



**MEDICINA**

**USP**



**WINTER SCHOOLS**  
**2017**



Information and  
Course Outlines



## PRESENTATION

We are honored to present you the third FMUSP Winter School.

The program consists of 2 weeks with educational activities on seven different topics: **Physical and Rehabilitation Medicine, Autopsy Pathology, Tropical Pathology, Cardiology, Gynecology, Physical Therapy and Dermatology.**

Beside the educational program, there will also be visits in our Health Care System (Hospital das Clínicas Complex) and social gatherings organized by the Brazilian students for the participants to experience and enjoy the culture and fun of São Paulo!

To have an idea of what the program looks like, locate the information about FMUSP Winter School 2017 and Course Outline on the pages below.

The FMUSP Winter School will provide you with a great opportunity to meet new people from all over the world and to share your interests and knowledge in Medical Areas. Come participate in this once-in-a-lifetime experience! **The deadline for application is March 22<sup>nd</sup>, 2017.**

Please visit our [Facebook page](#) or our [website](#) for updates throughout the upcoming months. Feel free to contact us if you need any further information ([winterschools@fm.usp.br](mailto:winterschools@fm.usp.br)).

Kindest regards,



José Otavio Auler Jr.  
Dean of the Faculty of Medicine



Aluisio Cotrim Segurado  
President of International Relations Committee



## INDEX

GENERAL INFORMATION.....	5
AUTOPSY PATHOLOGY WITH RADIOLOGICAL CORRELATIONS .....	6
EXPANDING THE FRONTIERS OF DERMATOLOGY: AN OVERVIEW OF SKIN DISEASES FROM A CONTEMPORARY PERSPECTIVE .....	8
ADVANCES IN PHYSICAL THERAPY: ESTABLISHING THERAPEUTIC GOALS BASED ON FUNCTIONAL ASSESSMENT .....	10
INFECTIOUS DISEASES IN WOMEN’S HEALTH.....	12
PHYSICAL AND REHABILITATION MEDICINE .....	14
PRACTICAL ASPECTS OF MODERN CARDIOLOGY – A MULTIDISCIPLINARY CLINICAL AND TRANSLACIONAL APPROACH .....	16
TROPICAL PATHOLOGY .....	18
CONTACTS – WINTER SCHOOLS TEAM.....	20

## GENERAL INFORMATION

<b>Period</b>	From 03 July to 14 July 2017
<b>Location</b>	Faculty of Medicine - University of São Paulo Hospital das Clínicas Complex
<b>Fee</b>	The courses will be <b>free of charge</b> for the selected students. The Faculty of Medicine will provide free accommodation in a student housing (two students per room) and lunch discount. The student should pay for his/her transportation to São Paulo and personal expenses.
<b>Requirements/levels</b>	a) to be an undergraduate medical student with a special interest in the courses offered b) to be a regularly enrolled student to an University officially covenanted to FMUSP c) to have completed training in basic biomedical sciences
<b>Course language</b>	English
<b>Number of participants</b>	8 international students in each course
<b>Certificate</b>	after participating in the entire educational course
<b>Application Period</b>	From <b>February 13<sup>th</sup></b> to <b>March 22<sup>nd</sup></b> 2017
<b>Application Documents</b>	Students will send their application by email to <a href="mailto:winterschools@fm.usp.br">winterschools@fm.usp.br</a> . <b>List of documents:</b> a) Student full transcripts issued by the home institution b) Support letter issued by the home institution c) Passport d) Digital Photo (passport standard, good quality) <b>Application:</b> Fill out the application form (available on our <a href="#">website</a> ) The selected students are required to provide a Health Insurance (self-funded, to be sent by email two weeks before the course start).
<b>Selection criteria</b>	In case we receive many inscriptions from the same University, FMUSP might request to the sending University classify their students. The FMUSP International Relations Committee will appraisal the candidacies in accordance with the following prerequisites: a) Student scholarly performance; b) Prizes and/ or distinguished academic activities at his/her home institution; c) Institution representativeness, and d) Other criteria still to be defined by the Program Coordinating Committee.
<b>Application Results</b>	The final results will be available on <b>April 5th</b> .

