

ESCMID Collaborative Center

Institute of Antibiotics, Huashan Hospital Fudan University

Brief Introduction

Huashan hospital is located in Shanghai, the largest Chinese city by population. Huashan Hospital, also named Chinese Red Cross General Hospital, was founded in 1907. The hospital is a tertiary comprehensive hospital covering medical treatment, scientific research and medical education. As one of the national highest-level medical teaching and research centers, Huashan hospital enjoys high reputation for its outstanding clinical achievements and excellent services. Through 2011 to 2013, the hospital ranked sixth in the "Best Hospitals Rankings in China", which was published by the Hospital Management Institute, Fudan University, China.

Institute of Antibiotics (IOA) was set up in 1963, assigned by Ministry of Health of China. It was one of the first approved sites for doctorates of infectious diseases and was the key discipline, assigned by Ministry of Education. The institute has 30 staffs including 14 infectious disease physicians, 15 research staffs (clinical microbiologists, clinical pharmacologists and technicians). This institute consists of four divisions: Division of Clinical Management of Infectious Diseases, Division of Clinical Microbiology, Division of Clinical Pharmacology and Division of Molecular Biology. Two clinical physicians of the institute are appointed as the director and vice director of the Infection Control Unit, and the director of Antibiotic Stewardship Program of Huashan Hospital.

The main tasks of the institute are as followings: Diagnosis and treatment of patients with infections; Surveillance of bacterial resistance; Studies on mechanisms of bacterial resistance; Clinical evaluation and clinical pharmacology of antimicrobial agents. This is an unique institute with a perfect integration of clinical practice and laboratory research.

The Department of Laboratory Medicine in Huashan hospital is a modernized, multifunctional centre for clinical laboratory diagnosis. It was established in 1950. The department has set up a good foundation of interdisciplinary research. The Division of Clinical Microbiology performed routine laboratory diagnosis of bacterial, TB, fungal and viral infections, antimicrobial susceptibility testing, as well as regular surveillance of nosocomial infections and scientific research. The daily experimental workload is huge, totally over 400 samples for 1000 tests (including microscopy, culture, serology, molecular, etc.) everyday. Currently, we have 10 regular employees and 2 contract employees to keep the lab running.

Outline briefly what a visitor can expect from a one-day, up to ten-day and up to one-month visit to the department(s)

For one day

A general tour of department, observing workflows and major facilities. Provide opportunity to meet department director/division group leaders/several of the staffs. A lunch meeting will be hold for a briefly discussion of one or more areas of special interest.

For up to ten days

A comprehensive tour of department and major facilities. The department organization, structure of services and department management are discussed in detail. Provide opportunity to meet department director/division group leaders/several of the staffs. The CM visitors will have opportunity to observe the routine workflows in major benches and/or research groups (each bench for one day, could be adjust accordingly). The IOA visitors will have opportunity to join in the ward round with attending doctors and visit the Infection Control Unit. A department meeting will be hold for a better communication with ESCMID Observer. Group leaders or major staffs from Huashan Hospital will introduce their own routine and/or research interests. The ESCMID Observer should be prepared to give a short presentation of him/her and the parent department to provide the audience with an understanding of the background of the visitor, especially pertaining to health care system, organization of CM and IOA and to epidemiological peculiarities.

For up to one month

A comprehensive tour of department and major facilities. The department organization, structure of services and department management are discussed in detail. Provide opportunity to meet department director/division group leaders/several of the staffs. The CM visitors will have opportunity to observe the routine workflows in major benches and/or research groups (each bench for two or three days upon to Observer's background and interests). The IOA visitors will have opportunity to join in the ward round with attending doctors for up to 3 weeks and working in research laboratory for 1 week. The visitors are also welcome to participate the work of Infection Control and Antibiotic Stewardship. Department meetings will be held for a better communication with ESCMID Observer per week. Group leaders and major staffs from Huashan Hospital will introduce their own routine and/or research interests. The ESCMID Observer should be prepared to give a short presentation (same as above up to ten days). The observer is given the opportunity to join in one specific researching programs in practice, or study several advanced laboratory methods or diagnostic techniques or clinical practices in such a way that he/she feels comfortable introducing these on return to the home department.

Head(s) of Department(s)

Institute of Antibiotics: Prof. Minggui Wang
Division of Clinical Microbiology: Prof. Xiaofei Jiang

Contact person at centre (professional issues)

Institute of Antibiotics: Fupin Hu
Email: hufupin@163.com

Research interests of the department

Our research interests include but are not limited to nationwide surveillance of antimicrobial (including antibacterial and antifungal) resistance, molecular epidemiology of major "super-bugs", resistance mechanisms, developing/evaluation of novel rapid diagnostic assays.

Accept observers with the following languages

Language one: English
Language two: Mandarin

Epidemiological characteristics of the area

The Institute of Antibiotics in Huashan hospital was amongst the first laboratories initiating antimicrobial resistance surveillance in China in the 1980s. Through the routine work and surveillance programs, we have realized the critical reality causing by the emergence and spreading of multi-drug resistant organisms in China. In particular, the prevalence MRSA, ESBL-producing Enterobacteriaceae and carbapenem-resistant *A. baumannii* represent more than 50% of microbial isolates. Bacterial resistance to fluoroquinolones, macrolides, extended-spectrum cephalosporins and carbapenems is of serious concern. There do not appear to be significant differences in bacterial resistance between distinct cities, despite the large geographical area and disproportionate economic development in many areas in China.

List a few youth hostels and/or hotels

1. Shanghai Hotel, <http://www.shanghaihotel.com>
2. Shanghai Hilton Hotel, <http://www.hilton.com.cn/Find/Shanghai.html>
3. Shanghai City Hotel, <http://www.shcityhotel.com/>

