Under the Aegis and Support of WHO

Eastern Mediterranean Region
VIII Parasitology Summer Course
(ParSCo)

Residency Course on
PARASITES, ARTHROPOD VECTORS AND TRANSMITTED PATHOGENS IN EASTERN MEDITERRANEAN REGION

5th-14th June 2020
SPONSORSHIP

Golden Sponsor
Bayer Healthcare Animal Health

Silver Sponsor
Boehringer Ingelheim

and with the participation of

SOIPA (Società Italiana di Parassitologia)

ISP (Iranian Society of Parasitology)
Dear Colleagues,

We are pleased to announce the eighth edition of the Parasitology Summer Course (VIII ParSCo) organized by the Parasitology Unit of the Department of Veterinary Medicine, University of Bari (Italy) and School of Public Health, Tehran University of Medical Science (TUMS) and Iranian Society of Parasitology (ISP) with the support of the European Veterinary Parasitology College (EVPC), of the World Health Organization (WHO) and of Parasites & Vectors.

Next year ParSCo will be held in Iran, a wonderful country in the Eastern Mediterranean Region (EMRO), and we will refer to this as EMRO-ParSCo. Over the past seven years, more than 95 attendees from all continents have attended ParSCo, which was traditionally held in Southern Italy. Visit:

- https://www.youtube.com/watch?v=qpZ6FV9KQVI&feature=youtu.be
- https://www.youtube.com/channel/UCQaKY0wwTxOs29QjPAqJ0tA

The reason why ParSCo is moving to Iran is to increase transboundary collaboration within EMRO and with young parasitologists from anywhere with the specific aim to promote the concept of One Health. EMRO-ParSCo will be focussed on vector-borne diseases (VBDs) of zoonotic importance for the region. Iran is known endemic for some vector-borne parasitic infections (e.g., leishmaniosis), as well for hydatidosis, fascioliasis and recently eliminated urinary schistosomiasis. The World Health Organization (WHO) is a major sponsor and it has certified the elimination of dracunculiasis in this country three decades ago and it is leading successful control programs to eliminate malaria in the country.

The EMRO-ParSCo will be an intense, nine days-long course for young parasitologists and post-graduate students working in the field of human and veterinary parasitology. This course will be mostly focused on practical activities in the field and laboratory, with theoretical lectures making up less than 40% of the whole program.

The program consists of oral lectures and practical activities with sample collection, aimed at isolation, identification and diagnosis of parasites such as *Leishmania infantum*, *L. major*, *L. tropica* and their natural vectors along with the examination of a range of host animals to detect other parasites such as cestodes, trematodes, *Trichinella* and filarioids. Participants will also attend clinical examinations and case findings with direct observation through sample collection from potential hosts in the given endemic region. Meanwhile, the opportunities to perform necropsies on road-killed animals, mainly carnivores, and collect the parasites they harbour, will be available throughout the summer course.

The course will take place in Esfahan, the third most populous city of Iran located in the centre of the country which hosts several UNESCO World Heritage Sites. A wide range of parasites, vectors and vector-borne pathogens occur in this part of Iran, including those transmitted between animals and humans. This region has received significant attention from researchers, not only for its outstanding species richness, but also because it may represent a model for other countries.

We thank WHO, TUMS, Bayer Health Care Animal Health, Boehringer Ingelheim and SoIPa for their financial support.

We look forward to welcoming you to an enjoyable VIII EMRO-ParSCo in marvellous Iran meeting and sharing our experience in the field of parasitology with you!

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University of Bari, Italy

Filipe Dantas-Torres
Aggeu Magalhães Institute Recife, Brazil

Scientific Organizers of the VIII EMRO-ParSCo

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Gholamreza Mowlavi
School of Public Health, Tehran University of Medical Sciences, Iran

Saeidreza Naddaf
Pasteur Institute, Tehran, Iran
GENERAL INFORMATION

For any information, please refer to the secretariat (dedonno.cinzia@gmail.com).

Videos for the previous ParSCo editions:
Promo
Testimonials

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VENUE
Esfahan Health Research Station
Tehran University of Medical Sciences
Esfahan, Iran
Laleh sq. Zeynabiye Av.
Reza Jafari
Shahrokh Izadi
www.tums.ac.ir
jafari_r@farabi.tums.ac.ir, ijpa@tums.ac.ir

APPLICATION
Course applicants are requested to complete the provided registration form, include a CV, a motivation letter and a recent passport photo. The maximum number of participants is 20 and will comprise 10 Iran and/or neighbouring countries (i.e., Afghanistan, Tajikistan, Kirgizstan, Pakistan, Armenia, Iraq, and Turkey) and 10 from any other country in the world. In the case of many applications received the organizers will guarantee a gender quote (i.e., a minimum of 50% of female attendees) to ensure gender equality.

