

PhD student in immunology at Biomedical Center, School of Health Sciences, University of Iceland, Reykjavik, Iceland.

A PhD student position is available to study neonatal immune response. Neonatal immune responses are weak and short lived and they are susceptible to infections. We have shown that adjuvants can accelerate and enhance neonatal immune responses and prolong their persistence. The PhD project will focus on synergistic effects of novel adjuvants when given one after the other subcutaneously or intranasally (prime-boost) with a vaccine against pneumococci. It will be studied if such immunizations can elicit optimal induction of long-lived B and T cells, survival of memory cells and plasma cells, their recruitment to the lungs and protection against pneumococcal lung infection and bacteremia. The tissue distribution of B and T memory cells will be studied, and generation of survival niches and survival factors. The project will involve the use of neonatal mice, isolation of cells from lymphoid organs and lungs, immunohistology and cellular analysis by ELISPOT and flow cytometry, antibody measurements by ELISA and analysis of gene expression by RT_PCR or sequencing, as well as other immunological, cellular and biochemical methods.

The project has been awarded a 3 years grant from the PhD Fund of the University of Iceland. The project should start 1. September 2020, or according to further agreement.

The student will be based at the Department of Immunology, Landspítali, The National University Hospital of Iceland and University of Iceland and work under the supervision of [Professor Ingileif Jonsdottir](#) and [Associate Professor Stefania P. Bjarnarson](#) as a part of their research team. The project is performed in collaboration with Professor Jan Holmgren, University of Gothenburg, Sweden, Dr. Dennis Christensen Statens Serum Institut, Copenhagen and Dr. Thorunn Asta Olafsdottir, deCODE genetics and University of Iceland.

The Department of Immunology belongs to University of Iceland Center (BMC, <http://lifvisindi.hi.is>) within the Faculty of Medicine. The BMC is an official collaboration between research groups working in biomedical molecular life sciences within the University, the University Hospital, Reykjavik University and other research institutions in Iceland. It includes over 70 Principle Investigators and over one hundred graduate students and postdocs

Requirements

- M.Sc. (or equivalent) in immunology, cellular and molecular biology, biochemistry or related fields
- experience in laboratory research in immunology, cellular and molecular biology, biochemistry
- computer and data analysis skills
- proficiency in written and spoken English
- the ability to work both independently and in a team
- the applicant has to fulfill the requirements for registration in PhD studies in the School of Health Sciences.

How to apply

Please apply through the University of Iceland website, [vacancies](#)

Deadline for application is 1. August 2020.

Interested applicants are invited to send:

- A short letter (max. 2 pages) describing their career goals, their interest in the project, and how they can contribute, as well as how they fulfill the application criteria
- Curriculum vitae
- Confirmed copy of academic degrees (BSc, MSc or equivalent) and grades.
- Contact information (address, phone number, e-mail) for 2 letter of reference (and relationships between applicant and referee)

- List of publications and presentations, if applicable
- Applicants may also provide their MSc thesis and publications as a PDF files

Salary is according official agreement between collective wage and salary agreement between the Minister of Finance and the relevant union..

All applications will be answered and applicants will be notified of the employment decision when a decision has been made. Applications will be valid for six months from the end of the application deadline.

Further information

For further information, please contact Ingileif Jonsdottir (ingiljo@hi.is) or Stefania P. Bjarnarson (stefbj@landspitali.is).

Profiles through Google Scholar: [Ingileif Jónsdóttir](#) and [Stefanía P. Bjarnarson](#)

Appointments to positions at the University of Iceland are made in consideration of the [Equal Rights Policy](#) of the University of Iceland.

The University of Iceland has a special [Language Policy](#).

School of Health Sciences offers diverse academic programmes in health sciences, on undergraduate and postgraduate levels. World class research is conducted at the School of Health Sciences and our staff and students play a leading role in the development and growth of the Icelandic health sector.

The University of Iceland is the largest teaching, research and science institute in Iceland and is ranked among the top 250 universities in the world by Times Higher Education.

More information about the University of Iceland can be found at the University of Iceland website, [Relocation Service](#).