

# Theoretical and Practical TB course, Institut Pasteur and Nanshan CCDC,

Oct 14-26, 2018 Shenzhen, China

## Sunday 14 Oct: Lectures, Open to Anyone Who Registers

### Course Welcome and Keynote Lectures

08:30	<b>Representative From Beijing</b>	Chinese	
08:40	<b>Brigitte Gicquel</b> , Institut Pasteur, Paris	English	
08:50	<b>Representative of Nanshan</b>	Chinese	
09 :00	<b>Lecture: Representative of Ministry of Health, Beijing</b>	Chinese	
10 :00	<b>Lecture: Representative of China CDC</b>	Chinese	
11 :00	<b>Lecture: General Epidemiology of Tuberculosis</b>	English	Philippe Glaziou, World Health Organisation, Geneva
14:30	<b>Lecture: Representative of Guangdong CTC</b>	Chinese	
15:45	<b>Lecture: The short term treatment for MDR tuberculosis</b>	English	Arnaud Trebucq, The Union Against Tuberculosis and Lung Disease, Paris, France
16:30	<b>lecture: Representative of Shenzhen CCDC</b>	Chinese	
17:30	<b>Coctail</b>		

### Monday 15-Oct

08:30	<b>Lecture: Clinical aspects in Tuberculosis</b>	English	Steffen Stenger, Ulm University, Ulm, Germany
09:30	<b>Lecture: Treatment of Tuberculosis</b>	English	Wenhong Zhang, Fudan University, Shanghai
10:30	<b>Lecture: Treatment of Tuberculosis Including MDR and XDR-TB</b>	English	Nicolas Veziris, Hospital Pitié Salpêtrière, Paris, France
12:00	<b>lunch</b>		
01:30	<b>Lecture: The fight against Tuberculosis - general aspects</b>	English	Steffen Stenger, Ulm University, Ulm, Germany
02:30	<b>Lecture: Pediatric TB</b>	English	Christophe Delacourt, Necker Childrens' Hospital , Paris France
16:00	<b>Lecture: Latency</b>	English	Ying Zhang, Johns Hopkins Center for Tuberculosis Research - Baltimore - U.S.A.
17:00	<b>Lecture: TB HIV/Diabetes</b>	English	Veronique Joly, Hospital Bichat–Claude Bernard, Paris

## Tuesday 16-Oct

08:30	<b>Lecture:</b> Immunology of TB	English	Xinchun Chen, School of Basic Medical Science, Shenzhen University
09:30	<b>Lecture:</b> Host-Pathogen Interactions	English	Olivier Neyrolles, Institute of Pharmacology & Structural Biology Toulouse, France
10:30	<b>Lecture:</b> Phenotypic and molecular tests for diagnosis	English	Catherine Pierre Audigier, Hospital Bichat–Claude Bernard; Institut Pasteur, Paris
12:30	<b>lunch</b>		
14:00	<b>Lecture:</b> IGRA and Biomarkers	English	Elisabeth Bouvet, Hospital Bichat–Claude Bernard, Paris
15:00	<b>Lecture:</b> Current and future technical options for the diagnosis of drug resistant tuberculosis	English	Francis Drobniowski, Imperial College, London
16:00	<b>Lecture:</b> Tuberculosis resistance: value of rapid testing in various infrastructure settings	English	Francis Drobniowski, Imperial College, London
17:00	<b>Lecture:</b> NTM Detection and speciation; when to treat	English	Jean-Louis HERRMANN, Hospital Raymond Poincaré, Garches, France
18:00	<b>Lecture:</b> Evaluation of new diagnostic techniques	English	Howard Takiff, Institut Pasteur, Paris

## Wednesday 17 October

08:30	<b>Lecture:</b> Drug action and Resistance Mechanisms	English	Ying Zhang - CONFIRMED
10:00	<b>Lecture:</b> Drug Discovery	English	Vincent Delorme, Institut Pasteur, Korea
11:00	<b>Lecture:</b> New Drugs, New Regimens, Drug trials	English	Ray Chen, NIAID, NIH, Bethesda, Maryland, USA
12:30	<b>lunch</b>		
14:00	<b>Lecture:</b> Population structures and evolution of M. Tuberculosis	English	Iñaki Comas, FISABIO Public Health, Valencia, Spain
03:30	<b>Lecture:</b> TB molecular Epidemiology	English	Qian Gao, Fudan University, Shanghai
04:45	<b>Lecture: Clinical usefulness of WGS</b>	English	Dick van Soolingen, National Institute for Public Health and the Environment, Netherlands

## Laboratory Practical Workshop, University of Shenzhen

### Thursday 18 October

Introduction to the Lab	Catherine Pierre-Audigier
Pre-test for practical session	
<b>Practical workshop:</b> Antibiotic Resistance sequencing	Howard Takiff
<b>Practical workshop:</b> ZN Staining and microscopy	Catherine Pierre-Audigier
<b>Practical workshop:</b> Kudoh inoculation	Howard Takiff

**Practical workshop:** MIRU-VNTR

Learning melting Curve method –Qian Gao to invite Xiamen, Zhishan

**Friday 19 October**

**Practical workshop:** GeneXpert

**Practical Workshop:** Spoligotyping

Cepheid, China

Dick van Soolingen, and Xiamen, Zhishan

**Saturday 20 October**

**Practical workshop:** Line Probe assay (Hain)

MTBDRplus/sI

melting Curve method to detect the mutations

Catherine Pierre Audigier, and melting Curve method, Qian Gao to invite Xiamen, Zhishan

**Sunday 21 October - Group Trip**

**Monday, 22 October**

**Practical Workshop:**Hain Test

**Practical Workshop:** Spoligotyping

Hain representative China

van Soolingen and melting Curve method, Qian Gao to invite Xiamen, Zhishan

**Bioinformatics: Sanger Sequencing, Multiplex and WGS**

**Tuesday 23 October**

Intro to bioinformatics

Ugene or Seqman, exercises with unknowns, Blast,

Howard Takiff

**Wednesday 24 October**

Continue with Bioinformatics excercises

Exam

Howard Takiff

Brigitte Gicquel, Catherine Pierre Audigier, Howard Takiff

**Thursday 25 October**

Multiplex PCR and NGS for detecting Drug Resistance

Review Exam

Philip Supply, Univ. de Louvain; Institut Pasteur, Lille, France; Genoscreen

Brigitte Gicquel, Catherine Pierre Audigier, Howard Takiff

**Friday 26 October**

Continue WGS basics

Course closure

Dinner

Qian Gao's Lab