# **AUTOPSY PATHOLOGY WITH RADIOLOGICAL CORRELATIONS**

## **Department of Pathology**

### **GENERAL DESCRIPTION**

Autopsies have been used for centuries to better understand the human diseases and to teach medical students in an integrated way. During the 21st century the number of autopsies is reducing dramatically for several reasons limiting the access for undergraduate students to this relevant teaching strategy.

The increase of temporal and spatial resolution of radiological exams has lead to better in vivo diagnosis. Post-mortem radiological exams have been used systematically since 1990's for forensic sciences and its use is increasing in clinical autopsies in the recent years.

In this course, a comprehensive program will include basics of the autopsy procedure and findings, followed by the numerous possibilities of correlation with radiology and the integrated clinical discussions in which all the aspects are put together in order to allow the students to see the “big picture” and understand the practical applicability of the discussed tools. We will also discuss the relevance and possibilities of autopsy and autopsy – radiology correlations in research and medical quality control.

### **COURSE OBJECTIVES**

The objectives of the course include:

1. To understand the morphological manifestation of diseases and its integration in the context of autopsies;
2. To demonstrate the importance and usefulness of post-mortem image exams to complement and enhance autopsy results;
3. To stimulate the clinical-pathological-radiological reasoning in case studies
4. To reinforce the relevance of autopsy in the acquisition of medical knowledge and in the quality control of our medical practice

### **TEACHING METHODS**

Lectures (20%):

- keynote lectures about autopsy relevance, techniques and the use of radiological images in pathology / autopsy including topics on autopsy pathology of infectious diseases

Practical activities (70%):

- Activities in the morgue attending conventional medical autopsies
- Activities in the morgue attending minimally invasive medical autopsies including post mortem computed tomography, 7t magnetic resonance, angioct and image guided biopsies
- Interesting cases meetings – discussion of previously selected cases of interest. The meeting will be conducted by a senior pathologist with more than 50 years of autopsy experience
- Grand meeting (once a week) in which a case will be selected for discussion of clinical and radiological aspects followed by the autopsy procedure – including students of other winter school courses

Workshop (10%):

- How to prepare autopsy reports and a minimally invasive autopsy report

### **WHO SHOULD ATTEND?**

This course is designed for medical students interested in medicine practice, pathology and radiology and that want to improve their skills on autopsy and its correlation with radiological findings.

#### **Faculty:**

Luiz Fernando Ferraz da Silva, Thais Mauad, Paulo Hilário Nascimento Saldiva, Edson Amaro Jr, Marisa Dolhnikoff, Carlos Augusto Gonçalves Pasqualucci, Felipe Nascimento, Amaro Duarte Neto, Vitor Ribeiro Paes, Thales de Britto.

#### **Course Schedule**

Mon, Thu and Fri – 8 AM to 12 PM  
 Tue and Wed – 8 AM to 4 PM

#### **Course material:**

All course material and bibliography will be available in advance for the students

#### **Prerequisites:**

Anatomy. Basic concepts of general pathology and radiology

Tetanus and HBV Vaccines;

# **EXPANDING THE FRONTIERS OF DERMATOLOGY: AN OVERVIEW OF SKIN DISEASES FROM A CONTEMPORARY PERSPECTIVE**

**Department of Dermatology**

## **GENERAL DESCRIPTION**

Dermatology is a crescent specialty worldwide, although it is usually an elective rotation in many medical programs. The Department of Dermatology of our Institution offers the opportunity to international medical students to share a unique approach of skin diseases, facilitating dermatology education across disciplines.

This course will focus on clinical principles of Dermatology, tropical Dermatology, autoimmune/inflammatory skin diseases, and skin cancer, intermingled with histopathology, immunology and basic science concepts. Moreover, novel concepts of Teledermatology will enhance the traditional learning methods.

