Laboratory Diagnosis of Human Parasitic Infections

Monday January 27th – February 7th 2020

9:00 – 17:00 uur

<see dayly actual starting time in schedule below>

Course language:
English

Course venue:
University of Applied Sciences Leiden (Hogeschool Leiden), Zernikedreef 11, Leiden, Netherlands
http://www.hsleiden.nl/english
This location is about 10 minutes 'walk from Leiden Central station.

Speakers: (week 1 or week 2)
Department of Parasitology; LUMC

- E.A.T. Brienen (1,2)
- Prof. Dr. C.H. Hokke (2)
- Dr. L. van Lieshout (1,2)
- Dr. M. Roestenberg (2)

Other departments LUMC

- Prof. Dr. L.G. Visser, Dept. Infectious Diseases (1,2)

Guest-speakers

- Dr. J. van der Giessen, Center of Disease Control the Netherlands ; National Institute of Public Health and Environment, Bilthoven (1)
- Drs. A. van Goor, Microbiology, University of Applied Sciences Leiden (1,2)
- Dr. C.L.M. van Hees, Dermatology, Erasmus MC, Rotterdam (2)
- Dr. J.J. van Hellemond, Microbiology, Erasmus MC, Harbour hospital, Rotterdam (2)
- Drs. L.M. Kortbeek, Center of Disease Control the Netherlands ; National Institute of Public Health and Environment, Bilthoven (2)
- Dr. T.G. Mank, Regional Laboratory for Medical Microbiology and Public Health, Haarlem (1)
- Dr. B. Mulder, Dept. Medical Microbiology and Infectious Diseases; Canisius Wilhelmina Hospital;Nijmegen (2)
- Dr. F. Stelma, Dept. Medical Microbiology, Radboud UMC, Nijmegen (2)
- Dr. J.J. Verweij, Laboratory for Medical Microbiology and Immunology; Laboratory for Clinical Pathology; St. Elisabeth Hospital, Tilburg (1,2)

Monday 27 January 2020

Approx. 30 min - pre-course homestudy
Introduction to course and laboratory diagnosis of parasitic infection
L. van Lieshout

Approx. 1 hr - pre-course homestudy
Diagnosis of soil transmitted helminths and Strongyloides, some theoretical aspects
L. van Lieshout

Approx. 30 min - pre-course homestudy
Diagnosis of Echinococcose, Taenia and other common cestodes; some theoretical aspects
L. van Lieshout

09.45 - 10.15	**Registration, coffea/tea**
10.15 - 10.30	Introduction to room G3.004
10.30 - 11.00	**Quiz and FAQ about pre-course homework** *L. van Lieshout*
11.00 - 12.30	**Diagnosis of soil transmitted helminths and cestodes – practice** **Strongyloides – the neglected among the neglected - theory** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 14.15	**Clinical aspects of echinococcosis** *M. Roestenberg*
14.15 - 15.15	**Epidemiology and control of echinococcosis** *J. van der Giessen*
15.15 - 15.30	**Coffea/tea break**
15.30 - 16.30	**Diagnosis of soil transmitted helminths and cestodes - practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
16.30 - 17.00	**Discussion about patient of the day, slide quiz and general review** *L. van Lieshout*

Tuesday 28 January 2020

Approx. 30 min - homestudy
Diagnosis of trematodes, some general aspects
L. van Lieshout

09.30 – 10.30	**Diagnosis and control of schistosomiasis - theoretical aspects** **Quiz and FAQ about homework** *L. van Lieshout*
10.30 - 10.45	**Coffea/tea break**
10.45 - 12.30	**Laboratory procedures for the diagnosis of helminths in stool and urine** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 14.00	**Laboratory procedures for the diagnosis of helminths in stool and urine** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
14.00 - 14.45	**Blinded cases for the diagnosis of helminths** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
14.45 - 15.00	**Coffea/tea break**
15.00 - 16.30	**Blinded cases for the diagnosis of helminths** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
16.30 - 17.00	**Discussion about patient of the day, slide quiz and general review** *L. van Lieshout*

