

## **DIAGNOSIS OF PARASITES IN HUMAN TISSUES**

**11-13 settembre 2006**

**Negrar – Verona  
ITALY**



**Prof. Lawrence R. Ash, Ph.D.**

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**THIS COURSE WILL BE IN ENGLISH**

**This course is jointly organised by the Centre for Tropical Diseases ( Director Dr. Zeno Bisoffi) and by the Service of Pathology (Director Prof. Giuseppe Zamboni) of the “Sacro Cuore – Don G.Calabria Hospital” of Negrar (Verona), with the “Fondazione Don G. Calabria per le Malattie Tropicali” and will be held at the “Sacro Cuore – Don G.Calabria Hospital” from September 11th to 13th 2006**

### **SCIENTIFIC SECRETARY**

**Stefania Marocco and Maria Gobbo**

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They are available for more detailed information at:

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## ORGANIZING MANAGER

Martina Speri, UFFICIO FORMAZIONE  
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## COURSE COORDINATORS

Prof. Lawrence R. Ash, Ph.D.  
Dr. Giovanni Swierczynski  
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### Candidates

Medical Doctors, Biologists, Laboratory and Pathology Technicians

**Maximum number of participants: 33**

### Learning Objectives and Specific Contents

1. Presentation of an overview of human and animal parasites that can occur in human tissues.  
Discussion of basic tissue structures of the major helminth groups: Nematodes, Trematodes and Cestodes
2. Within the nematodes, a discussion and approach to the identification of the more important nematode parasites found in human tissues:
  - a. Filarial worms
  - b. Ascarids and Anisakids
  - c. Trichuroids (including *Trichuris*, *Trichinella*, *Capillaria*)
  - d. *Strongyloides*
  - e. Larval nematodes causing visceral larva migrans (*Toxocara*, *Baylisascaris*, hookworms, Gnathostomes)
  - f. Pinworms
3. Discussion of trematodes and their eggs often found in human tissues:
  - a. Liver flukes (*Clonorchis*, *Fasciola*)
  - b. Lung flukes (*Paragonimus*)
  - c. Schistosome parasites)
4. Discussion of cestode larval stages often found in human tissues
  - a. Cysticercosis (*Taenia solium*)
  - b. Sparganosis (*Spirometra* spp)
  - c. Hydatid cysts (*Echinococcus granulosus* and *E. multilocularis*)
5. Approaches to diagnosis of protozoan parasites in human tissues
  - a. Amebiasis (intestinal and free-living pathogenic amebae)
  - b. Toxoplasmosis and other coccidian parasites
  - c. Leishmaniasis
  - d. Trypanosomiasis
6. Overview of Arthropods encountered in human tissues
7. Overview of Artifacts sometimes found in human tissues
8. Opportunities to study in histologic section many of the parasites covered in the lecture material

### Methodology

40% lectures

60% practical work with tutor

## PROGRAM

### Monday 11th September

09.00 - 09.30	<b>Introduction to the Workshop</b>	Dr. Bisoffi/Prof. Zamboni
09.30 - 11.00	<b>Theory and approach to diagnosing helminths in tissue</b>	Prof. Ash / Prof. Orihel
11.00 - 11.30	Coffee Break	
11.30 - 13.30	<b>Nematodes (roundworms): morphology in tissue section</b>	Prof. Ash / Prof. Orihel
13.30 - 14.30	LUNCH	
14.30 - 16.30	<b>Examples of microscopic diagnosis of nematodes</b>	Prof. Ash / Prof. Orihel
16.30 - 17.00	Coffee Break	
17.00 - 18.30	<b>Continuation of diagnosis by microscopy</b>	Prof. Ash / Prof. Orihel

### Tuesday 12th September

09.00 - 11.00	<b>Trematodes and Cestodes – morphology in tissue section</b>	Prof. Ash
11.00 - 11.30	Coffee Break	
11.30 - 13.30	<b>Examples: microscopic diagnosis of flatworms in tissue</b>	Prof. Ash / Prof. Orihel
13.30 - 14.30	LUNCH	
14.30 - 16.30	<b>Protozoa: intestinal and free-living amebae; toxoplasmosis, leishmaniasis, <i>Trypanosoma cruzi</i>, malaria</b>	Prof. Ash / Prof. Orihel
16.30 - 17.00	Coffee Break	
17.00 - 18.30	<b>Examples of microscopic diagnosis of protozoa in tissue</b>	Prof. Ash / Prof. Orihel

### Wednesday 13th September

09.00 - 10.30	<b>Artifacts in tissue sections</b>	Prof. Ash
	<b>Arthropods and rare tissue parasites</b>	Prof. Orihel
10.30 - 11.00	Coffee Break	
11.00 - 13.30	<b>Microscope diagnosis</b>	Prof. Ash / Prof. Orihel
13.30 - 14.30	LUNCH	
14.30 - 17.00	<b>Discussion and post-test</b>	Prof. Ash / Prof. Orihel

## Deadline for applications: 28th August, 2006

Applications will be considered on a « first come, first served » basis. After the deadline, applications will be considered only in case of vacancies.

