Aim
The aim of the course is research capacity building through local and international research collaborations. The course aims to introduce the basic concepts in statistics and epidemiology.

Objectives
1. Data management
2. Study design
3. Statistical applications
4. Research and publication Ethics

What the participants will gain?
1. Define basic statistical and epidemiological concepts
2. Evaluate methodology in scientific publications
3. Control data collection and management
4. Choose relevant statistical tests
5. How to read and write scientific papers
6. Gain insight into building international research partnerships
7. Increase research capacity
8. Prepare proposals for institutional review boards

Course methodology
Lectures and practicum with approximately 50 participants

Programme Chair:
Professor Önder Ergönül, MD, MPH
Professor of Infectious Diseases and Clinical Microbiology
Koç University, School of Medicine, American Hospital
Chair, Infectious Diseases and Clinical Microbiology Department, Istanbul, Turkey
ESCMID Education and Communication Officer
**Monday, Aug 23rd**

**08:00-08:15** Welcome and Opening Speech Dr. Emel Mashaki Ceyhan

**08:15-08:30** Overview and Objectives Prof. Önder Ergönül

**08:30-08:45** Introduction to Epidemiology & Contribution on Health Prof. Önder Ergönül

**08:45-09:15** Types of Study Design Prof. Önder Ergönül

**10:15-10:45** Break

**10:45-11:30** Case Reports: Narrating Clinical Practice to Scientific Evidence Prof. Önder Ergönül

**11:30-12:15** Cross Sectional Studies Prof. Sibel Sakarya

**12:15-13:00** Cohort Studies Prof. Önder Ergönül

**13:00-14:00** Lunch

**14:00-14:15** Case Control studies Prof. Önder Ergönül

**14:45-15:30** Survey Design Prof. Sibel Sakarya

**15:30-15:45** Break

**15:45-16:30** Introduction to Practicum - STATA & Journal club Prof. Önder Ergönül

**16:30** Wrap-up & Closure Prof. Önder Ergönül

**Tuesday, Aug 24th**

**08:00-08:15** Welcome to Day 2 Prof. Önder Ergönül

**08:15-10:00** Descriptive measures: Central tendency measures, Central dispersion measures, Distribution of data Prof. Önder Ergönül

**10:00-11:00** Univariate statistical analysis: Parametric tests and Nonparametric tests Prof. Önder Ergönül

**11:00-11:30** Break

**11:30-13:00** Practicum Prof. Önder Ergönül, Claudine Szpilfogel

**13:00-14:00** Lunch

**14:00-14:15** Correlation Claudine Szpilfogel

**14:45-15:30** Multivariate Analysis Prof. Önder Ergönül

**15:30-15:45** Break

**15:45-16:30** Practicum Prof. Önder Ergönül, Claudine Szpilfogel

**16:30** Wrap-up & Closure Prof. Önder Ergönül

**Wednesday, Aug 25th**

**08:00-08:15** Welcome to Day 3 Prof. Önder Ergönül

**08:15-10:00** Survival Analysis Prof. Sam Salek

**09:45-10:30** Randomized Clinical Trial Claudine Szpilfogel

**10:30-11:00** Break

**11:00-12:00** Systematic Review and Meta-analysis Claudine Szpilfogel

**12:00-12:30** Qualitative Research Methods and Analysis Prof. Sam Salek

**12:30-14:00** Lunch

**14:00-14:45** Patient-Reported Outcomes in Clinical Practice and Research Prof. Sam Salek

**14:45-15:30** Reporting Outcome Guidelines in Studies Claudine Szpilfogel

**15:30-15:45** Break

**15:45-16:30** Practicum Prof. Sam Salek, Claudine Szpilfogel, Prof. Önder Ergönül

**16:30** Wrap-up & Closure Prof. Önder Ergönül

**Thursday, Aug 26th**

**08:00-08:15** Welcome to Day 4 Prof. Önder Ergönül

**08:15-10:00** Principles of Health Economic Outcome Research Prof. Sam Salek

**10:00-10:45** Critical Thinking, Reading and Raising the Visibility of Your Research Prof. Sam Salek

**10:45-11:00** Break

**11:00-12:30** Scientific Publishing Landscape and Tips on Writing Editor (tbc)

**12:00-13:00** Lunch

**13:00-14:00** Abstract Writing Workshop Editor (tbc) Prof. Önder Ergönül

**14:30-14:45** Break

**14:45-15:30** Panel with Editors: Convincing the Editor Prof. Sam Salek, Editor (tbc) Prof. Önder Ergönül

**15:30-15:45** Break

**15:45-16:30** Closure Prof. Önder Ergönül, Dr. Emel Mashaki Ceyhan