## **COURSE OBJECTIVES**

Main objectives of this course include:

- To allow medical students to improve their dermatological skills through traditional clinical approach and Teledermatology;
- To expand the awareness of early diagnosis of potential severe skin/systemic diseases;
- To improve global understanding of Dermatology, including tropical dermatoses, skin cancer, and autoimmune/inflammatory diseases with skin involvement, based on clinical and laboratory approaches.

## **TEACHING METHODS**

A-The medical students will take part in:





- Interactive bench to bedside lectures with senior faculty, including essential topics: basic dermatology, tropical skin diseases, skin cancer and allergy/inflammation; autoimmune skin diseases. For this activity, students will have access to related articles/materials in advance;
- Guided 1-hr seminars, including the major topics of this program. The students have to prepare a short presentation, and the faculty members will provide a clinical case for discussion;
- Student rounds monitored by a faculty member 5x/week, with patients from dermatology admission, ward and subspecialty clinics; once a week (Thursday morning, from 10:30am -12:00 pm) the students will join the grand rounds, with all the staff, students and residents;
- Visit to the dermatologic surgery facility and investigative laboratories of the department;
- Introduction to Tele dermatology, with online interactive sessions with other medical specialties.
- B-Evaluation of the participants of winter school-dermatology branch

Evaluation of the student performance will include: participation at seminars and a written evaluation, based on clinical cases.

## WHO SHOULD ATTEND?

Medical students with pre-clinical knowledge

### Faculty:

Professors from the Department of Dermatology and Senior Clinicians from Hospital das Clínicas- Division of Dermatology (José Antonio Sanches Jr., Cyro Festa Neto, Valéria Aoki, Celina W. Maruta, Maria N. Sato, Gil Benard, Jade Martins Cury and João Avancini)

### Course Schedule:

7 periods weekly

### Course material:

1-Textbook- Dermatology J. Bologna, 3rd edition, Elsevier.

2-Seminars (articles will be provided prior to sessions)

**Prerequisites:** Medical students with pre-clinical knowledge

Fluent English

# **ADVANCES IN PHYSICAL THERAPY: ESTABLISHING THERAPEUTIC GOALS BASED ON FUNCTIONAL ASSESSMENT**

**Department of Physical Therapy, Speech and Occupational Therapy**

## **GENERAL DESCRIPTION**

Physiotherapy (PT) is a professional field and a science has investigated and acted in the recovering of the human movement and its functions. In the clinical practice, the assistance to the patients should be based on a well-designed global functional assessment, applying pathophysiologic background and biomechanical principles.

According to current knowledge, the assessment process is not pathology-based; instead, it is patient-centered and focused on her/his functional limitations. The assessment requires a large range of expertise and it constitutes the key point to establish the therapeutic goals and identify the most efficient strategy to achieve them.

In this context, the main purpose of this course is to build the rationale for physiotherapeutic evaluation based on functional approach in order to establish the therapeutic goals and identify proper techniques for intervention in people living with fibromyalgia, asthma, chronic obstructive pulmonary disease (COPD) as well as Parkinson's and other severe musculoskeletal diseases.

This course is designed to fulfill the gap between theory and practice; it will combine state-of-the-art lectures in order to update the students' knowledge about the rationale behind the motor evaluation based on functional approach. The quick transit between theory and practice will provide a better environment for problem identification and proper solutions, besides the opportunity to learn and develop techniques and therapeutic procedures. Clinical based sessions will also be included to provide educational illustration of clinical techniques and treatment procedures through demonstrations utilizing patient to further develop practitioners' skills and knowledge within the field of PT treatment for such as fibromyalgia and respiratory and Parkinson's diseases. A large range of some prevalent diseases such as fibromyalgia, asthma, COPD, Parkinson's and other musculoskeletal diseases, such as mictional dysfunctions, pelvic pain, or even patients with severe illness will be covered in our case discussion sessions.

