

**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: risk factors for atherosclerosis, acute and chronic ischemic heart disease, cardiac arrhythmias, valvular heart congenital heart diseases, molecular biology, ECG and images in cardiology, cardiac surgery.

**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:

- Visit to basic research laboratories;
- Study of cardiac anatomy and pathology with specimens;
- Analysis and discussion of EKG tracings, echocardiographic, multislice angiotomography, cardiac magnetic resonance and nuclear cardiology images.
- Case-discussions and clinical assessment of hospitalized and outpatients with different CV diseases;
- Clinical and surgical-pathological correlation sessions;
- Visit to operating rooms acting as observers in selected surgical procedures.

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.

### Course Coordinators

Prof. Dr. José C. Nicolau  
Prof. Dr. Raul D. Santos Filho  
Profa. Colaboradora Vera Demarchi Aiello  
Prof. Colaborador Wilson Mathias Jr.  
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 2020, 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.

## TRAUMA AND ACUTE CARE SURGERY

### DEPARTMENT OF SURGERY

#### GENERAL DESCRIPTION

The emergency department of the hospital das clinicas is the main trauma center in sao paulo. It has a specialized multidisciplinary team for trauma patients and also serves as a referral center for acute care surgery (mainly acute abdomen in critical and oncologic patients). The hospital provides cutting edge technology and high-quality surgical care to an area comprising almost 5 million people. The discipline of general surgery and trauma is also committed with the training of medical students and residents. They are exposed to complex and challenging cases and receive a unique training in emergency surgery.

#### COURSE OBJECTIVES

- Evaluate the complex trauma patient and recognize diagnostic and operative management principles.
- recognize the acute abdomen, focusing on diagnostic and treatment challenges.
- provide critical analysis of the imaging findings in surgical emergencies (tomography and ultrasound)
- evaluate the postoperative management of complex trauma and acute care surgery in the intensive care unit

#### TEACHING METHODS

- cases and papers discussion
- trauma management: atls simulation
- rounds in the emergency department and emergency surgical intensive care unit
- operative room exposure
- point of care ultrasound basics
- cadaver dissection and anatomy
- surgical skill laboratory technique – introduction to laparoscopy

**WHO SHOULD ATTEND?**

Medical Students From The Last Two Years Of Medical School

**Coordinator(s):**

Professor Edivaldo Massazo Utiyama

**Faculty:**

Roberto Rasslan, Carlos Augusto Menegozzo

**Course material:**

Review Papers

**Prerequisites:**

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 theoretical classes, plus seminars and visits to places where old persons receive attention to their health and well-being. We intend to emphasize interactive and practical activities and have the smallest possible time of master classes.

Proposed themes:

1. Populational aspects of aging: starting with a brief theoretical introduction, followed by a more interactive activity: students will be invited to search for information about their own countries, and afterwards discuss with the whole group;
2. Social aspects of aging: retirement policies and living arrangements: following the same teaching strategy;
3. 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;
4. Special issues of the aging process: functionality, frailty, immobility, sexuality, therapeutic particularities. Those themes will be discussed using the acquired knowledge of biology and the background of the participants.

Programed visits:

1. GEROLAB: a unit of the Medical School dedicated to basic research;
2. GEROSAÚDE: a program of free activities including, lectures, workshops, a journal, and UNAPES, an open university offered to elderlies that emphasizes health promotion;
3. Palliative Care Unit: an inpatient unit where patients eligible to palliative care, most of them elderlies, receive adequate treatment;
4. Frailty Ambulatory and Acupuncture Ambulatory: branches of the Geriatrics Ambulatory dedicated to research, professional training, and treatment;
5. Day Hospital: a unit of the Clinics Hospital of the Medical School that offers intermediate care, between in-patients and out-patients units, partially dedicated to aged patients;
6. CEDPES: a day care center dedicated to elderlies, that offers a variety of activities for health promotion and leisure;
7. Casa Ondina Lobo: a nursing home dedicated to elderlies with no family or financial resources;
8. ACCAPES: a fitness center directed to assistance and research on physical activity and aged individuals

## COURSE OBJECTIVES

Offering undergraduate students basic 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 the Brazilian solutions for the problems of the aged population are, 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.

Study material will be available at Google Classroom, as soon as the platform is opened to the students.

Evaluation will be based on performance during seminars, attendance to activities and participation of activities proposed at Google Classroom.

