

Activity Report

2019



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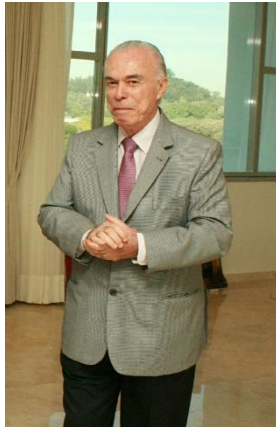
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MESSAGE FROM THE BOARD



Prof. Dr. Flavio Fava de Moraes, Director General of FFM



Prof. Dr. Jose Otavio Costa Auler Jr., Deputy Director General of FFM

On September 18, 1986, on the initiative of the Alumni Association (AAA), with the approval of the Congregation of the Faculty of Medicine of the University of São Paulo (FMUSP), the Fundação Faculdade de Medicina (FFM) was created. It is therefore 33 years of activities as a Support Foundation to FMUSP and its Hospital das Clínicas (HCFMUSP).

Along this trajectory, FFM faced and overcame adversities of various kinds until it achieved a praiseworthy balance not only in the internal environment of the FM/HCFMUSP System, but mainly before the external organs of state control and also the external private audits. That is, with a lot of dedication from the actors involved, FFM acquired its own identity and strengthened its private nature, but not totally independent in its decisions, since it also has interaction through agreements and contracts with the municipal, state and federal public authorities.

In view of the acquired maturity, on different occasions, FFM was highlighted as a Foundation of recognized performance in its main mission of supporting teaching, research and assistance developed in the FM/HCFMUSP System.

An important stage had already been underscored in 2016 when, through its journal (Jornal da FFM), the 20 main leaders of the System gave significant testimonies about the relevance of FFM in the governance and management of its different activities that were registered as its

unquestionable and inescapable institutional values.

However, as the FM/HCFMUSP System is of great dynamism and high social significance associated with a groundbreaking position in teaching, research and medical assistance quality, its daily performance is permanently under a positive differentiated evaluation by international rankings and the users' opinions with a high approval rating.

This information summary transcribed herein has just been surpassed by a tribute that touches us all and that increases our responsibility to face future challenges in a dedicated, modern and increasingly loving way towards our main focus, which are our patients. That is the recent announcement of the São Paulo Public Ministry, through its Foundations Curatorship, which attested our recognized administrative quality by distinguishing FFM – among the 300 foundations in the Municipality of São Paulo – as one of the 10 most outstanding Foundations and classified it in the honorable and symbolic “TOP TEN”.

The laudatory text of this brilliant achievement is critical for us to continue to deserve the unwavering trust of the whole society and at the same time to express our due and profound gratitude before all our superior collegiates and collaborators.

***FFM Board
March/2020***

PRESENTATION

FFM plays a key role in the development of a comprehensive health care within the FM/HCFMUSP System.

Get an overview of the social reach that FFM, in a joint initiative with HCFMUSP and FMUSP, obtained in 2019 by analyzing the chart "**FFM in Numbers**" (page 6).

A brief **history** of FFM (page 8), **organizational structure** (page 9), **strategies** adopted (page 11), main **partners** (page 13), main **certifications** (page 14), its **consolidated results** (page 17), the **Financial Balance overview** (page 20), are also presented in this Report.

In the FMUSP-HC System (page 22) we underscore, in 2019, the 75th anniversary of HCFMUSP.

In order to fulfill their statutory objectives, FFM develops, along with HCFMUSP and other partners, a series of **integral health care actions** (page 28), always prioritizing SUS patient care. Ensuring the performance of **special procedures** such as transplants, implants and other high specialty procedures (page 30), is another among its priorities.

Sustaining the performance obtained by the HCFMUSP Complex (page 33) and by other Health Units (page 43) was guaranteed by FFM, via the provision of human and financial resources. In 2019, we highlight the upgrade of the ICHC from level I to level II (Full Accredited) of the ONA Certification.

With the qualification as a Social Organization, it became possible for FFM to manage the **ICESP Management Contract** (page 46), specialized in high complexity care and equipped to provide integral care to oncology patients in the public health service (SUS). The highlight in 2019 is the pioneer form of tumor removal through microwave ablation, which treats lesions in a less invasive manner, preserving the function of the organs involved and reducing the length of hospital stay.

FFM also continued to manage the **IRLM Management Contract** (page 49), which grants SUS quality levels similar to the best care centers for the disabled in the world. In addition to specialized, care, in 2019 the IRLM Nutrition service developed a project that presented the importance of ludo-pedagogical materials for the nutritional education of pediatric patients in the rehabilitation clinic and the cost to be invested in

the acquisition of these materials and the adequacy of the space.

Recognized and certified as a philanthropic entity, FFM develops, in a joint action with HCFMUSP and other partners, several **social work projects** (page 51), both inside and out of FMUSP-HC installations, focused on the more unattended sector of the population, with no prejudice to SUS services. An example of that is the Suzano's Psychological Assistance Program (page 56), which, due to the tragedy that occurred in March 2019 at the Professor Raul Brasil State School, resulting in the death of five students and two school employees, left emotional sequels among the residents.

Research development (page 59), jointly with HCFMUSP and other partners, is one of the priority functions of FFM, whether through its structure or its incentive to scientific production, in addition to the development of clinical studies. In 2019, a research on stroke, carried out by the neurology area, which received the Paul Dudley Award in Honolulu, Hawaii, stands out.

Training projects (page 77), jointly with HCFMUSP and other partners, is another among FFM's roles, with a main goal to train public service professionals, e.g. the Specialization Course in Health Education for teachers at the Higher School of Health Sciences at UEA, whose proposal is to transform education centered on the content transmission into an education of content integration.

The **development of Health Policy projects** (page 81), jointly with HCFMUSP and other partners, including the definition of processes and technologies, development of assessment instruments, analysis of results, among others, is also part of FFM's activities, such as, for example, a project aimed at developing an application that will use artificial intelligence to scan the population's Vaccination Cards, inform the health worker which vaccines a person still needs to receive, and send the collected information to the government.

The **development of Institutional Projects** (page 87) jointly with HCFMUSP and other partners, with aim, especially, to the upgrade, expansion and maintenance of the physical and

technological infrastructure of FM/HCFMUSP System installations, is also part of FFM's actions in 2019, e.g. the acquisition of equipment, with Finep's support, for the development of highly multidisciplinary projects and intense interaction with Engineering, which will allow the introduction

of new lines of research and the training of professionals prepared for innovation projects.

The **abbreviations** used (page 94) and the current membership of **FFM's Administration** (page 96) complete the FFM 2019 Report.

FFM IN NUMBERS

Procedures + Admissions with No Cost for SUS Patients - 2019	Quantity	Page
Transplants and Implants (SES-SP Agreement)	(*) 951	30
Ambulatory Statement - Authorization for High Complexity Procedures - APAC (SES-SP Agreement)	(*) 165,779	31
Pharmaceutical Assistance - Quantity of Medications from CEAF (SES-SP Agreement)	(*) 43,797,798	32
ICHC + PAMB – Medical Specialties Care (SES-SP Agreement)	8,278,402	34
IPq – Psychiatric Care (SES-SP Agreement)	99,606	35
IOT – Orthopedics and Traumatology Care (SES-SP Agreement)	398,539	36
ICr - Children and Youth Health Care (SES-SP Agreement)	909,148	37
InRad – Radiology Care (SES-SP Agreement)	290.186	38
IMRea – Vila Mariana, Umarizal, Lapa and Clínicas Units (SES-SP Agreement)	429,582	40
HAS – Long-stay patient care – (Under construction) (SES-SP Agreement)	594	41
HAC – Intermediary care assistance – (Under construction) (SES-SP Agreement)	0	41
House of Aids (SES-SP Agreement)	36,509	43
ITACI - Children's Cancer Treatment (SES-SP Agreement)	41,594	44
C.S.E. Butantã (SES-SP Agreement)	5,958	44
NGA Várzea do Carmo (SES-SP Agreement)	20,121	45
HU-USP – Number of Surgeries and Ambulatory Care (SES-SP Agreement)	(**) 22,122	45
ICESP (Management Contract)	471,716	47
ICESP Osasco (Management Contract)	24,111	47
Lucy Montoro Rehabilitation Institute (Management Contract)	34,221	50
Bandeira Científica Project 2019	(****) 5,019	53
Equilibrium Program (Other Agreements)	(***) 519	54
Vision of the Future (SES-SP Agreement)	2,252	55
RRLM Mobile Unit (SES-SP Agreement)	250	55
Suzano's Psychological Assistance Program (SES-SP Agreement)	(****) 18,621	56
CEMIM – IOT - Number of Surgeries and Ambulatory Care (SES-SP Agreement)	11,907	56
CEDMAC - Number of Assistances (SES-SP Agreement)	(*****) 11,880	57
Assist. Speech + Surgery Patients with Labiopalatine Clefts (Other Agreements)	639	58
Student's Financial Support Program - AFINAL	88	58
TOTAL	11,113,584	

- (*) Information-only quantity not considered in the Total of Assistances carried out
 (**) Approximate average quantity from April to December/2019
 (***) From January to May/2019
 (****) From July to December/2019
 (*****) Approximate average quantity

FFM Profile

FFM PROFILE

Brief History

On September 18, 1986, on the initiative of the FMUSP's Alumni Association, the Faculdade de Medicina Foundation was created as a Support Foundation for FMUSP and its Hospital das Clínicas. Today, 33 years later, it is considered one of the top 10 foundations in the Municipality of São Paulo.

The Faculdade de Medicina Foundation was created in 1986 by FMUSP alumni in order to contribute to the activities of the FM/HCFMUSP System. From the beginning, FFM's statutory objectives aim at supporting teaching, research and health care at FMUSP and Hospital das Clínicas (HCFMUSP), in addition to preserving the heritage of FMUSP's Academic Center Oswaldo Cruz (CAOC).



Facade of FFM headquarters, at Av. Rebouças

The Foundation's activities are associated with the decisions of the FFM Board of Trustees and Advisory Board; the HCFMUSP Deliberative Board and Planning and Control Commission; and the FMUSP Congregation and Technical Administrative Board.

In addition, FFM is subject to strict controls by the Curatorship of Foundations of the Public Ministry of São Paulo, the State and Municipal Court of Auditors and an independent external audit.

For the effective joint action of HCFMUSP and FFM in developing integral health care, a University Agreement was signed in 1988 between FFM, HCFMUSP and SES-SP, the **Comprehensive Health Care Agreement for SUS Patients** (former University Agreement), whose objective is to provide a comprehensive health care for SUS patients, in addition to other health actions in the Hospital Complex. This agreement was renewed for another five years at the end of 2018.

FFM develops, supports, manages and maintains hundreds of Comprehensive Health Care, Assistance, Institutional, Research, Clinical

Studies and Health Policy Projects, through national and international agreements, by hiring researchers and professionals allocated directly in research, in addition to the acquisition of materials and equipment.

Over the years, the FFM Board has faced, with seriousness and competence, all the difficulties that the country has been going through, keeping the FFM solid and stable. The last few years in particular, in which the health sector has experienced so much difficulty, FFM's performance has been essential to assist hospitals under its management.

In the quadrennium of 2003-2006, FFM had a leading role in the support to the FMUSP Restoration and Modernization Project, which updated the installations of their main building.

In the following quadrennium, FFM became a Social Organization and extended their participation in the management of health care projects, such as the West Side Project, jointly with the Municipal Health Secretariat of São Paulo, which resulted in a growth in both revenues and human resources. With that, the control and processes systems were upgraded without need to significantly increase the direct administration staff.

In 2006, 112 assistance programs and projects and 120 clinical studies were developed in the FM/HCFMUSP System. In December/2019, these numbers increased to 169 and 464, respectively.

Over the last four quadrenniums, FFM's general revenues increased in approximately 376%.

In terms of staff, in 2003 there were 10,203 collaborators administrated by the FFM Human Resources Management, among those allocated in direct administration, in the Clinical Hospital and in specific projects. Today there are 11.216 (December/2019) collaborators in total.

Currently FFM is considered by the Foundations Curatorship of São Paulo of the Public Prosecutor's Office as one of the ten largest foundations among the 300 present in the state capital.

Organizational Structure

Each Management has a leadership with technical and managerial expertise, which coordinates its team with lucidity, determination and responsibility.

FFM has – as its maximum control body – the **Board of Trustees** (made up of ten members) and the **Advisory Board** (made up of 30 invited members from the FM/HCFMUSP System and civil society), both chaired by the Director of FMUSP.

The synergistic relationship with the Board of FMUSP and its Congregation and with the Deliberative Board, Planning and Control Commission, Clinical Board and Superintendence of HCFMUSP, enhances and leverages the joint actions they practice even more.

The 355 (December/2019) direct administration professionals of FFM are distributed and organized into teams of the nine Specialized Managements that compose it, in addition to their Board and Financial Superintendency. They are: **1)** Legal Consulting; **2)** Controllershship; **3)** Invoicing and Control; **4)** Financial; **5)** Information Technology; **6)** Materials and Importation; **7)** Projects and Research; **8)** Human Resources; and **9)** Complementary Health.

