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USP

# FMUSP Winter Schools

July 16 – 27, 2018

4th Edition

## INDEX

PRESENTATION.....	2
PROGRAM OVERVIEW.....	3
APPLICATION CALL.....	4
COURSE OUTLINES	
PRACTICAL ASPECTS OF MODERN CARDIOLOGY: A MULTIDISCIPLINARY CLINICAL AND TRANSLATIONAL APPROACH .....	7
GENETIC OVERHAUL OF CLINICAL ENDOCRINOLOGY .....	9
THE AGING PROCESS – BIOLOGICAL ASPECTS AND SOCIAL CONSEQUENCES .....	11
EXPANDING THE FRONTIERS OF DERMATOLOGY: AN OVERVIEW OF SKIN DISEASES FROM A CONTEMPORARY PERSPECTIVE .....	13
INFECTIOUS DISEASES IN WOMEN’S HEALTH .....	15
NEGLECTED TROPICAL DISEASES AND EMERGING INFECTIONS: HEALTH CHALLENGES IN BRAZIL IN THE 21ST CENTURY .....	17
AUTOPSY PATHOLOGY WITH RADIOLOGICAL CORRELATIONS.....	19
THE MAIN PSYCHIATRIC SYMPTOMS AND THEIR NEUROPHYSIOLOGY.....	21
PHYSICAL AND REHABILITATION MEDICINE.....	23
CONTACT US.....	25

## PRESENTATION

Dear partners and students,

After three very successful editions of our FMUSP Winter Schools, we are honored to present you our fourth and next one!

The Winter Schools 2018 consists of 2 weeks with educational activities on nine different topics: **Autopsy Pathology, Cardiology, Gynecology, Dermatology, Endocrinology, Geriatrics, Infectious Diseases, Psychiatry and Physical and Rehabilitation Medicine.**

Besides 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!

The Winter Schools 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!

You will find more information on the following sessions: Program Overview, Application Call and Courses Outlines. **The deadline for application is March 09<sup>nd</sup>, 2018.**

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

## PROGRAM OVERVIEW

<b>Period</b>	From July 16 to 27, 2018
<b>Schedule</b>	Monday to Friday, mornings and afternoons.
<b>Location</b>	Faculty of Medicine - University of São Paulo <i>Hospital das Clínicas</i> Complex São Paulo, Brazil
<b>Fee</b>	The courses will be <b>free of charge</b> for the 60 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>Course language</b>	English
<b>Number of participants</b>	60 students
<b>Certificate</b>	According to the Universities rules, a certificate of participation will be provided to students that have met minimal grades and attendance criteria.
<b>Application</b>	Application will be open from <b>February 26<sup>th</sup> to March 9<sup>th</sup> 2018</b>
<b>Application Results</b>	The final results will be available on <b>March 26<sup>th</sup> 2018</b> .
<b>Eligibility; Application Procedure; Documents; Calendar; Selection criteria.</b>	Check the following Application Call
<b>Contact</b>	<a href="http://www.fm.usp.br/en/international/winterschools@fm.usp.br">http://www.fm.usp.br/en/international/winterschools@fm.usp.br</a>

## APPLICATION CALL

### 1. Opportunities

- 1.1. FMUSP Winter Schools 4<sup>th</sup> Edition will take place at the Faculty of Medicine of the University of São Paulo, from July 16 to 27, 2018.
- 1.2. This edition will select 60 students for the following courses, which will be given completely in English:
  - Practical Aspects Of Modern Cardiology
  - Genetic Overhaul Of Clinical Endocrinology
  - The Aging Process – Biological Aspects And Social Consequences (Geriatrics)
  - Expanding The Frontiers Of Dermatology
  - Physical And Rehabilitation Medicine
  - Neglected Tropical Diseases And Emerging Infections: Health Challenges In Brazil In The 21st Century
  - Infectious Diseases in Women's Health
  - Autopsy Pathology With Radiological Correlations
  - The Main Psychiatric Symptoms
- 1.3. Selected applicants will benefit from a scholarship, which includes the course, housing and discounts on breakfast and lunch.
- 1.4. All other expenses, like flight tickets, transportation, visa, personal expenses, will be covered by the student him/herself.

