

Second European Workshop

*Modern Taxonomic Tools
and Molecular Mycology
in Diagnosis, Treatment,
Epidemiology and Prevention
of Fungal Diseases*

**November, 4 - 8, 2003
Athens, Greece**



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University of Athens
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Faculty:

R. Ashbee (Leeds, UK)
C. Hitchcock (Sandwich, UK)
W. Meyer (Sydney, Australia)
V. Robert (Utrecht, The Netherlands)
& A. Velegaki (Athens, Greece)



PROGRAM

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Novartis Greece & Pfizer Greece for supporting travel
of the invited speakers**

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offered by Pfizer Greece**

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by Wyeth Greece**

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Culture for financing reproduction of all Workshop material and to the
Pharmaceutical, Reagent and Diagnostics industry for the liberally
provided support*

Tuesday 4.11.2003

8.30 Registration

9.00 **Opening of the Workshop:** N. J. Legakis, Professor of Microbiology, Medical School, National University of Athens

9.15 **Self-introduction of all Participants**

9.30 **Introduction:** A. Velegraki, Asst. Professor (Mycology), Medical School, University of Athens. "Why a European Workshop in Molecular Mycology"

Practice using demonstration station material: Staff of the National Mycology Reference Laboratory "Dermatophytes Clinical and Laboratory Aspects"

In memoriam Prof. E.G.V. Evans, Late member of the Workshop Faculty

10.15 Coffee Break

10.30 **Lecture:** M. Junie, Professor of Microbiology, Medical School, University of Cluj, Romania

“The Clinical Microbiologist's experience with the disk diffusion methods for testing yeast susceptibility”

11.15 Lecture: A. Velegraki

“Antifungal Susceptibility Testing I: NCCLS and AFST-EUCAST Microdilution Methods and Etest”

12.15 Lunch

13.00 Practical: G. Gaitanis/S. Kritikou/A. Velegraki.

“Antifungal Susceptibility Testing II: The dermatophyte and *Malassezia* challenge”

13.30 Practical: M. Logotheti/S. Kritikou/A. Milioni/
A. Velegraki

“Antifungal Susceptibility Testing III: Microdilution and Etest”

16.00 Coffee Break

16.15 Lecture: W. Meyer, Chief Scientist, Molecular Mycology Laboratory, Centre for Infectious Diseases and Microbiology, Westmead Hospital NSW, Australia

“Molecular Biology as the Basis for Molecular Fungal ID”

17.15 Lecture: V. Robert, Curator Yeast Division,
Centraalbureau voor Schimmelcultures (CBS), Utrecht, The
Netherlands.

“Fungal storage”

17.45 Lecture: W. Meyer

“Molecular ID I - Specimen Collection, DNA Extraction,
Gene Amplification, Commercial DNA based Fungal ID
Systems”

**20.0 Welcome Reception at the Roof Garden of the
President Hotel.**

Wednesday 5.11.2003

9.00 **Practical:** W. Meyer/A. Velegraki/G. Gaitanis/
M. Arabatzis

“Molecular Practical I: Spectrophotometric quantification of DNA extracted from pure cultures. ITS amplification PCR and gel set up”

11.00 Coffee Break

11.30 **Lecture:** W. Meyer

“Molecular ID II-RFLP analysis as tool for species identification. Multilocus approaches (RAPD, AFLP, PCR-fingerprinting) as tools for species and strain ID and PCR-fingerprinting Database”

12.30 Lunch

13.30 **Practical:** W. Meyer/A. Velegraki/G. Gaitanis/
M. Arabatzis

“Molecular Practical II: Gel loading”

15.00 **Lecture:** V. Robert

“Algorithmic and organizational challenges related to the integration of large volume of heterogeneous data /BioloMICS”

16.30 Coffee Break

16.45 **Practical:** W. Meyer/A. Velegraki/G. Gaitanis/
M. Arabatzis

“Molecular Practical III: Gel analysis, taking a photo of the ITS gel, discussion of the ITS amplification results, RFLP set up”

18.00 **Practical:** M. Logotheti/S. Kritikou/A. Milioni/
M. Junie/A. Velegraki

“Reading 24 h MIC results”

18.30 Evening Free

Thursday 6.11.2003

9.00 **Lecture:** R. Ashbee, Principal Clinical Mycologist,
Mycology Reference Centre, University of Leeds and Leeds
General Infirmary, U.K.