## **OBJECTIVES**

At the end of this course, participants should be able to better:

- Understand the issues involved in selecting appropriate tools to evaluate people living with fibromyalgia, asthma, COPD, Parkinson's and other musculoskeletal diseases;
- Utilize a range of strategies to examine, characterize and differentiate motor alterations associated to musculoskeletal, respiratory and neurological dysfunctions;
- Identify a rational for establishing the therapeutic goals based on the proper semiology and addressing the best treatment approach in order to achieve them;

Discuss the therapeutic options available for improving the functionality of people living with fibromyalgia, asthma, COPD, Parkinson's and other musculoskeletal diseases, based on the most recent scientific evidences.

### TEACHING METHODS

The students will participate in the following interactive activities:

- State-of-the-art lectures in order to update the students' knowledge in the course's field
- Visits and measuring sessions in Biomechanics laboratories at HCFMUSP and Cidade Universitária to participate actively in measuring sessions of outcome patients.
- Case-discussions of hospitalized and chronic outpatients based on video reports
- Clinical based training sessions through visits to clinical settings including the HCFMUSP units related to course's field and Brazil Parkinson Association.
- All theoretical and practical activities will based on active learning methodologies in order to encourage the students to bring examples based on their own practical background and to build a critical view about the course's issues.

### WHO SHOULD ATTEND?

Physical Therapy students from different countries with knowledge in basic sciences and interested in expanding their knowledge in physiotherapy practice focusing on evaluation process based on functional approach in muscle-skeletal, respiratory and neurological dysfunctions.

**Faculty:** - Amélia Pasqual Marques, PhD / Celso R. F. Carvalho, PhD / Clarice Tanaka, PhD / Isabel C. N. Sacco / Maria Elisa Pimentel Piemonte, PhD / Collaborators from the Physical Therapy, Speech and Occupational Therapy department and Division of Hospital das Clínicas, School of Medicine, USP.

**Course Schedule:**

7 periods weekly (Mon-Fri mornings and twice a week in the afternoon)

**Course Material:** Printed and electronic notes. Bibliography will be available for the students during the course.

**Prerequisites:** Basic sciences

## **INFECTIOUS DISEASES IN WOMEN'S HEALTH**

### **Department of Obstetrics and Gynecology**

#### **GENERAL DESCRIPTION**

This course aims to present and discuss the principles of infectious diseases in Women's Health during the reproductive years and pregnancy. It focuses on concepts, methods, issues, and applications related to this field. Moreover, it will provide detailed information on diagnosis of infectious diseases in Obstetrics and Gynecology (such as, Zika virus, Dengue, HPV, HIV, cytomegalovirus, Toxoplasmosis, Rubella and so on), as well as screening methods and management guidelines applied to the diseases in the context of obstetric and gynecological primary care in the Brazilian Unified Health System - SUS. In this intensive course, students will be exposed to an update of gynecological and obstetrical infections, and have the opportunity to discuss clinical cases in real practice, getting hands on experience in the appropriate investigation and treatment of these prevalent and potential harmful diseases.

#### **COURSE OBJECTIVES**

The main aim of this course is to discuss infectious diseases of clinical and epidemiological relevance in Obstetrics and Gynecology in Brazil, with special emphasis on successful prevention programs and on present and future strategies for diagnosis and treatment. The aims will be reached by providing specialized information on different areas:

##### **General objectives:**

- To enhance participant's abilities in recognizing clinical features of these diseases;
- To promote the understanding of interventions, which are recommended for their management, prevention and control.

##### **Specific objectives:** the participant will learn about:

- When to investigate infections during pregnancy including mosquito-borne arboviral diseases;
- How to prevent and treat infections during pregnancy including arboviral diseases;
- Physiopathology of placental transfer of the most common infectious agents;
- How and when the fetus should be investigated;
- How to evaluate and diminish the risks of vulnerable pregnancy outcomes
- Pelvic Inflammatory Disease and Sexually Transmitted Diseases
- Arboviral infection in the Reproduction Center
- HIV infection and the impact on women's health
- HPV infection and cancer
- Genital Immunity and heat shock proteins



## TEACHING METHODS

The course aims to stimulate discussion of topics presented at formal lectures or e-learning, as well as observation of surgical procedures and outpatient consultations.

