

EMBO Gold Medal 2004 goes to Spanish scientist, María Blasco

EMBO Heidelberg, November 5, 2004

The 2004 winner of the EMBO Gold Medal is María Blasco, Director of the Molecular Oncology at the Centro Nacional de Investigaciones Oncológicas (CNIO) in Madrid. The EMBO Gold Medal is awarded annually to an outstanding young scientist for exceptional research carried out within Europe.

María Blasco receives the award in recognition of her landmark work in the area of [telomeres*](#). The scientist's research has had a groundbreaking impact on cancer research and received wide recognition in the field. The medal will be presented to the winner at the EMBO Members Meeting, "Frontiers of Molecular Biology", in Vienna on October 15, 2004.

The EMBO Gold Medal highlights the high standards being reached in molecular biology in Europe. Awarded annually to a scientist under 40 years of age, the prize brings the very best young scientists in Europe to the attention of a global audience. Presented for the first time in 1986, the EMBO Gold Medal has had many notable recipients. On hearing the news of her selection, the 2004 winner, María Blasco, commented:

"I'm honoured to accept this prestigious award. It's extremely satisfying to gain the recognition of the wider scientific community for my group's research efforts. I'm also delighted to be the first Spanish scientist to receive this prize and as a female scientist, I hope my achievement will inspire other women in science to persevere in their career."

Frank Gannon, Executive Director of EMBO said:

"EMBO is about advancing the biosciences in Europe. This means maintaining quality and momentum in research. One way of doing this is to put a spotlight on the best molecular biologists in Europe. The EMBO Gold Medal highlights the accomplishments of young researchers, showing just what can and is being achieved. María is a fine example of this. Her contribution to cancer research is unquestionable and her unstinting dedication makes her the ideal role model for other young researchers."

María Blasco – Background and research

Born in Alicante, Spain, María Blasco is currently the Director of the Molecular Oncology Programme at the Spanish National Cancer Centre (CNIO) in Madrid. In 1993, the scientist obtained her Ph.D. in Biochemistry and Molecular Biology at the University Autónoma of Madrid, where she made significant contributions to the structure function of a viral DNA polymerase involved in the replication of DNA ends.

Blasco's next move took her to Cold Spring Harbor Laboratory in New York City, where she investigated telomeres and telomerase. The scientist's research led to the landmark discovery of the mammalian telomerase RNA component. Subsequently Blasco knocked out the telomerase RNA in the mouse producing a powerful tool to understand the role of telomerase on cancer and aging.

In 1997, Blasco started her own research group in mammalian telomeres and telomerase at the National Centre of Biotechnology in Madrid. Most recently, the scientist moved her group to the Spanish National Cancer Centre (CNIO), where she now heads up the Molecular Oncology Programme. The research interests of Blasco's group have been diverse – not only connecting telomeres to DNA repair and the cell cycle but also to chromatin epigenetics.

Recent discoveries

Most recently, the research group produced the first characterization of mammalian telomeric heterochromatin and the activities that regulate it. Other recent groundbreaking contributions to cancer research include generation of the first telomerase transgenic mice – showing them to be tumour-prone; demonstration of interplay between the status of the retinoblastoma family of proteins and the length of the telomeres; and demonstration that telomere maintenance requires both telomerase activity and homologous recombination.

Since 1997, María Blasco has published more than 65 papers on telomere research in publications such as Cell, Nature Genetics, Molecular and Cellular Biology, and The EMBO Journal. The scientist has also received a number of international distinctions for her research. She was elected an EMBO member in 2000 and received the Swiss Bridge Award for Research in Cancer in the same year. In 2002, Blasco received the ELSO Early Career Award. Most recently, Blasco was honoured with the Josef Steiner Cancer Research Award and the Universalia Research Award in 2003 and the Carcinogenesis Young Investigator Award in 2004.

* Telomeres are the physical ends of chromosomes and have important functions, primarily in the protection, replication, and stabilization of the chromosome ends

Press Contacts

<p>Lindsay Johnson Communications Officer EMBO Postfach 102240 D-69012 Heidelberg Germany</p> <p>Tel: 0049 6221 8891 108 Fax: 0049 6221 8891 200 Lindsay.Johnson@embo.org</p>	<p>Amanda Wren Director of International Communications CNIO Centro Nacional de Investigaciones Oncológicas (CNIO) Spanish National Cancer Centre C/ Melchor Fernández Almagro, 3 28029 Madrid Spain</p> <p>Tel: +34 91 2246985 Mb: +34 609384526 Fax: +34 91 2246981 awren@cnio.es</p>
--	---