Each Management has a leadership with technical and managerial expertise, who coordinates their team with rationality, determination and responsibility. That grants autonomy to the leadership, but not independence, because the many institutional processes (task sequences) are not restricted to a single department. That work requires a permanent interaction among the departments so the processes may materialize all the way and with quality. Hence a genuine network of processes is configured, with a bidirectional flow, where every department depends on each other. The general coordination is up to the Board, seconded by the Financial Superintendency.

The assignments of each of the nine Managements are shown below.

1) The **LEGAL ADVICE** Department promotes the defense of FFM's interests in administrative, legal or out-of-court suits; it sponsors and administrates the litigation of suits in the tax, labor and civil areas, in the legal and administrative spheres; in addition to complying with all legal obligations, the maintenance of the certificates and titles granted, the execution of the tax planning, etc.

2) The **CONTROLLERSHIP** Department is responsible for the accounting, bookkeeping,

accountability and property control of the Institution, among other functions.

3) The **INVOICING AND CONTROL** Department is responsible for invoicing the medical care services for patients of the SUS and Complementary systems, as well as for the operations of billing, control and distribution of the values related to the services provided in the several units of the FM/HCFMUSP System, via management actions implemented to seek improvement and enhancement of the billing, registry, control and invoicing techniques. The Medical Auditing area of the Invoicing and Control Department of FFM is dedicated to analyzing medical records to assess if the procedure executed x invoiced from the patient's account finds itself invoiced in accordance with the SUS norms in effect. It also works as a authorizer and promotes the guidance process to the CGs, with aim to improve the invoicing quality.

4) The **FINANCIAL** Department seeks to maintain the best results in the financial management of the Cash and the constant improvement of the receipt and payment services required by the FM/HCFMUSP System and other partners, by means of the latest, safest and most agile tools for financial performance available in the market.

5) The **INFORMATION TECHNOLOGY** Department is responsible for identifying and developing specialized systems; integrating and monitoring third party systems, ensuring alignment of the requests with the institutional objectives; implementing and upgrading the technical infrastructure required to ensure information security and meet the demands for quality development in the administrative and operational processes, within the scope of FFM and interfaces with the partners HCFMUSP, FMUSP, ICESP and IRLM. They define the strategic Planning of Information Technology (IT) and monitor, via the Annual Work Plan and the Investment Plan, the projects that shall provide the corporate requirements of technological upgrade of information and communications. They keep a close relationship with the IT and communications areas of HCFMUSP with the purpose of sharing knowledge, maximizing results and reducing costs.

6) The Department of **MATERIALS (national and Importation markets)** executes the acquisitions of materials, inputs, devices and equipment; service contracting, works and renovations; payment of international services, complying with the proper taxes and legislation in regards to providing information to the controlling bodies; and everything else that may benefit the FM/HCFMUSP System and other Health Units.

7) The **PROJECTS AND RESEARCH** Department carries out the viability studies, implementation and follow-up of the contracts/agreements signed with public and private, national and international bodies, related to the activities proposed by their partners, in particular the FMUSP-HC System. In December 2019, **169 projects** were active in FFM, subsidized by public and private resources, both national and international, and **464 clinical studies**, sponsored by the pharmaceutical industry. In 2019, the **Communications** area of the Projects and Research Management kept FFM's Intranet permanently updated, which offers users facility and agility in the search for information and documents, access to the integrated systems and several other resources. At FFM's **Website**, the Transparency Portal was remodeled and updated. The **FFM Journal**, a bi-monthly publication distributed to the entire HCFMUSP Complex, journalists, authorities, companies, public and private institutions, has reached its one hundredth issue.

8) The **HUMAN RESOURCES** Department administrated, in 2019, **11,216** (December/2019) employees, among the personnel from the FFM direct administration, FFM personnel at the service of the FM/HCFMUSP System, part-time workers

and personnel allocated in specific population care projects. Of that total, **355** (December/2019) collaborators are allocated in direct administration, focused on the support to hundreds of the entity's social programs, as well as health care activities, integral health care development and service to SUS patients, developed by the remaining professionals. The latter are hired in a part-time or full-time shift, hence seeking to stimulate the production of works in the didactic, health care and research areas, by means of material support and proper remuneration. The department also carried on Personnel Training and Training Program (**5,707** hours/class), recruitment and selection activities for the entire FM/HCFMUSP System (**1,918** vacancies), administration and payment of social benefits (**R\$79** million) and salaries, involving payroll expenses of approximately **R\$740** million, in addition to coordinating the hiring process, dismissals, licenses, vacations, positions and salaries, food stamps, meal vouchers, transportation vouchers, among others.

9) The **COMPLEMENTARY MINISTRY OF HEALTH** is committed to achieving business deals and strengthen relationships with health contractors/operators, as well as the latent challenge of seeking alternatives to offer this model of healthcare provision together with the upper echelons of HCFMUSP and its Institutes. Highlights are the continuous action to increment the Complementary Health Segment, via the extension of the contracted services; market negotiations to improve payment values and conditions; and the management of Health Operator portfolios and other private sources.

Strategies

Only 355 employees of its current staff of 11,216 (December/2019) belong to FFM's direct management; the remaining professionals work directly in the care activities, comprehensive health care and care for SUS patients.

Since its creation, on September 18, 1986, FFM has been promoting health teaching, research and assistance and supporting the activities of the USP Medical School (FMUSP) and the FMUSP Hospital das Clínicas (HCFMUSP).

Since 1998 it sustains agreements with SES-SP, which include the joint execution of several activities, ranging from the invoicing of the medical-hospital care services and the human resources management of the FMUSP-HC System, to renovations and the acquisition of equipment and inputs, among others. It also supports the FM/HCFMUSP System, its extension courses, events, research projects, clinical studies, among other initiatives.

From their current staff of 11.216 employees (December/2019), only 355 are allocated in direct administration; the remaining professionals work directly in activities of assistance, integral health care development and services to SUS patients.

The structural and technological modernization of FMUSP and its Hospital das Clínicas is also among the main objectives, which has been maintained with constant investments. Improving management and services provided by its employees is also a priority, with a strong contribution allocated to training and courses.

A key point in its institutional strategy is transparency, given the extensive inspection to which it is submitted. FFM's activities are audited by the Curatorship of the Public Prosecutor's Office, by an independent external audit, and by the State Court of Auditors, in addition to accounting for their projects to bodies such as Ministries, State and Municipal Secretariats, and several public and private institutions, both national and foreign. In the relationship with partners, they operate according to regulations agreed upon case by case, always ensuring austerity in management.

FFM is also accountable for their works beyond the Curatorship Council (four meetings/year) and the Consultive Council (two meetings/year). In these cases, accountability takes place via its Status Report. FFM annually presents these two collegiats with their Work Plan for the coming year and the Activity Report of the year past. In the Deliberative Council and in the

HCFMUSP Planning and Control Commission, FFM discloses on a monthly basis the Cash Flow book operational accounts. They also publish the bi-monthly edition of the FFM Journal, with varied and updated content associated to the FMUSP-HC System.

In order to adjust to the requirements of the State Court of Auditors, FFM adjusted its Purchase regulations and its personnel selection criteria for FMUSP and the FM/HCFMUSP System, approaching them to federal law 8666/93 and has been, ever since, conducting tenders and contests, in particular for the selection of the health personnel. They aimed, with such, to ensure greater publicity, competitiveness and savings, with no loss of agility in conducting their processes.

FFM is also guided by values of transparency in relation to financial and administrative information, periodically publishing its reports on the website www.ffm.br.

The growth of the Faculdade de Medicina Foundation in the last ten years has been quite impressive. Its infrastructure was already quite similar in organizational terms, and the increase in the number of employees focused on the management and operational area grew at much smaller proportions than the projects and resources they developed.

Due to the credibility that FFM inspires with the subvention bodies, the volume of values handled by FFM has increased significantly, year after year. In face of the substantial progress of the operational revenues, projects, contracts and agreements, FFM has ascertained expressive amounts of revenues from financial applications, fully reinvested in favor of the operation itself and the projects executed by FFM.

The **financial guideline** has maintained the quest for positive working capital, basing their decisions on expenses or investments with the prior requirement that financial resources exist for such.

Let it be also noted that, over 2019, FFM received, via **Donations**, the amount of BRL 24.0 million, which have been invested in the execution of several projects in the assistance, education and research areas, with a highlight to the purchase of

equipment and medication for FMUSP and for the services in the FMUSP-HC System, in addition to ICESP and IRLM project.

Over its 33 years, they have constantly sought the **improvement** of their service standards while being concurrently dedicated to fulfilling its goals and meeting the needs of their partners.

The continuous **modernization** of its technical infrastructure, the adjustment to the current technological demands and the **training** and specialization of their team of professionals are among its other priorities.

The Board has a special focus on people and is concerned with their professional and personal growth. The Training and Qualification Program of their collaborators improves their technical skill set, rendering them more efficient and effective. Furthermore, the Board seeks to fulfill the legitimate needs of their professionals by means of reassessing positions, functions, classifications and promotions, always seeking to promote merit. This clears a path towards professional development, it generates adhesion, a team spirit and a feeling of belonging to the institution.

The management model also emphasizes a Positive Values Code, which permeate the institution as a whole, represented by integrity, transparency, reliability, good example, commitment, responsibility, flexibility, tolerance, listening skills and patience.

The Board stimulates the Improvement of Processes and Interpersonal Relationships. People have diverse backgrounds, different personalities and varied attitudes and behaviors. FFM understands that the technical competence of people, although absolutely necessary, is not sufficient to complete the profile they desire from collaborators. They thus invest and persist in the improvement of the interpersonal relationships in a way that one may recognize the other, with mutual tolerance, acceptance and bilateral respect. That reduces reactivity, improves the institutional environment and transforms opposition into cooperation.

The 355 (December/2019) professionals of FFM's direct administration are distributed and organized in the teams of nine Specialized Managements that compose it, in addition to their Executive Board and Financial Superintendence. They are: Legal Consulting, Controlling, Billing and Control, Financial, IT, Materials and Import, Projects and Research, Human Resources and Complementary Health.

With aim towards the effectiveness of the management, FFM's Board holds its Integration Meeting on a monthly basis, with the participation of the Financial Superintendency and the

Specialized Managements of each department. Everything is shared among all: difficulties, issues, demands of the FM/HCFMUSP System and the potential relevant solutions. The meeting is dynamic and has generated greater cohesion and institutional integration. In the second part of the meeting, guest specialized authorities proffer lectures about topics within FFM's interest.

Among the various activities developed by FFM, international cooperation in research projects has grown year after year. More and more, the FFM team takes courses and receives training for the proper fulfillment of the specific requirements of each foreign subsidizing body, whether public or private, in Brazil and abroad.

FFM also answers for the Clinical Studies management, under the supervision of the House professors, to evaluate the effectiveness, tolerability and safety of medications and human and animal research.

In 2019, 169 programs/assistance, education and research projects were active within the institution, in addition to 464 clinical studies developed in the FM/HCFMUSP System.

In 2008, FFM became recognized as a Social Organization, a private legal entity, non profit, whose activities are directed to education, scientific research, technological development, protection and preservation of the environment, culture and health, receiving such title from the Public Administration and authorized to enter into Management Contracts with them to perform non exclusive services of the State. As a result, control systems and processes were modernized, without the need for significant expansion of the direct management team.

In 2008, FFM signed a Management Contract with SES-SP to handle the activities of ICESP, a tertiary hospital that is highly specialized in cancer treatment, which serves SUS patients for complex treatments, coming from the entire state. With the enactment of Complementary Law No. 1.160/2011, which transformed HCFMUSP into a special regime autarchy, FFM, a social organization selected in a public notice, initiated the Management Contracted directly with HCFMUSP as of 2017.

Since 2010 FFM has maintained the Management Contract with SES-SP to carry out the health activities and services at the IRLM. Inaugurated in September 2009, the Institute was designed to become a center of excellence in treatment, education and research in rehabilitation.

Also, in 2019 it developed along with the FM/HCFMUSP System several **partnerships** with

institutions interested in developing medical sciences, such as:

Federal Public Bodies:

- Brazilian Health Regulatory Agency – ANVISA;
- National Economic and Social Development Bank – BNDES;
- Justice Department / National Secretariat for Policies on Drugs – Senad;
- Science and Technology Department / CNPq – National Scientific and Technological Development Council;
- Science and Technology Department / FINEP – Studies and Projects Financier;
- Ministry of Health – MS;
- Labor Prosecutor's Office – MPT;
- World Health Organization - WHO / Pan American Health Organization (PAHO);
- Universidade Federal do Sul da Bahia.

State Public Bodies:

- Research Support Foundation of the State of São Paulo - FAPESP;
- Emílio Ribas Infectology Institute;
- Secretariat for Economic Development, Science, Technology and Innovation - SED;
- Social Development Secretariat of the State of São Paulo - SEDS;
- State Health Secretariat of São Paulo – SES-SP;
- Universidade do Estado do Amazonas – UEA.

