



CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

One Research Fellowship (BI-RE)

One Research Fellowship (BI-RE) for a PhD is open at the **Fundação da Faculdade de Ciências da Universidade de Lisboa, F.P. (FFCUL)**, for the project entitled Tumor Treating Fields (TTF), to be carried out at the Institute of Biophysics and Biomedical Engineering (IBEB), financed by Novocure, under the following conditions:

1. **Scientific Area:** Biomedical Engineering
2. **Requirements for admission:** Applicants should have a PhD in Physics, Engineering or related areas and have a strong background in numerical modelling in bioelectromagnetics.
3. **Factors preferred:** Previous experience with the finite element method is a high priority, particularly aspects related to mesh generation and optimization. Experience in neural stimulation and neural modelling is also an advantage.
4. **Work plan:** The objective of this work is to improve our understanding of the use of intermediate frequency electric fields to treat brain tumours, specifically Glioblastoma multiforme (for more details see Eur J Cancer 2012; 48(14): 2192-2202). The successful applicant will 1) develop analytical and finite element models (FEM) describing the distribution of intermediate frequency electric fields within the brain, 2) use DTI data to incorporate anisotropy in the electrical conductivity (i.e., the electrical conductivity tensor) in white matter in the FEM modelling framework, and 3) develop analytical and finite element models of the electric fields produced within cells in response to an applied AC electric field.
5. **Legislation framework:** A fellowship contract will be celebrated according to the regulations defined by FCT "Regulations for Advanced Training and Qualification of Human Resources", in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of 9 July; And also by the FCT, I.P. Fellowships Regulation, in force (www.fct.pt/apoios/bolsas/regulamento.phtml) and FFCUL's Fellowship Regulation, as approved on 22nd December 2014.
6. **Place of work:** The work will be developed at the Institute of Biophysics and Biomedical Engineering (IBEB), Faculty of Science of the University of Lisbon, under the scientific guidance of Pedro Cavaleiro Miranda.
7. **Fellowship duration:** This position is initially opened for 6 months and will begin on the 1st of July 2015. The fellowship contract may be renewed for 3 additional periods of 6 months each, for a total duration of 24 months or eventually until the end date of the project, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P. – 2013.
8. **Monthly allowance:** The fellowship amounts to € 1850.00.
The fellowship holder will have a personal accident insurance and, if not covered by any social protection scheme can ensure the right to social security through adherence to the voluntary social insurance scheme, pursuant to Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social.
The fellowship will be paid monthly by bank transfer.
9. **Selection method:** Candidates will be assessed by the quality of their CV and the motivation letter (50%) and the relevance of their experience (50%). Shortlisted candidates will be interviewed via Skype.
10. **Selection Committee:** Pedro Cavaleiro Miranda, Ricardo Salvador, Pedro Dinis de Almeida.
11. **Publication/notification of results:** The final results of the evaluation will become public, through an ordered list, which will be posted at the entrance hall of the **Fundação da Faculdade de Ciências da Universidade de Lisboa**, located at



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the Faculdade de Ciências da Universidade de Lisboa, C1 bldg – 3rd floor, Campo Grande, 1749-016 Lisboa, and sent by email to the candidates. The selected candidate will be notified by email.

12. **Deadlines:** This call for applications is open from 20 May 2015 to 26 May 2015.
13. **Application:** Applications may be sent via e-mail to pcmiranda@fc.ul.pt, by attaching the following documents: Curriculum Vitae, motivation letter, copy of doctoral degree, and other documents deemed relevant.