## WHO SHOULD ATTEND?

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

Modern health care involves intense interaction of professionals of different specialties. From our previous experience, not only in Winter Schools, but also other teaching and training activities, we realized that the presence of students of varied health care areas is a very enriching situation, not only for acquiring new information, but also for getting acquainted with team work

### **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.

## **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 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.

Traditional bedside rounds and classes are complemented by novel concepts in Teledermatology, enhancing the learning methods, and offering an active role of the attendants.

### **COURSE OBJECTIVES**

Main objectives of this course are below listed:

To allow medical students to improve their dermatological skills through traditional clinical semiology 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

The students' performance is based on 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, Raquel Orfali 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



## REPRODUCTIVE HEALTH IN GYNECOLOGY AND OBSTETRICS: TRENDING TOPICS

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 disease in Obstetrics and Gynecology diseases, the successful prevention programmes and the present and future strategies for diagnosis and treatment. The aims 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) Principal disturbances in Reproduction
  - h) HIV and impact on the female health
  - i) HPV and cancer
  - j) Genital Immunity, heat shock proteins and reproduction disturbances
  - k) Some relevant infection during pregnancy: Syphilis, Varicella, HIV, CMV, Toxoplasmosis and Yellow Fever
  - l) Manifestation of Fetal Infection
  - m) Polycystic Ovary Syndrome
  - n) Contraception in Menopausal transition
  - o) Perinatal and Maternal mortality in Brasil
  - p) Hypertension in Pregnancy
  - q) Diabetes in Pregnancy
  - r) Mental diseases in Pregnancy

### TEACHING METHODS

The course aims to stimulate discussion of topics presented at formal lectures or e-learning, as well as watch surgery 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 who are interested in Global Health and in clinical and epidemiological aspects of infectious diseases in resource-limited settings. Completion of preclinical studies at home institutions is required.

**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 the course digital teaching platform.

## PSYCHIATRIC INTERVIEW

DEPARTMENT OF PSYCHIATRY

### GENERAL DESCRIPTION

This course will help you to learn some of the main medical and psychiatric interview techniques.

You will learn how to establish a good rapport, the different phases and contents of the interview, phenomenological interview, comprehensive interview, nosologic interview, personality focus interview, how to avoid common errors, how to deal with difficult moments, motivational interview, cultural sensitive interview, spiritual and religion issues interview, strategies and tactics of the interview, useful interview techniques.

The most frequent psychiatric symptoms and the techniques to diagnose them will be presented and discussed.

How to do a biopsychosocial formulation will also be presented.

### COURSE OBJECTIVES

At the end of this course the student shall be able to perform a good medical or psychiatric interview and to recognize some of the main psychopathological symptoms.

### TEACHING METHODS

- lectures;
- Roleplay exercises.
- clinical videos and scenes from commercial films and excerpts from graphic novels.
- clinical case studies will be presented and discussed.
- Visits to wards and services

### WHO SHOULD ATTEND?

Medical Students.

**Coordinator(s):** Francisco Lotufo Neto & Marco Scanavino

**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 school 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.



## **APPROACHING CHILDREN AND ADOLESCENTS WITH CHRONIC DISEASES**

**DEPARTMENT OF PEDIATRICS**

### **GENERAL DESCRIPTION**

Chronic diseases (CD) are increasing in the first two decades of life, and it is estimated that 17-20% of children and adolescents present CDs. The Department of Pediatrics at FMUSP has developed significant expertise in diagnosis and in multidisciplinary approach to CDs, both common and rare illnesses. Currently, around 18,000 children and adolescents with several types CDs are followed at FMUSP Children's Hospital (Instituto da Criança e do Adolescente HC-FMUSP). Bronchial asthma associated to upper airways allergic disorders is the most common CD in these age groups, affecting up to 12% of children and adolescents. Overweight and obesity have risen dramatically in the last decades around the world, and certainly constitute the second most common CD still in early life. Autoimmune and other immune-mediated diseases, such type 1 diabetes mellitus, childhood-systemic lupus erythematosus and humoral immunodeficiencies, have also been increasingly recognized in pediatric clinical practice. Neoplasias (particularly acute leukemia and lymphoma) and genetic disorders (such as sickle cell disease and cystic fibrosis) constitute nowadays important CDs in children and adolescents.

