



# 7<sup>th</sup> FMUSP WINTER SCHOOLS JULY 17 to 28, 2023



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# **PRESENTATION**

Dear partners and students,

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

The FMUSP Winter Schools 2023 consists of 2 weeks of in-person educational activities in one of these 10 different topics: Cardiology, Gynecology/Obstetrics, Dermatology, Geriatrics, Pediatrics, Physical and Rehabilitation Medicine, Infectious Diseases, Digestive Surgery, Plastic Surgery, Trauma and Acute Care Surgery, from July 17 to 28, 2023, at University of São Paulo Faculty of Medicine in São Paulo, Brazil.

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

The 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!

You will find more information on the following sessions: Program Overview, Application Call and Courses Outlines. **The deadline for application is March 19th, 2023.** 

Please visit our **website** for updates throughout the upcoming months. Feel free to contact us if you need any further information (<u>winterschools@fm.usp.br</u>).

Kindest regards,



Eloísa Silva Dutra de Oliveira Bonfá Dean Faculty of Medicine



Valeria Aoki President of International Relations Committee Faculty of Medicine



# **PROGRAM OVERVIEW**

Period	From 17 to 28 July 2023.
Schedule	Monday to Friday, mornings and afternoons.
Location	Faculty of Medicine - University of São Paulo Hospital das Clínicas Complex São Paulo, Brazil
Fee	The courses will be <b>free of charge</b> for the 60 selected students. The Faculty of Medicine will provide accommodation in student housing on Campus (two students per room) under the payment of a <b>housing fee</b> (300 dollars). The student should pay for his/her transportation to São Paulo and personal expenses.
Course language	English
Number of participants	60 students
Certificate	According to the Universities rules, a certificate of participation will be provided to students that have met minimal grades and attendance criteria.
Application	Online application will be open from <b>February 08th</b> until <b>March 19, 2023</b> Form <u>available on this link</u>
Application Results	The results will be available on <b>April 3rd</b> , <b>2023</b> .
Eligibility; Application Procedure; Documents; Calendar; Selection criteria.	Check the following Application Call
Contact	http://www.fm.usp.br/en/winter-schools/Programoverviewwinterschools@fm.usp.br



# **APPLICATION CALL**

# 1. Opportunities

- **1.1.** FMUSP Winter School 7<sup>th</sup> Edition will take place at the Faculty of Medicine of the University of São Paulo, from 17 to 28 July 2023.
- **1.2.** This edition will select around 60 students for the following courses, which will be given completely in English:
  - Practical Aspects of Modern Cardiology: a Multidisciplinary Clinical and Translational Approach
  - The Aging Process: Biological Aspects and Social Consequences
  - Expanding the Frontiers of Dermatology
  - Experience in cases of high and low complexity in Gynecology and Obstetrics
  - Neglected Tropical Diseases and Emerging Viral Infections: Health Challenges in Brazil in the 21st Century
  - Physical and Rehabilitation Medicine
  - Approaching Children and Adolescents with Chronic Diseases
  - Acute Care Surgery and Trauma
  - Plastic Surgery
  - Digestive Surgery Division

Selected applicants will benefit from a scholarship, which includes the course. Housing on campus will be offered under a fee.

1.3. All other expenses, like flight tickets, transportation, meals, visa, personal expenses, will be covered by the student him/herself.

#### 2. Calendar

from February 8th until March 19th, 2023	Applications Submission Deadline
03 April 2023	Results
02 July 2023	Health insurance, Flight Information submission and Vaccination (a link will be sent)
15 and 16 July 2023	Housing Check-in
17 July 2023	Winter School Start
28 July 2023	Winter School End
28 July 2023	Report Submission (online form)
30 July 2023	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 in a foreign Institution or in a Public University in Sao Paulo state (FMRP, UNICAMP, UNESP, FAMEMA, FAMERP, SANTA CASA Universities from other states are not included in this edition):
  - 3.1.2. Be proficient in English;
  - 3.1.3. Be fully vaccinated;
  - 3.1.4. Fulfill the specific course requirements (check the specific course outline);
  - 3.1.5. Applicants who did not participate 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.