“Epidemiology and Immunology of the Diseases
Assosiated with *Malassezia* species”

10.00 Coffee Break

10.30 **Practical:** W. Meyer/A. Velegraki/G. Gaitanis/
S. Kritikou

“Molecular Practical IV: Loading the RFLP gel”

11.30 **Practical:** W. Meyer/ S. Kritikou /M.Arabatzis/
A. Velegraki

“Conventional versus molecular tests for identification of
Malassezia species. New *Malassezia* species by PCR-RFLP”

12.00 Lunch

12.45 **Lecture:** W. Meyer

“Molecular ID III - Phylogeny as basis for a taxonomy
based on natural relationships and subsequent molecular ID,

amplification of specific genes and sequencing for species ID, evaluation of ribosomal DNA and actin gene sequences”

13.15 Practical: W. Meyer/A. Velegraki/G. Gaitanis/
M. Arabatzis/H. Karahaliou

“Molecular Practical V: Taking a photo of the RFLP gel, discussion of the RFLP results”

15.00 Coffee Break

15.20 Lecture: Video assisted brief lecture .

“Automated capillary sequencing for identification of clinical yeast isolates ”

15.40 Lecture: V. Robert

“Issues with sequence data handling”

16.30 Practical: W. Meyer/A. Velegraki/M. Junie/
G. Gaitanis/M. Arabatzis/ H.Karahaliou

“Molecular Practical VI: Setting up the PCR-fingerprint reaction”

18.00 Practical: M. Logotheti/S. Kritikou/A. Milioni/
A. Velegraki

“Reading 48 h MICs-Discussion of Results”

Friday 7.11.2003

9.00 **Lecture:** C. A. Hitchcock. Senior Director, Exploratory Development, Pfizer Global Research & Development, Sandwich Laboratories, U.K.

“Genomics and the challenge of drug discovery”.

10.00 **Practical:** W. Meyer/ A. Velegraki/G. Gaitanis/
M. Arabatzis

“Molecular Practical VII: PCR-fingerprinting Gel loading”

10.45 **Lecture:** K. Tasiouka (Biosolutions-Applied Biosystems)

“Identification through Ribosomal DNA Sequencing”

11.30 Coffee Break

12.00 **Lecture:** K. Tasiouka

“Molecular ID IV - Real time PCR TaqMan applications for fungal detection and quantitation”

12.45 Lunch

14.00 Practical: H. Karahaliou/A. Velegraki/N. Mavroidis,
Bioanalytica, Greece

“Molecular Practical VIII: Real Time PCR set up, Roche
Light Cycler *Candida* Kit M Grade”

14.45 Lecture: A. Velegraki/P. Menounos, Chief Molecular
Biologist, Molecular Biology Laboratory, Military School of
Nurses, Athens.

“Real Time PCR-SSCP for the detection of *Candida*
species”

15.15 On -line demonstration: H. Karahaliou/
A. Velegraki/N. Mavroidis

“Molecular Practical IX: Real time PCR, in house *Candida*
detection assay in whole blood”

16.00 Practical: A. Velegraki/N. Mavroidis/ D. Makri/
W. Meyer

“Molecular Practical X: Discussion of the Real Time PCR
results”

16.30 Coffee Break

16.45 Practical: W. Meyer/A. Velegraki/G. Gaitanis/
M. Arabatzis

“Molecular Practical XI: taking a photo of the PCR-finger-
print gel and discussion of the PCR-fingerprint results”

**20.0 Farewell Dinner in Piraeus at “*Taste of the Ancient*”
with genuine Ancient Greek dishes and drinks.**

Transport to and from the President Hotel provided

Saturday 8.11.2003

9.00 Practical: V. Robert

“Molecular Practical XII: How to do a sequence search”

10.30 Coffee Break

11.00 Lecture: W. Meyer

“Molecular ID V-Critical issues of molecular based fungal identification and Future directions of molecular fungal ID (Macro-Microarray technology)”

12.00 Lecture: M. Kambouris, Consultant for the 2004 Olympics (Pollutant biological and chemical compounds)/
A. Velegraki

“Microarrays: The new challenge in the clinical setting and applications in yeast detection”

12.30 Lunch

13.30 Practical: V. Robert

“How to use BioloMICS”

15.00 **Lecture:** W. Meyer

“Epidemiological applications of molecular laboratory tools”

16.00 Coffee Break

16.15 **Lecture:** W. Meyer

“Molecular data reveal ongoing speciation within the *Cryptococcus neoformans* species complex”

17.15 Discussion and Workshop Evaluation

18.00 Closing of the Workshop



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PLATINUM SUPPORT



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