

Pasteur TB course 2017 Preliminary Program 13 Avril

Monday June 12 2017

9:00 - 10:00	Welcome and introduction to the course Pre-test for practical session	Brigitte GICQUEL Catherine PIERRE-AUDIGIER Howard TAKIFF (Institut Pasteur - Paris)
10:30 - 11:00	Lecture: The fight against Tuberculosis - general aspects	Brigitte GICQUEL (Institut Pasteur - Paris)
11:15 - 12:15	Lecture: Clinical aspects in Tuberculosis	Steffen STENGER (Ulm University - Ulm - Germany)
13:15 - 13:45	Laboratory presentation and use of available material	Isabelle LEQUEUTRE Insitut Pasteur - Paris
13:45 - 14:00	Synthesis of the day's activities in Context	
14:00 - 14:30	ZNStaining and microscopy	
14:30 - 15:00	Lecture: Mechanisms of resistance to RIF and Fluoroquinolones Practical workshop: Antibiotic Resistance sequencing	Howard TAKIFF Howard TAKIFF
15:30 - 18:30	Principal of test Preparaton of mix and amplification, preparing gels	

Tuesday June 13 2017

9:00 – 10:00	Lecture: Immunology of TB	Steffen STENGER (Ulm University - Ulm - Germany)
10:00 - 11:00	Lecture: Evaluation of new diagnostic techniques	Howard TAKIFF
11:15 - 11:30	Course PHOTO	
11:30 - 12:30	Lecture: Phenotypic and molcular tests for diagnosis	Catherine PIERRE-AUDIGIER (Institut Pasteur – Paris)
13:30 - 13:45	Synthesis of the day's activities in Context	
13:45 - 15:00	Practical workshop: Antibiotic Resistance Sequencing Electrophoresis	Howard TAKIFF
15:00 – 15:45	Practical workshop Petroff demonstration, Kudoh inoculation	
15:45 – 16:45	Practical workshop: Antibiotic Resistance Sequencing Analysis electrophoresis PCR results	Howard TAKIFF
17:00 - 18:00	Lecture: TB mol Epi and Spoligotyping	Dick VAN SOOLINGEN (National Institute for Public Health and the Environment - Netherlands)
18:00 - 19:00	Intro to Bioinformatics	Howard TAKIFF

Wednesday June 14 2017

09:00-9:30 (in Lab)	PCR spoligo	Dick VAN SOOLINGEN
9:30 - 10:30	Lecture: Pediatric TB	Christophe DELACOURT (Necker Enfants Malades Hospital - Paris France)
10:45 - 12:00	Lecture: TB mol Epi and Spoligotyping	Dick VAN SOOLINGEN
13:00 - 13:15	Synthesis of the day's activities in Context	
13:15 - 18:00	Practical Workshop: Spoligotyping, Hybridization + lecture during dead time	Dick VAN SOOLINGEN
18:00 - 19:00	Bioinformatics exercises	Howard TAKIFF

Thursday June 15 201709:00-9:30
(in Lab)**Lecture:** MIRU**Philip SUPPLY**

(Institut Pasteur - Lille -France)

9:30-10:00

PCR MIRU

Veronique JOLY

(Hopital Bichat–Claude Bernard - Paris)

10:30-11:30

Lecture: TB HIV/Diabetes**Laurent ABEL**

(Necker Enfants Malades Hospital - Paris France)

11:45-12:45

Lecture: Genetic Susceptibility to TB

13:45 - 14:00

Synthesis of the day's activities in Context

14:00-16:00

Practical workshop: MIRU, electrophoresis (dépôts = 90') + lecture
MIRU gels overnight**Philip SUPPLY**

(Institut Pasteur - Lille - France)

16:30 - 18:00

Practical Workshop: Spoligotyping: Results and Discussion**Philip SUPPLY**

18:00 - 19:00

Bioinformatics exercises

Friday June 16 2017

9:00 – 10:00

Lecture: NTM Detection and speciation; when to treat**Jean-Louis HERRMANN**

(Hôpital Raymond Poincaré- Garches- France)

