

Postdoc position at the Center for Cancer Immune Therapy (CCIT), Copenhagen University Hospital, Herlev, Denmark

Postdoc position – Functional impact of TAM (Tyro, Axl and Mer) expression by T cells

We are looking for a highly motivated candidate for a postdoc position within the field of T cell biology/cancer immunotherapy. The applicant must have a solid background in immunology.

Keywords: T cell regulation, immune checkpoint molecules, immunotherapy, T cell suppression, T cell activation.

The research group: The project will be carried out at the Center for Cancer Immune therapy (CCIT), Copenhagen University Hospital, Herlev, Denmark, a research center with a strong background in experimental and clinical cancer immunotherapy research. More information about the center can be found on <https://www.herlevhospital.dk/ccit-denmark/Sider/default.aspx>. Per thor Stratens group (T Cell Tinkers (TCT)) is focused on unraveling novel mechanisms by which T cell functionality can be blocked or dampened in the tumor micro-environment (TME).

The research project: Cancer immunotherapy has experienced major breakthroughs over the last decade with the discoveries that the patient's own cytotoxic T cells possess the ability to react against cancer cells and that unleash of immunosuppressive signals by blocking antibodies can lead to impressive clinical outcome. However, many cancer patients do not respond to immunotherapy. One possible reason is that T cells in the tumor are suppressed by other known or yet unknown components in the tumor microenvironment. Innate cells express MERTK, a member of the TAM receptor family. We have recently found that activated T cells also express MERTK as well as the ligand PROS1, and that this axis delivers a co-stimulatory signal to the T cell. TAM receptors are also expressed by cancer cells where they act as oncogenes. We aim to study how the expression of TAM receptors and ligands by innate cells, cancer cells and T cells may impede on T cell function. The successful candidate will work on a project aimed at unraveling the role of TAM receptor expression by T cells in the interaction with antigen presenting cells (APCs) as well as cancer cells. The precise project will be defined after discussions between applicant and supervisor, taking into consideration the interests and expertise of the applicant.

The project will be based on in vitro (human) and in vivo mouse studies of T cells using several of the following methods: flow cytometry, xCelligence, Seahorse/metabolic studies, gene silencing by siRNA, real-time qPCR, Western blotting, mRNA transfection and/or viral transduction of T cells, co-culture studies, and FACS sorting of cells for downstream functional and molecular analyses.

Requirements: Recent PhD in immunology, in depth insight into T cell biology and cancer immunotherapy is required, as is knowledge of cancer biology and immunotherapy. Candidates are expected to have excellent communication, writing, organizational skills; and be motivated to contribute intellectually in a dynamic team environment. Additionally, the successful candidate will have the ability to design and execute laboratory experiments, critically interpret experimental results, and to present the data in a clear and concise manner.

Salary: Salary, pension and terms of employment will be in accordance with the regional AC-agreement. Currently, the monthly salary starts at approximately 32.350 DKK/4,250 EUR plus pension.

Start date: April 1st, 2019 or after agreement.

Duration: 2 years, with the possibility for extension.

Application deadline: February 15th, 2019. The application should include a motivated letter of application (max. 1 page), a CV, and at least 2 letters of recommendation. To submit your application, please use this website:

For further information regarding the position, please contact Per thor Stratén.

E-mail: per.thor.straten@regionh.dk or Tel: (+45) 21485109.