We expect students to present cases, bring examples and suggest innovative ways to address issues talked during the course.

The length of seminars is 30 minutes.

The student evaluation occurs before and after the discussion of clinical cases.

Students will observe clinical appointments, ultrasound exams and invasive procedures of patients in the outpatient clinics.

Students will observe gynecological surgery with a Tutor and small outpatient procedures, such as the pelvic ultrasound.

## WHO SHOULD ATTEND?

This course is designed for Medical students who want to learn about Female Health: M3 and M4 American students; or equivalent (other countries).

### Faculty:

- Edmund C Baracat, MD, PhD, Full Professor and Head of Discipline of Gynecology, Department of Obstetrics and Gynecology, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo
- Marcelo Zugaib, MD, PhD, Full Professor and Head of Discipline of Obstetrics, Department of Obstetrics and Gynecology, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo

### Members

Aluisio Augusto Cotrim Segurado, Rossana P. V. Francisco, José Maria Soares Júnior, Lisandra Stein Bernardes, Maricy Tacla, Iara Moreno Linhares, Gustavo Arantes Rosa Maciel, Isabel Cristina Espósito Sorpreso, Joelma Queiroz Andrade, Antonio Gomes de Amorin and Gilmar de Souza Osmundo Junior.

### Course Schedule:

7 periods weekly (Mon-Fri mornings and twice a week in the afternoon)

**Course material:** Printed and electronic notes, PUBLICATIONS IN SPECIALIZED JOURNALS

**Prerequisites:** Basic knowledge on Gynecology and Obstetrics

## **PHYSICAL AND REHABILITATION MEDICINE**

### **Department of Legal Medicine, Medical Ethics and Social and Occupational Medicine**

#### **GENERAL DESCRIPTION**

Physical and rehabilitation medicine, also known as physiatry, is a medical specialty dedicated to the diagnosis, evaluation and care of people of all ages who experience disability. This art involves the diagnosis and treatment of patients with disabilities and aims to help patients to achieve their full bio-psycho-social potential, embracing physical, functional, psychological and social factors.

It recovers what is possible, adapts what is not (or does it until it is), and trains and supports people to face their new reality. Diagnosis in rehabilitation medicine is carried out by clinical methods and additional assessments. Providing rehabilitation involves the use of preventive and therapeutic measures, training and support, with attention to risk factors, preexisting comorbidities and impairments.

Therapeutic measures involve the use of medications, procedures, rehabilitation therapies, and assistive technologies (orthotics, prosthetics, and mobility aids), besides rehabilitation technologies, such as rehabilitation robotics for upper and lower extremities.

#### **OBJECTIVES**

The course aims to prepare its students to acknowledge the most important factors that interfere in assessing and treating impairments and disabilities, through a clinical approach, including medical and therapeutic interventions.

#### **TEACHING METHODS**

Students should improve their ability to assist patients using a comprehensive approach, considering their bio-psycho-social context.

The course focuses on functional assessments and is oriented towards disabling pain syndromes, brain and spinal cord injuries, amputations, motion analysis, oncologic rehabilitation, children's rehabilitation, and toxin applications in rehabilitation.

This knowledge, skills and attitudes are transmitted through theoretical and practical classes offered at the in- and outpatient services of the physical and rehabilitation medicine institute of the university of sao paulo medical school general hospital.

Classes are comprised by a brief lecture followed by a monitored clinical and practical session, which count on the participation, when feasible, of volunteer patients. All classes are only concluded after a group discussion on the subject and an individual assessment of that session's content.

Besides a daily evaluation for immediate feedback, students will have a final test by the end of the course. The program includes a visit to internationally accredited rehabilitation facilities in the city.