PARTICIPATION FEE
The total cost for participation is € 1000
• € 1000 is to be paid to Società Italiana di Parassitologia (SoIPa) (includes venue, teaching and laboratory material, transportation to field sites and others).
The participation fee does not include the costs of accommodation and dinner for the first night in Tehran (about € 70) and should be paid on site in cash.
Payment to the Società Italiana di Parassitologia (SoIPa) has to be issued by bank transfer to:
Società Italiana di Parassitologia (SoIPa)
IBAN= IT10 A 02008 62770 000012827594
(CIN = ABI = 02008  CAB = 62770)
UniCredit Banca filiale 2506, Ponte S. Nicolò (PD)
Codice BIC SWIFT: UNCRITM1R06
Please add as the reason for payment: Attendance to the VIII Parasitology Summer Course (5th June to 14th June 2020, Iran).

Applicants (up to 10) from Iran and/or neighbouring countries (i.e., Afghanistan, Tajikistan, Kyrgyzstan, Pakistan, Armenia, Iraq, Turkey) may request a reduced fee, which will be granted based on the CV assessment, the motivation letter, the entire final budget and number of applicants.

Iranian applicants can pay their registration fees by visiting the website of Iranian Society of Parasitology (http://en.tums.ac.ir/en/content/167/parsco) with the account number that will be addressed on time.

In the unlikely event of cancellation of the course only by the organizers due to unpredictable circumstances, the participation fee will be refunded except for bank transaction costs.

**DEADLINES**
- Applicants will be notified of acceptance by the 1st of February 2020.
- Payments and Visa documentation (see Visa section) should be issued/sent by 15th February 2020.
- Communication to the secretariat regarding flight schedules: 29th February 2020.

**OFFICIAL LANGUAGE**
- English. Proficiency skill is needed. All the applicants will undergo a Skype meeting interview with the organizers (Dr Jairo Menzdoza-Roldan will contact you for interview).

**ATLAS**
*By plane*
Imam Khomeini International Airport (https://www.ikac.ir/en/), daily flight to and from the main European cities.

**ACCOMMODATION**

1st night – Tehran
Boulevard Hotel (to be paid on site)
Tehran, No. 108, Keshavarz Blvd, 1511733911, Iran.
Phone+98 21 88106700
https://www.persiantouring.com/hotels/boulevard-hotel-tehran/
e-mail: info@persiantouring.com

**Esfahan Health Research Station (EHRS)**
Esfahan Health Research Station affiliated to Tehran University of Medical Sciences
Laleh Sq., Zeynabiye Av., Esfahan, Iran
e-mail: jafari_r@farabi.tums.ac.ir shahrokhizadi20@gmail.com iipa@tums.ac.ir
WEATHER
The area features the general characteristics of the typical central Iran climate, in June the temperature is from 18° to 35° C. You are advised to bring an ordinary jacket or a jumper and also sufficient sun protection.

FIELD AND LAB WORK
Program involves intensive field-work. The applicants should bring suitable clothes, shoes and sufficient sun protection. Hand disinfectants and insect repellents will be provided. The applicants should bring their own lab coat for training in labs.

SPECIAL RECOMENDATION
The attendees are strongly advised to be vaccinated against rabies. Please consider that the accommodation at EHRS is in a guesthouse with up to 3 beds in a room. Applicants are advised to check the cultural context of Iran and advices provided by the local Iranian Embassies in their respective countries. Please be sure that you can travel to Iran with your passport (i.e., check your previous travels). Credit cards may not be used and you are advised to bring with you some cash. In case of any questions, get in touch with organizers.

TO OBTAIN YOUR VISA
Every applicant is the only responsible for getting visa. For those of you that are eligible, for obtaining the Visa upon the arrival to Tehran airport (total cost about 80 Euro), the organizers will provide you with the electronic Visa. Accepted participants should provide the following documents for obtaining the electronic VISA:
- copy of the passport
- 150 words biographical sketch
- recent face photograph.
Citizen from Bangladesh, Canada, Colombia, Iraq, Jordan, Nepal, Somalia, Afghanistan, Pakistan, Sri Lanka, US, UK have to obtain their Visa at the Iranian embassy in their Country. For further information please visit: https://e_visa.mfa.ir/en/

ETHICAL ASSESSMENT
Participants should be inspired by the following principle “Equality of all human beings must not be undermined by any form of discrimination (racial, political, economic, religious, gender or based on one’s sexual orientation) or poverty. We all deserve the same opportunities in our pursuit of scientific knowledge toward a better world for all.”