National Private Institutions:

- Aids Healthcare Foundation do Brasil;
- Associação Beneficente Alzira Denize Hertzog da Silva – ABADHS;
- Crefisa S/A Crédito, Financiamento e Investimentos;
- EMS S/A;
- Fundação Butantan;
- Fundação Itaú Social;
- Fundação Maria Cecília Souto Vidigal;
- Fundação para o Desenvolvimento Científico e Tecnológico em Saúde – FIOTEC;
- GE Healthcare do Brasil;
- Horizon Pharma;
- Laboratórios Ferring Ltda.;
- Ouro Fino Saúde Animal Ltda.;
- Sanofi Aventis Farmacêutica Ltda.;
- Vale S/A.

International Institutions:

- Alzheimer's Association;
- Inter-American Development Bank - IDB;
- Bill and Melinda Gates Foundation;
- Blood Systems Research Institute;

- Case Western Reserve University;
- Center for International Blood and Marrow Transplant Research;
- Climate and Land Use Alliance;
- Conquer Cancer Foundation of ASCO;
- Cornell University;
- European Foundation for the Study of Diabetes;
- European Union by European Commission;
- Family Health International;
- Fondation Mérieux;
- General Electric Healthcare;
- Grand Challenges Canada;
- Harvard University;
- Health Research Incorporated;
- Hebrew Senior Life;
- Institut Mérieux;
- Johns Hopkins International Injury Research Unit;
- Kingston General Health Research Institute;
- National Institutes of Health – NIH;
- United Nations Educational, Scientific and Cultural Organization - UNESCO;
- Partners Healthcare (founded by Brigham and Women's Hospital and Massachusetts General Hospital);
- President and Fellows of Harvard College;
- United Nations Development Programme – PNUD;
- Queen Mary University of London;
- Research Foundation for Mental Hygiene (The New York Psychiatric Institute);
- Rush University Medical Center;
- International Society of Nephrology – ISN;
- Swiss Tropical and Public Health Institute;
- The Chancellor, Masters and Scholars of the University of Cambridge;
- The Encephalitis Society;
- The George Washington University;
- The Ohio State University;
- The Open Society Policy Center – OSPC;
- The Smile Train;
- The Spaulding Rehabilitation Hospital;
- The Stanley Medical Research Institute;
- The University of Manchester;
- The University of North Carolina;
- University College London
- University of Birmingham;
- University of Bristol;
- University of California;
- University of Cambridge;
- University of Georgia;
- University of Wisconsin – Madison;

- U.S. Civilian Research & Development Foundation;

- ViiV Healthcare UK Ltd.;
- Vitalant Research Institute;
- Yale University.

The **FMUSP restoration and modernization** Project, developed between the years of 2000 and 2008, relied on the key support from FFM, which shared with FMUSP the coordination of the Project and the fund raising. The initiative had the goal of investing in historical heritage and adjust its spaces to the currently developed activities, improving the infrastructure and logistics of the work processes. The project not only promoted physical renovation, but a profound human and cultural shift on all the community of the FM/HCFMUSP System. The maintenance works continued in 2019, now incorporated to FMUSP's operational routine.

In its 33 years of existence, FFM obtained public acknowledgment for their work as a charitable entity of social welfare, by obtaining and maintaining several **certifications**, among which stand out:

- Declaration of State and Municipal Public Interest (the Declaration of Federal Public Interest was revoked for all institutions, by Law No. 13,204/2015);
- Attestation of Record and Certificate of a Social Welfare Charitable Entity (**CEBAS**), deferred by Decree SAS/MS No. 946, of 09/25/2014, published in the Official Press of the Union on 09/26/2014, valid from 06/12/2010 to 06/11/2015 (currently under process of renovation);
- Certificate No. 018/2008 of Qualification as a Social Organization of the Municipal Secretariat of the São Paulo Municipality Prefecture Management;
- Certificate of Qualification as a Social Health Organization of the São Paulo State Government Health Secretariat - Process SS 001/0001/002.913/2008;
- Certification with CNPq No. 900.0011/1990, valid through 04/13/2021;
- Declaration of Recognition of Tax Immunity over the "Causa Mortis" Transmission and Donation of any Assets or Rights - ITCMD – Process No. 51220-135787/2017, valid through 2021;
- Certification of Enrollment No. 0308/SP/2000 of the State Social Assistance Council - CONSEAS;
- Accreditation, as a foundation to support HCFMUSP, with the Secretariat for Economic Development, Science, Technology and Innovation, Resolution SDE 26, of 10/04/2019.

In 2019, FFM participated actively, either as a Member or Consultant, of the following **Commissions, Committees, Work Groups** and other initiatives:

- ✓ Collaboration to the São Paulo Foundations Association (AFP);
- ✓ Commission of the Alcohol and Drugs Agreement;
- ✓ Commission of the Permanent Education School;
- ✓ Commission of Financial Support to FMUSP Students;
- ✓ Commission of Clinical Studies of the HCFMUSP Clinical Board;
- ✓ Inova/HCFMUSP Executive Commission;
- ✓ Executive Committee for Agenda 2030;
- ✓ USP Foundations Committee (FUNASP);
- ✓ Commission of HC/FMUSP/FFM Integration;
- ✓ FMUSP Research Committee;
- ✓ HCFMUSP Deliberative Council Planning and Control Commission;
- ✓ HCFMUSP Strategic Planning Commission;
- ✓ Ciclotron Project Commission;
- ✓ Information Technology Committee;
- ✓ Angola Project Management Committee;
- ✓ FMUSP Congregation;
- ✓ Board of the Company School Integration Center (CIEE);
- ✓ Zerbini Foundation Consultive Council;
- ✓ HCFMUSP Deliberative Board;
- ✓ ICESP Board of Directors - São Paulo State Cancer Institute;
- ✓ Board of the Football and Portuguese Language Museums;
- ✓ Complementary Health Contacts;
- ✓ Contracting Process for the SUS Agreement;
- ✓ Management of ICESP as an OSS;
- ✓ Management of the Luci Montoro Network (Morumbi Unit) with OSS;
- ✓ Pacaembu Pole Real Estate Management;
- ✓ Work Group for the Analysis and Improvement of the Invoicing Process;
- ✓ HR Fixation Management Group;
- ✓ Interaction with TCE/MP/Comptroller;
- ✓ Member of the FMUSP Observatory/Library;
- ✓ People Management Nucleus;
- ✓ Partnership with the Electronic Purchase Exchange;
- ✓ Participation in the Health Coalition (PCOS);
- ✓ IT Master Plan.

In 2019, FFM continued to execute activities of the Pacaembu Cultural Pole relevant to those already mentioned for the year 2018 and which

earned a detailed specification that should be reiterated for this report, namely: **a)** participation in public hearings about the review of the Strategic Master Plan of the City of São Paulo; and **b)** participation in meetings with councilmen commissions and party leaders in the São Paulo City Council, to discuss the corrective measures for the wrongful launch of the PCP area as residential, by means of launching the area as a ZOE - Special Occupation Zone (NR3), without prejudice to the area's preservation, as required by DEPAVE, CONPESP, CONDEPHAAT, SEHAB, SEMPLA and SVMA. They also extended alternative suggestions for the use of the Pole, so the social use of the real estate could be operative, in compliance with that required by the real estate listing process.

FFM also supports the members in carrying out their various events. In 2019, it participated in the following technical-scientific and institutional events: **a)** 18th CIAD - Brazilian Interdisciplinary

Congress on Home Assistance; **b)** Psychiatric Clinical Course for Residents – Tysa 2019; **c)** CINDOR - USP's Interdisciplinary Pain Congress; **d)** III Interdisciplinary Symposium of the Department of Clinical Medicine – SICLIM 2019; **e)** 22nd Annual Nephrology Course - NEFROUSP 2019; **f)** 2nd ICHC-FMUSP National Conference and Physiotherapy; **g)** III Practical Course on Glomerulopathy at the University of São Paulo; **h)** XIV Advanced Course on HIV Pathogenesis; **i)** Specialization Course in Interdisciplinary Pain Assessment and Treatment; **j)** 4th International Symposium on Neglected Tropical Diseases - An Integrated View of the Relationship between Parasites and Hosts, Chemotherapy and Treatment; **k)** Course on Microbioma and Microbiota Transplantation.

In addition, they **financially supported** the FM/HCFMUSP System in the following technical-scientific and/or institutional initiatives, whose objectives were pursuant to its Bylaws:

APPROVAL	EVENT
02/04/18	Bandeira Científica Project
24/10/18	ICESP Humanization Project
30/01/19	Introductory Course of the League to Combat Rheumatic Fever
30/01/19	Introductory Course of the League of Pediatrics and Childcare
30/01/19	Introductory Course of the League of Otorhinolaryngological Skills - Nasal Obstruction
30/01/19	Introductory Course to the League to Combat Syphilis and other STDs
07/02/19	League of Physical Medicine and Rehabilitation
07/02/19	16th Course of Introduction to the League of Cardiology and Pediatric Cardiac Transplantation
11/02/19	Introduction Course to the League of Posture and Movement at USP
11/02/19	Introduction to the Physiotherapy League in the Health of the Elderly
12/02/19	Anxiety League Introductory Course
14/02/19	II Introductory Course to the Electrocardiography League
14/02/19	League of Liver Surgery and Portal Hypertension
14/02/19	Introductory Course to the Trauma Surgery League
18/02/19	Kids Save Lives Brasil
28/02/19	AMERUSP - Association of Medical Residents of FMUSP
28/02/19	LIV Introductory Course to the Physiotherapy League in Neonatology and Pediatrics
08/03/19	Pre-Selection Physiotherapy League
11/03/19	League of Cardiovascular Emergencies
11/03/19	League of Geriatrics and Gerontology
03/14/19	Academic Medical Extension
14/03/19	Surgical Expedition Academic Extension
14/03/19	Blindness Prevention League
14/03/19	FMUSP XIII Course on Infection in Transplants and VIII Symposium on Infection in Immunodepressed Individuals
14/03/19	HCFMUSP Community Beneficent and Cultural Association
14/03/19	Neurosurgery League
03/15/19	10th International Colloquium on Psychodynamics and Psychopathology at Work
19/03/19	Emergency League Introductory Course
26/03/19	Academic Day on Gynecology
03/04/19	Introductory Course of the Multidisciplinary League on Violence, Gender and Health
11/04/19	Nephrology League Introductory Course

16/04/19	Introductory Course of the League of Oncological Surgery
26/04/19	Introductory Course of the League of Initiation to Coloproctology, League to Combat Obesity and Metabolic Diseases and League of Liver Surgery and Portal Hypertension (XII Gastrinho)
26/04/19	FMUSP XXXVIII University Medical Congress
02/05/19	Systemic Hypertension League Introductory Course
03/05/19	Bandeira Científica Project
14/05/19	XVIII CIAD - Home Care Interdisciplinary Congress
23/05/19	Introductory Course of the League of Hematology and Hemotherapy and Cell Therapy
11/06/19	II ICHC National Physiotherapy Conference
27/06/19	AEMED - Brazilian Medical Students Association (award)
02/07/19	Mad Joy Project
05/07/19	Electrocardiogram Course of the League to Combat Rheumatic Fever
17/07/19	Meditation and Health League
23/07/19	Introductory Course of the League of Orthopedics and Traumatology
23/07/19	Introductory Course of the League of Forensic Medicine and Bioethics
23/07/19	IV Humanization Symposium and II International Symposium on Patient Experience - ICESP
26/07/19	Introductory Course on the Depression League and Other Mood Disorders
29/07/19	Generations Meeting
29/07/19	Introductory Course of the Multidisciplinary Prenatal Care League
08/08/19	Introductory Course of the Pediatric Heart Surgery League
08/08/09	Introductory Course of the Pediatric Oncology League
19/08/19	Introductory Course on Lida of Surgical Technique and Experimental Surgery
21/08/19	Introductory Course on the Artificial Heart Stimulation League
21/08/19	XXXI Introductory Course to the Gynecology League
08/21/19	V Neurinho Introductory Course
16/09/19	Introductory Course of the Pediatric Surgery League
30/09/19	Introductory Course of the Clinical Oncology League
30/09/19	Introductory Course of the Clinical Anatomy League
02/10/19	Introductory Course of the League of Andrology and Men's Health
03/10/19	Introductory Course of the Diabetes Mellitus Control League
09/10/19	6th Grade Graduation
06/11/19	Introductory Course of the Academic Urological League
29/11/19	XIII Introductory Course of the Metabolic Syndrome League

FFM Consolidated Results

Initiatives towards health promotion, disease prevention, medical-hospital assistance and high complexity rehabilitation to the Public Health Service (SUS) users are the health care activities promoted, in joint action, by HCFMUSP and by FFM, through the Integral Health Care for SUS Patients Agreement, signed, since 1988, between FFM, HCFMUSP and SES-SP.

In ever more upgraded and technologically equipped installations, following the latest international quality guidelines, the assistance also relies on a highly specialized and trained staff.

Partnerships with public and private, national and international institutions enable FFM to develop several programs, mainly in the areas of health and education, which benefit the population.