10:15-12:45

Lecture: Population structures and evolution of M. Tuberculosis**Sébastien GAGNEUX****MIRU and Spoligotyping in context with WGS****Sébastien GAGNEUX****Lecture:** WGS and SNPs and Transmission

(Swiss Tropical and Public Health Institute, Basel - Switzerland)

14:00 - 14:15

Synthesis of the day's activities in Context

14:15 - 16:30

Practical Workshop: MIRU Photos + Results and Discussion**Philip SUPPLY**

16:30 - 18:00

Comparison of results: Mol Epi. in the context of tuberculosis phylogeny

Philip SUPPLY*First week course evaluation***- WEEK 2 -****Monday June 19 2017**

9 - 10:30

Lecture: Treatment of Tuberculosis**Nicolas VEZIRIS**

Including MDR and XDR cases

(Hôpital Pitié Salpêtrière, Paris- France)

10:45 - 11:15

Lecture: The short term treatment for MDR tuberculosis**Arnaud TREBUCQ**

(The Union - Paris - France)

11:30-11:45

Synthesis of the day's activities in Context

-11:45-12:15

Practical workshop: Line Probe assay test (Hain) Genotype
MTBDRplus/sl**Catherine PIERRE-AUDIGIER**

Preparation of Mix and amplification

(Institut Pasteur – Paris)

12:15-12:45

Practical workshop: GeneXpert**Indira SOUNDIRAM**

Principle of test : first run

(Cepheid Europe - Maurens Scopont - France)

Practical workshop: Genotype MDRplus-hybridization**Catherine PIERRE-AUDIGIER**

(Institut Pasteur - Paris)

14:00-18:00

GeneXpert : Tests, Installation and maintenance

Indira SOUNDIRAM

Tuesday June 20 2017

9:00 - 10:00	Current and future technical options for the diagnosis of drug resistant tuberculosis	Elisa TAGLIANI Institut San Raffaele - Milano
10:15-11:15	Defining the boundaries of a healthy immune response for a better understanding of TB immunity	Darragh Duffy Institut Pasteur, Paris
11:30 - 12:30	Bioinformatics exercises	
13:45 - 15:00	Practical workshop: Interpretation of Genotype MTBDRplus/sl	Catherine PIERRE-AUDIGIER, Elisa TAGLIANI
15:30 - 17:45	Practical workshop: Interpretation and Discussion of GeneXpert	Indira SOUNDIRAM, Elisa TAGLIANI
18:00 - 18:45	Bioinformatics exercises	

Wednesday June 21 2017

9:00 – 11:00	Lecture: New Drugs, New Regimens, Drug trials	Susan DORMAN (Johns Hopkins Center for Tuberculosis Research, - Baltimore - U.S.A.)
11:15 - 13:00	Lecture: Drug action and Resistance Mechanisms	Ying ZHANG (Johns Hopkins Center for Tuberculosis Research - Baltimore - U.S.A.)
14:00 - 14:15	Synthesis of the day's activities in Context	
14:15 - 15:30	Lecture: Clinical usefulness of WGS	Philip BUTCHER and Adam WITNEY (University of London)
15:30 - 18:00	Practical Workshop: Bioinformatics exercises Databases, WGS	Magnus FONTES and team (Institut Pasteur - Paris)

Thursday June 22 2017

9:00 - 11:00	EXAM	
11:15 - 12:30	Lecture: Tuberculosis resistance: value of rapid testing in various infrastructure settings	Francis DROBNIEWSKI Imperial College - London
13:30 - 13:45	Synthesis of the day's activities in Context	
13:45 – 18:00	Practical workshop: WGS scanning, databases	Philip BUTCHER and Adam WITNEY

Friday June 23 2017

9:00 - 10:00	Lecture: General Epidemiology of Tuberculosis	Philippe GLAZIOU (World Health Organisation - Geneva - Switzerland)
10:15 - 11:15	Pasteur Museum visit	
11:30 - 13:00	Correction of Tests	
14:00 - 15:45	Correction of Tests	
16:00 - 18:00	Group Discussion, Course Evaluation	
18:00 - 18:00	Presentation of Diplomas and course closure	