

1. First name, last name: **Professor Peter M Lydyard**
2. Affiliation: Emeritus Professor of Immunology, University College London and Visiting Professor of Immunology at the University of Westminster, London and St. George's Medical School, London.
3. Title of course: **New treatments for diseases resulting from a malfunctioning immune system** (Alternative title: The immune system, what goes wrong and how to fix it)
4. Course aim

This course aims to provide students with the basis of *what*, *where* and *how* normal immune responses are made; examples of diseases where these responses are either inadequate or excessive and finally, current and future treatments.

5. Learning outcomes

By the end of the course students should be able to:

List the cellular and humoral components of the immune system

Describe the development of lymphoid cells and where they are found in the body

Describe how cells interact with each other to produce an effective immune response (against microbes) and regulate it.

Distinguish between primary and secondary immunodeficiencies, describe the cellular/molecular basis of primary immunodeficiencies and how both types are treated.

Describe the mechanisms behind allergies and their treatment.

Describe autoimmune diseases, their pathogenesis and treatment

Have a knowledge of the new types of immunotherapy, what diseases they are used to treat and especially for tumors

6. Prerequisites

Some basic knowledge of immunology is desirable

7. Details of the course

7.1. Dates:

May 21st, 22nd, 24th, and 25th

7.2. Hours: **4 hours per day** – Suggested times - 1.00pm-5pm or 2pm – 6pm, **Total 16 hours**

7.3. Target students: **BSc/MSc students**

8. Course description

The first day will mainly focus on Innate and adaptive immunity – the molecules and cells, where they are produced and how and where they interact with each other to produce effective responses against microbes. Vaccination.

Immunodeficiency diseases will be discussed as both primary and secondary; what causes them and how they are treated with new kinds of drugs and stem cell therapy.

The mechanisms by which **allergies** occur will be discussed together with the various methods of their treatment.

The mechanisms by which **autoimmune Diseases** occur will be discussed together with the various ways they are treated.

The rationale and mechanisms of **transplant** rejection and the strategies used to suppress it will be discussed.

The concepts of Immunotherapy will be discussed and its use in treating a wide variety of diseases including **tumours**

Assessment

An MCQ test at the end of each day that would be marked and at the end of the course the students would be given a score.

9. Course support material

Powerpoint presentations will be provided in advance so that handouts can be prepared for the students.

A 'Certificate of Attendance' could be provided by TSU and signed by Prof. Lydyard for each student together with or without their score.

მოწვეული პროფესორის პიტერ ლიდიარდის განრიგი:

ყველა ლექცია ჩატარდება თსუ-ს მე-XI კორპუსში, უნივერსიტეტის ქ.13 („მადლივის“ მოპირდაპირე მხარეს - „ბიოლოგების“ კორპუსში).						
	ორშ. 21 მაისი	სამშ. 22. მაისი	ოთხშ. 23 მაისი	ხუთშ. 24 მაისი	პარ. 25 მაისი	
I ბლოკი 14.00 სთ - 15.30სთ.	იმუნური სისტემა	იმუნოდეფიცი- ტური დაავადებები, ნაწილი II	ვიზიტი აკაკი წერეთლის სახ. სახელმწიფ ო	ალერგიები ნაწილი II	აუტოიმუნური დაავადებები ნაწილი II	
II ბლოკი 16.00 სთ - 17.30სთ.	იმუნოდეფიცი-ტურ დაავადებები, ნაწილი I	ალერგიები ნაწილი I	უნივერსიტე ტში (ქ. ქუთაისი)	აუტოიმუნურ ი დაავადებები ნაწილი I	სიმსივნეები	
სამეცნიერო სემინარი				CD180-ის როლის შესწავლა ქრონიკული ლიმფოციტური ლეიკემიის იმუნოპათოგენე ზში, სამომავლო თანამშრომლობ ის პერსპექტივების განხილვა		