FFM CONSOLIDATED RESULTS							
(In thousands of BRL)	2013	2014*	2015	2016	2017	2018	2019
Revenues	1,206,359	1,222,869	1,183,383	1,159,527	1,187,917	1,256,771	1,286,982
SUS medical care	282,535	291,880	276,587	277,231	287,472	290,957	316,839
Private medical care	86,892	90,920	87,654	111,018	119,968	118,544	125,411
Subventions and contributions	713,826	680,251	649,926	619,578	617,768	692,589	705,481
Financial revenues (net)	35,004	51,335	56,076	60,510	48,542	32,628	31,299
Technical services	39,432	52,299	49,834	44,815	42,077	47,690	44,189
Other (courses, donations, etc.)	48,670	56,184	63,306	46,375	72,090	74,363	63,763
Expenses	1,043,148	1,132,588	1,132,359	1,100,606	1,165,371	1,206,875	1,209,230
Personnel	595,332	666,520	704,885	677,160	672,852	696,140	734,150
Consumption materials	223,114	237,924	207,134	201,922	225,173	242,129	213,442
Professional services	166,129	163,469	152,892	145,116	152,751	171,466	176,614
Other (general, depreciations, etc.)	58,573	64,675	67,448	76,408	114,595	97,140	85,024
Result	163,211	90,281	51,024	58,921	22,546	49,896	77,752

* With the conclusion of the ICESP Management Contract in 2014, ad hoc operations took place which, due to their nature, were not incorporated to the statements above, namely: return of the contingency fund to SES (BRL 43.8 million), return of residual balances to SES (BRL 12.7 million) and transfer of stock materials to the HC (BRL 25.8 million).

While comparing FFM's total revenues, a **growth of 24%** in 2019 in comparison to 2013 was achieved. The revenues deriving from medical assistances performed by SUS **rose 12%** in that period, obtained mainly by means of reassessment of fixed values established in the formal agreements that regulate the government funding.

The **investments in infrastructure and equipment** made by FFM in 2019 totaled approximately **BRL 26 million**. BRL 16.1 million were invested in the HCFMUSP, BRL 8.1 million in ICESP, BRL 851 thousand in FMUSP, BRL 240 thousand in IRLM and BRL 174 thousand in other agreements. In turn, FFM administration invested approximately BRL 715 thousand, with emphasis on equipment and information technology.

FFM CONSOLIDATED RESULTS							
(In millions of BRL)	2013	2014	2015	2016	2017	2018	2019
Total	49.2	54.9	42.5	26.9	26.2	38.1	26.2
Equipment	22.8	16.9	26.4	13.2	11.1	12.5	14.8
Buildings and Installations	15.1	25.8	7.8	7.3	8.1	16.6	1.9
Information Technology	6.1	6.3	5.4	4.1	5.2	7.4	7.7
Other (furniture, vehicles, etc.)	5.2	5.9	2.9	2.3	1.8	1.6	1.8



Overview of the Financial Balance 2019

Overview of the Financial Balance 2019

ORIGIN OF THE RESOURCES	2019	%	2018	%	2017	%
Total Revenues	1,287.0	100%	1,256.8	100%	1,187.9	100%
Government Resources	1,004.2	78.0%	967.5	77.0%	894.0	75.3%
Medical Care - SUS	316.8	24.6%	291.0	23.2%	287.5	24.2%
Subventions	687.4	53.4%	676.5	53.8%	606.5	51.1%
Medical Care - Insurance and Private	125.4	9.7%	118.5	9.4%	119.9	10.1%
Donations	24.0	1.9%	26.6	2.1%	14.5	1.2%
Private cooperation - national and international	18.1	1.4%	16.1	1.3%	11.3	1.0%
Provision of services and/or product sales	65.6	5.1%	67.1	5.3%	58.1	4.9%
Other revenues	49.7	3.9%	61.0	4.9%	90.1	7.5%

RESOURCE APPLICATION	2019	%	2018	%	2017	%
Total Expenses	1,235.4	100%	1,245.0	100%	1,191.6	100%
Personnel	734.1	59.4%	696.1	55.9%	672.9	56.5%
Operational expenses	475.1	38.5%	510.8	41.0%	492.5	41.3%
Asset acquisitions	26.2	2.1%	38.1	3.1%	26.2	2.2%



Integral Health Care Actions

Integral Health Care Actions

The FM/HCFMUSP System, composed of FMUSP, HCFMUSP and other health units, serves patients at the three levels of assistance and develops around 6% of all Brazilian research in the areas of health and biomedical sciences.

FM/HCFMUSP System

The FMUSP-HC System is an Academic Health System. It occupies a constructed area of 350 thousand m² and attends patients in the three levels of care. It develops around 6% of Brazilian research in the health and biomedical sciences areas.

In addition to FMUSP, also integrating it are institutes specialized in high complexity care (**tertiary/quaternary care** - HCFMUSP), a hospital with medium complexity (**secondary attention** - HU-USP), auxiliary hospitals, units specialized in the integral care of patients that carry HIV/Aids, School Care Center and Basic Health Units (**primary attention** - CSE Butantã, DHAC, DHAS, House of Aids), as well as IMT and SVOC, both linked to FMUSP.

HCFMUSP unit for scientific research, the LIMs are intended to develop basic and applied research, in addition to diagnostic methods. The current 62 LIMs Laboratory Units are home to more than 200 research groups, which are academically and scientifically linked to FMUSP and administratively to HCFMUSP.

In the last 10 years, the FM/HCFMUSP System has been developing a network of multiuser equipment considered a national model. There are currently 42 centers, which make available equipment and services to System researchers and external ones, both national and international (www.premium.fm.usp.br). Among the equipment available is the 7 Tesla Resonance and the MicroPET-CT. Among the experimental models available are the zebra fish and the animal ICU.

Long recognized for its excellence in health care, teaching and research, the HCFMUSP had its status as a Scientific and Technological Institution (ICT) formalized in 2016 and created its Center for Technological Innovation (NIT-HCFMUSP), inaugurated at the end of 2018.

The main objective of the NIT-HCFMUSP is to encourage innovation within the scope of the FM/HCFMUSP System, to manage the intellectual property generated in this environment and to provide means to promote the transfer of

scientific, technological and cultural knowledge to the public and private productive sector, aiming at improving State and Nation health.

The superior instances of the System are FMUSP Congregation and the HCFMUSP Deliberative Council, both presided by FMUSP's Director. **FMUSP Congregation** has a consultative and deliberative function and is advised by the Graduation, Post Graduation, Research, Culture and Extension, Medical Residency and Foreign Relations Commissions. **HCFMUSP's Deliberative Council** defines the guidelines of tertiary medical-hospital care and is composed by ten representatives of FMUSP full professors, elected by their peers.

The FM/HCFMUSP System is composed by the following institutions:

The **Faculty of Medicine of the University of São Paulo (FMUSP)** (page 24), recognized for its pioneering spirit and excellence in teaching and research, was founded in 1912 and implemented in 1913. In 1931, the current Faculty of Medicine building was inaugurated. In 1934, it joined USP.

FMUSP has 17 departments, 362 teachers and 500 technical-administrative employees. It offers four undergraduate courses (Medicine, Physiotherapy, Occupational Therapy and Speech Therapy) and 25 postgraduate *Stricto Sensu* programs. The Faculty has 1,400 undergraduate students, 1,400 doctoral students, 700 master's students, 200 special graduate students and 1,500 medical residency students, enrolled in 52 different programs. Currently, it has 140 postdoctoral researchers.

It has the largest hospital in Latin America - HCFMUSP and is one of the largest medical-scientific research centers in the country, with 230 research groups and an expressive intellectual production.

The Faculty works in partnership with HU and has CSE Butantã as a teaching-assistance unit specialized in primary health care.

It has more than a century of excellence in teaching and international recognition. In 2015, Medical Winter Schools was implemented, which receives students from universities in different countries.

The **Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HCFMUSP)** (page 26), completed 75 years on April 19, 2019.

Officially inaugurated in 1944, the HCFMUSP is the largest hospital complex in Latin America, with approximately 2,400 beds distributed among its eight specialized institutes, two auxiliary hospitals, a rehabilitation division, an associated hospital, 62 medical research laboratories and a Convention Center.

As a benchmark of the Brazilian medicine in the assistance, research and teaching of technical and scientific disciplines, the complex has the collaboration of 22 thousand professionals.

Increasingly, the institution seeks to maintain its pioneering spirit by improving humanization, entrepreneurship and technological innovation, with the support of a management focused on scientific development.

Fundação Faculdade de Medicina (FFM), a non profit entity, created in 1986 by AAAMUSP, which actively participates in the education and research activities in FMUSP and their Hospital das Clínicas.

FFM has a key role in the development of integral health care in the FM/HCFMUSP System in its several Institutes and Units, for it ensures that the deprived population have continuity in medical-hospital care via the Public Health System (SUS), through the allocation of the System's human and financial resources on the Hospital itself, thus enabling the HCFMUSP to reach levels of SUS care (outpatient and hospitalization) in an average percentage of 95%.

In a shared action with HCFMUSP, FMUSP and other partners, FFM participates in relevant projects and research, carried out in all units of the FM/HCFMUSP System, mainly focused on the prevention and treatment of diseases that affect the health of the Brazilian population, generate hundreds of works published in indexed journals and is gaining global reach and visibility.

Zerbini Foundation (FZ), private-law foundation that has had an important role in promoting administrative agility and efficiency to InCor, as well as the additional fund raising.

The **Cancer Institute of the State of São Paulo (ICESP)** (page 46), internationally recognized for its studies, is the largest public cancer treatment hospital in Latin America, offering all care activities, attending oncological complications, chemotherapy and radiotherapy.

Lucy Montoro Rehabilitation Institute (IRLM) (page 49) center of excellence in treatment, education and research in rehabilitation. It attends people with physical disabilities or potentially disabling diseases and has the objective of performing the integral medical rehabilitation program, professional orientation and guidance and also achieve physical and social promotion of rehabilitation.

USP University Hospital (HU-USP) (page 46), community school-hospital, inaugurated, in 1981, in the University City, which works in partnership with FMUSP and aims to promote teaching, research and the extension of services to the community.

Samuel Barnsley Pessoa School Health Center (CSE Butantã) (page 44), FMUSP faculty-care unit, under the responsibility of the Departments of Preventive Medicine, Pediatric, Medical Clinic and Speech Therapy, Physiotherapy and Occupational Therapy (FOFITO), focused on the resident population of Butantã, in the west region of the city of São Paulo.

The **Institute for Tropical Medicine (IMT-FMUSP)**, reincorporated to FMUSP in 2019, which is dedicated to research, teaching and assistance in the area of tropical diseases, is the only one of its kind in the State of São Paulo.

Death Verification Service of the Capital (SVOC), body binded to FMUSP dedicated to clarifying the *causa mortis* in deaths of poorly defined diseases or with no medical assistance, occurred in the city of São Paulo.

THE FACULDADE DE MEDICINA DA USP

FMUSP, recognized for its pioneering spirit and excellence in teaching and research, is one of the largest medical and scientific research centers in the country.



Main entrance to the Faculdade de Medicina da USP

Founded in 1912 and initially known as the São Paulo School of Medicine and Surgery, the institution received financial resources from the Government of the State of São Paulo and the Rockefeller Foundation to introduce a new teaching model based on university hospitals in Brazil.

The current Faculty building was opened in 1931 and, in 1934, was part of the University of São Paulo. Therewith, it became known as the Faculty of Medicine of the University of São Paulo. Currently, FMUSP is associated with a Hospital Complex with eight institutes and two auxiliary hospitals, allowing practical learning for undergraduate students, medical and multiprofessional residencies.

The Medical Residency Program brings together 51 of the 53 medical specialties recognized in Brazil, being the largest and most competitive set of programs in the country. In general, they are based on activities supervised by specialists working in Basic Units (primary care), at the University Hospital (secondary care) and at Hospital das Clínicas (tertiary care).

FMUSP offers courses in medicine, physiotherapy, speech therapy and occupational therapy, in addition to 26 broad and stricto sensu graduate programs.

The multiprofessional residency in health is distributed in 12 programs among the institutes of the Complex, such as: Hospital and Clinical Pharmaceutical Assistance, Mental and Psychiatric Health Nursing, Medical Physics, Clinical Nutrition in Cardiopneumology, Clinical Nutrition in Gastroenterology, Hospital Dentistry, Prevention and Cardiovascular Therapeutics, Health Promotion and Care in Hospital Care, Rehabilitation of People with Disabilities, Collective Health and Primary Care, Health of the Elderly in Palliative Care and Mental Health with Emphasis on Chemical Dependence.

The Graduation Preceptorship project is innovative and unique to FMUSP. Part of the success of the program can be explained by the fact that the newly graduated preceptor of the residency is very close to the students' reality in the most diverse ways. Thus, they have a better perception of the difficulties during the internship,

they are more familiar with various technologies used in the training and assistance process, in addition to experiencing hands-on the doubts inherent to the end of the course, such as the choice of the future specialty, a fact that often teachers, due to their extensive activities and distance from this moment, are unable to transmit.

After the creation of the Graduation Preceptorship, FFM assumed a relevant role in different aspects such as: **a)** continuous search for a source of funding for these scholars to maintain the program's viability; **b)** legal regulations that allowed the granting of scholarships. In addition, FFM has financially supported the CEDEM team by sponsoring training courses for these preceptors.