### 2. Calendar

Until 23h59 (GMT-3) of March 9 <sup>th</sup> , 2018	Applications Submission Deadline
26 March, 2018	Results
June 30, 2018	Health insurance and Flight Information submission (a link will be sent)
July 14 and 15, 2018	Housing Check-in
July 16, 2018	Winter Schools Start
July 27, 2018	Winter Schools End
July 28, 2018	Report Submission (online form)
July 29, 2018	Housing check-out deadline

### 3. Eligibility and requirements

- 3.1. Applicants must fulfill the requirements below:
  - 3.1.1. Be enrolled as an undergraduate, bachelor student in Health Sciences or as a medical student;
  - 3.1.2. Be proficient in English;
  - 3.1.3. Fulfill the specific course requirements (check the specific course outline);
  - 3.1.4. Applicants who did not have participated in previous editions will have their applications prioritized.
- 3.2. The selected candidates must commit to:
  - 3.2.1. Not to fail the class he/her is enrolled at;
  - 3.2.2. Not to miss a single day of class without good reason (i.e. sickness);
  - 3.2.3. To write a final report of his/her experience.

### 4. Selection Criteria

- 4.1. All applications are first screened by the Winter Schools Team for fulfilling the following criteria:
  - 4.1.1. having met the application deadline;
  - 4.1.2. completeness of the application;
  - 4.1.3. having met the eligibility (see point 3);

- 4.2. All applications that meet the 4.1. are then assessed by the course coordinator against the following selection criteria:
  - 4.2.1. student scholarly performance, including prizes and/ or distinguished academic activities at his/her home institution;
  - 4.2.2. motivation statement and recommendation from his/her Home Institution;
  - 4.2.3. plurality of institution representativeness, and
  - 4.2.4. other criteria still to be defined by the Program Coordinator.
- 4.3. In case FMUSP Winter Schools receive many inscriptions from the same University, FMUSP might request to the sending University rank their students.

## 5. Application procedure

- 5.1. The application submission deadline is mentioned in the Calendar above (see item 2). No exceptions will be considered.
- 5.2. To apply, fill out the **application form** [available on this link](#) and attach the documents below:
  - 5.2.1. Copy of **passport** identification page;
  - 5.2.2. **Photo** for your Winter Schools Student ID card (it is mandatory to use [this template](#));
  - 5.2.3. Confirmation Letter of **current enrollment** in a University in a letterhead paper, signed and stamped, in English, Portuguese, French or Spanish. This Letter must also indicate the applicant's overall score (or Degree Classification) and the highest score possible to achieve;
  - 5.2.4. Record of attended courses and grades (**transcripts of records**) mentioning your overall score, certified by your Home Institution (no translation required);
  - 5.2.5. **Recommendation Form**, signed and stamped by a Faculty Member who should be familiar with your academic achievements, in English or Portuguese (it is mandatory to use [this template](#));
  - 5.2.6. **Motivation Statement** and Short Bio, in English (it is mandatory to use [this template](#));
- 5.3. Please note that documents that not met the following criteria will not be considered:
  - 5.3.1. All scanned documents must be in good quality, straight and not blurred. If you cannot reach a good quality scan image with your mobile device, we strongly recommend you to use a regular scanner.
  - 5.3.2. All documents must be renamed with applicant's name according to these examples: "Firstname\_LASTNAME\_Passport"; "Firstname\_LASTNAME\_Photo"; "Firstname\_LASTNAME\_RecommendationForm" etc.
  - 5.3.3. The completed application form accompanied by all the required documents (item 5.2) must be submitted by 23h59 (GMT-3) March 9, 2018. Applications via email will not be considered.

## 6. After selection

- 6.1. After the selection, the selected applicants:
  - 6.1.1. will receive further instructions about housing application and practical information for preparing their arrival.
  - 6.1.2. will be required to present flight/arrival information and a **health insurance** (covering the whole period of their stay in Brazil).
  - 6.1.3. must consult the Brazilian Embassy or Consulate in their home countries in order to verify if they need a visa.
- 6.2. After course conclusion, students who have met 80% of attendance and had a grade of at least 7,0 (out of 10,0), will receive a certificate of participation.

## 7. Further information

- 7.1. Due to the high volume of email queries, we might be unable to reply to requests for information which is already fully outlined in detail on this call. If the applicant needs any information that is not expressed on this call, please contact [winterschools@fm.usp.br](mailto:winterschools@fm.usp.br);
- 7.2. Direct communication will be made, exclusively, by e-mail (it is the student responsibility to provide an updated and correctly spelled email);



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- 7.3. The FMUSP International Office do not hold itself accounted for potential damage to the student caused by incorrect or outdated e-mails as well as other problems related to it that would prevent an effective communication between the parties (such as internet connection, power failure, etc).

