



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Autoimmunity: Autoimmune Liver Diseases

2122-3-H4102D097

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#### Aims

The elective course is focused on the more recent advances in our knowledge related to the loss of liver tolerance that leads to overactivation of the innate and adaptive immune response and the development of autoimmune liver diseases, such as autoimmune hepatitis, primary biliary cholangitis, and primary sclerosing cholangitis.

In particular, the course will capture the underlying immunomolecular mechanisms of the development and progression of autoimmune liver diseases, the novel field of the immune-related "liver-gut" axis influences to the development of liver autoimmunity, the predominant role of genetic factors, and the increasingly effective immunotherapeutic possibilities.

#### Contents

The study of the liver as a lymphoid organ is a growing field fueled by our better knowledge of the different component of the immune system and how they orchestrate an immune-related response. The liver have highly specialized mechanisms of immune tolerance, mainly because is continuously exposed to microbial and environmental antigens, and dietary components from the gut. Growing evidences show that the liver produces a plethora of neo-antigens being the primary metabolic organ of the body.

Common immune mechanisms play a key pathogenetic role in most of acute and chronic liver diseases and in the rejection of liver allografts.

Any perturbations of liver-related immune functions have important clinical implications, such as the development of autoimmune liver diseases, i.e. autoimmune hepatitis, primary biliary cholangitis, and primary sclerosing cholangitis, a great paradox for a tolerogenic organ.

## **Detailed program**

Pathophysiology of the hepatic immune system. Autoimmune hepatitis. Primary biliary cholangitis. ....

## **Prerequisites**

Medical student from years 3 to 6

## **Teaching form**

Lectures

## **Textbook and teaching resource**

## **Semester**

## **Assessment method**

Interactive verification at the course conclusion

**Office hours**