One of the priorities of FMUSP is to promote the internationalization of the Faculty, expanding the exchange of students and researchers from Brazil and the world. Internationalization is one of the axes of the FMUSP 2020 Project, a strategic planning implemented with the participation of the entire academic community in 2010, aiming at the development of FMUSP in the next 10 years.

With financial support from FFM, FMUSP has created new ties of integration with foreign institutions and has also worked on maintaining and fostering existing relationships. The International Relations Commission (CRIInt) was strengthened. It is composed of chairmen of the FMUSP Commissions and responsible for deliberating on the different aspects related to internationalization, such as international agreements, prospects for student mobility of FMUSP students to foreign institutions and vice versa, as well as for forging a deeper scientific cooperation with partner institutions abroad. In addition, the Commission works in close partnership with the International Office to define annual internationalization goals.

Another action that also received financial support from the FFM was the granting of scholarships to FMUSP students, selected for an exchange program at the Harvard School of Public Health, in Boston, in the United States.

One of the most frequent actions, which has the support of the FFM and has been expanding

every year, is the participation of home professors and researchers in international symposia, conferences and congresses, in countries like Germany, Portugal, United States, Denmark, among others.

In order to strengthen the internationalization axes, the institution sought to provide improvements in student exchange actions and activities. Creating the FMUSP i-Friends program directly with undergraduate students, without the help of the Oswaldo Cruz Academic Center; expanding the number of social activities with exchange students and the number of vacancies offered by the departments; and improving the international website of FMUSP, in order to optimize information for interested foreign students.

Still within the scope of Incoming mobility, CRIInt drafted and published a regulation regulating all types of foreign visitors' links in the complex and delegating responsibility for each of them to the different statutory commissions of FMUSP and other complementary bodies, such as the Medical Residency Commission (COREME) and the School of Permanent Education (EEP).

In 2019, FFM continued to support the internationalization process, guaranteeing teachers, home and foreign students the diversity of experiences and knowledge that this type of action can bring.

Due to the multiplicity of bonds of the FMUSP-HC complex researchers, the institution developed a capturing system for their scientific production, called the intellectual Production Observatory (OPI). This system enables obtaining reports based on the name of the researcher (and its variations), the institutional bond, the binded laboratory or the research group. Since 2012, the data periodically updated and certified by the FMUSP Library and Documentation Service are made available at the website <http://observatorio.fm.usp.br>.

In 2019, FFM contributed effectively in expediting bureaucratic processes and, mainly, in the implementation of projects and programs that, in government administration, are more morose.

THE FMUSP HOSPITAL DAS CLÍNICAS

An international benchmark in several highly complex specialties, the HCFMUSP celebrates its 75th anniversary reaffirming its mission: providing free assistance to the population, while developing professionals, carrying out cutting-edge health research and bringing innovation to the country.



Hospital das Clínicas of the USP Medical School in the 1940s

On April 19, the HCFMUSP completed 75 years of its foundation. Officially inaugurated in 1944, the HCFMUSP is the largest hospital complex in Latin America, with approximately 2,400 beds distributed among its eight specialized institutes, two Auxiliary Hospitals, a rehabilitation division, an Associated Hospital, 62 Medical Research Laboratories and a Convention Center.

As a benchmark for the Brazilian medicine in the assistance, research and teaching of technical and scientific disciplines, the complex has the collaboration of 22 thousand professionals.

Increasingly, the institution seeks to maintain its pioneering spirit by improving humanization, entrepreneurship and technological innovation, with the support of a management focused on scientific development.

The figures give an idea of the giant size and relevance of the HCFMUSP. In this true medical city of more than 600 thousand square meters, occupied by about 20 thousand employees and third parties, in addition to hundreds of

undergraduates, interns, master's students, doctoral students and residents in medical and paramedical areas, each month about 250 thousand patients pass through by the eight institutes and two auxiliary hospitals for free procedures, ranging from accidents to organ transplants and other highly complex procedures. There are 2,500 beds, an apparently high number, but small in view of the representativeness of the HCFMUSP's activity. In the state, for example, it performs around 15% of transplants and accounts for 10.7% of highly complex hospitalizations.

By going through the social and political changes along seven decades, we sought to preserve the ideals and values of the founding founders: to train highly qualified human resources to face health problems in our environment, endowed with solid technical-scientific knowledge, ethical and social values and willingness to practice humanized health care, and to generate knowledge and innovation that can turn into effective actions in health promotion, prevention

and management of diseases that afflict the community.

Improving patient care is an ongoing goal of HCFMUSP employees. Management projects are the result of great ideas put into practice in the name of quality service and can change the lives of thousands of people.

Emergency is a critical hospital area; therefore, the Referenced Emergency Unit has been the focus of action of the **Technical and Scientific Center for Humanization (NTH)**. One of the main initiatives was the creation of the SOS Acolhe Team, at the Central Institute, which, since 2014, helps in the communication and reception of patients and companions, in addition to contributing to internal workflows.

In 2019, the **Compliance Handbook** was updated, with the creation of its second version and the online portal, which started to be fed monthly with the frequently asked questions dealt with in the face-to-face training. The Compliance Department also started to have a weekly space in the HC Online newspaper, disseminating topics of interest to the HCFMUSP community, in addition to the compliance training conducted in each unit.

PROAHSA, created in 1972 for teaching, research and service provision in the fields of Hospital Administration and Health Systems, included, in 1992, the Professional Improvement Program (PAP), aimed at improving health administration for professionals with higher education, with the exception of doctors.

EEP supports all HC institutes for the development of teaching activities. With 10 years of experience and accredited by the State Council of Education, it has a portfolio with more than 300 courses in various modalities – lato sensu postgraduate courses, distance learning, updating and technical training for professionals in the various areas of health. In addition to traditional methodologies, realistic simulation is present in the training offered for advanced trauma care (ATLS) and cardiovascular care (ACLS, PALS, BLS, etc.). In addition, in 2019, courses were implemented in which virtual reality is used to train doctors in videolaparoscopy, endoscopic procedures, ultrasound and hemodynamics.

The opening of the Inova-HC District (an area of 900 m² on two floors of the HCFMUSP Employee Service Center) in 2019 confirms HCFMUSP's goal of becoming a benchmark for innovation in its sector. The space is intended for the development of new ideas and businesses for the health area through public-private partnerships.

Initiatives like this make the HCFMUSP the most innovative Brazilian institution in the health sector today, according to a study developed by the Standard Intelligence Center (CIP) for the second edition of the Whow! Award, created with the objective of identifying and recognizing companies and institutions that foster consistent innovation.

On December 5-6, the 8th edition of the Brilho nos Olhos Workshop was held at the CCR. The “Brilho nos Olhos” project was conceived during the Future Search Conference 2020, and implemented in late 2009, with the objective of improving results while bringing more enthusiasm and satisfaction to all who work at the HCFMUSP.

Among the thematic axes of the work are: influential and inspiring leadership; intellectual leadership to foster knowledge generation; strategic alignment; and decentralized performance.

Humanization, which permeates every strategy, has as some of its objectives the valorization of the health professional; encouraging permanent education; advising leaders on actions to impact the valuation of patient care; and the contribution to improving working relationships.

Since the beginning, the Brilho nos Olhos Management has been based on a collective construction and seeks to value the work of all employees, so that each one feeds the feeling of pride for being part of a unique institution. Its objective is to reinforce the historical and social role of Hospital das Clínicas, which keeps up with the changes in the health area, in order to maintain the standard of excellence in patient care.

The new management was divided into three waves. The first one is focused on the organization and structuring of the project. The second one focuses on the definition of goals and corporate results. And finally, the third one is aimed at the sedimentation and feedback from the model in the organizational structure – the latter seeks continuous growth without spending great efforts, keeping the organization self-sustainable over time.

In 2019, with the shared operation of the HCFMUSP, FFM continued with the actions for the improvement and expansion of the FMUSP Hospital das Clínicas operational capacity and the development of actions and services for the integral health care of SUS patients.

Integral Health Care Agreement for SUS Patients

Comprehensive health care actions for SUS patients mark FFM's sphere of action.

Behind the USP School of Medicine (FMUSP) and its Hospital das Clínicas (HCFMUSP), with its Institutes, auxiliary hospitals and other health care services, in addition to teaching and research – which are the pillars of the University of São Paulo – operates the Fundação Faculdade de Medicina (FFM), founded by a group of professors over 30 years ago to support the activities of FMUSP and HCFMUSP.

Since 1988, FFM has been responsible for the University Agreement signed with the HCFMUSP and the São Paulo State Department of Health, aimed at the free care of SUS patients. The Agreement also guarantees the performance of special procedures, such as transplants of different organs, different implants and other highly complex procedures.

Access and assistance to SUS at all HCFMUSP facilities (except InCor) are ensured by FFM, through the allocation of the System's human and financial resources on the Hospital itself, thus enabling the HCFMUSP to reach SUS (outpatient) levels of care and hospitalizations) in an average percentage of 95%. On average, approximately 3 million patients are treated at the HCFMUSP Complex every year, undergoing 10 million outpatient procedures each year.

The Agreements signed, within the scope of SUS, between SES, HCFMUSP and FFM, have their own characteristics, with a remarkable uniqueness | due to HCFMUSP's certification as a Teaching Hospital, where all production, actions and health services, within the scope of SUS, must constitute a field of practice for teaching, research and technological incorporation.

The rules and policies for the application of resources from that agreement are dynamically instituted by the several directive bodies of HCFMUSP (Deliberative Council, Board Councils, Executive Boards and Superintendency) and from FFM (Curator Council), which continuously monitor the results achieved, especially in regards to the funding of medical-hospital assistance.

HCFMUSP and FFM'S operation is shared, in the management and in services to SUS patients, and derives from the expressed authorization from the State Executive Authority, duly formalized in the proper legal instruments.

In order to achieve their objectives, FFM currently employs 11,216 professionals (December/2019), of which more than 90% are dedicated directly to the assistance / care of SUS patients.

The labor contracts signed by FFM are very distinct from the contracts of the public servers at the HCFMUSP, with no incompatibilities or subordination.

The professionals hiring process by FFM has the purpose of meeting the SUS patient demand of the HCFMUSP, and the difficulties inherent to the Government Authority in creating job posts. The financial resources used for salary payments derive, exclusively, from the consideration of their activities in the health sector.

In addition, on their behalf they acquire medication, inputs, consumption material, equipment, furniture, utensils and others, fully dedicated to the assistance and care of SUS patients. It is worth noting that FFM does not undertake to manage HCFMUSP's budgetary resources nor do they receive any resource from that state autarchy.

CEBAS is granted by the Ministry of Health to private, non-profit legal entities recognized as a Social Assistance Charity Entity for the provision of services in the Health Area. Obtaining CEBAS guarantees the exemption from social contributions and the celebration of agreements with public authorities, among others.

FFM has had this title since 1989 and, thanks to it, has access to tax immunity from taxes and social contributions, providing the FM/HCFMUSP System with a tax saving of approximately R\$204 million per year, resources that are totally destined to the FM/HCFMUSP System in the form of costing, hiring human resources, purchasing medical and hospital devices, modernizing the technological park, maintenance, renovations, extensions and other initiatives that, eventually, benefit the patient from the Unified Health System - SUS.

As a result, there are more resources for investment in cutting-edge equipment, training, scholarships, research financing, physical adaptation of spaces, purchase of medicines, hiring professionals allocated to research projects, among many other demands that are daily demanded by structure of the FM/HCFMUSP

System, the largest teaching, research and health care center in Latin America, where 50 thousand people pass by daily.

The **number of assistances** performed, in the past two years, by HCFMUSP and by FFM, in joint action, is demonstrated in the two charts below:

2019							
ASSISTANCE INDICATORS OF THE HCFMUSP INSTITUTES AND AUXILIARY HOSPITALS (EXCEPT INCOR, IMREA AND ICESP)							
Institute / Hospitals	Admissions	Surgeries	Urgent and emergency attention	Ambulatory Appointments	Imaging Exams	Lab Exams	Total per Institute / Hospitais
ICHC	31,852	25,722	44,082	696,625	100,216	7,379,905	8,278,402
ICr	7,222	2,159	17,078	74,747	43,361	764,581	909,148
IOT	5,047	5,599	18,097	68,548	89,388	211,860	398,539
IPq	2,646	1,252	-	81,728	13,980	-	99,606
InRad	-	-	-	4,827	285,359	-	290,186
HAS	108	-	-	19	392	75	594
HAC (under construction)	-	-	-	-	-	-	0
Total	46,875	34,732	79,257	926,494	532,696	8,356,421	9,976,475

2018							
ASSISTANCE INDICATORS OF THE HCFMUSP INSTITUTES AND AUXILIARY HOSPITALS (EXCEPT INCOR, IMREA AND ICESP)							
Institute / Hospitals	Admissions	Surgeries	Urgent and emergency attention	Ambulatory Appointments	Imaging Exams	Lab Exams	Total per Institute / Hospitais
ICHC	34,467	25,145	69,057	705,068	98,679	7,396,008	8,328,424
ICr	6,451	2,067	20,331	66,554	44,836	694,678	834,917
IOT	4,825	5,719	20,505	65,613	96,646	271,572	464,880
IPq	3,059	1,216	-	81,026	10,484	-	95,785
InRad	-	-	-	10,302	215,600	-	225,902
DHAS	152	-	-	27	575	575	1,329
DHAC (under construction)	-	-	-	-	-	-	-
Total	48,954	34,147	109,893	928,590	466,820	8,362,833	9,951,237

Special Procedures

In addition to conventional care and admissions, FFM and HCFMUSP perform jointly transplants and implants, high complexity procedures and pharmaceutical assistance to SUS patients.