## **PRACTICAL ASPECTS OF MODERN CARDIOLOGY: A MULTIDISCIPLINARY CLINICAL AND TRANSLATIONAL 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 include the improvement in the students' research skills, the possibility to maintain future interaction with the InCor staff and colleagues of the course. At the end of the 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:

- Visits 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;
- Visits 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 5<sup>th</sup> period (3<sup>rd</sup> year) and advanced.

#### **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

#### **Faculty:**

The above professionals will also participate as faculty members. Additionally, as many other professionals from InCor's staff will also be participating. A complete list can be provided if requested.

#### **Course material:**

- Bibliography to be provided in May 2018, 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.

## GENETIC OVERHAUL OF CLINICAL ENDOCRINOLOGY

DEPARTMENT OF INTERNAL MEDICINE - ENDOCRINOLOGY

### GENERAL DESCRIPTION

Endocrinology is one of many clinical specialties for which routine patient care is being revolutionized by a deeper understanding of genetics and molecular diagnosis. During the past decades, we at FMUSP and others have contributed to the identification of the molecular causes of several rare endocrine disorders, such as short stature, disorders of sex development, and advanced or delayed puberty. With the advent of massive parallel sequencing, it is expected that the routine identification of pathogenic variants for common disorders such as diabetes, obesity, thyroid cancer and osteoporosis will also be incorporated into our clinical assessment. Therefore, the future endocrinologist will need to not only have a solid understanding of the genetic basis of endocrinopathies, but also to navigate molecular diagnostic reports in order to aptly appreciate the phenotypic repercussions of genetic variants.

In this intensive course, students will be exposed to world-class research in the genetic bases of endocrinopathies carried on at the Department of Internal Medicine/Endocrinology at FMUSP, discuss molecular findings in light of detailed clinical phenotyping, get hands-on experience with basic molecular biology lab techniques and massive parallel sequencing data analysis, and have the opportunity to see patients with rare and common endocrine disorders.

The first edition of this WS course happened in 2016 and was very successful, gathering students from the UK, the USA, Japan, Mexico and Colombia in a friendly learning environment. Feedback was overwhelmingly positive.

### COURSE OBJECTIVES

The aim of this course is to introduce current genetic mechanisms involved in endocrine disorders, and to familiarize students with tools for molecular diagnosis. Different topics will be discussed, such as:

1. How to explain the high incidence of adrenal tumors in Brazil?
2. Genetic basis of congenital adrenal hyperplasia
3. New genetic players on human pubertal development
4. Understanding the complexity of sex development
5. Fundamental aspects of thyroid cancer
6. Genetics of rare and common bone metabolism disorders
7. When to think of monogenic diabetes mellitus?
8. Genetic contribution to neuroendocrine diseases

### TEACHING METHODS

We aim to stimulate active learning and critical thinking through short lectures, case-based discussions, critical reviews of published papers (presented by the students), ward rounds and visits to the outpatient clinic, and lab-based practical sessions.

**WHO SHOULD ATTEND?**

Medical students with basic knowledge in molecular biology and pre-clinical knowledge in endocrinology and genetics; previous experience in molecular biology is a plus.

**Coordinator(s):**

Ana Claudia Latronico MD PhD, Full Professor of Endocrinology, FMUSP

Bruno Ferraz-de-Souza MD, PhD, Consultant and PI in Endocrinology, FMUSP

**Faculty:**

Ana Claudia Latronico MD PhD, Full Professor of Endocrinology, FMUSP

Berenice B Mendonca MD PhD, Full Professor of Endocrinology, FMUSP

Alexander A L Jorge MD PhD, Associate Professor of Endocrinology, FMUSP

Ana A O Hoff MD PhD, Director of Endocrine Oncology, ICESP / FMUSP

Bruno Ferraz-de-Souza MD, PhD, Consultant and PI in Endocrinology, FMUSP

Luciani R Carvalho MD PhD, Consultant and PI in Endocrinology, FMUSP

Milena Teles MD PhD, Consultant and PI in Endocrinology, FMUSP

Larissa Garcia Gomes MD PhD, Consultant and PI in Endocrinology, FMUSP

**Course material:**

Printed and electronic case reports, scientific papers and lecture summaries will be provided

