Senior postdoctoral fellow at University of Copenhagen

Senior postdoc in malaria immunology/molecular biology Centre for Medical Parasitology (CMP) Department of Immunology and Microbiology (ISIM) Faculty of Health and Medical Sciences University of Copenhagen

A three-year Senior post-doc position funded by a research grant from the Danish Council for Independent Research (DFF) to Lars Hviid is available in the SURFACE team at CMP (<u>http://cmp.ku.dk/research/teamsurface/</u>). The starting date for the position(s) is as soon as possible.

Research in the SURFACE team is focussed on immunological and functional characterization of antigens on the surface of erythrocytes infected by the malaria parasite *Plasmodium falciparum*. Our ambition is to improve the understanding of the role these antigens play in the pathogenesis of malaria and in the acquisition of protective immunity to the disease.

Qualifications requirements

The postdoc will be expected to take a leading role in the team's continued investigations of (i) the role of serum factors involved in rosetting and adhesion of *P. falciparum*-infected erythrocytes, (ii) parasite ligands involved in merozoite invasion of erythrocytes, and (iii) identification and functional characterization of monoclonal antibodies reacting with relevant parasite antigens. Studies of the role of α_2 -macroglobulin and IgM in rosetting and sequestration of *P. falciparum*-infected erythrocytes are expected to be a particular focus of the successful candidate's research.

Substantial experience in experimental immunology and molecular biology research from previous postdoctoral work is essential, including a track record documenting ability to conduct and lead research and bring it to timely fruition. Experience with recombinant antibody technologies, antigen cloning and expression of high-molecular weight recombinant proteins, *P. falciparum* variant surface antigens, single-cell sorting by flow cytometry, and/or *in vitro* manipulation of *P. falciparum* parasites will be considered advantageous.

In addition to laboratory-based research in Copenhagen, the postdoc will be expected to participate in the team's laboratory training of junior scientists, in our pre- and postgraduate teaching duties, in our field work in Africa (mainly Ghana), and in our on-going efforts to procure additional funding.

Questions

Further information about CMP and ISIM can be obtained at <u>http://cmp.ku.dk</u> and <u>http://isim.ku.dk</u>, respectively. Direct inquiries about the position to the SURFACE team leader, Prof. Lars Hviid (<u>lhviid@sund.ku.dk</u>).

Terms of employment

The position is covered by the Memorandum on Job Structure for Academic Staff.

Terms of appointment and payment will be according to the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations on Academics in the State.

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background. Applicants may be eligible for tax reductions if they have not lived in Denmark for the past three years.

Application

The application, in English, must be submitted electronically through the University of Copenhagen web site. This post will be available later this month (a link will be available at http://cmp.ku.dk/vacancies/), but if you are interested in the position, send an e-mail to me, and if possible let us meet at the BioMalPar XII later this month.

Key publications of relevance to this position

Pleass RJ, Moore SC, Stevenson L and Hviid L. Immunoglobulin M (IgM): restrainer of inflammation and mediator of immune evasion in *Plasmodium falciparum* malaria. Trends Parasitol 32: 108-119, 2016

Stevenson L, Huda P, Jeppesen A, Laursen E, Rowe JA, Craig A, Streicher W, Barfod L and Hviid L. Investigating the function of Fc-specific binding of IgM to *Plasmodium falciparum* erythrocyte membrane protein 1 mediating erythrocyte rosetting. Cell Microbiol 17: 819-831, 2015

Stevenson L, Laursen E, Cowan GJ, Bandoh B, Barfod L, Cavanagh DR, Andersen GR and Hviid L. α_2 macroglobulin binds multiple *Plasmodium falciparum* erythrocyte membrane protein 1 (PfEMP1) molecules and may facilitate adhesion of parasitized erythrocytes. PLoS Pathog 11: e1005022, 2015