



MOLECULAR BIOLOGY TECHNIQUES

HANDS-ON SHORT COURSES FOR LABORATORY PROFESSIONALS

in the Food Microbiology Laboratory of the
University of Udine, Italy

Instructors: *Dr. Luca Cocolin, PhD, Food Microbiologist*
Dr. Kalliopi Rantsiou, PhD, Biologist

Courses

1. September 9-12, 2004: **Detection and Identification of Foodborne Pathogens Using Nucleic-acid Techniques (4 days)**

- Theory and methodology
- The application of molecular methods to the sample
- Standard analysis of food samples
- Sample preparation
- Interpretation of results
- Protocols
- Hands-on practice, under supervision

Course Fee: €1,500.00 (one thousand five hundred Euros)

Participants: 10

2. October 27-November 2, 2004: **Contemporary Molecular Biology Techniques (7 days)**

- Sample handling
- Enzymes – *in vivo* and *in vitro*
- Electrophoresis
- Cloning
- Sequencing
- PCR
- Laboratory procedures
- Hands-on practice, under supervision

Course Fee: €2,000.00 (two thousand Euros)

Participants: 10

3. December 3-7, 2004: **Polymerase Chain Reaction (PCR) (5 days)**

- Theory and applications of PCR
- Protocols
- Equipment, reagents and procedures
- Demonstration / presentation of the protocols
- Hands-on practice, under supervision

Course Fee: €1,700.00 (one thousand seven hundred Euros)

Participants: 10

**FEES EXCLUDE COSTS OF TRAVEL, MEALS AND LODGING.
DISCOUNTS MAY APPLY. For registration or further information
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AFSIS: MOLECULAR BIOLOGY TECHNIQUES

HANDS-ON SHORT COURSES FOR LABORATORY PROFESSIONALS

**in the Food Microbiology Laboratory of the
*University of Udine, Italy***

Who should Attend?

Biologists, microbiologists, food scientists, chemists, biochemists, medical doctors, veterinarians, chemical engineers.

Participant numbers are strictly limited to ten per course to permit maximum hands-on learning time.

Goals

The AFSIS Molecular Biology Training Courses will acquaint participants hands-on with the modern techniques and current protocols used in a molecular biology laboratory.

The three sequential courses can be taken together or individually. (Discounts may apply to those taking more than one course.) Scientists and technicians from different disciplines can refresh their knowledge or be introduced to novel scientific approaches. Participants will benefit from intensive supervision and direct, hands-on experience for the duration of each course.

Location, Accommodation and Travel

The seminars will take place in the *Food Microbiology Laboratory* of the Department of Food Science, University of Udine, Italy. Udine is a charming city close to Venice and Trieste. **Course leaders can assist you find accommodation in local hotels.** Trieste or Venice airports serve Udine.

The Laboratory and its Facilities

The laboratory has over 10 years experience in the application of molecular biology for the detection and identification of foodborne pathogens. In the past two years, part of the research carried out in the lab was directed towards gene cloning and expression analysis. The laboratory's equipment was recently renovated and expanded, meeting international standards for molecular biology research.

Instructors and Staff

The AFSIS instructors, and Udine laboratory personnel, are experienced researchers. Dr. Cocolin and Dr. Rantsiou both have interests in the microbial ecology of fermented foods and the genetic characterization of Lactic Acid Bacteria strains of importance to fermented foods.

Registration

For registration or further information: go to www.afsis.com

Or contact:

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