**Prerequisites:**

Basic sciences; Fluency in spoken and written English

## THE AGING PROCESS – BIOLOGICAL ASPECTS AND SOCIAL CONSEQUENCES

DEPARTMENT OF INTERNAL MEDICINE - GERIATRICS DISCIPLINE

### GENERAL DESCRIPTION

The course will be based on a few theoretical classes to introduce the basic concepts, plus seminars and visits to a variety of places where old persons receive attention to their health and well-being. The proposed themes are:

Populational aspects of aging: this theme will start with a brief theoretical introduction, followed by a more interactive activity: students will be invited to search for information about their own countries within a limited period of time, and afterwards the theme will be discussed by the whole group;

Social aspects of aging: retirement policies and living arrangements: following the same teaching strategy;

Biological aspects: general and specific systems biology. This theme will be explored with a period of directed study of previously selected material, followed by group discussion;

Special issues of the aging process: functionality, frailty, immobility, sexuality, complementary medicine. Those themes will be brought to group discussion, using the previously acquired knowledge of biology and the background of the participants.

Programed visits:

GEROLAB: a unit of the Medical School dedicated to basic research and aging;

GEROSAÚDE: a program of free activities including, lectures, workshops, a journal, and UNAPES, an open university offered to elderlies that emphasizes health promotion;

GAMIA: a branch of the Geriatrics Ambulatory that emphasizes preventive and multiprofessional health care;

Frailty Ambulatory: a branch of the Geriatrics Ambulatory dedicated to research and treatment;

Day Hospital: a unit of the Clinics Hospital of the Medical School dedicated to an intermediate care, between in-patients and out-patients units, that has part of it's staff and resources dedicated to aged patients;

CEDPES: a day care center dedicated to elderlies, that offers a variety of activities for health promotion and leisure;

Casa Ondina Lobo: a nursing home dedicated to elderlies with no family or financial resources;

ACCAPES: a fitness center directed to assistance and research on physical activity and aged individuals

**COURSE OBJECTIVES**

Offering undergraduate students the knowledge about the aging process, it's epidemiology, biological determinants and characteristics

Discuss the social consequences of the aging of the population.

Show students what are the Brazilian solutions for the problems of the aged population, and encourage them to find out what happens in their own countries.

**TEACHING METHODS**

Theoretical classes: presentations lasting at most 50 minutes, with the possibility of interaction, questions and discussion of the topics, along it or afterwards.

Seminars: starting with a brief presentation, followed by the proposal a theme to research on line or on previously selected material. After the research time, all the group will gather together to discuss the answers and conclusions.

Programmed visits: the places to be visited are what we consider successful experiences on gerontological assistance. A member of the course staff will be present all the time, and an English speaking local member of the local staff will be responsible for describing activities and local functioning. Students will also be invited to interact with the elderlies, with the support of the teachers for translation.

Evaluation will be based on performance during seminars and attendance to activities.

**WHO SHOULD ATTEND?**

Undergraduate students of medicine, and other biomedical and social areas.

**Coordinator(s):**

Yolanda Maria Garcia, Md, PhD, assistant professor

Claudia Suemoto, Md, PhD, assistant professor

Alexandre Leopold Busse, Md, PhD, colaborating professor

Wilson Jacob Filho, Full professor.

**Course material:** textbooks and articles from journals available at our library and on line.

**Prerequisites:** being an undergraduate student of the medical, biomedical or social areas.

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

DEPARTMENT OF DERMATOLOGY

### **GENERAL DESCRIPTION**

Dermatology is a rising specialty worldwide, although it is usually an elective rotation in many medical programs. The Department of Dermatology of our Institution offers the opportunity for 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 are below listed:

1. To allow medical students to improve their dermatological skills through traditional clinical semiology and Teledermatology;
2. To expand the awareness of early diagnosis of potential severe skin/systemic diseases;
3. 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:

- 1- 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;
- 2- 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;
- 3- 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;
- 4- Visit to the dermatologic surgery facility and investigative laboratories of the department;

5- Introduction to Tele dermatology, with online interactive sessions with other medical specialties.

B-Evaluation of the participants of winter school-dermatology

The students' performance will be analyzed, according to his/her active input during seminars and clinical rounds, and a team-based case discussion with oral evaluation.

