

Judite Novais Barbosa

Date and place of birth

17th of November, 1974; Póvoa de Varzim, Portugal.

Academic degrees, fields of study, awarding institutions, dates

PhD in Engineering Sciences, University of Porto, 2005.

Graduated in Microbiology, Escola Superior de Biotecnologia, Universidade Católica Portuguesa, 1997.

Present positions

Post doctoral researcher at INEB.

Main areas of research

Inflammatory cell interactions with self-assembled monolayers; Inflammatory reaction to implanted biomaterials; Blood-contacting biomaterials.

Research projects

Has been involved in research projects in the area of biomaterials for blood contacting applications, more recently in engineered surfaces that reduce the risk of inflammatory reactions and thrombus formation.

Public awareness of science

Has participated in the preparation of exhibitions, visits to schools and training of students from secondary schools in the summer vacations aimed at promoting scientific culture in society.

Membership of scientific societies

Member of the European Society for Biomaterials (ESB).

Other relevant scientific activities

Refereeing for the international journal Biomaterials since 2004.

Responsible for the laboratory session entitled “Effect of surface chemistry on protein adsorption” of the 6th Advanced Course in Cell Material Interactions *at molecular level*, June 2005, Porto, Portugal.

Responsible for the laboratory session entitled “Effect of surface chemistry on protein adsorption” of the 5th Advanced Course in Cell Material Interactions, July 2004, Porto, Portugal.

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Publications

Barbosa JN, Madureira P, Barbosa MA, Aguas AP. The influence of functional groups of self-assembled monolayers on fibrous capsule formation and cell recruitment. *Journal of Biomedical Materials Research*, 2006;76:737-43.

Barbosa JN, Barbosa MA, Aguas AP. Inflammatory cell recruitment and adhesion to methyl-terminated self-assembled monolayers: Effect of implantation time. *Microscopy Research and Technique* 2005;66:37-42.

Barbosa JN, Madureira P, Barbosa MA, Aguas AP. The attraction of Mac-1⁺ phagocytes during acute inflammation by methyl-coated self-assembled monolayers. *Biomaterials* 2005;26:3021-3027.

Barbosa JN, Barbosa MA, Aguas AP. Inflammatory responses and cell adhesion to self-assembled monolayers of alkanethiolates on gold. *Biomaterials* 2004;25:2557-2563.

Barbosa JN, Barbosa MA, Aguas AP. Adhesion of human leukocytes to biomaterials: an *in vitro* study using alkanethiolate monolayers with different chemically functionalized surfaces. *Journal of Biomedical Materials Research* 2003;65:429-434.

Communications

Oral Communications

Barbosa MA, Martins MC, Gonçalves IC, **Barbosa JN**, Amaral IF, Sousa SR, Barrias CC, Granja PL, Brás M. Revisiting the protein-material interfacial chemistry. International conference on advances in biomaterials for drug delivery and regenerative medicine, 11-16 June 2006, Capri, Italy.

Barbosa JN, Barbosa MA, Aguas AP. Inflammatory cell interactions with self-assembled monolayers. 1st Chinese-European Symposium Biomaterials in Regenerative Medicine, 3-7 April 2006, Suzhou, China.

Barbosa MA, Martins MC, **Barbosa JN**. The use of model self-assembled monolayers in the elucidation of the role of proteins and white blood cells in blood-material interactions. Micro'05 Biotec'05, Nov 30 – Dec 03, 2005, Póvoa de Varzim, Portugal.

Barbosa JN, Barbosa MA, Aguas AP. Acute inflammation induced by methyl-terminated self-assembled monolayers. 19th European Conference on Biomaterials, September 2005, Sorrento, Italy.

Martins MC, **Barbosa JN**, Barbosa MA. Protein Adsorption and Leukocyte Adhesion on Self-Assembled Monolayers of Alkanethiols- The Role of the Functional Group and Electrical Charge. 9th Seminar and Meeting on Ceramics, Cells and Tissues. Sept 28 - Oct 1, 2004 Faenza, Italy.

Barbosa JN, Barbosa MA, Aguas AP. Inflammatory responses to self-assembled monolayers: An *in vivo* study using a rodent air pouch model. II Iberian Congress on Biomaterials, September 2004, Évora, Portugal.

Barbosa MA, M Cristina LM, **Barbosa JN**. Protein adsorption and leukocyte adhesion on molecularly designed surfaces. III Congresso Latino Americano de Órgãos Artificiais e Biomateriais, Julho 2004, S. Paulo, Brasil.

Barbosa MA, M Cristina LM, **Barbosa JN**. Interactions of cells and proteins with molecularly designed surfaces. European Cells and Materials V - The cell biomaterial reaction, June 2004, Davos, Switzerland.

Barbosa JN, Barbosa MA, Águas AP. In vitro human leukocyte adhesion to chemically functionalized monolayers using alkanethiolate treatment. XXVI Annual Meeting of the Portuguese Society of Immunology. November 2001, Lisbon, Portugal.

Barbosa JN, Martins MCL, Barbosa MA. Haemocompatibility of plasticized PVC for blood bags. 1st International Materials Symposium - Materiais'2001, April 2001, Coimbra, Portugal.

Posters in Conferences

Barbosa JN, Barbosa MA, Águas AP. Inflammatory cell interactions with methyl-terminated self-assembled monolayers. 6th Advanced Course in Cell Material Interactions *at molecular level*, June 2005, Porto, Portugal.

Barbosa JN, Barbosa MA, Águas AP. Inflammatory responses to self-assembled monolayers: an *in vivo* study using a rodent air pouch model. 5th Advanced Course in Cell Material Interactions, July 2004, Porto, Portugal.

Barbosa JN, Barbosa MA, Águas AP. Use of a rodent air pouch model to study inflammatory responses to biomaterials. XXXVII Annual Meeting of the Portuguese Society of Electron Microscopy and Cellular Biology, December 2002, Funchal, Portugal.

Barbosa JN, Barbosa MA, Águas AP. Inflammatory responses to methyl-terminated alkanethiols on gold surfaces using a rodent air pouch model. 17th European Conference on Biomaterials, September 2002, Barcelona, Spain.

Barbosa JN, Barbosa MA, Águas AP. Adhesion of human leukocytes to biomaterials: an in vitro study using alkanethiolate monolayers with different chemically functionalized surfaces. 11th International Congress of Immunology, July 2001, Stockholm, Sweden.

Contact

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