### WHO SHOULD ATTEND?

Medical students. Students should be compassionate and eager to effectively address the major demands of the world of physiatry.

#### Faculty:

- Linamara Rizzo Battistella
- Marta Imamura
- Marcel Simis
- Mariane Tateishi
- Gilson Tanaka Shinzato And Roberto De Valhe Abi Rached
- Daniella Lins Neves And José Augusto Fernandes Lopes
- Christina May Moran De Brito And Rebeca Boltes Cecatto
- André Tadeu Sugawara
- Luiz Fernando Rocha De Abreu
- Viviane Sales And Daniela Utiyama
- Vivian Vicente And Silvia Nakazune
- Elizabete Saito And Mariana De Carvalho
- Arquimedes Ramos And Tae Mo Chung

#### Course Schedule:

7 periods weekly (Mon-Fri mornings and twice a week in the afternoon)

**Course material:** support documents for the classes are based on the materials available for the undergraduate subjects of "impairment and disability" and "principles of physical and rehabilitation medicine" offered by the University of Sao Paulo medical school. This will be made available online on a dedicated website, for ease of reference during the course.

Faculty members are invited to produce their own materials depending on the subjects of their classes. Hands-on workshops are strongly encouraged throughout the course.

**Prerequisites:** Basic knowledge on Gynecology and Obstetrics

# **PRACTICAL ASPECTS OF MODERN CARDIOLOGY – A MULTIDISCIPLINARY CLINICAL AND TRANSLACIONAL APPROACH**

## **Department of Cardiopneumology**

### **GENERAL DESCRIPTION**

The cardiovascular diseases are the main cause of adult deaths from a global and Brazilian perspective, in spite of important geographic differences, related mainly to the level of the country or region development. The main purpose of the present course is to develop, in a very interactive way, correlations between basic and advanced Cardiology, giving substrate for the student to understand the pathophysiology, diagnosis, prevention and therapeutic options (clinical and surgical) for most cardiovascular diseases. Emphasis will be given for disorders that are prevalent in both, developed and in-development countries.

The main topics to be covered will be: atherosclerosis and lipidology, acute and chronic ischemic heart disease, rheumatic fever and rheumatic heart disease, cardiomyopathies (including Chagas disease) and congenital heart defects.

### **COURSE OBJECTIVES**

The main objective of the Course is to develop in the student the interest in the study of cardiovascular diseases and translational cardiovascular research, encouraging the improvement of reasoning derived from correlations among several different aspects of Cardiology and Cardiovascular Surgery. Other objectives includes the improvement in their research skills, the possibility to continue interacting with InCor staff and colleagues of the course in the future. At the end of their training, the students will be able to recognize the most important forms of CV diseases, and understand the importance of the translational approach in research

### **TEACHING METHODS**

The students will participate in the following interactive activities:

- Visit to basic research laboratories;
- Study of cardiac anatomy and pathology with specimens;



- Analysis and discussion of EKG tracings, echocardiographic, magnetic resonance and nuclear cardiology images.
- Case-discussions of hospitalized Acute Coronary Syndrome patients;
- Case-discussions and clinical assessment of outpatients with different CV diseases;
- Clinical and surgical-pathological correlation sessions;
- Visit to operating rooms acting as observers in selected surgical procedures
- Other types of interactive sessions, such as the InCor Grand Round.
- Interactivity will be the main focus of the Course, and different tools will be utilized for this purpose, as anatomical specimens, computer images, case discussions, etc

### WHO SHOULD ATTEND?

Medical students from the 5th period (3rd year) and advanced.