Transplants and Implants

Pursuant to the objectives of the Integral Health for SUS Patients Agreement (previously the University Agreement), signed between FFM and HCFMUSP and SES-SP, HCFMUSP and FFM jointly carry out transplant and implant procedures that are quite important for the population, and it is

considered strategic by the Ministry of Health for SUS services.

The quantity of transplant and implant procedures performed gratuitously in the past couple of years was the following:

STRATEGIC PROCEDURES - TRANSPLANTS AND IMPLANTS		
Description	Quantity	
	2018	2019
Cochlear implant	110	109
Partial hepatectomy for transplant (live donor)	45	30
Unilateral nephroureterectomy for transplant	41	42
Allogeneic transplant of bone marrow hematopoietic stem cell - related	17	25
Allogeneic transplant of bone marrow hematopoietic stem cell - not related	08	12
Allogeneic transplant of umbilical cord blood hematopoietic stem cell - not related	03	-
Allogeneic transplant of peripheral blood hematopoietic stem cells - related	-	24
Allogeneic transplant of peripheral blood hematopoietic stem cells - not related	-	3
Autogeneic transplant of bone marrow hematopoietic stem cells	11	6
Autogeneic transplant of peripheral blood hematopoietic stem cells	107	111
Cornea transplant	111	131
Cornea transplant (in combined surgeries)	01	9
Cornea transplant (in reoperations)	15	17
Sclera transplant	01	-
Liver transplant (deceased donor organ)	110	146
Liver transplant (living donor organ)	42	35
Pancreas transplant	-	2
Kidney transplant (deceased donor organ)	127	177
Kidney transplant (living donor organ)	47	61
Simultaneous pancreas and kidney transplant	03	11
Total	799	951

High Complexity Procedures

Pursuant to the objectives of the Integral Health to SUS Patients Agreement (previous University Agreement), signed between FFM and HCFMUSP and SES-SP, HCFMUSP and FFM jointly

carry out High Complexity Ambulatory Procedures, whose production, in the past two years, is demonstrated in the following chart:

AMBULATORY DEMONSTRATION AUTHORIZATION FOR HIGH COMPLEXITY PROCEDURES - APAC		
Description	Quantity	
	2018	2019
Diagnosis in Clinical Laboratory	32,514	33,542
Radiology Diagnosis	97	105
Diagnosis by Tomography	1,600	960
Ultrasonography	17	26
Diagnostic Methods in Specialties	27,922	26,765
Appointments / Assistances / Follow-ups	8,055	8,256
Treatment in Oncology	73,025	18,599 (*)
Treatment in Nephrology	21,929	22,095
Dental Treatments	43	46
Specialized Therapies	1,069	1,296
Upper Respiratory Tracts, Head / Neck Surgery	0	0
Vision System Surgery	4,796	4,667
Genitourinary System Surgery	182	100
Reparation Surgery	781	741
Surgeries in Nephrology	83	89
Small Surgery and Surgery of the Skin, Subcutaneous Tissue and Mucous Membrane	0	0
Collection and Exams for Organ Donation Purposes	17,945	22,160
Follow-up and Post-Transplant Complications	14,288	16,753
OPMs Not Related to the Surgical Act	5,468	4,426
OPMs Related to the Surgical Act	667	662
Tissue Processing for Transplants	413	311
Clinical Treatments (other specialties)	3,428	4,180
Total	214,322	165,779 (*)

(*) The decrease was mainly due to Ordinance No. 263 of 02/2019, which changed the way of charging for procedures related to treatment in Oncology

Integral Pharmaceutical Assistance

Pursuant to the objectives of the Integral Health for SUS Patients Agreement (previous University Agreement), signed between FFM and HCFMUSP (Accredited) and SES-SP, HCFMUSP and FFM, in the integral health care, the pharmaceutical assistance is determinant for the resolubility in the attention and health services.

The medication supply guarantee of the Specialized Component of Pharmaceutical Assistance (CEAF) is key for maintaining patient treatment, and a complement for the complex and high cost medical-hospital procedures, such as transplants, for example.

In 2019, **43,797,798 medication units** from CEAF were distributed, representing BRL 20,979,373.55. The control of CEAF medication distribution and the emission of PACs are carried out through the Hospital Information System - SIGH Prodesp.

In 2019, the HCFMUSP Pharmacy met 1,186,836 ambulatory prescriptions, an average of five thousand per day. There is also a medication home delivery service that, since 2013, became free of charge. Around 60% of the outpatients receive their medication at home, with no cost.

Located on the 8th floor of ICHC's PAMB, HCFMUSP has the largest hospital pharmacy in Brazil. Founded in the same year of the Hospital, 1944, today 315 collaborators work there, of which 91 are pharmacists.

Much more than a medication distribution center, a real factory functions there, where medications that do not exist in the market are produced, i.e. those that do not attract commercial interest. Different dilutions and dosages than those available in the market are also prepared, in accordance with the patient's requirements, or

compositions that are different from traditional ones.

In 2019, medication production generated savings in the amount of BRL 7,036,765.15. Sixty-seven types of standardized medication were produced, with a total of more than 8.3 million units, and 340 formulas were manipulated, in a personalized and individualized manner (297,472 units), to fulfill the medical prescriptions and patient requirements. The pharmacy also distributed 60 special medications, produced for research protocols, in a total of 39,028 units. In addition to medication produced internally, 359 different medications were acquired and unitized, totaling 1.8 million units to fulfill admitted patients' prescriptions.

In 2019, the following upgrades in pharmaceutical assistance took place:

- Expansion of traceability for parenteral nutrition;
- Implementation of a technical visit program in critical suppliers, visiting three suppliers of sterile and injectable manipulated drugs and parenteral nutrition;
- Manipulation of doses of the drug ceftazidime + avibactam, expanding treatment coverage and promoting savings of R\$5,295.60/treatment;
- Participation in the multiprofessional visit guided by goals in the burn ICU;
- Approval of the form for the implementation of the medication refusal term;
- Implementation of the Pharmaceutical Care Expansion project at the CEAF of the Ministry of Health - Rheumatoid Arthritis; and
- Training of the clinical pharmacy using active methodologies.

The Institutes, Auxiliary Hospitals and Specialized Health Units of the FM/HCFMUSP

The HCFMUSP and FFM jointly develop health promotion actions in the most modern hospital facilities, with the support of highly specialized teams and a state-of-the-art technology park.



Aerial view of Hospital das Clínicas of the USP Medical School

75 years ago, on April 19, 1944, the Hospital das Clínicas of the USP Medical School was inaugurated. Considered one of the main hospital complexes in the world, since the first discussions regarding its creation, the HC was designed to house services from different medical specialties that were consolidated at that time. Precisely for this reason, it should have the highest technology available, knowledge and practices, intensifying the corporate transformations linked to the training of specialist doctors, giving clinical thought an increasingly broader position in the face of medical and public health issues.

While working in health care, HCFMUSP and FFM jointly develop actions towards health promotion, disease prevention, medical-hospital

care and high complexity rehabilitation for SUS users.

In the Institutes, Auxiliary Hospitals and Health Specialized Units, the care is provided in state-of-the-art hospital installations, with the support from highly specialized teams and a high grade technological park.

The HCFMUSP, through FFM, also attends some health plan operators, whose revenues, although inexpressive, are fully reinvested into the hospital's operations.

The performance, in 2019, of the many Institutes (except ICESP and InCor), Auxiliary Hospitals of the HCFMUSP and specialized Units is presented in the following pages.

ICHC

Institutional Data:

Foundation: 1944

Constructed Area: 178.5 thousand m²

Collaborators: 5,892

Accreditations: ONA II, CAP, PALC, ISO 9001, OHSAS 18001, ISO 14001, Friend of the Elderly Hospital Seal, SINASC Seal, Friend of the Environment, International Certification for Distinction in Assisted Infusion Therapy

Care Indicators:

Admissions: 31,852

Surgeries: 25,722

Urgent and emergency attention: 44,082

Outpatient appointments: 696,625

Imaging exams 100,216

Lab exams: 7,379,905

The **Central Institute** (ICHC), the complex's first building, currently concentrates 36 medical and multi-professional specialties. In 1981, it started to have an interconnected building, the Outpatient Building (PAMB), where the largest surgical center of the HC is located, the Pharmacotechnics Unit and the Central Laboratory Division.

In 2019, ICHC's Clinical Emergency Service Intensive Care Units (ICU) gained new facilities on the 11th floor. The units occupy two of the six assistance wards built in an area of 4,200 m², interconnected by footbridges, which are undergoing tests for validation and approval. In all, the Intensive Care Center will house 75 beds, 16 of which are for patients in respiratory isolation.



Nurse Daniel Tadeu Braido in the new ICU facilities.

In 2019, the Rheumatology and Pulmonology Outpatient Clinic was opened at PAMB, which now operates in an integrated space, enabling more dignified and humanized care for patients.

The Division of Endocrinology participated in the international, multicenter, retrospective study,

Study in Patients with Multiple Endocrine Neoplasia type 2B, published in January 2019, in *The Lancet Diabetes & Endocrinology*. The survey was conducted with registration information from 48 centers worldwide. Data from 345 patients followed up during the years 1970 and 2016 were recovered, with the objective of determining the overall medullary and specific survival of thyroid carcinoma, based on the fact that the patient underwent an early thyroidectomy before the age of one year.

The Prediction Model project for the use of Insulin in Pregnant Women Diagnosed with Gestational Diabetes by Fasting Glycemia, from the Division of Clinical Obstetrics, published in June 2019 in *The Journal of Maternal-Fetal & Neonatal Medicine*, evaluated the risk factors and proposed a model (construction of a nomogram and a digital calculator for easy clinical use) to predict the need for insulin, during the treatment of early diagnosed Gestational Diabetes Mellitus. This was a retrospective, cohort study, involving 408 pregnant women followed up for 4 years.

In 2019, thanks to the practices adopted, which added value and gave edges that strengthened the integrated management between assistance and administration, the ICHC evolved from level I to level II (Fully Accredited) within the ONA Certification. The improvement of internal processes, the analysis of results and the integration between the areas were necessary for this achievement. The evolution in the accreditation system is a challenge and has motivated the teams to maintain good practices and seek their improvement.

The NIT-HCFMUSP, opened at the end of 2018, aims to encourage and provide facilities for professionals in order to transform their creative product proposals and research into valuable goods for solving health problems. In addition, it has a portfolio of projects with more than 20 initiatives from employees and collaborators. Established in 2019, the practice, called Wednesday Innovation, is an open event that promotes and disseminates the institute's initiatives for innovative health solutions, with the purpose of forming a multidisciplinary environment with the presence of actors from different sectors of the ecosystem. innovation.

In 2019, in a joint action with FFM, the ICHC carried out **8,278,402 assistance procedures**.

Institutional Data:

Foundation: 1952
 Constructed area: 22 thousand m²
 Collaborators: 591
 Accreditations: ONA II

Care Indicators:

Admissions: 2,646
 Surgeries: 1,252
 Outpatient appointments: 81,728
 Imaging exams: 13,980

The **Institute of Psychiatry (IPq)** is one of the first institutions in the country to offer comprehensive and integrated care to various types of psychiatric disorders. It has the only unit in Brazil specialized in child therapy and is a benchmark for functional neurosurgery.

In the area of assistance, the *Mental Health Outpatient Clinic for People in Vulnerable Situation Living on the Street* stands out. It maintains an active search for homeless people in vulnerable situations, who have difficulty reaching the services of the Psychosocial Care Network, either due to the social situation they are facing, the prejudice of the professionals who provide assistance or the difficulty in understanding their mental illness as a homeless person. In addition to assistance, training for undergraduate and graduate students is offered to identify and treat serious psychiatric disorders in this population.



IPq facade

In May 2019, the IPq Pharmacy started to perform the logistics management of materials and OPMEs. This action resulted in the improvement of processes, optimization of resources, improvement in monitoring the implementation of the

outsourcing project and guaranteeing the supply of needs, even in non-elective situations.

The Institute of Psychiatry maintains its level of Full Accredited (Level 2), by ONA, conferring a prominent position in quality among the country's psychiatric hospitals.

In 2019, the "IPq Open Doors 8th Edition - Suicide Prevention" was held, a mental health action introduced in 2012, which aims to welcome the population to the institute and provide correct and safe information about mental disorders. For this, more than 270 professionals, including doctors, multiprofessionals, volunteers and administrators, host, lectures and rounds, in addition to more than 20 activities, such as reiki, shiatsu, acupuncture, nutritional and dental guidance, blood pressure reading and blood glucose test. The action is free and serves more than 2,000 people.