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### 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 the sending University to 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** (from February 8 until 23h55 (GMT-3) of March 19, 2023) and attach the documents below:
  - 5.2.1. Copy of **passport** identification page;
  - 5.2.2. **Photo** for your Winter School Student ID card;
  - 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 <a href="mailto:this template">this template</a>);
- 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 the 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 19, 2023. Applications via email will not be considered.

# 6. After selection

- 6.1. After the selection, the selected applicants:
  - 6.1.1. must consult the Brazilian Embassy or Consulate in their home countries in order to verify if they need a visa. Short stay (up to 90 days): Depending on your NATIONALITY, you may be required to obtain a visa to enter Brazil (visit visa = VIVIS) or can travel visa-free. To find out if you need a VIVIS to travel to Brazil, click here.
  - 6.1.2. will receive further instructions about housing applications and practical information for preparing their arrival.



- will be required to present flight/arrival information, health insurance (covering the whole period of their stay in Brazil) and an immunization form to be completed, that should include **covid-19 vaccination proof** (mandatory).
  - 6.1.4. USP will require students, faculty, and staff who are in person on campus to be fully vaccinated against COVID-19. The final dose to be completed two weeks prior to being on campus. Any vaccine authorized by the United States Food and Drug Administration (FDA) or the World Health Organization (WHO) will be accepted. This information may change as the FDA and WHO authorize (or approve) additional vaccines. Applicants will receive a link to submit their proof of vaccination.
- 6.2. After the 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 by their courses.

# **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 .



# PRACTICAL ASPECTS OF MODERN CARDIOLOGY: A MULTIDISCIPLINARY CLINICAL AND TRANSLATIONAL APPROACH

DEPARTMENT OF CARDIOPNEUMOLOGY

#### **GENERAL DESCRIPTION**

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's 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, and 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 and implement an initial clinical approach to the most relevant forms of CV diseases, and understand the importance of the translational 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, echocardiography, multislice angiotomography, cardiac magnetic resonance and nuclear cardiology;
- Case-discussions and clinical assessment of hospitalized and outpatients with different clinical presentation of CV diseases;
- Clinical and surgical-pathological correlation sessions:
- Visit to operating rooms acting as observers in selected cardiac surgical procedures.

Interactivity will be the main focus of the Course, and different tools will be utilized for this purpose, such 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**

Prof. Dr. Roberto Kalil Filho

Prof. Dr. Fábio Biscegli 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 2023, in order to make the course as updated as possible;
- 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.



# THE AGING PROCESS: BIOLOGICAL ASPECTS AND SOCIAL CONSEQUENCES

DEPARTMENT OF INTERNAL MEDICINE - GERIATRICS DISCIPLINE

# **GENERAL DESCRIPTION**

The course intends to give to health care area undergraduate students an interdisciplinary vision about human aging. It 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 theoretical classes.

# Proposed themes are:

- 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 it with the whole group;
- 2. 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;
- 3. Social aspects of aging: making links among previous aspects and trying to understand their impact on society, following the same teaching strategy;
- 4. Special issues of the aging process: functionality, frailty, immobility, sexuality, therapeutic particularities. For those themes the strategy will be using the acquired knowledge of epidemiology and biology and combine it with the background of the participants in order to build knowledge with their active participation.

# Programed visits:

- 1. GEROLAB: a unit of the Medical School dedicated to basic research:
- 2. GEROSAUDE: 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 were patients eligible to palliative care, most of then 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 of 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: to places that 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 are also expected to interact with the elderly, 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?

Undergraduate 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 Wilson Jacob Filho, Md, PhD, Full professor.

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

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



# EXPANDING THE FRONTIERS OF DERMATOLOGY

### 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 General Dermatology, Tropical Dermatology, Autoimmune/inflammatory skin diseases, and Skin cancer, intermingled with Dermatopathology, Immunodermatology and Translational Dermatology.

Traditional bedside rounds and practical clinical classes at the Outpatient Subspecialties Clinics offers active, real-time activity of the attendants.

# **COURSE OBJECTIVES**

Main objectives of this course are below listed:

- 1. To allow medical students to improve their dermatological skills through traditional clinical semiology, with additional complementary, non-invasive diagnostic tools.
- 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 interactive dermatological sessions with other medical specialties.