OBJECTIVES AND CONTENTS
The main objective of the course is to provide, by means of oral lectures (OL) and practical activities (PA), a training of the following topics:

The basics on arthropod-borne diseases: biological agents, pathogenesis, vectors and their diversity and geographical distributions.

SAND FLIES AND LEISHMANIASIS
- Sand fly species in the Eastern Mediterranean area:
- biology and ecology
- collection
- slide mounting
- identification
- processing for molecular detection of *Leishmania*
- Sampling collection for the diagnosis of leishmaniasis

**TICKS AND TICK-BORNE DISEASES (TBDs)**
- Tick taxonomy, biology and ecology
- Tick collection from dogs, camels, sheep and cattle
- Tick collection from the environment
- Tick slide mounting
- Tick identification
- Tick dissection and detection of pathogens
- Tick-borne diseases in the Eastern Mediterranean area

**CLINICAL PARASITOLOGY**
- Clinical presentation and diagnosis of vector-borne diseases

**OTHER**
- Diagnosis of filarioids (e.g., *Dirofilaria* spp., *Onchocerca lupi* and *Cercopithifilaria* spp.)
- Rodent trapping, necropsies and ectoparasite collection
- Parasite of reptile their collection and identification
- *Trichinella* spp. infection and diagnosis
- Metaestode collection from organs
GENERAL GOAL
The main goal of the course is to provide attendees with updated information on the biology and ecology of arthropods such as sand flies, ticks and other vectors of pathogens in the EMRO. At the end of the course, they should be able to collect and identify important arthropod vectors (i.e., ticks, sand flies) as well as to diagnose vector-borne infections in rodents, reptiles, livestock and dogs. Elements of clinical parasitology, presentation and diagnostic procedures of tick-borne diseases, zoonotic parasitoses with emphasis on leishmaniasis will also be provided.

PRE-REQUIRED KNOWLEDGE
- Basic knowledge of veterinary and/or medical parasitology
- Selected papers will be sent to the attendees one month before the course initiation

TEACHING APPROACH
- Oral lectures (40%)
- Practical activities (60%)

LEARNING OUTCOMES
The attendees will be updated on the biology and ecology of the main arthropod vectors and pathogens in the EMRO. They will be able to:

- Collect and identify sand flies
- Collect and identify ticks
- Collect samples from dogs and livestock for the detection of vector-borne parasites
- Collect samples from rodents for the diagnosis of ecto- and endoparasites
- Examine slides for the cytological diagnosis of vector-borne parasites
- Examine and collect samples from rodents and dogs infected by L. infantum and L. major
- Perform sample collection from the wildlife for the diagnosis of Trichinella spp.
- Collect samples from the slaughter houses for the detection of helminths
- Collect samples from reptiles and identification of ecto- and hemo-parasites
- Diagnose the main zoonotic cestodes in the EMRO
LIST OF LECTURERS AND TECHNICAL ASSISTANTS

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Mr. Zabihollah Zarei
Mr. Reza Jafari
Mrs. Zahra Saidi
School of Public Health, Tehran University of Medical Sciences, Iran
SCIENTIFIC CONTEXT IN THE SPECIFIC AREA OF THE COURSE

Ticks are arthropods of medical and veterinary significance. Together with mosquitoes, they act as the main vectors of pathogens to animals and humans worldwide. Ticks transmit many emerging pathogens that have been discovered over the past decades, including several *Rickettsia* species. The Mediterranean and EMRO are particularly suitable for ticks in terms of host availability and climate features and ticks can be found throughout the year in urban, suburban, rural, and forested areas. Indeed, some species are found even during winter. Iranian researchers have conducted several studies on ticks and tick-borne pathogens in several parts of Iran so far. In one of these studies, a significant proportion of human infectious diseases are estimated tick-borne, suggesting that tick-borne zoonoses should be concerned in the country.