In 2019, the "IPq Excellence Award" was created to recognize and value the excellence of professionals in the following categories: researcher, assistant physician, multi-professional, support and administrative, voluntary and outsourced. For this award there is a rigorous selection process, with objective criteria and meritocracy.

In order to promote the practice of physical activity in daily life, the IPq inaugurated, in 2019, the "Stairway Space". It is an environment for artistic exhibitions, where the works can be checked while stimulating the walk and up or down flights of stairs, instead of using elevators.

The "Stairway Space" is one of the actions of the "IPq Fit Program", which aims at the well-being and quality of life of professionals.

Since 2009, the IPq has led the First Ties Program, created by the National Institute of Developmental Psychiatry for Children and Adolescents (INPD). The program carries out an intervention based on a home visitation program by nurses to teenage mothers and their children in adverse conditions, with the objective of identifying individuals at risk and promoting improvements in the quality of life of these young women and their children. Once located, there is work to reduce threats and identify protective elements, increasing the chance that children will not develop mental disorders.

In 2019, in a joint action with FFM, the IPq carried out **99,606 assistance procedures**.

IOT

Institutional Data:

Foundation: 1953
Constructed area: 27.5 thousand m²
Collaborators: 1.009
Accreditations: ONA I

Care Indicators:

Admissions: 5,047
Surgeries: 5,599
Urgent and emergency attention: 18,097
Outpatient appointments: 68,548
Imaging exams: 89,388
Lab exams: 211,860

As one of the oldest institutes in the complex, the **Institute of Orthopedics and Traumatology (IOT)** was created in 1953 to assist victims of childhood paralysis. Today, it is a benchmark for healthcare of patients with respiratory and traumatological disorders, spinal cord injuries, limb reimplantation, reconstructions with endoprostheses or with a tissue bank in major tumor resections.

At the IOT, outpatient and inpatient assistance is provided, in addition to support for more severe cases with a help from the Referenced Emergency Unit.



IOT facade

The highlights in the area of assistance in 2019 were the development and implementation of the Fasting Protocols, Prevention of Venous Thromboembolism, Safe Transfusion of Hemocomponent, Sepsis and Complication, based on the best practices used and standardized care, facilitating decision making of the assistance team and promoting greater security in assistance.

The Welcoming Project aims to guide and clarify patients and companions regarding their surgery and treatment, thus improving communication in search of greater safety and comfort.

In the field of research, the natural evolution of the adolescent idiopathic scoliosis (AIS) has been extensively studied and several factors have already been identified that can determine the severity and progression of the disease in different populations. The IOT developed a simple scoring scale, based on evidence, which correlates with the quality of life of patients and is capable of stratifying those with idiopathic scoliosis, prioritizing risk factors for progression and severity.

In addition, anatomical studies of microsurgical flaps, used in clinical practice, are performed to improve the surgical technique.

In 2019, innovations like the Computed Tomography with Load stand out. It is the only equipment in Brazil that has technology that allows imaging of the feet, ankles, knees, hands, wrists and elbows, with the patient in an orthostatic position (standing). Among the benefits of the equipment, located at the IOT Diagnostic Center, are the most reliable evaluation, with less time in the acquisition of images, the low radiation dose, as well as the determination of a much more precise surgical planning.

In addition, the IOT's robotic arm will carry out work such as sculpting custom wheelchair seats (work that is done manually today) and assist in the construction of orthopedic vests (which correct scoliosis, for example). Among the benefits is the reduction in waiting time for patients.

The specialized internal ombudsman service for employees aims to establish a communication channel between employees, the People Management Center and the IOT's Executive Board. The considerations and/or criticisms are important for the IOT to improve management practices.

The Clean Award, offered on a quarterly basis by the IOT Administration and Executive Board, aims to value the teams of the outsourced company hired to perform hospital cleaning, and promote constant improvements in these services.

In 2019, jointly with FFM, **398,539 assistance procedures** were carried out by the IOT.

Institutional Data:

Foundation: 1976
 Constructed area: 23 thousand m²
 Collaborators: 1,526
 Accreditations: ONA II

Care Indicators:

Admissions: 7,222
 Surgeries: 2,159
 Urgent and emergency attention: 17,078
 Outpatient appointments: 74,747
 Imaging exams: 43,361
 Lab exams: 764,581

The **Institute for Children and Adolescents (ICr)** is a reference in tertiary and multiprofessional care, from birth to adolescence, with high diagnostic and therapeutic technology, in addition to 20 medical modalities that treat chronic and complex diseases.

Among the units are Emergency and Urgency, Intensive Care, Hospitalization, Outpatient, Day Hospital and Renal Replacement Therapy. In its own headquarters, the Institute for Childhood Cancer Treatment (ITACI) (page 44), linked to the ICr, stands out in the areas of Onco-Hematology, stem cells and hematopoietic stem cell transplants.



ICr facilities

ICr Archives

In the area of assistance, the Multidisciplinary Protocol for the Prevention of Intracranial Hemorrhage (ICH) in Very Low Weight Newborns is the result of multidisciplinary work that has improved the admission routine of these patients, who are more fragile and vulnerable. There was a drop from 13% to 9.6% in the prevalence of ICH in the first six months after its implantation.

In 2019, the Liver Transplantation Program completed 30 years. During this period, 850 transplants were performed, approximately half with cadaveric donors and the remainder being interventional. This is a pioneering service that addresses all types of liver failure, including fulminant hepatitis.

The work *“Changes in Lipid Metabolism in Pediatric Patients with Severe Sepsis and Septic Shock”* was published in *Nutrition: The International Journal of Applied and Basic Nutritional Sciences* and recognized as runner-up in *The 2019 John M Kinney Award for Pediatric Nutrition*.

Considered a rare disease, the "Brazilian Group for Juvenile Lupus Erythematosus", coordinated by the ICr, includes a series of 27 Rheumatology Services for the investigation of pathophysiology and new forms of treatment.

The purpose of the "Defining Molecular Characteristics of Pediatric Malignant Neoplasms and Target Therapy" process is, not only to know them biologically, but to better establish the possible etiological links of their diseases, stratify their risk states, recognize drugs with potential actions in specific changes that the tumors present and to be able to use the target therapy resource for these patients with less toxicity and greater success.

In the work entitled "Therapeutic Use of Human Milk Antibodies in Surgical Newborns and in Patients with Primary and Secondary Immunosuppression", the liquid phase of colostrum and human milk is obtained free of fat and cells, but maintaining the secreting IgA antibodies and soluble bioactive factors of milk. The objective is the therapeutic use of this preparation administered orally as a food supplement, aiming at its ability to protect newborns with congenital malformations of the abdominal wall (gastroschisis), in which infections by bacteria from the gastrointestinal tract represent the main cause of postoperative morbidity and mortality.

In 2019, the book "Pediatric Nursing and Neonatal Assistance of High Complexity" was launched. It is the result of long experience of the ICr nurses, who proposed to develop the content to support professionals for integrated and multidisciplinary care in search of excellence in care centered on newborns, children and adolescents.

In 2019, the ICr celebrated the 30th anniversary of the first pediatric liver transplant, starting a specialty that has already saved the lives of more than 800 children across Brazil.

In 2019, in a joint action with FFM, the ICr carried out **909,148 assistance procedures**.

InRad

Institutional Data:

Foundation: 1994

Constructed area: 14.3 thousand m²

Collaborators: 565

Accreditations: ONA III and National Program of Quality in Mammographies (PNQM), QUANUN

Care Indicators:

Outpatient appointments: 4,827

Imaging exams: 285,359

Hailed for innovation, the **Radiology Institute (InRad)** has the most modern diagnostic and therapeutic imaging resources in the modalities of radiology, nuclear medicine, interventionist radiology and radiotherapy, becoming a benchmark for excellence both in Brazil and abroad.

In 2019, InRad's Nuclear Medicine was audited by the *Quality Management Audits in Nuclear Medicine Practices* (QUANUM), program of the International Atomic Energy Agency (IAEA). At the site, assistance and management support processes were evaluated, reaching 94.4% compliance, with the best performance of the 74 services already visited in the world. The result showed that the quality of the services provided by Nuclear Medicine at the institute is on par with the highest international standards.

PET-RM is a hybrid imaging device with which, in just one exam, it is possible to obtain Nuclear Medicine and Magnetic Resonance images. The study "Traumatic Brain Injury in Retired Soccer Players" assesses the brains of retired professional soccer players in order to verify whether sports activity is associated with brain injuries and/or impairments.

In 2019, the InRad intensified the "PISA Project (Image Platform in the Autopsy Room)" and "Magnetic Resonance 7 Tesla", involving volunteers and patients from the HCFMUSP. These projects, using high field, aim to obtain better image quality and improve qualitative and quantitative markers in the central nervous system.

The InRad joined the delivery of reports and exam images through the Patient Portal. In addition to providing access to the report, without the need to travel to the HCFMUSP, the initiative allows the reduction of direct (printing images and reports) and indirect costs, with the care of

patients who seek the institute to obtain test results. It is worth noting that access has increased significantly – after three months of implantation, a daily average of 540 patients was recorded.



Release- InRad HCFMUSP Advisory

InRad's Magnetom 7T device, one of 60 in operation worldwide, used for virtual autopsies and data collection

As of 2019, patients at Hospital das Clínicas have access to PET/CT exams with the radiopharmaceutical 68Ga-DOTATATE, used for the diagnosis and monitoring of neuroendocrine tumors. The analysis of the condition is a challenge because, in addition to being a heterogeneous disease, with varied and often nonspecific symptoms, it leads in general to small lesions. The early identification and staging of tumors are important steps for the adequate treatment and prognostic evaluation. PET/CT with 68Ga-PSMA is an important tool in the evaluation of patients with prostate tumor, especially for cases that have already been treated and that present elevated PSA.

The "Artificial Intelligence and Big Data Technology to Optimize Health Processes" is another innovative project, carried out in partnership with the Gastroenterology department and the InRad, to organize a liver image bank, with the objective of developing IA algorithms to optimize the flow of reports and organize data for research.

In 2019, in a joint action with FFM, the InRad carried out **290,186 assistance procedures**.

Institutional Data:

Foundation: 1975
Constructed area: 33.2 thousand m²
Collaborators: 571
Accreditations: CARF and Accessibility Seal

Care Indicators:

Total quantity of Assistances (Vila Mariana, Umarizal, Lapa and Clínicas Units): 429,582

A pioneer in rehabilitational assistance, the **Institute of Physical Medicine and Rehabilitation (IMREA)** has multidisciplinary teams that treat patients with temporary or permanent disability, in a comprehensive and integrated manner, using modern technological resources.

Since 2008, IMREA coordinates the Managing Committee of the Lucy Montoro Rehabilitation Network and develops standard care clinical protocols for each one of the 17 units of the State of São Paulo.

The institution seeks to be a pioneer in rehabilitation assistance through clinical research and technological innovations, with the development of results assessment strategies for the patient and society.

The Workshop "Experience of the Patient with Spinal Cord Injury during Hospitalization" is an activity developed for discussion, alignment, description of processes and flows that involve the care of the patient with spinal cord injury, aiming to guarantee the excellence of the assistance provided by the multiprofessional team.

The highlights in the field of research in 2019 were the study "Optimization of Rehabilitation for Phantom Limb Pain, using Mirror Therapy and Transcranial Direct Current Stimulation", a multicenter study of efficiency of Mirror Therapy associated with Transcranial Direct Current Stimulation in reducing phantom limb pain, and the study "Inhibitory Deficit as a Marker of Neuroplasticity", observational study of neurophysiological markers present in different pathologies and their changes after rehabilitation.

In the field of innovation, the "Cycloergometer with Functional Electric Stimulation" stands out. This is an ergometric bicycle adapted with a chair for postural support and a functional electrical stimulator to activate muscles that will activate the bicycle, and the "Integrated Manufacturing Laboratory", space with 3D printing, with a filament reproduction technology and adaptation modules for laser cutting and engraving and micro machining center.

In 2019, the IMRea received the Institutional Memorial Haim Ring Award in Japan. The award ceremony was held on June 13 in the city of Kobe, at the end of the International Society of Physical Medicine (ISPM), international congress of Physical Medicine and Rehabilitation.

As has been the case since 2016, in July 2019, the IMRea received a group of medical students for the Winter School on Physical and Rehabilitation Medicine, part of the FMUSP Winter School program. A total of 35 young people from 10 countries have already participated in the program focused on rehabilitation.



Students from the Winter School on Physical and Rehabilitation Medicine

The students participated in theoretical classes and practical activities involving volunteer patients. The program aims to enable future doctors to know the fundamental factors that interfere in the assessment and treatment of disabilities and disabling health conditions, in a clinical approach that includes medical and therapeutic interventions. More directly, they analyze disabling pain, spinal and brain injuries, stroke, cerebral palsy and amputations, in addition to making contact with techniques such as robotic rehabilitation, oncological rehabilitation, child rehabilitation and application of toxins for therapeutic use.

It is also part of the objectives to emphasize the importance of a multidisciplinary team in evaluations and treatments, as well as to present the different environments and treatment modalities that involve a rehabilitation process. Therefore, classes are taught by medical professionals, such as physiatrists, neurologists and orthopedists, and also by physiotherapists, occupational therapists and engineers.