B-Evaluation of the participants of winter school-dermatology
The students' performance will be 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 7 students

# **Coordinator(s):**

Valeria Aoki, MD, PhD Celina W. Maruta, MD, PhD

**Faculty:** Professors from the Department of Dermatology and Senior Clinicians from Hospital das Clínicas-Division of Dermatology (José Antonio Sanches Jr., Cyro Festa Neto, Valeria Aoki, Celina W. Maruta, Maria N. Sato, Gil Benard, Raquel Orfali, Marcello Nico and João Avancini)

# Course material:

Articles about the main dermatological themes, online videos and Dermatology textbooks

# **Prerequisites:**

Medical students with pre-clinical knowledge Fluent English



# EXPERIENCE IN CASES OF HIGH AND LOW COMPLEXITY IN GYNECOLOGY AND OBSTETRICS

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

### **GENERAL DESCRIPTION**

This course offers the students the participation as an observer of medical assistance in clinical cases of high and low complexity in the Gynecology and Obstetrics Divisions at the *Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HC-FMUSP)*. The program will focus on the discussion of clinical cases in the various topics of the specialty and comparison with medical care provided in other countries.

# **COURSE OBJECTIVES**

The main objective of this course is to provide observational experience of high and low complexity care in Gynecology and Obstetrics at the HC-FMUSP Complex Divisions, with a deep understanding of women's health in the Brazilian context.

# **TEACHING METHODS**

Observational practice of different areas of outpatient and surgical activities, with discussion of clinical cases, protocols and reflection on regional differences. Students will be invited to present the overview of women's health in their countries of origin in its various aspects, compared to the Brazilian reality.

Students will be assessed as to attendance, interest, punctuality, ethical position and capacity for interaction. At the end, there will also be a test about the content, with objective questions and tests.

# WHO SHOULD ATTEND?

Medicine students interested in Gynecology and Obstetrics, in the Brazilian context, and who already have a notion of Anatomy, Physiology and Semiology in Gynecology and Obstetrics.

# **Faculty:**

Professor Dr. José Maria Soares Junior, Dr. Marco Aurélio Knipell Galletta, Professor Dra Rossana Pulcineli Vieira Francisco and professionals of the Department of Obstetrics and Gynecology.

**Course material:** the materials will be available during the course.



# Neglected Tropical Diseases and Emerging Viral 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 viral 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 COVID-19 pandemic in our country and to 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 viral 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 viral infections, consisting of background lectures, clinical rounds in inpatient wards and visits to outpatient clinics and research laboratories. Assessment will be based on the evaluation of



given at the end of the course.

# WHO SHOULD ATTEND?

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

# Coordinator(s): Aluisio Cotrim Segurado, MD, PhD

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

**Prerequisites**: Basic science knowledge

**Course material:** Mandell, Douglas and Bennett's Principles and Practice of Infectious Diseases, edited by John Bennett, Ralph Dolin, and Martin Blaser, 9th edition, Churchill-Livingston, 2019. Additional material will be provided in class.



# PHYSICAL AND REHABILITATION MEDICINE

DEPARTMENT OF LEGAL MEDICINE, BIOETHICS, OCCUPATIONAL MEDICINE AND PHYSICAL AND REHABILITATION 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 disabling health conditions and aims to assist them 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. In rehabilitation, diagnosis is carried out by clinical methods and additional assessments. providing rehabilitation care 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, clinical procedures, rehabilitation therapies, and assistive technology (orthotics, prosthetics, and mobility aids), besides rehabilitation technologies such as rehabilitation robotics for upper and lower extremities.

# **COURSE OBJECTIVES**

The course aims to prepare students to acknowledge the most important factors that interfere in assessing and treating impairments and disability, 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, cerebral palsy and cancer 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 São Paulo Medical School General Hospital.
- Classes consist of a 30 minute lecture followed by a monitored clinical and practical session, which count on the participation when feasible, and as indicated in the course's program 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.



- During the course, other facilities of our institute will be visited, which include outreach rehabilitation units in the community and an inpatient rehabilitation center.

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

# WHO SHOULD ATTEND?

Medical students who are compassionate and eager to effectively address the major demands of the world of Physiatry.

Previous classes gathered medical students from 2nd to 8th semester of their medical course, coming from Belgium, Brazil, Chile, Colombia, France, Japan, Mexico, the Netherlands, United Kingdom, Uruguay, and the USA.

