

**Workshop on
Molecular Methods in Microbiology and Epidemiology**

*Rijeka, June 12th – 15th, 2012
University of Rijeka, Faculty of Medicine
Department of Microbiology*

Workshop Program

Day I – Tuesday June 12th, Lecture Hall

- 10:00 – 11:00 **Anders Sjostedt**, University of Umeå, Sweden
Advice and regulations regarding BSL3 facilities
- 11:00 – 11:30 Coffee break
- 11:30 – 12:30 **Evelyn Stelzl**, Medical University of Graz, Austria
Trends in routine molecular diagnostics
- 12:30 – 13:00 **Mihaela Matovina**, Faculty of Medicine, University of Rijeka
*Molecular typing by Pulsed Field Gel Electrophoresis (PFGE)
- introduction*
- 13:00 – 14:00 Lunch

Day II – Wednesday June 13th, Department of Microbiology

- Hands-on laboratory work: PFGE for Klebsiella pneumoniae
genotyping (Mihaela Matovina, Vanja Vasiljev Marchesi)*
- 09:00 – 12:00 Bacterial cultures preparation
- 12:00 – 13:00 Lunch
- 13:00 – 17:00 Agarose plugs preparation
Incubation of plugs in lysis buffer 1
Washing
Incubation of plugs in lysis buffer 2



Day III – Thursday June 14th, Department of Microbiology

- 09:00 – 13:00 *Hands-on laboratory work: PFGE for Klebsiella pneumoniae genotyping (Mihaela Matovina, Vanja Vasiljev Marchesi)*
Washing
Preparation of samples for restriction enzyme digestion
Restriction enzyme digestion
- 13:00 – 15:00 Lunch
- 15:00 – 17:00 Sample loading
Gel preparation
Electrophoresis

Day IV – Friday June 15th, Lecture Hall

- 09:30 – 09:50 **Suzana Bukovski**, University Hospital for Infectious diseases "Dr. Fran Mihaljević", Zagreb
When, why and how to apply molecular diagnostics of invasive bacterial infections
- 09:50 – 10:10 **Ana Budimir**, Clinical Hospital Center and School of Medicine, University of Zagreb
Molecular typing methods for bacterial pathogens
- 10:10 – 10:30 **Vera Katalinić Janković**, Croatian National Mycobacteria Reference Laboratory, Zagreb
Molecular tools in diagnosis and TB control
- 10:30 – 11:00 Coffee break
- 11:00 – 11:20 **Ivana Goić Barišić**, Clinical Department of Microbiology and Parasitology, Split University Hospital and Faculty of Medicine, University of Split
Molecular epidemiological investigation of carbapenem-resistant Acinetobacter baumannii isolates from Split University Hospital during ten years period
- 11:20 – 11:40 **Mihaela Matovina**, Faculty of Medicine, University of Rijeka
Genotyping of Pseudomonas aeruginosa by PFGE
- 11:40 – 12:00 Discussion
- 12:00 – 14:00 Lunch
- 14:00 – 16:00 *Hands-on laboratory work: PFGE for Klebsiella pneumoniae genotyping (Mihaela Matovina, Vanja Vasiljev Marchesi)*
Gel staining and documentation
Analysis of PFGE results
GelCompar II software demonstration