Wednesday 29 January 2020

Approx. 30 min - homestudy
Diagnosis of intestinal protozoa, some general aspects
L. van Lieshout

09.30 - 10.30	**Laboratory diagnosis of amoebiasis, theory and practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
10.30 - 10.45	**Coffea/tea break**
10.45 - 11.30	**Laboratory diagnosis of other pathogenic intestinal protozoa, theory and practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
11.30 - 12.30	**Laboratory diagnosis of non-pathogenic intestinal protozoa, theory and practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 15.00	***Giardia* and *D. fragilis*, clinical aspects, diagnostics and epidemiology** *T.G. Mank*
15.00 - 15.15	**Coffea/tea break**
15.15 - 16.30	**Blinded cases for the diagnosis of most common intestinal prozoa** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
16.30 - 17.00	**Slide quiz, discussion about patient of the day and general review** *L. van Lieshout*

Thursday 30 January 2020

Approx. 30 min - homestudy
Diagnosis of coccidia and microsporidium, some general aspects
L. van Lieshout

09.30 - 10.00	**Artefacts when detecting helminth or protozoa in stool or urine** *E.A.T. Brienen*
10.00 - 10.30	**Laboratory diagnosis of coccidia and microsporidium and artefacts** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
10.30 - 10.45	**Coffea/tea break**
10.45 - 12.30	**Laboratory diagnosis of *P. falciparum*, theory and practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 15.00	**Laboratory diagnosis of non-*P. falciparum* malaria, theory and practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
15.00 - 15.15	**Coffea/tea break**
15.15 - 16.30	**Blinded cases for the diagnosis of malaria** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
16.30 - 17.00	**Slide quiz, discussion about patient of the day and general review** *L. van Lieshout*
17.00 - 20.30	**Social Event – (optional)** *Dutch pancackes – Dutch treat (not included in the fee)*

Friday 31 January 2020

09.00 - 10.30	**New developments in the laboratory diagnosis of parasitic infection** *J.J. Verweij*
10.30 - 10.45	**Coffea/tea break**
10.45 - 11.30	**A brief introduction to other common blood and tissue paristes** *L. van Lieshout*
11.30 - 12.30	**Laboratory diagnosis of other common blood and tissue paristes** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 14.30	**Blinded cases for the diagnosis of parasitic infections** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
14.30 - 15.15	**Discussion about patient of the day, quiz and general evaluation of the week** *L. van Lieshout*
15.15 - 15.30	**Coffea/tea break**
15.30 - 16.45	**Clinical aspects of parasitic infections discussed during the first week** *L. Visser*
16.45 - 17:00	**Closure of week 1** *L. van Lieshout*

Monday 3 February 2020

Approx. 30 min - homestudy
Filariasis and dracunsulus – within endemic regions
L. van Lieshout

Approx. 30 min - homestudy
Free living amoeba
L. van Lieshout

09.45 - 10.15	**Repetition of week 1 assignment** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
10.15 - 10.30	**Coffea/tea break**
10.15 - 10.30	**Coffea/tea break**
10.30 - 12.15	**Malaria microscopy of complicated cases** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.15 - 12.30	**Discussion about patient of the day and general review** *L. van Lieshout*
12.30 - 13.15	**Lunch break**
13.15 - 14.45	**Parasites of the skin** *C. van Hees*
14.45 - 15.00	**Coffea/tea break**
15.00 - 16.15	**Clinical aspects and treatment of malaria** *L. Visser*
16:15 – 17:00	**Non-microscopy diagnosis of malaria** *M. Roestenberg*

