

神経病態解析学

Awajiro の わがままセミナー

セミナー シリーズ

本セミナーは、HBS研究部・神経病態解析学分野（准教授・笠原二郎）が不定期に主催するセミナーシリーズで、聴衆（特に若者）への刺激とブレインストーミングを目的に、ジャンルを問わず各界の最前線でユニークな活躍をされている方々をお招きし、お話し頂きます。研究部の多くの学部生・大学院生・教職員の参加をお待ちしております。

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シリーズ第12回 演者：Prof. Emanuela Corsini

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演題：Current trend on *in vitro* immunotoxicology in EU

開催日時：2013年2月12日(火) 17:00 – 18:30

開催場所：薬学部 2F 第4講義室(北階段・エレベーター側)

ミラノから毒性学の大物が登場です。Corsini 博士は毒性学の世界組織である IUTOX の理事であり、特に免疫毒性学領域における世界的リーダーの一人です。アレルゲン等を同定・評価するための動物実験代替試験法を熟知され、製薬業界は勿論、食品や化粧品業界でも評価が高く、日本に何度も招聘されています。

講演要旨

Historically, the toxicological evaluation is conducted on animals, however, worldwide there is a continuous effort to find alternative approaches, to avoid testing on animals wherever possible. Whenever replacement is not possible, the development of methods, which use fewer animals or cause least suffering to the animals, is supported. Particularly in the EU, political pressures, such as the REACH legislation and the 7th Amendment to the cosmetic legislation, have prompted the need of new approaches.

The immune system can be the target of many chemicals, including drugs, with potentially severe adverse effects on the host's health. At present, assessment of immunotoxic effects relies on different animal models and several assays have been proposed to characterize immunosuppression and sensitization. The use of whole animals, however, presents many secondary issues, such as expense, ethical concerns, political and practical resistance and eventual relevance to risk assessment for humans. Although formally validated alternative *in vitro* tests to assess immunotoxicity do not exist, significant progress has been made toward *in vitro* assays in the last decades. Alternative *in vitro* assays to detect immunosuppression and allergic hypersensitivity have the potential to reduce animal use, testing cost, and to increase throughput of immunotoxicity screening and prioritization efforts. Therefore, such models can be used for the pre-screening and hazard identification of unintended immunosuppression and contact hypersensitivity of direct immunotoxicants. This presentation intends to review the past, present and future in the field of *in vitro* immunotoxicity in Europe.