



## UNIVERSITY OF MINHO

### 3B's Research Group - Biomaterials, Biodegradables and Biomimetics

#### ICVS/3B's Associate Laboratory, University of Minho

### Open Call for Twelve Research Fellowships under the ON.2 SR&TD Integrated Program (N-01-01-01-24-01-07)

The 3B's Research Group - Biomaterials, Biodegradables and Biomimetics ([www.3bs.uminho.pt](http://www.3bs.uminho.pt)), University of Minho, Portugal, a member of the ICVS/3B's – Associate Laboratory, opens a call for twelve research fellowships (for PhD holders) under the framework of the ON.2 SR&TD Integrated Program “Integration of cutting-edge health science research and ground-breaking technologies for the development of new clinically useful therapies, tissue regeneration strategies, advanced prophylactic measures and diagnosis methods”, supported by the *Programa Operacional Regional do Norte (ON.2)*, as described and established in article 46<sup>o</sup> of DL 312/2007 of 17/09 - point r), n.º 2, modified and republished by DL 74/2008 of 22/04; article 19.º from FEDER and Cohesion Fund General Regulations; the Specific Regulation of “*Sistema de Apoio a Entidades do Sistema Científico e Tecnológico Nacional*” and the respective Opening Announcement – SAESCTN - PIIC&DT/1/2011 –IC&DT Integrated Programs. The proposed integrated program will adopt highly multidisciplinary methodologies in order to advance the present knowledge on Health related Technologies - Biomaterials, Nanomedicine and Stem Cells, and Tissue Engineering / Regenerative Medicine. The main aim is to develop new and sophisticated interventions to prevailing relevant health problems, including advanced prophylactic measures, diagnosis methods and therapies, such as for instances regenerative medicine approaches.

The fellowships will be attributed under the following conditions:

**1. Fellowship Term and Legal Status:** The fellowships will last 6 months each and are expected to start in June/July 2013. The fellowship contract may be renewed, upon positive evaluation, with a possibility for an extension until the end of the project (30<sup>th</sup> July, 2015). It is a full time research fellowship and all the conditions established by the Portuguese Foundation for Science and Technology will be applied (more information <http://www.fct.pt>). The candidates should hold a PhD degree.

**2. Research Lines and Positions available:**

**Research Line 1 (Ref.: NORTE-01-0124-FEDER-000016) – RL1:** Novel smart and biomimetic materials for innovative regenerative medicine approaches.

**RL1.1** – Materials derived from natural-based polymers;

**RL1.2** – Stimuli-responsive materials and controlled release systems;

**RL1.3** – Bioinspired materials and surfaces obtained from assembly approaches;

**RL1.4** – Chromatographic methods for physicochemical characterization of biomaterials.

**Research Line 2 (Ref.: NORTE-01-0124-FEDER-000018) – RL2:** New methodologies for the isolation and control of stem cells differentiation using advanced culturing conditions and/or nanomaterials.

**RL2.1** – Culture methodologies for stem cells expansion and maintenance of pluri/multipotency and co-culture systems for studying cell-cell interactions;

**RL2.2** – Nanostructured surfaces;

**RL2.3** – Nano-approaches for controlling stem cells differentiation;

**RL2.4** – Microscopic techniques for biological characterization of stem cells.

**Research Line 3 (Ref.: NORTE-01-0124-FEDER-000020) – RL3:** Tissue engineering of connective tissues.

**RL3.1** – Injectable scaffolds - Scaffold Design and Processing;

**RL3.2** – Assembling of complex tissues - Design and optimization of advanced bioreactors;

**RL3.3** – In vitro functionality assessment and pre-clinical models-host response of tissue engineered constructs;

**RL3.4** – Translational/pre-industrial optimizations.

A good standard in English with excellent verbal and written communication skills is also required.



- 3. Fellowships Value:** The fellowships value will be based on the Portuguese Foundation for Science and Technology rules for fellowships, monthly stipend of 1495 euros for research fellowship – PhD level (tax free) (more information <http://www.fct.pt>).
- 4. Selection methods:** Curriculum Evaluation and Interview. The evaluation criteria for each method is as following:
  - A. Curriculum Evaluation (Weighting: 50%)
    - A.1. Academic qualifications
    - A.2. Research Experience under the project scope
  - B. Interview (Weighting: 25% or 50%)
    - B.1. Professional and behavioral skills.
  - C. Eventual oral presentation about their previous or ongoing, if the number of candidates selected for the interview is not significant. (Weighting: 25% or 0%).The candidates will be classified with a scale of 1 to 20 for each criterion, and candidates classified with a score below 15 in the Curriculum Evaluation will not be admitted to the Interview and to the oral presentation.
- 5. Jury Panel:** Prof. Rui L. Reis (President); Prof. João F. Mano and Prof. Nuno M. Neves.
- 6. Form of advertising /notification of results:** the final evaluation will be published through the list ordered according to final score. It will be posted in a public location of the 3B 's Research Group, the successful candidate will be notified by e-mail.
- 7. Documents:** Motivation letter (maximum one A4 page), copy of the Certificate of academic degree(s) and detailed Curriculum Vitae.
- 8. Period of application:** The Applications should be submitted (using the Fellowship Reference: BPD\_Position Number\_May\_2013. (Positions available: RL1.1; RL1.2; RL1.3; RL1.4; RL2.1; RL2.2; RL2.3; RL2.4; RL3.1; RL3.2; RL3.3 and/or RL3.4) from 6<sup>nd</sup> to 17<sup>th</sup> of May, by e-mail to [info@3bs.uminho.pt](mailto:info@3bs.uminho.pt) or ordinary mail to:

A/c Prof. Rui L. Reis  
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The applications that do not include all the elements indicated will not be considered.

For more information on the 3B's Research Group – University of Minho and the Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, please see: <http://www.3bs.uminho.pt> or contact Tel.: +351 253 510915.