**FACULTY:** Prof. Dr. Marta Imamura, Prof. Dr. Linamara Rizzo Battistella Professors and health care team from Physical and Rehabilitation Medicine Institute

### **COURSE MATERIAL:**

Literature references and supporting materials (including slide decks, videos, and other media files) will be shared online, using Google Classroom resources.

# PREREQUISITES:

Not applicable. Medical students enrolled from the 3rd semester on are preferred.



# Approaching Children and Adolescents with Chronic Diseases

#### DEPARTMENT OF PEDIATRICS

# **GENERAL DESCRIPTION**

Pediatric chronic conditions (PCC) are increasing in the first two decades of life, and it is estimated that 17-20% of children and adolescents present PCC. The Department of Pediatrics at FMUSP has developed significant expertise in diagnosis and in multidisciplinary approach to PCC, both common and rare illnesses. Currently, around 18,000 children and adolescents with several types of PCC are followed at FMUSP Children and Adolescents' Hospital (Instituto da Criança e do Adolescente HC-FMUSP). Bronchial asthma associated to upper airways allergic disorders is the most common PCC 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 PCC still in early life. Autoimmune and other immune-mediated diseases, such type 1 diabetes mellitus, childhood-systemic lupus erythematosus, inflammatory bowel disease and humoral immunodeficiencies, have been increasingly recognized in pediatric clinical practice. Pediatric transplantation, neoplasias (particularly acute leukemia and lymphoma), genetic (such as sickle cell disease and cystic fibrosis), renal, liver and infectious conditions (HIV, tuberculosis and COVID-19) constitute nowadays important PCC in children and adolescents.

# **COURSE OBJECTIVES**

The main objectives of this course are:

- 1) To discuss the most important pediatric chronic conditions (PCC) in children and adolescents, such as severe respiratory allergic disorders, obesity, type 1 diabetes mellitus, childhood-systemic lupus erythematosus, inflammatory bowel disease, primary hypogammaglobulinemia, cystic fibrosis, nephritis, chronic hepatitis, pediatric transplantation, tuberculosis, COVID-19 and the main types of pediatric cancer, among others:
- 2) To discuss each PCC focusing on its epidemiology, pathogenesis, clinical and laboratorial diagnosis, treatment, outcome, precision medicine, nutritional care, as well as therapeutic education aiming at improving pediatric patient and family adherence.

# **TEACHING METHODS**



Short lectures: presentations lasting at most 30 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, neonatal care, emergency room and wards at "Instituto da Criança e do Adolescente (ICr)", "Instituto do Tratamento do Cancer Infantil (ITACI)" and "Instituto Central (IC)" of HC-FMUSP.

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

### WHO SHOULD ATTEND?

Undergraduate medical students: 6 to 8 students

# **Coordinators:**

- · Dr. Alberto Carame Helito, Dr. Gabriele Zamperlini Netto, Dr. Thomaz Bittencourt Couto
- · Profs. Clovis Artur Almeida da Silva, Magda Carneiro-Sampaio, Vicente Odone Filho

**Faculty:** Profa. Ana Cristina Tannuri, Dra. Adriana Maluf Elias Sallum, Dra. Ana Paula Castro, Dra. Anna Dulce Carneiro-Sampaio, Dra. Andreia Watanabe, Dra. Katia Kozu, Dra. Karina Viani, Dra. Gabriela Leal, Dra. Heloisa Helena Marques, Dra. Nadia Emi Aikawa, Profa. Lilian Maria Cristofani, Prof. Luiz Vicente Ribeiro Ferreira da Silva Filho, Dra. Livia Lindoso, Dra. Lucia Maria Arruda Campos, Dra. Marcela Prieto, Dra. Maria Fernanda Baduê Pereira, Dra. Thais Fink.

# **COURSE MATERIAL:**

Lectures' powerpoints, selected papers

# PREREOUISITES:

Undergraduate medical students - 6 to 8 students



# ACUTE CARE SURGERY AND TRAUMA

### **DEPARTMENT OF SURGERY**

### **GENERAL DESCRIPTION**

The emergency department of the Hospital das Clinicas is the main trauma center in São 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

# WHO SHOULD ATTEND?

Medical Students From The Last Two Years Of Medical School

# **Coordinator(s):**

Professor Edivaldo Massazo Utiyama / Dr. Roberto Rasslan



# TZJ

# Faculty:

Carlos Augusto Menegozzo, Francisco Collet de Salles e Silva, Jeammy Andrea Parra Perez e Vitor Marcondes Ramos

# **Course material:**

**Review Papers** 

# **Prerequisites:**

Fluency in spoken and written English



# **PLASTIC SURGERY**

# DEPARTMENT OF PSYCHIATRY

### **GENERAL DESCRIPTION**

Flaps are routinely used in surgery for reconstructive and aesthetic purposes. A general surgeon needs to know about some regional flaps.

