neurobiology in Martinsried near Munich, where she headed the Junior Research Group Signal Transduction. She was appointed to the Macromolecular Complexes Center of Excellence at the Goethe University, Frankfurt, in 2007. Prof. Amparo Acker-Palmer is a member of the American Society for Biochemistry and Molecular Biology (ASBMB), the Interdisciplinary Center for Neuroscience Frankfurt (ICNF), the Frankfurt Center for Membrane Proteomics (CMP) and the German Neuroscience Society (GNS).

### **The Paul Ehrlich and Ludwig Darmstaedter Prize for Young Researchers**

The Paul Ehrlich and Ludwig Darmstaedter Prize for Young Researchers has been awarded by the Paul Ehrlich Foundation since 2006. It is awarded annually to a young scientist working at a research institute in Germany for outstanding accomplishments in the field of biomedical research. The prize must be used completely for research purposes. Nominees can be suggested by university lecturers as well as senior scientists of research institutes in Germany. Award winners are selected by the Council of the Paul Ehrlich Foundation following the suggestions by a selection commission comprising eight German scientists.

### **The Paul Ehrlich Foundation**

The Paul Ehrlich Foundation is a legally dependent foundation of the Association of Friends and Patrons of the Johann Wolfgang Goethe University Frankfurt am Main e.V. The Honorary President of the Foundation, which was set up in 1929 by Hedwig Ehrlich, is the President of the Federal Republic of Germany, who also appoints the elected members of the Council and the Board of Trustees. The Chairman of the Association of Friends and Patrons is at the same time the Chairman of the Council of the Paul Ehrlich Foundation. This committee selects the prizewinners. The President of the Johann Wolfgang Goethe University is ex officio member of the Board of Trustees of the Paul Ehrlich Foundation.

### **Further information**

The detailed CV and a photo of the prize winner as well as a list of publications is available from the Paul Ehrlich Foundation Press Office (c/o Dr. Monika Mölders, Telephone: +49 6238 982783, Telefax: +49 6238 982784, E-Mail: Paul-Ehrlich-Stiftung@pvw.uni-frankfurt.de).

### **Additional information:**

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