### **COURSE OBJECTIVES**

The main objectives of this course are:

- 1) To discuss the most important chronic diseases (CD) in children and adolescents, such as severe respiratory allergic disorders, obesity, type 1 diabetes mellitus, childhood-systemic lupus erythematosus, primary hypogammaglobulinemia, cystic fibrosis and the main types of pediatric cancer, among others;
- 2) To discuss each CD focusing on its epidemiology, pathogenesis, clinical and laboratorial diagnosis, treatment, outcome, as well as therapeutic education aiming at improving patient and family adherence.

### **TEACHING METHODS**

Short lectures: presentations lasting at most 40 minutes, with interaction, questions and discussions of the proposed topics.

Case discussion: including patient's medical history, description of physical examination findings, pictures of clinical features, discussions of laboratorial and imaging abnormalities, and initial treatment.

Programmed visits: in outpatient clinics, day-hospital and wards at "Instituto da Criança e do Adolescente (ICr)" and "Instituto do Tratamento do Cancer Infantil (ITACI)".

Evaluation will be based on performance during case discussions and attendance to the clinical visits..

The program includes a visit to internationally accredited rehabilitation facilities in the city.

**WHO SHOULD ATTEND?**

Undergraduate medical students: 6 to 8 students.

**Coordinators:** Profs. Clovis Artur Almeida da Silva, Magda Carneiro-Sampaio, Vicente Odone Filho

**Faculty:** Dra. Andreia Watanabe, Dr. Alberto Caramé Helito, Prof. Durval Damiani, Prof. Joaquim Carlos Rodrigues, Dra. Leandra Steinmetz, Dra. Louise Cominato, Profa. Lilian Maria Cristofani, Dra. Ligia Bruni Queiroz, Dr. Luiz Vicente Ribeiro Ferreira da Silva Filho, Dra. Thais Della Manna

**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 São 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.

## **INTEGRATING ACUPUNCTURE AND MODERN WESTERN MEDICINE**

**DEPARTMENT OF ORTHOPEDICS AND TRAUMATOLOGY**

### **GENERAL DESCRIPTION**

Acupuncture is a part of Traditional Chinese Medicine, an example of traditional medicine widely used in the Eastern part of the world that reached Western world during the XXTh Century. It is now accepted by academic institutions after a good number of scientific studies demonstrated its utility, when adequately combined with modern evidence based medicine.

The good use of Acupuncture, with the best possible results for the patient wellbeing, depends on a good knowledge on both modern scientific medicine and a good knowledge of acupuncture technics. Mechanisms of action of acupuncture must be understood, in order to be possible to use it with safety and efficiency.

To make this clear to the students, the course will start with the history of acupuncture and Traditional Chinese Medicine, in China, Asia and the rest of the world. The mechanisms of action that have already been described will be discussed.

After that, the basic aspects of the classic concepts will be presented, as their practical use in the treatment.

Following this, the possible insertions of acupuncture technics in the medical specialties are going to be described and discussed by specialists, with good knowledge and experience on both acupuncture and medical specialty that will take advantage of this combination.

The topic that will close the course will be a discussion on the scientific methodology for research on acupuncture

The evaluation of the students will be based on previous reading of the offered material, active participation on discussions and practical activities, but also some objective tests, performed on Google Classroom at the theme transitions.

### **COURSE OBJECTIVES**

The objective of this course is to offer medical students an overview of Acupuncture as a powerful therapeutic instrument, that must be integrated to other resources of modern scientific medicine, in order to offer patients the best options for treating a wide variety of conditions. And also to demonstrate how it can be integrated to different medical specialties, in order to offer the best treatment to each particular clinical need.

## **TEACHING METHODS**

The program course will be covered using conventional lectures, seminars and practical activities. Reading material will be available at Google Classroom as soon as possible, according to the FMUSP International Office (CRInt) strategy of selection and acceptance of candidates. As much as possible, the themes will be explored with interactive activities, like seminars and case discussions, instead of theoretical classes. For practical activities, students will be taken to outpatients unities, where they will observe and eventually take part of the assistance to patients specially selected for this activity.

## **WHO SHOULD ATTEND?**

Medical students off all levels, but those who are closer to the end of their courses will probably take most advantage of the course.

**Coordinators:** Profs. Wu Tu Hsing, Profa. Yolanda Maria Garcia

## **COURSE MATERIAL:**

textbooks, journal articles, contents of the Acupuncture Center Website

## **PREREQUISITES:**

Medical students. No other prerequisites are applicable.

## CONTACT US

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