Leishmaniasis is a parasitic infection caused by different species of *Leishmania* protozoa. It is transmitted through the bite of infected female sand flies. Leishmaniasis is clinically divided into three major categories – cutaneous, mucocutaneous, and visceral. Old World Cutaneous leishmaniasis (CL) is endemic in the Mediterranean and in the EMRO including Iran. Iran is endemic for CL and during the last two decades the incidence of disease varied from approximately 100 to 200 cases per 100,000 population. *Phlebotomus papatasi, Ph. major, Ph. alexandri, Ph. sergenti* are major vectors of CL in the country. Visceral leishmaniasis (VL) is a life-threatening vector-borne parasitic disease distributed in some parts of the new world and old world. Parasitological investigations have revealed the role of domestic dogs in villages known as endemic foci of human VL as the most susceptible reservoir host for *L. infantum*. However, the main reservoirs of *L. major*, prevalent in the Esfahan region, are desert rodents e.g. *Rhombomys opimus* and *Meriones libycus*. Based on epidemiological, parasitological and molecular studies carried out in VL endemic areas of Iran during the last two decades, *Phlebotomus kandelakii, Phlebotomus perfiliewi* and *Phlebotomus tobbi* in north-western Iran, *Phlebotomus major* s.l., *Phlebotomus keshishiani* and *Phlebotomus alexandri* in southern parts of Iran are recognized as proven or probable VL vectors. Reptiles play an important role in the epidemiology of many parasites in the EMRO.

From the perspective of public health importance some parasitic diseases such as hydatidosis, fascioliasis and toxocariasis are also of national concern in Iran. Furthermore, although trichinellosis in Iran is not regarded as a common human health problem, parasitological surveys have been performed on wildlife of the country in the last six decades and the number of *Trichinella*-infected road killed carnivores and wild boars, is remarkable.

The attendees of the EMRO-ParSCo will have the unique opportunity to visit the areas where the abovementioned studies have been carried out.
PREPARATORY WORK AND FINAL EXAMINATION

- Article reading (selected papers)
- Attendees should prepare in advance a short power point presentation (up to 5 min) about their main activities and field interests
- Final examination (10 multiple choice questions)
- Course evaluation questionnaire
- An oral presentation of the EMRO-ParSCo activities will be delivered at the next EVPC meeting by one of the attendees

CANDIDATE SELECTION
The course is open to researchers and students from any country of the world with a particular interest in parasitology, including those who intend to apply for an EVPC Alternative Training Program and all peers who would like to delve in 10 intense days of field parasitology in EMRO. The course organizers will select the candidates (see above) based on a motivation letter, CV, date of application, skype interview and training level.

GROUP FORMATION
- In order to facilitate the activities, attendees may be divided in two or more groups
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Residency Course on

PARASITES, ARTHROPOD VECTORS AND TRANSMITTED PATHOGENS IN EASTERN MEDITERRANEAN REGION (EMRO)

5th-14th June 2020

Application form
To be sent before 19 January 2019

To the Organizing Committee  E-mail: parscobari@gmail.com
Fax: +39 080/4679839  Phone: +39 080/4679837

Name: ________________________  Surname: ________________________
Institution: ________________________________
City: ______________________  Country: ______________________
Phone: __________________  Fax: __________________
E-mail: ________________________________

I will arrive to Tehran by  □ train  □ plane

Arrival date: ________________________________
Time ________________________________

□ Acceptance of terms and conditions
Please be aware that the course organizers are not responsible for any damage or injury in any way arising from transfers and field, clinical and laboratory activities during participation to the course. We strongly suggest you opt for personal accident insurance if you do not already have it. By the acceptance of terms and conditions the applicants agree with processing of their personal data according to the European law.

Date______________________________
DETAILED PROGRAM
TIMETABLE AND CONTENTS

Friday 5th June

Arrival in Imam Khomeini International Airport and transfer to Tehran Boulevard Hotel
15:30 Meeting at the reception, departure by bus to Tehran historical center (optional)
15:30-18:00 Sightseeing of Tehran (optional)
18:00-22:00 Welcome dinner (optional)

Saturday 6th June

9:00-10:00 Welcome to the course (meeting with TUMS, Ministry of Health, and WHO official representatives)
10:00-11:00 Overview of Public Health in Iran (A. H. Takian, A. Akbari Sari)
11:00-11:30 Short introduction of all attendees (two sentences each)
11:30-12:00 Coffee break
12:00-13:00 Visit of the Campus and laboratories
13:00-14:30 Lunch
14:30 Departure to Esfahan by bus
21:00 Arrival and check-in at the Esfahan Health Research Station