## Fee

The course fee is €(euro) 500,00. This fee includes: tuition, handouts, lunch and coffee breaks. It does not include travel and accommodation. In case of withdrawal in the two weeks before the course, only 20% of the fee will be reimbursed.

For student attending a post doc course (a document proving the matriculation to a specialization school is required): €100,00.

## HOW TO REACH NEGRAR

### By car

Exit Verona Nord, Brennero motorway.

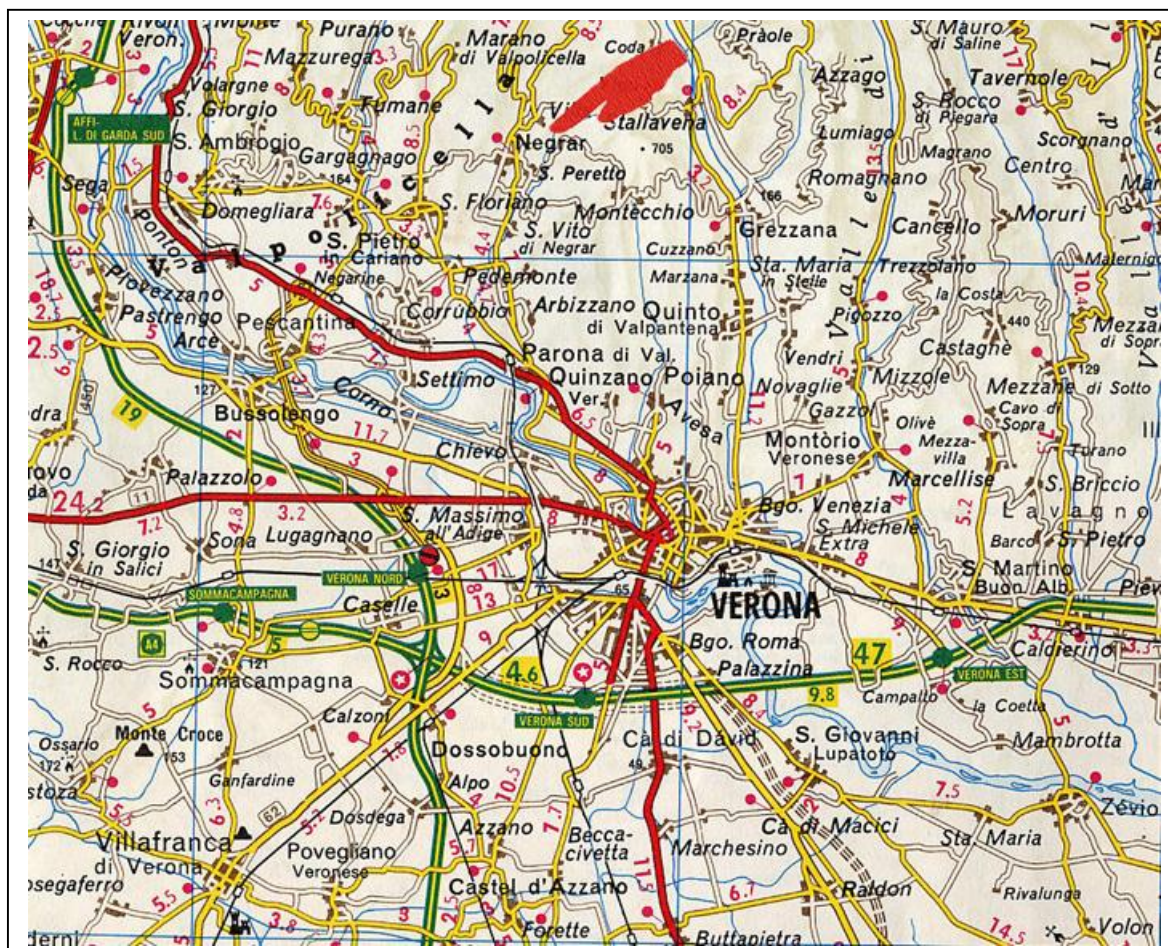
Go straight on the main road until the end, then turn right and follow indications to Negrar.

### By train

Railways Station Verona Porta Nuova. In front of the Station, take a bus to Negrar (informations on tickets and timetables at the APT Office, just outside the Station). Bus stop “Ospedale di Negrar”.

### By air

There is a shuttle bus to the Railways Station Verona Porta Nuova (see above)





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