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

-Medical students with pre-clinical knowledge

- 5 to 8 students

#### **Coordinator(s):**

Valeria Aoki and Celina W. Maruta

**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, and João Avancini)

#### **Course material:**

1-Textbook- Dermatology J. Bologna, 3<sup>rd</sup> edition, Elsevier.

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

#### **Prerequisites:**

Medical students with pre-clinical knowledge

Fluent English

## 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 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, Toxoplasmosis, Rubella and so on), as well as screening methods and programmes applied in different treatment for those affections. Other point is the obstetric and gynecological primary care based on the Brazilian female health. 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 the infectious diseases in Obstetrics and Gynecology diseases, the successful prevention programmes and the present and future strategies for diagnosis and treatment. The objectives will be reached by providing specialized information on different areas:

- 1) General objectives:
  - To enhance participants abilities in recognizing clinical features of these diseases;
  - To promote the understanding of interventions, which are recommended for their management, prevention and control.
  
- 2) Specific objectives: the participant will learn about:
  - a) When to investigate infections during pregnancy including arboviruses;
  - b) How to prevent and treat infection during pregnancy including arboviruses;
  - c) Physiopathology of placental transfer of the most common infectious agents;
  - d) How and when the fetus might be investigated;
  - e) How to evaluate and diminish the risks for the pregnancy
  - f) Pelvic Inflammatory Disease and Sexual Transmitted Disease
  - g) Arboviruses in Reproduction Center
  - h) HIV and impact on the female health
  - i) HPV and cancer
  - j) Genital Immunity and heat shock proteins
  - k) Some relevant infection during pregnancy: Syphilis, Varicella, HIV, CMV, Toxoplasmosis and Yellow Fever
  - l) Manifestation of Fetal Infection



### TEACHING METHODS

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

We expect students to present cases, bring examples and suggest innovative ways to address - course issue.

-The length of seminars is 30 minutes.

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

-The students observe the clinical appointment, ultrasound exams and invasive procedures of patients in outpatient service.

-The students observe the gynecological surgery with 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; internist (other countries)

#### Faculty:

##### Coordinators

- 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; Marco Arélio Knippel Galletta; Mario Henrique Burlacchini de Carvalho; Lisandra Stein Bernardes; Maricy Tacla; Iara Moreno Linhares; Gustavo Arantes Rosa Maciel; Isabel Cristina Espósito Sorpreso; Eduardo Vieira da Motta; Lana Maria Aguiar; Alexandre Lobel; Ricardo dos Santos Simões; Joelma Queiroz Andrade; Antonio Gomes de Amorin; Gilmar de Souza Osmundo Junior; Ursula Trovato Gomes.

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

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

# NEGLECTED TROPICAL DISEASES AND EMERGING INFECTIONS: HEALTH CHALLENGES IN BRAZIL IN THE 21ST CENTURY

DEPARTMENT OF INFECTIOUS DISEASES

## GENERAL DESCRIPTION

Neglected tropical diseases (NTD) constitute a diverse group of infectious diseases that affect mainly the poorest populations of the globe, whereas emerging infections are defined as those whose incidence in humans has increased in the past 2 decades or threaten to increase in the near future.

Brazil and other Latin American countries still present a significant burden of disease caused by NTD. In addition, these areas of the globe have recently been affected by outbreaks of emerging arboviral infections with remarkable public health impact. Knowledge about host-pathogen mechanisms and the recognition of social and environmental determinants of both NTD and emerging infections is crucial for the clinical management of individual cases and for the development and implementation of efficient prevention and control measures.

In this intensive course, students will be exposed to clinical and public health aspects of NTD that are epidemiologically relevant in Brazil, such as leprosy, Chagas' disease, leishmaniasis, schistosomiasis and soil-transmitted helminthic diseases. In addition, malaria, tuberculosis and poisonous animal bites will be discussed. A special attention will be given to the recent Brazilian outbreaks of emerging arboviral infections, including dengue, chikungunya, zika and yellow fever.

## COURSE OBJECTIVES

To enhance participants' skills in:

- understanding host-pathogen interactions in NTD, emerging arboviral infections and other important infectious diseases
- recognizing clinical features of these diseases
- understanding interventions that are recommended for their management, prevention and control.

