



# NSI Meeting Announcement

Date: Thursday, June 21<sup>st</sup>, 14:00 – 14:45

Venue: Seminar room A3.3067, Rikshospitalet

## Guest lecture

by

**Professor John Kearney,**

**University of Alabama**

## ***“Marginal Zone B cells: Development and Function”***

### **Abstract**

Marginal zone (MZ) lymphocytes are distinguished from the bulk of spleen recirculating naïve B cells, typified by follicular (FO) B cells, by distinctive functions and a number of membrane markers including CD9, CD36, gp49b and FcRH3. MZ B cells can mount a vigorous T independent (TI) IgM response to blood borne antigens by an orchestrated set of interactions with immature DCs which capture and transport bacteria from blood to the spleen. This involves a rapid movement of MZ B cells from their niches in the MZ followed by interactions with CD11clo DCs which provide critical survival signals, supporting their differentiation into short-lived IgM secreting plasmablasts in the red pulp. B cells, in transgenic mice expressing heavy chains of antibodies specific for bacteria-associated antigens including phosphorylcholine, n-acetyl glucosamine and alpha 1-3 dextran, select the appropriate light chains from the available kappa and lambda repertoires and selectively enrich in the MZ compartment. Some of these antigenic epitopes expressed on pathogenic bacteria can elicit protective antibodies against *S. pneumoniae*, Group A streptococci and *E. cloacae* respectively. Additionally these epitopes are also found on self (or modified self) antigens. Thus some clones of MZ B cells, situated strategically in the MZ, and equipped to mount a rapid response to classic T-independent antigens appear to be selected by self antigen and in addition to responding to extrinsic antigens may contribute to housekeeping functions.

[www.uab.edu/luckielab/](http://www.uab.edu/luckielab/)

**Refreshments will be served from 13:45**

**Welcome all!**



**Norwegian Society for Immunology**  
[www.norwegianimmunology.org](http://www.norwegianimmunology.org)