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NANOFOL
diagnosis/therapy nanobiodevice

RESEARCH FELLOWSHIP (M/F)

Reference: FP7-NMP-2008-LARGE-2 (FP7 NMP-2008-4.0-1)

Grant agreement no.: 228827-2

Title of the Project: NANOFOL - Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases

Internal Code: PR032501

A Fellowship is open for recruitment of a Research Fellow to collaborate in the Project referred above, starting on April 1st, 2010. The fellowship is for one year, eventually renewable. The monthly amount of the fellowship is €745 or €980, depending on qualifications.

Place of Work: Institute for Molecular and Cell Biology, Porto, Portugal

Work Program: See attached.

Description: The successful candidate will work with macrophages in culture and explore methods to down-regulate the expression of activation markers. He/she will also evaluate the capacity of specific siRNAs to have an impact of the viability of macrophages.

Candidate profile: The candidate should possess a degree in the fields of Biomedicine, Biology, Biochemistry, Molecular Biology or related areas. We are looking for highly motivated candidates, having excellent academic marks/reports, with a deep interest in RNA techniques, including RNA interference.

The applications should be received between February 25th and March 11th, 2010.
Proposals must include a letter of motivation, CV, a letter of reference, and be sent to the e-mail candidaturas@ibmc.up.pt referring the internal code (PR032501).

The fellowship is regulated by current laws relating to the Statute of Science Research Fellows, namely Law 40/2004 of August 18, and the Regulation of Scientific Research Studentships of the IBMC (www.ibmc.up.pt/fellowships.php).

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Project: NANOFOL - Folate-based nanobiodevices for integrated diagnosis/therapy targeting chronic inflammatory diseases

Supervisor:

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Summary:

NANOFOL proposes to develop a new diagnostic/therapy approach using folate based nanobiodevices (FBN) able to provide a new type of **cost efficient treatment for chronic inflammatory diseases** such as Atherosclerosis and Rheumatoid Arthritis with low side effects that will constitute a more advantageous solution than current therapies. Indeed one of the benefits of this method will be the detection of continuous inflammation sites **(diagnosis)** and the delivery of potent therapeutic agent to the cytoplasm of these cells to stop the persistent inflammatory process **(therapeutics**). NANOFOL has adopted a specific **risk strategy** to attain objectives in a **step by step approach** allowing improving gradually the concept (specificity, stability, side effects efficacy) from the lower to the higher risky solutions ensuring reduced experimental animal testing and high human safety.

In the CAGE group, the successful candidate will perform research addressing the following:

a) Analysis of siRNA release and stability in activated macrophages.

b) Evaluation of physiological effects of specific siRNAs in activated macrophages.