## TEACHING METHODS

Students will participate in interactive sessions that will cover from bench to bedside and from bedside to field perspectives of NTD and emerging arboviral infections, consisting of background lectures, clinical rounds in inpatient wards and visits to outpatient clinics and research laboratories. Active learning methodologies will be applied throughout the course. Assessment will be based on the evaluation of students' participation in course activities and on their performance in a test to be given at the end of the course.

**WHO SHOULD ATTEND?**

Medical students with some pre-clinical knowledge interested in NTD, emerging infections and/or global health determinants and challenges.

**Coordinator(s):**  
**Aluisio Cotrim Segurado**

**Faculty:** Professors of the Department of Infectious Diseases and Senior Clinicians at Hospital das Clinicas - Division of Infectious Diseases

**Course material:** Douglas and Bennett's Principles and Practice of Infectious Diseases, edited by Gerald Mandell, John Bennet, Ralph Dolin, 8th edition, Churchill-Livingston, 2014. Additional material will be provided in class.

**Prerequisites:** Basic science

## **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 led 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, angio-ct 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?

Medical students interested in medicine practice, pathology and radiology and that want to improve their skills on autopsy and its correlation with radiological findings.

#### **Coordinator(s): Luiz Fernando Ferraz da Silva**

**Faculty:** Luiz Fernando Ferraz da Silva, Thais Mauad, Paulo Hilário Nascimento Saldiva, Edson Amaro Jr, Marisa Dolhnikoff, Carlos Augusto Gonçalves Pasqualucci, Amaro Duarte Neto, Vitor Ribeiro Paes, Ilka Regina Oliveira, Claudia da Costa Leite

**Course material:** All course material and bibliography will be available in advance for the students in the Google Classroom and in a Google Drive folder.

#### **Prerequisites:**

Anatomy. Basic concepts of general pathology and radiology  
Tetanus, Yellow Fever and HBV Vaccines  
Max of 7 students

## THE MAIN PSYCHIATRIC SYMPTOMS AND THEIR NEUROPHYSIOLOGY

DEPARTMENT OF PSYCHIATRY

### GENERAL DESCRIPTION

This course will help you to identify some of the main psychiatric symptoms. The most frequent psychiatric symptoms will be presented and discussed: psychiatric interview; classification attempts in psychiatry; the importance of the concept of anguish; depressive and manic symptoms; impulse disorders symptoms; attention disorders symptoms; fear, anxiety, trauma, and related disorders; obsession and compulsions; delusion, hallucinations and other psychotic symptoms; memories and their clinic; gender dysphoria and its neurophysiological bases; somatoform and dissociative symptoms - Differences in their presentation due to cultural aspects will be discussed. Interview techniques and semiology to facilitate their identification will be demonstrated. The actual knowledge of their neurophysiological bases will be presented.

### COURSE OBJECTIVES

At the end of this course, the student should be able to perform a mental status examination and recognize some of the main psychopathological symptoms.

The student should also describe the current knowledge about the neurophysiological bases of these symptoms.

### TEACHING METHODS

- lectures;
- short lectures with scenes from commercial films and excerpts from graphic novels that illustrate the main psychiatric symptoms will be presented.
- the semiology to identify these symptoms will be shown. Each symptom will have its neurophysiological bases discussed.
- clinical case studies will be presented and discussed.

**WHO SHOULD ATTEND?**

Medical Students.

**Coordinator(s):** Francisco Lotufo Neto

**Faculty:** Eurípedes Miguel; Valentim Gentil; Orestes Forlenza; José Gallucci Neto; Helio Elkis, Hermano Tavares; Guilherme Polanczyk; Helena Brentani, Felipe Corchs, Carmita Abdo, Eduardo Martinho, Marcos Croci, Marcelo Brañas.

**Course material:** Course Syllabus, lectures' powerpoints, selected papers, movies and graphic novels.

**Prerequisites:** none

## 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.

### COURSE 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.

Winter schools 2016 had medical students from the 2<sup>nd</sup> to 8<sup>th</sup> semester of the medical course, coming from Mexico, England, Uruguay, Chile, the Netherlands, Japan and Chile.

**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; Daniela Utiyama; Silvia Nakazune; Elizabete Saito And Mariana De Carvalho; Arquimedes Ramos; Tae Mo Chung

**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:**

Medical students. No other prerequisites are applicable.

## CONTACT US

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