Tuesday 4 February 2020

9.00 - 09.30	**Molecular diagnosis of Leishmania and Trypanosoma** *J.J. Verweij*
09.30 - 10.30	**Ectoparasites** *A.van Goor*
10.30 - 10.45	**Coffea/tea break**
10.45 - 11.00	**Microscopy and macroscopy of ectoparasites and artefacts** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
11.00 - 12.30	**Laboratory diagnosis of special cases (T-cases)** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13:15 – 14:00	**Filariasis in practice** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
14.00 - 14.45	D**iscussion about patient of the day a and special cases (malaria slide quiz)** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
14.45 - 15.00	**Coffea/tea break**
15.00 - 16.00	**Toxoplasmosis** *L.M. Kortbeek*
16:00 – 17:00	**Clinical aspects of toxocariasis and trichinellosis** *L.M. Kortbeek*

Wednesday 5 February 2020

09.00 - 10.30	**Trichimonas & clinical cases seen in a Dutch travel clinic or academic hospital** *J. van Hellemond*
10.30 - 10.45	**Coffea/tea break**
10.45 - 12.15	**Blinded cases diagnosis (IP-cases)** *L. van Lieshout; E.A.T. Brienen*
12.15 - 12.30	**Discussion about patient of the day and general review** *L. van Lieshout*
12.30 - 13.15	**Lunch break**
13.15 - 13.30	**Walk to LUMC (room L4-25, Medical Microbiology))**
13.30 - 15.00	**Therapy of malaria, leishmania and other more complicated parasitic infections** *L. Visser*
15.00 – 15.15	Coffea/tea break
15.15 - 16.00	**Research in human parasitlogy** *C.H. Hokke*
16.00 - 17.00	**Visit to research department of Parasitology, LUMC** *L. van Lieshout, C.H. Hokke*

Thursday 6 February 2020

Approx. 30 min - homestudy
Readings about parasites discussed so far during the course
L. van Lieshout

09.30 - 10.30	**Malaria microscopy of complicated cases, including slidequiz** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
10.30 - 10.45	**Coffea/tea break**
10.45 - 12.30	**Blinded cases diagnosis (T -cases)** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
12.30 - 13.15	**Lunch break**
13.15 - 14.15	**Sarcocistis, gnatostomiasis and other exotic parasites** *M. Roestenberg*
14:15 – 15:00	**Parasitic cases in severly immunocompromised patients** *F. Stelma*
15.00 - 15.15	**Coffea/tea break**
15.15 - 16.45	**Clinical cases as seen in a Dutch regional laboratory and treatment protocols** *B. Mulder*
16.45 - 17.00	D**iscussion about patient of the day and general review** *L. van Lieshout*

Friday 7 February 2020

Approx 30 min - homestudy
e-learning "Laboratory Diagnosis parasitic infections"
L. van Lieshout

09.30 - 10.00	**Answers of the e-learning "Laboratory Diagnosis parasitic infections"** *L. van Lieshout*
10.00 - 10.30	**More about microscopy-based techniques for the detection of intestinal parasites: Permanent staining, FLOTAC, mini-FLOTAC and more.** *L. van Lieshout*
10.30 - 10.45	**Coffea/tea break**
10.45 - 11.30	**Blinded cases diagnosis (IP-cases)** *L. van Lieshout; E.A.T. Brienen, A. van Goor*
11.30 - 11.45	**Answers of the T-cases** *L. van Lieshout*
11.45 - 12.30	**Case of the day, E-diagnosis, artefacts and delusions** *L. van Lieshout*
12.30 - 13.15	**Lunch break**
13.15 - 13.45	**Discussion about patient of the day and cases of the participants** *L. van Lieshout together with participants*
13.45 - 14.15	**Final test** *L. van Lieshout*
14.15 - 15.30	**Clinical aspects of parasitic infections discussed in during the course** M. Roestenberg / L. Visser
15.30 - 15.45	**Evaluation of the course** *E.A.T. Brienen, L. van Lieshout*
15.45 - 16.30	**Drinks and departure**
16:30	**Closure of week 2**