

# ASSOC. PROF. ALAIN JACQUET, PH.D.



- **Appointment: Professor**
- **Specialty: Protein Molecular Biology**
- **Position: Associate Professor, Department of Medicine , Faculty of Medicine, Chulalongkorn University**
- **Qualification & Education:**
  - **Ph.D in Chemistry, Université Libre de Bruxelles, Belgium, 1986-1989**
  - **Post-doc researcher, Université Libre de Bruxelles, 1989-2000**
  - **Head, Laboratory of Experimental Allergology, Université Libre de Bruxelles, Belgium, 2000-2009**
  - **Associate Professor, Chulalongkorn University since 2009**
- **Area of Interest : House dust mite allergy, Design of recombinant vaccines**

# ACTIVITIES AT CHULALONGKORN U. since 2009 (1)

## Research:

### 1) House dust mite allergy

- ) Design of recombinant vaccines (protein- or DNA-based)
- ) Component-resolved diagnosis of HDM allergy
- ) Characterization of innate immune signaling pathways triggered by HDM allergens

Co-PI of Master and PhD students

### 2) Dengue Virus

- ) Design of chimeric VLP-based vaccines

Co-PI of Master student

### 3) Leptospirosis

- ) Purification of recombinant *Leptospira* antigens (Prof. Kanitha Patarakul)

4) Support for any protein expression/isolation (assistance of Master/PhD students)

## ACTIVITIES AT CHULALONGKORN U. since 2009 (2)

### Teaching:

Molecular and Cellular Biotechnology (3000736, 30h)

Protein Expression and Purification (3000757, 30h)

Protein Biochemistry (3000763, 30h)

Research Skills in Biomedical Sciences and Biotechnology-  
3000751

- Protein separation and purification (5h)

- Cell line cultures (5h)

Advanced Immunology-3004741

- Immunomodulation of the allergic responses (3h)

Cellular and Molecular Biology- 3700501

- From DNA to protein (3h)

- Immune system (3h)

Basic and Applied Immunology-2011703

- Mucosal Immunity(2h)

## **ACTIVITIES AT CHULALONGKORN U. since 2009 (3)**

Main organizer and instructor of the International Workshop on Protein Expression and Purification Strategies

(Chulalongkorn University, Faculty of Medicine, Bangkok, Thailand, September 2010, October 2011, 2012, 2013 and 2014)

Associate Editor of Asian Biomedicine Journal

# FUTURE ACTIVITIES AT CHULALONGKORN U. (1)

## 1) House dust mite allergy

-) Design of recombinant vaccines (protein- or DNA-based)

Therapeutic vaccinations, safety, GMP production

-) Component-resolved diagnosis of HDM allergy

(including the *Blomia tropicalis* mite specie)

-) Characterization of innate immune signaling pathways

triggered by HDM allergens

(using Der p/Blo t allergens)

Master thesis: Innate Immunity, ROS production and HDM allergens

PhD thesis: Innate Immunity activation by *Blomia tropicalis* allergens

# FUTURE ACTIVITIES AT CHULALONGKORN U. (2)

## 1) House dust mite allergy

-) Selection of probiotics according to their immunomodulatory properties (Pro-tolerance “adjuvants”, IL-10 inducers, Prof. Somying)

PhD thesis: immunomodulatory properties of compounds secreted by probiotics

## 2) Vaccine research center

-) Support in any recombinant vaccine production

## 3) Teaching: to pursue my teaching activities

Would like to create some basic science lab sessions in molecular biology