Sunday 7th June

9:00-10:00 Introduction to the EMROParSCo
Contents: Presentation of the course location, organization, learning material for attendees (e.g., slides, selected articles, tick and sand fly identification keys).
10:00-10:30 Epidemiology of cutaneous and visceral leishmaniosis in Iran and the Middle East (M. Mohebali)
Contents: Oral lecture on Leishmania spp. present in EMRO with emphasis to their epidemiology, biology and risk of importation into other areas.
10:30-11:00 Coffee break
11:00-11:10 Technical brief about the field trip
11:10-12:10 Leishmania spp. in humans and dogs (D. Otranto)
Contents: Oral lecture on Leishmania spp. infecting dogs and humans
12:10-13:10 Lunch at the station
13:10-14:10 Ecology and ectoparasites of reptiles (J. Mendoza-Roldan)
Contents: Introduction to the principles and techniques of capturing and sampling reptiles and collection of ectoparasites and biological samples
15:00 Departure to the field (2 hrs trip to Matinabad)
17:30-20:00 Rodent trapping and observation of colonies, collection of Phlebotomus, practical demonstration of traps (A. Akhavan, A. Zahraei-Ramazani, R. Jafari)
Contents: Practical activity on the principles and techniques of trapping the rodents and Phlebotomus spp. visiting colonies of great gerbils (Rhombomys opimus)
20:00-21:30 Dinner and overnight in Matinabad desert camp
21:30-... Watching the stars and search for reptiles (optional)
Monday 8th June

06:30-07:30 Breakfast
08:00-09:00 Rodents’ trap collection and preliminary identification (A. Akhavan, A. Zahraci-Ramazani, R. Jafari)
Contents: Practical activity on collection of rodents, with demonstration of different procedures for restraining, transportation and preservation of collected animals prior to laboratory examination
09:00-11:00 Reptiles collection and collection of ectoparasites (J. Mendoza-Roldan, D. Modrý)
Contents: Practical activity on collection of reptiles, with demonstration of different handling and restrain. Collection and preservation of blood samples and ectoparasites
09:00-11:00 Examination of rodents, collection of ectoparasites (D. Modrý, A. Akhavan, G. Mowlavi)
Contents: Practical field activities including short term anesthesia of rodents, biological sample collection, ectoparasites collection and preservation
11:00-13:00 Rest in desert camp, lunch
13:00-15:30 Sightseeing, demonstration of basics of desert ecology and livestock in arid areas, opportunistic sampling of camels for ectoparasites (D. Modrý, Mrs. Zahra Saidi)
15:30 Departure to Esfahan (return trip, approximately 2 hrs)
18:00-19:00 Refreshing break
19:00-20:00 Veterinary and Human Parasitology and One Health (D. Modrý)
Contents: Oral lecture about connection of infectious diseases of humans and wild and domestic animals in their environment and its on-going changes. Focus on the reasons for infectious disease emergence in various ecosystems (One Health approach)
20:30-22:30 Dinner and visiting the town.

Tuesday 9th June

07:00-08:00 Breakfast
08:00-10:00 Examination of rodents and collection of parasites (A. Akhavan, G. Mowlavi)
Contents: Practical activities including necropsies of rodents collected in previous days, checking for Leishmania and other endoparasites as well as ectoparasites they carry
10:00-10:30 Coffee break
10:30-13:00 Laboratory diagnostics of Leishmania infection in rodents, canines and humans (M. Mohebali, H. Hajjaran, B. Akhoundi, E. Kazemirad)
Contents: Practical activities including rodent examination, parasite isolation, cytology and serology (including laboratory rodents)
13:00-14:30 Lunch
14:30-15:30 Tick biology and ecology (F. Dantas-Torres)
Contents: Oral lecture on biology and ecology of ticks
15:30-16:00 Coffee break
16:00-17:00 Ticks and tick collection in Iran and EMRO (S. Naddaf, R. Abaei)
Contents: Oral lecture
17:00-18:30 Tick-borne diseases in animals and humans (F. Dantas-Torres, D. Modrý, D. Otranto)
Contents: Oral lecture on diversity, clinical impact and diagnostics of TBDs
18:30-19:00 Technical brief about the following day
19:30-22:00 Dinner and visit to the town
Wednesday 10th June