Some surgical technique learning processes are based on the Halsteadian method. However, nowadays, educational plans show the importance of a well-established learning curve.

This course aims to teach medical students how to perform basic tissue flaps (rotation, advancement, and transposition). For this reason, we offer didactic materials and hands-on workshops with no living models. The first part of this course will explain the basic steps of the surgical flap procedure and comment on the most common mistakes.

Following the procedure, we will practice flap drawing (angles, curves, and extension) with Ethylene-Vinyl Acetate material.

Finally, we will use the swine belly to perform surgical flaps.

This methods was publish in: Camargo, C., Freire Barbosa, E., Camargo Maluf, F., Morais-Besteiro, J., & Gemperli, R. (2020). The use of simulation with non-living model to enhance medical students' learning in a surgical training course. Principles and Practice of Clinical Research, 6(3), 29–34. https://doi.org/10.21801/ppcrj.2020.63.3

# **COURSE OBJECTIVES**

The aim of this course is:

- competence to surgical suture
- explain the flap physics
- understand the surgical flap design
- know when to indicate surgical flaps

# **TEACHING METHODS**

We will use Myller's pyramid method.

In the first part, we will offer theoretical material (a procedural step) and apply a pretest exam. Then, the students will practice the flap surgery in stages. We will present some clinical cases to open discussion. Finally, we will perform a surgical flap on a non-living model. In the end, we will apply a post-test exam.



# WHO SHOULD ATTEND?

This workshop is helpful for health and medical students from 3rd to 6th years.

**Coordinator(s):** Prof. Rolf Gemperli and Profa. Cristina Pires Camargo

**Course material:** Course Syllabus, lectures' powerpoints, selected papers, practice experiments.

**Prerequisites:** medical students from 3rd to 6th year



# DIGESTIVE SURGERY DIVISION AT HOSPITAL DAS CLÍNICAS – UNIVERSITY OF SÃO PAULO

DEPARTMENT OF GASTROENREROLOGY

### **GENERAL DESCRIPTION**

The administrative sector of the Clinical Gastroenterology Service operates on the same floor as the Gastric Surgery Service. The wards of both services also operate on the nineth floor of the Central Institute of the Hospital das Clínicas.

The Clinical Gastroenterology Service has the outpatient clinics related to diseases of the esophagus, stomach, intestines and pancreas operating in the same space in the outpatient building, which is located next to the Central Institute.

Regarding liver diseases, there are specific clinics related to viral hepatitis, non-alcoholic fatty liver disease, liver nodules and hepatocellular carcinoma, metabolic and autoimmune liver diseases and cholestasis. These outpatient clinics operate in the outpatient clinic building. The service also provides care for liver transplantation patients and those on the transplant list. It also has the propaedeutic services of digestive endoscopy, phmetry and esophageal electromanometry and liver imaging (abdominal ultrasound and liver elastography).

There are also didactic activities in meetings with discussion of clinical cases and presentations of updates on important topics in the specialty.

# **COURSE OBJECTIVES**

To discuss the specific gastrointestinal diseases focusing on epidemiology, pathogenesis, diagnosis, treatment (medical and surgical) and outcomes, all based on real cases.

Visitors will live the day-by-day practice at our department.



# **TEACHING METHODS**

Didactic (academic) visits to patients' wards and consultations at the outpatients clinic with a tutor/professor.

Lectures and case discussions.

Participation in daily medical activities at our department.

# **WHO SHOULD ATTEND?**

Medical students

Coordinators: Prof. Paulo Herman; Prof. Wellington Andraus

# **COURSE MATERIAL:**

Students will receive a pdf with the most important articles or chapters written by members from our team.

# **PREREQUISITES:**

Medical students. No other prerequisites are applicable.



# **CONTACT US**

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