

# McGill TB Research Methods Course

AN INTENSIVE COURSE ON TB RESEARCH METHODS

McGill University, Montreal, Quebec, Canada – July 14–18, 2014

 <b>Centre international de TB McGill</b>	<b>Hosted by:</b>  <b>McGill International TB Centre</b>	<b>Venue:</b> McGill University campus, McConnell Engineering Building 3480 University Street, Montreal, Qc, H3A OE9, Canada
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## COURSE SCHEDULE: OUTLINE

Day	Date	Time	Major themes
1	July 14, Mon	8.30 AM – 5.00 PM	WHO – TB, DR –TB, Pediatric TB, HIV-TB
2	July 15, Tues	9.00 AM – 5.00 PM	Operational Research
3	July 16, Wed	9.00 AM – 5.00 PM	Molecular epidemiology, genetic epidemiology
4	July 17, Thur	9.00 AM – 5.00 PM	Randomized Clinical Trials
5	July 18, Fri	9.00 AM – 5.00 PM	Economic analysis and disease modelling

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Course website: [www.teachepi.org](http://www.teachepi.org)




A website for learning and teaching epidemiology


## Day 1 - July 14, 2014 [Monday]

Time	Lecture	Faculty
8.00 AM	Registration	
8.30 – 9.00 AM	Welcome and Introductions	All
9.00 – 9.40 AM	Overview – The WHO global TB research Plan	C Leinhardt
9.40 – 10.20 AM	Research priorities in DR-TB	D Menzies
10.20 – 10.40 AM	Coffee	
10.40 – 11.20 AM	Pediatric TB research – barriers and progress	B Marais
11.20 – 12.00 PM	HIV-TB research and global priorities	WJ Burman
12.00 – 1.00 PM	Lunch	
1.00 – 2.00 PM	Overview of study architectures	D Menzies
2.00 – 4.30 PM Including Coffee	 Small groups- Selecting a question and study design	
4:30 – 5.00 PM	Q & A	D Menzies
5.15 – 6.15 PM	Wine and Cheese Reception Hosted by McGill International TB Centre Venue: TBA	


## Day 2 - July 15, 2014 [Tuesday]

Time	Lecture	Faculty
9.00 – 9.40 AM	Operational research: what, why and how	T Harries
9.40 – 10.20 AM	Capacity building for operational research in low- and middle-income countries – the SORT IT Model	T Harries
10.20 – 10.40 AM	Coffee	T Harries
10.40 – 11.20 AM	Principles and structure of a research protocol	
11.20 – 12.00 PM	Examples of operations research studies conducted within the Indian National TB Control Programme	S Satyanarayana
12.00 – 1.00 PM	Lunch	
1.00 – 2.00 PM	Error, Confounders and Bias	M Pai
2.00 – 4.30 PM Including Coffee	 Small groups- Measurement issues in assessing determinants, covariates and outcomes. Errors and biases in measurement.	
4:30 – 5.00 PM	Q & A	M Pai


### Day 3 - July 16, 2014 [Wednesday]

Time	Lecture	Faculty
9.00 – 9.40 AM	Molecular methods for typing and branding the tubercle bacillus	M Behr
9.40 – 10.20 AM	Molecular Typing for patient, outbreak and population-level studies of TB epidemiology	M Behr
10.20 – 10.40 AM	Coffee	
10.40 – 11.20 AM	Genetic Epidemiology – A brief introduction	E Schurr
11.20 – 12.00 PM	Allelic association studies in TB	E Schurr
12.00 – 1.00 PM	Lunch	
1.00 – 2.00 PM	Population selection and sample size	A Benedetti
2.00 – 4.30 PM Including Coffee	 Small groups- Study population and sample size issues	
4:30 – 5.00 PM	Q & A	A Benedetti

### Day 4 - July 17, 2014 [Thursday]

Time	Lecture	Faculty
9.00 – 9.40 AM	RCT designs. Phase 1, 2 and 3 trials. Placebo and OBT designs	D Menzies
9.40 – 10.20 AM	Study populations, sample size, preventing bias and measurements issues. Interim analyses, stopping rules	F Khan
10.20 – 10.40 AM	Coffee	
10.40 – 11.20 AM	RCTs. End-points and surrogates. Review panels and DSMB. IRB issues and study oversight	D Menzies
11.20 – 12.00 PM	Data Analysis – primary end-points, planned and unplanned secondary analyses	D Menzies
12.00 – 1.00 PM	Lunch	
1.00 – 2.00 PM	Data Analysis Methodology	A Benedetti
2.00 – 4.30 PM Including Coffee	 Small groups- Data handling, verification and data analysis	
4:30 – 5.00 PM	Q & A	A Benedetti

## Day 5 - July 18, 2014 [Friday]

Time	Lecture	Faculty
9.00 – 9.40 AM	Introduction to infectious disease modeling	O Oxlade
9.40 – 10.20 AM	Introduction to economic analyses	K Schwartzman
10.20 – 10.40 AM	Coffee	
10.40 – 11.20 AM	How to evaluate an economic analysis	K Schwartzman
11.20 – 12.00 PM	Issues and challenges in modeling TB	O Oxlade
12.00 – 1.00 PM	Lunch	
2.00 – 4.30 PM Including Coffee	 Small groups- Presentation of studies by small groups  Comments on study protocols	D Menzies M Behr
4:30 – 5.00 PM	Course evaluations and closure	D Menzies M Behr