

Postdoctoral Position at FUNDP - University of Namur

We invite applications for postdoctoral one research position inside the Research Institute NARILIS. Successful candidates will work in the teams led by the promoters in charge of the projects.

Candidates (*not older than 40 years*) must have a PhD obtained *after September 1, 2004 and before September 1, 2010* in the required field of research. They also must be within international mobility condition. The award will include a fellowship of 2140 EUR per month for 12 consecutive months.

Applications must include a CV, a motivation letter, list of publications and three letters of recommendation.

They should be addressed **Prof. J-M. Dogné**

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The positions are available for the next academic year 2010-2011 (starting November 1, 2010); **applications will be accepted until 15 september**

Modulation of tissue factor expression on microparticles by multiple myeloma microenvironment and new antimyeloma agents

Promoters: Jean-Michel Dogné – Carine Michiels

NARILIS

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Background: Patients with hematologic cancers have increased risk of venous thromboembolism (VTE) up to 28-fold. Microparticles (MPs) containing TF and membrane phospholipids leading to procoagulant activity (PCA) could be involved in this mechanism. Patients with multiple myeloma (MM) are especially at risk of VTE. However, the underlying mechanism of VTE in such patients is not known. Thalidomide (Thal), lenalidomide (Len), and one proteasome inhibitor, bortezomib (Btz) are used in the treatment of MM. Surprisingly, Thal and Len have been shown to increase the risk of VTE by an unknown mechanism. Several VTE prophylaxis strategies, such as low-molecular-weight heparin, and more surprisingly, acetylsalicylic acid (ASA), have been shown to prevent this risk. On the contrary, Btz has not been associated with an increased risk of VTE, and may even reduce the risk.

Hypotheses:

- i) Treatment of patients with Thal or Len in association with Dex or Mel-Pre or chemotherapy may promote TF expression and/or the release of TF positive MPs.
- ii) Btz does not increase the risk of VTE in MM via its impact on NF- κ B through regulation of TF expression by MPs.
- iii) ASA may prevent the risk of VTE in MM-treated patients by their inhibition of NF- κ B.

Objectives:

1. To study the TF expression (proteomics and genomics) and its modulations on cultured myeloma cells, and to study the release and procoagulant activity of MPs expressing TF by such myeloma cells, with varying conditions simulating the multiple myeloma microenvironment. The following complementary techniques will be used: Flow cytometry, Transmission Electron Microscopy, Atomic Force Microscopy and Thrombin Generation Assay.
2. To study and compare the effects of antimyeloma agents and salicylates on this generation of MP and TF expression *in vitro*.
3. The same study will be performed on human plasma cells isolated from MM patients before and during treatment.

PROFILE OF THE APPLICANT

Job description: Post-Doctoral position for a dynamic candidate looking for a challenging research in the field of pharmacology and thrombosis

Qualifications: The candidate should have a Ph.D. in one of the following disciplines: medicine, pharmaceutical sciences, medical sciences or biological sciences.

Scientific experience:

-In the field of fundamental research in thrombosis and hemostasis

-Good knowledge in basic pharmacology

-Technical knowledge in biological assays, including ELISA, flow cytometry, fluorimetry

Skills: We are seeking for a highly motivated, enthusiastic, dynamic and autonomous candidate who enjoys teamwork. Fluent English (scientific writing/speaking skills) is required. Good communication skills are essential.