#### Faculty:

##### Course Coordinators

Prof. Dr. José C. Nicolau

Prof. Dr. Raul D. Santos Filho

Profa. Colaboradora Vera Demarchi Aiello

Prof. Colaborador Luiz Fernando Caneo

Prof. Colaborador Paulo Sampaio Gutierrez

Prof. Colaborador Carlos Alberto Pastore

##### Course Supervisors

Roberto Kalil Filho

Prof. Dr. Paulo Pego Fernandes

Prof. Dr. Fábio B. Jatene

#### Course Schedule:

7 periods weekly (Mon-Fri mornings and twice a week in the afternoon)

#### Course material:

- Bibliography to be provided in May 2017, in order to make the course as updated as possibly;
- EKG, magnetic resonance echocardiographic and nuclear cardiology images;
- Pathological specimens;
- Films of cardiac operations;

#### Prerequisites:

- Applicants are required to demonstrate sufficient ability to understand and express themselves in both spoken and written English.

## **TROPICAL PATHOLOGY**

### **Department of Pathology**

#### **GENERAL DESCRIPTION**

Tropical pathology mainly includes the study of diseases caused by infectious agents like bacteria, viruses, fungi, protozoa and helminthes. The knowledge of this group of diseases has importance because of the recent increase in exposition due to mobility of man and globalization, despite the decreasing incidence in developed countries but the menace for reintroduction, as Zika virus and Ebola. The understanding of the agents and diseases, their host-parasite relationship, through the knowledge of the in situ pathological features induced by different agents is important to support adequate diagnosis and therapy.

This course will offer to medical students the pathological aspects of organs of patients affected by tropical diseases such as leprosy, paracoccidioidomycosis, malaria, schistosomiasis, Chagas' Disease, Leishmaniasis, Cysticercosis and viral diseases, with special emphasis on haemorrhagic fevers. Each disease will be presented and discussed based on organs lesions but focusing on pathogenesis, from the infection to resolution, looking for diagnostic morphological aspects, the immune host response in target organs, as well as advanced methods for agent demonstration.

#### **COURSE OBJECTIVES**

The course aims the understanding of host-parasite relation in tropical diseases through the knowledge of morphological alterations, characteristics of tissue response of target organs and pathogenesis.

#### **TEACHING METHODS**

- The students will attend oriented study of digital slides representative of the diseases, followed by the presentation and discussion of each disease.
- They also will attend clinical-pathological sections of well documented autopsy cases and/or biopsies.
- There will be also one monitored lab-based activity to exemplify how to study the in situ tissue response and also to perform methods of parasites demonstration in the lesions.

#### **WHO SHOULD ATTEND?**

Medical students with basic knowledge on microbiology, parasitology, immunology and general pathology.

**Faculty:**

All faculties are from the Discipline of Pathology of Infectious Diseases – Department of Pathology

Evandro Sobroza de Melo, MD PhD

Heitor Franco de Andrade Júnior, MD - Associate Professor

Maria Irma Seixas Duarte, MD - Senior Full Professor

Mirian Nacagami Sotto, MD- Full Professor (coordinator)

Amaro Nunes Duarte Neto, MD PhD

Carla Pagliari, BSc PhD

**Course Schedule:**

7 periods weekly (Mon-Fri mornings and twice a week in the afternoon)

**Course material:**

Bibliography: Manson's Tropical Diseases, 23rd Edition; Robbins & Cotran Pathologic Basis of Disease, 9e (Robbins Pathology) 9th Edition.

The students will have access to Tropical pathology digital slides collection from the Department of Pathology; gross pathology slides demonstration; summary of the lectures and clinical-pathological correlations (pdf); additional recommended scientific papers (will be provided before the course starts).

**Prerequisites:**

- Applicants are required to demonstrate sufficient ability to understand and express themselves in both spoken and written English.



## CONTACTS – WINTER SCHOOLS TEAM

### **E-mail for contact**

winterschools@fm.usp.br

### **Coordinator**

Talita de Almeida

### **Staff**

Douglas Bartholomeu

Emily da Silva

Jackeline Bonfim

Marco Vallada

**Website:** <http://www.fm.usp.br/site/Winter-2017>

**Facebook:** <https://www.facebook.com/fmuspwinterschool/>

**Hours:** Monday to Friday from 8am to 3pm

### **Address**

Av. Dr. Arnaldo, 455

Main Building - Room 1345

01246-903

São Paulo, Brazil