05:30-06:00 Breakfast
06:15 Departure to the field (1.5 hr trip to Islamabad)
08:00-11:00 Sampling livestock and dogs (Dantas-Torres, R. Jafari, J. Mendoza-Roldan, D. Modrý, Y. Rassi, A. Sazmand, D. Otranto, A. Varcasia, Z. Zarei, A. Zahraei-Ramazani)
Contents: Practical activities on clinical examination of dogs, sheep, cattle and camels and collection of ectoparasites, blood, skin and lymph node biopsy for lab diagnosis
11:30-13:30 Rest and lunch
13:30-16:00 Sightseeing (optional)
16:30-19:00 Sampling livestock and dogs (see above)
Contents: Practical activities on clinical examination of dogs, sheep, cattle and camels and collection of ectoparasites, blood, skin and lymph node biopsy for lab diagnosis
19:00-21:00 Dinner in Islamabad
21:00 Departure to Esfahan (return trip, 1.5 hr)

Thursday 11th June

07:00-08:00 Breakfast
08:30-09:15 Filarioiids of human and dogs (G. Mowlavi, D. Otranto, A. Sazmand)
Contents: Oral lecture on Dirofilaria spp. and Onchocerca lupi and Cercopithifilaria spp.
09:15-10:15 Filarioiids of dogs and livestock (D. Otranto, G. Mowlavi, A. Sazmand)
Contents: Practical activities and demostration of filarioiids present in different geographical areas of EMRO
10:15-10:45 Coffee break
10:45-13:00 Tick-borne diseases in animals and humans (S. Naddaf)
Contents: Practical activities on the diagnosis of tick-borne diseases (preparation, staining and observation of slides, SNAP 4Dx)
13:00-14:30 Lunch
14:30-15:30 Phlebotomine sand flies (A. Akhavan, Y. Rassi)
Contents: Oral lecture on sand flies and their role as vectors of pathogens
15:30-19:00 Sand fly mounting and identification (A. Akhavan, F. Dantas-Torres, Y. Rassi)
Contents: Oral lecture and practical activities (two groups) on sand fly identification
19:30-22:00 Dinner

Friday 12th June

07:00-08:00 Breakfast
08:00-11:00 Ticks and other ectoparasites of dogs and livestock (F. Dantas-Torres, S. Naddaf, D. Otranto, Z. Zarei)
Contents: Practical activities on the identification and mounting on collected material from morning field work
11:00-11:30 Coffee break
11:30-12:00 Trichinella spp. infection (G. Mowlavi)
Contents: Oral lecture on *Trichinella* spp. infection, epidemiology and diagnosis.

**12:00-13:00** Hydatidosis and fascioliasis in Iran, EMRO and Mediterranean region (M.B. Rokni, A. Varcasia)
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Contents: Oral lecture on epidemiology and diagnosis.

**13:00-14:30** Lunch

**14:30-16:00** *Trichinella* spp. detection (G. Mowlavi)

Contents: Practical activity preparation and microscopic observation of samples.

**16:30-18:00** Post-mortem diagnosis of helminths of animals (M.B. Rokni, A. Varcasia)

Contents: Practical activities on necropsy including carnivore carcasses necropsy, examination of organs from slaughterhouse

**18:00-23:00** Free time and visiting of the famous historical places in Esfahan along with dinner in the Restaurant gardens

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**Saturday 13th June**

**07:30-08:30** Breakfast

**08:30-12:00** “It’s your turn: attendees” talks

Contents: Attendees will deliver a short presentation (up to 10 min, including discussion) about their main activities and interests. The idea exchange is to stimulate future collaborations among attendees and the EMRO-ParSCo team.

**12:00-13:00** Free time for studying

Contents: The course organizers and collaborators will remain at the attendees’ disposal to respond to any questions or to solve doubts about the content of the past lectures. Attendees will have free access to stereomicroscopes and microscopes for practical activities during this time.

**13:00-14:00** Lunch

**14:00-16:00** Final exam

Contents: Attendees will sit a final exam (10 multiple-choice questions) on all topics discussed during the course. Attendees will also receive an evaluation questionnaire to give their impressions on the course.

**16:00-18:00** Free time for refreshing and packing.

**19:00-20:00** Final results and presentation of certificates.

**20:00-22:00** Final dinner in a historical place of the city.

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**Sunday 14th June**

**07:30-08:30** Breakfast

9:00 (about six hours) Checkout and return to Imam Khomeini International Airport via visiting Kashan (one of the most important historical cities of Iran) and lunch in a memorial place to enjoy Iranian culture.

Important: The organizers recommend that you plan your departure time for night of 14th or early morning of 15th of June.