TWO POSTDOCTORAL POSITIONS AVAILABLE

IMMUNOLOGY - Instituto de Biologia Molecular e Celular, Porto

Host Institute: Instituto de Biologia Molecular e Celular (IBMC), Porto, Portugal.

Location: Porto is a vibrant city with a rich international research community.

Duration: 3 (up to 5) years.

Starting date: Tentative start date is 1st of July 2015.

Summary: Our laboratory studies the differentiation and function of Thymic Epithelial Cells (TEC), which provide chief microenvironments for T-cell development and tolerance induction within the thymus. Cortical (cTEC) and medullary (mTEC) subtypes define functionally distinct niches that derive from bipotent TEC progenitors. Yet, the genetic details that control cTEC/mTEC lineage specifications from TEC progenitors are unsettled.

Job Description: We are seeking two highly motivated postdoctoral candidates to integrate our ERC-funded team that aims to identify the nature of TEC progenitors and decipher the molecular principles involved in their self-renewal and cell-fate decision. We take an integrative approach to examine TEC differentiation, proceeding from high-throughput analyses at cellular level to *in vivo* mouse models.

IBMC is a leading European research institute whose mission is to promote scientific excellence and innovation in Health Sciences. IBMC offers a state of the art, dynamic and international research environment. The working language is English.

The remuneration will be according to the national postdoctoral grants regulations.

Further information about IBMC and our group may be found at:
https://www.ibmc.up.pt/
https://www.ibmc.up.pt/research/research-groups/thymus-development-and-function

Qualifications: Applicants must have (or be finalizing their studies towards) a Ph.D. in Immunology, or similar degree, at least one publication as first author, a strong background in T-cell biology and autonomy to lead a scientific project. Experience in mouse models, flow cytometry, molecular and cell biology (lentiviral transduction), imaging analysis and/or bioinformatics (RNA-seq analysis) will be valued.

Interested Candidates: Please send a brief letter of intent, CV and the names of three references directly to Nuno Alves: nalves@ibmc.up.pt

Although there is not a deadline for the official application yet, we expect to finalize the search and process by May 2015.

Selected Relevant Publications:

Ribeiro AR, Meireles C, Rodrigues PM, **Alves NL** (2014) The intermediate expression of CCRL1 reveals novel subpopulations of medullary thymic epithelial cells that emerge in the postnatal thymus. **Eur J Immunol**. 2014 Oct;44(10):2918-24.

Alves NL, Takahama Y, Ohigashi Y, Ribeiro A, Baik S, Anderson G, Jenkinson WE (2014) Serial progression of cortical and medullary thymic epithelial microenvironments. **Eur J Immunol.** 44:16-22.

Ribeiro AR, Rodrigues P, Meireles C, Di Santo JP, **Alves NL** (2013). Thymocyte selection regulates the homeostasis of IL-7-expressing thymic cortical epithelial cells *in vivo*. **J Immunol.**191:1200-9.

Alves NL, Huntington ND, Mention JJ, Goff OR and Di Santo JP (2010) Cutting Edge: A thymocyte-thymic epithelial cell crosstalk dynamically regulates intrathymic IL-7 expression *in vivo*. **J Immunol.** 184: 5949-53.

Alves NL, Goff OR, Huntington ND, Sousa AP, Ribeiro VS, Chidgey A, Cumano A, Boyd R, Eberl G, Di Santo JP (2009). Characterization of the thymic IL-7 niche *in vivo*. **PNAS**. 106:1512-1517.

Instituto de Biologia Molecular e Celular
Thymus Development and Function Laboratory
Rua do Campo Alegre, 823, 4150-180 Porto Portugal
TEL +351-226074900