

In the framework of the Marie Curie Research Training Network (MC-RTN) project on

"Modelling Mathematical Methods and Computer Simulation of Tumour Growth and Therapy"

the European Community is providing a **three-year fellowship, to be held at the Université Joseph Fourier (France) starting on November 1st, 2005.**

The fellowships will cover

- a grant of 30550 Euros per year (including social charges and other relevant costs)
- mobility allowances to partner teams (up to 5000 Euros per year)
- travel costs up to 250 Euros per year for one visit to the home scientific community.

Eligibility of the Early Stage Researcher (ESR) must be met under the following conditions:

Degree : Candidates must be holders of a **degree which qualifies them to embark onto a doctoral degree**. The degree must have been obtained from a university or equivalent higher education institution,

Experience : They must have **at most 4 years of full-time research experience** since obtaining the diploma giving them access to doctoral studies. An exemption will be made for compulsory military service or childcare.

Mobility : They should be **European** (or citizen of an associated state) but **cannot be French**. In addition, at the start of their fellowship/activity, researchers may not have stayed or carried out their main activity (work, studies, etc) in France for more than 12 months in the 3 years immediately prior to the starting date. Equal opportunities policies are applied.

Content of Work :

The main objectives of the research project are:

- 1- Developing experiments related to the **interactions between cancer cells and the endothelium**, as well as the **extravasation of tumour cells**.
- 2- Related biological aspects: proteins involved, signalisation
- 2- Understanding and measuring cell **microrheology**
- 3- Modelling the above aspects using selected mathematical models (phase-field methods, level-set methods, etc.)

A good **background in biophysics/biomechanics** is strongly recommended. Knowledge of **experimental work** is also a prerequisite. Also a background in modelling would be appreciated. Applications should contain:

- * A letter explaining the motivations for participating in the network
- * Curriculum vitae
- * List of publications (if any) and copies of the most important ones
- * A letter of recommendation (or more)

and should be sent within September 30th, 2005 to:

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