The IMRea comprises today five Units, distributed over the Greater São Paulo: IMRea-Vila

Mariana, IMRea-Umarizal, IMRea-Lapa, IMRea-Clínicas and IMRea Morumbi (IRLM – page 50) and a mobile unit (page 55).

IMRea's main office is located in **Vila Mariana**, south side of São Paulo, and assists, on average, **313 patients per day**, offering specialized exams and treatments with high-end equipment, including Robotics Labs, Neuromodulation (inaugurated in 2013) and the Assistive Technology Lab. The admissions ward has adapted rooms to enable patients and their caretakers to a humanized and comfortable sheltering environment. The medical staff includes physiatrists and specialists in the areas of: Urology, Cardiology, Neurology, Psychiatry, Radiology, Medical Clinic, Infectology, Labor Medicine and Dentistry.

In the south side, in the district of Campo Limpo, is located the **IMRea Umarizal**, inaugurated in 2001. It assists approximately **136 patients every day** within its several rehabilitation programs. It offers high-end technology, such as the Robotics and the Assistive Technology Labs, which aims to develop the patients' maximum potential. It provides specialized ambulatories, such as Neuromuscular Blockage, Acupuncture, Dentistry, and the labs specialized in Electroneuromyography and Isokinetic evaluation. After the conclusion of the rehabilitation program, it is possible to participate in physical conditioning activities to improve physical abilities, introduction to adapted sports and initiation into orientation and occupational/professional qualification.

In the west side of the city, **IMRea Lapa**, inaugurated in 2007, currently attends around **220 patients per day** within its several rehabilitation programs. It offers specialized outpatient facilities, such as hemophilia and Integral Care for Down Syndrome, which assists patients from zero to 18 years of age, with distinguished programs according to the age profile and different

development phases. It provides complementary activities post rehabilitation program, such as: physical conditioning to improve physical abilities and introduction to adapted sports, cultural and therapeutic workshops, income generation and professional training workshops, the latter two within the rehabilitation and professional and social inclusion program. The Laboratory of Instrumental and Practical Life Skills (Habilit-Lab) is a set of interventions for the development and improvement of practical life skills. Prepared by a multidisciplinary team and specialized technicians, which combine methods of education, art, sport and accessible leisure and culture concepts, enable greater active participation in society and inclusion in the community in which they live. In this Unit also take place the activities of the Wheelchair Technology Center and of the management and development associated to the provision of orthoses, prosthesis and auxiliary means of locomotion for patients in rehabilitation programs.

Inaugurated in 2008, **IMRea Clínicas** is located within the HCFMUSP block and assists, through its several rehabilitation programs, approximately **84 people a day**, which are referred by the community, Basic Health Units, Specialized Outpatient Ambulatories, and HCFMUSP as well. It attends the higher complexity cases, such as brain lesions, cerebral paralysis and/or delayed neuropsychomotor development, neurodegenerative diseases and musculoskeletal pathologies, in addition to relying on the specialized ambulatory for Neuromuscular Blockade and the specialized Electroneuromyography lab.

In 2019, the quantity of outpatient assistances of **IMRea** (with exception to IRLM (page 50), including medical and dentist appointments, multiprofessional assistances and exams totaled **429,582**, according to the chart below:

PHYSICAL MEDICINE AND REHABILITATION INSTITUTE - ASSISTANCES IN 2018				
Unit	Multi-professional Assistances	Medical / Dental / SSO Assistances	Exams	Total
Vila Mariana	144,539	19,378	3,420	167,337
Lapa	138,175	2,904	00	141,079
Umarizal	65,461	7,385	27	72,873
Clínicas	42,215	5,840	238	48,293
Total	390,390	35,507	3,685	429,582

Suzano Auxiliary Hospital Division

Institutional Data:

Foundation: 1960
Constructed area: 20.9 thousand m²
Collaborators: 450
Accreditations: ONA I

Care Indicators:

Admissions: 108
Outpatient appointments: 19
Imaging exams: 392
Lab exams: 75

The **Suzano Auxiliary Hospital (HAS)** focuses its assistance on long-term patients. This specialty makes the institution a fundamental arm of the Hospital das Clínicas in the Greater São Paulo area.

The multiprofessional teams that attend the unit receive adults and children at different stages of illness. The objective is to restore the patient's functional capacity and reduce the impact of several sequelae.

Thanks to the reforms in the hospital, 2019 marks its expansion to increase the capacity of care and the amount of diagnostic and therapeutic resources available.



Facade of the Suzano Auxiliary Hospital

In 2019, a revision of the “Multidisciplinary Skin Injury Protocol” was carried out, with the standardization of statistical collection instruments, including the control of wound closure, in addition to an adaptation in the Dental Assistance Structure, impacting on the reduction of aspiration pneumonia due to the improvement of patients' oral health and reducing costs resulting from this type of infection.

The Research Project “Effects of Weight Loss on the Plasma Lipid Profile of Lipid Transfer to HDL Pre and Post Bariatric Surgery”, approved by the Ethics Council, is in the data collection phase.

The “João e Maria” project expanded the aspects of humanization during the hospitalization period of pediatric patients, through the use of rag dolls with tracheostomy. The project provides an important source of identification and reframing for patients and companions.

The establishment of the “Multiprofessional Protocol for the Visit of Domestic Animals to Patients Restricted to the Bed” enabled clinical-care safety in practice, combined with the wishes and well-being of patients.

In 2019, Hospital Cost Management by Productive and Support/Administrative Cost Centers was implemented, with periodic monitoring and presentation of results.

In addition, management and monitoring tools for the Health and Social Assistance Network were implemented, aimed at discharging patients on medical discharge with social restrictions, both due to vulnerability and judicial aspects.

In 2019, in joint action with FFM, the HAS carried out **594 assistance procedures**.

Cotoxó Auxiliary Hospital Division

The Cotoxó Auxiliary Hospital (HAC) was created in 1971, with the objective of supporting the HCFMUSP Institutes.

Located in the Pompeia neighborhood, in São Paulo, the hospital offers specialized medical-hospital assistance to patients in intermediate care, through an integrated multi-professional team.

Currently, the HAC is under construction to expand its installed capacity. The renovation, which shall be concluded in the coming years, will enable the introduction of modern resources in diagnostic and therapeutic procedures, in addition to new spaces dedicated to education and research in the health sector.

Created in 1975, in FMUSP, and incorporated to HCFMUSP in 1977, the **Medical Investigation Labs (LIMs)** are the branch for scientific research development. The LIMs standardize new technique and diagnostic methods, promote training in basic and applied research and have courses in the Medical and health fields.

In addition, they work as a field for education, development and training of health professionals and higher education level students.

The labs have 62 units and 200 research groups that work in the various fields of health sciences, developing basic and applied research, as well as diagnostic methods.

The LIMs do not have their own building and the Laboratory Units are distributed among the different buildings of the FM/HCFMUSP System, Oscar Freire Institute and IMT-FMUSP, remaining in a greater concentration (42 Units) allocated in the FMUSP Central Building.

Its scientific production is developed in the Institutes and represents 7.3% of Brazilian publications and 3.3% of Latin American publications in the health and biomedical sciences field, according to data from the Science and Technology Department.

With the growth of the scientific production of the FM/HCFMUSP system, in 2014 the Observatory of Intellectual Production (OPI) was launched to monitor and organize the scientific production of researchers linked to the institution, which developed its own database that gathers all scientific production from the FM/HCFMUSP system since 2011.

It is possible to consult the published works of the last eight years produced by researchers linked to the FM/HCFMUSP system through the FMUSP library website. Availability of the material in its entirety may vary. The OPI seeks to facilitate access to the full text, on the other hand, in keeping with copyright law and copyright, restricts or prohibits access to what is not allowed.

In March 2019, the LIMs held the scientific seminar “Yellow Fever: Clinical presentation,

prognostic factors and development of new therapies”. The characteristics of the disease, prognostic factors, transmission cycles, signs and symptoms, outbreaks, yellow fever in the city of São Paulo and the development of research and treatments carried out at the FMUSP were some of the topics addressed at the seminar.



Prof. Dr. Esper Kallás presented the results of the new research on yellow fever, which signals the development of new therapies for the treatment of the disease

Scientific Seminars are organized by the Scientific Committee and the LIMs Executive Board, they always take place on the second Wednesday of the month and have speakers from different areas of LIMs scientific research.

In the last ten years, the FM/HCFMUSP System has been developing a network of multiuser equipment considered to be a national model (PREMiUM) (page 93). Currently, there are 42 centers, which make available the use of equipment and services to System researchers and external ones, both national and international (www.premium.fm.usp.br). More than US\$20 million has already been invested in the construction of this network. The financing for the acquisition of this equipment is made through development agencies and administrative bodies, among others. Among the equipment available is the 7 Tesla Resonance and the MicroPET-CT. Among the experimental models available are the zebra fish and the animal ICU.

Other Health Units

FFM and HCFMUSP, in joint action, also develop actions focused on improving other Units and Health Centers, equally dedicated to the gratuitous assistance of SUS patients.

House of Aids

Installed in the Pinheiros neighborhood, west zone of the capital of São Paulo, the **Service of Extension to the Attendance of HIV/AIDS Patients – Casa da Aids (SEAP)**, of the Division of Infectious and Parasitic Diseases of the HCFMUSP is an outpatient and day hospital for teaching, research and interdisciplinary assistance to adult patients living with the human immunodeficiency virus.

Inaugurated in 1994, it develops teaching, research and assistance to patients with HIV/AIDS and has been working together with the FFM since 2004.

Through agreements signed between FFM, SES-SP and HCFMUSP, approximately 3,300 adult patients are in care. In February 2019, an additional 500 patients on HIV pre-exposure prophylaxis (PrEP) were added. Comprehensive care is in charge of a multidisciplinary team that includes an infectious disease physician, gynecologist, psychiatrist, nurses, pharmacists, psychologists, social workers, nutritionist, physical educators, dentist and technical and administrative support. Since May/2019, the space also has a physical activity laboratory.

SEAP is the first public health system in the state of São Paulo aimed at people with HIV and started to incorporate, in an innovative way, sports practice in the proposal of a comprehensive care for HIV patients, in order to minimize the effects of diseases associated with the chronic AIDS and the use of antiretroviral drugs, with improved quality of life and adherence to treatment.

HIV prevention and diagnosis actions, testing for the virus and other infections, such as hepatitis and syphilis, which can be sexually transmitted, are also carried out

In 2019, House of Aids celebrated its 25th anniversary, contributing to the fight against the HIV/AIDS epidemic. Over the next 25 years, it plans to expand prevention actions, especially the implementation of PrEP, the diagnosis and treatment of sexually transmitted infections and

research. The team has been progressively increasing its performance in national and international research projects, seeking to contribute to the increase of knowledge in the area.

On December 6, 2019, a task force of rapid tests for HIV detection was carried out. The action is part of the World Campaign to Fight AIDS, called “Red December”.

The service took place at Largo da Batata, in Pinheiros, where the public received guidance on how to prevent sexually transmitted infections and condoms and information were distributed to further disseminate the information.

The rapid test consists of collecting secretion from the oral mucosa, with a cotton swab between the gum and lip, and the result is obtained in 30 minutes. 370 tests were carried out, four positive HIV results were identified, promptly received for follow-up.



At the FMUSP Theater, the celebration of the 25th anniversary of the House of Aids

With aim to continue these actions, started in 2004, an Agreement was made between SES-SP, FFM and HCFMUSP, in effect from 2017 to 2019.

In 2019, through FFM, 14,786 medical consultations and 21,723 visits by the multidisciplinary team were carried out, totaling **36,509 outpatient procedures**.

In 2019, 3,025 rapid HIV tests, as well as 1,280 rapid tests for viral hepatitis and syphilis and 1,715 tuberculin skin tests, were applied.

Institute for Childhood Cancer Treatment – ITACI

The current Onco Hematology Service (SOH) of HCFMUSP's ICr, known as ITACI, serves children and adolescents, from 0 to 19 years old, with onco-hematological diseases and started its activities on 12/17/2002.

FFM and HCFMUSP, through agreements made with SES-SP, jointly develop ICr's ITACI activities, a reference in assisting children with cancer.



Festa Junina for ITACI patients

The festivities, aimed at patients, were held by ITACI in 2019, such as the Festa Junina, which was attended by about 200 people.

In 2019, ITACI actively participated in the Golden September campaign, in favor of early diagnosis in the fight against childhood cancer, the biggest campaign to raise the flag of early diagnosis and awareness that this is a powerful weapon to fight childhood cancer.

In 2013, the ITACI received the ONA 1 Accreditation certification and, in 2014, obtained the maintenance of the seal. In 2015, it received ONA Level 2 Accreditation – Full Accreditation, which, in addition to meeting patient safety criteria, has integrated management, with processes occurring in a fluid manner and full communication between activities. In 2016, 2017, 2018 and 2019, it kept the ONA Level 2 Accreditation.

With aim to continue these actions, an Agreement was made between the HCFMUSP, FFM and SES-SP in effect from 2017 to 2019.

In 2019 were performed: **14,930** medical appointments **18,440** multiprofessional appointments; **54** Hematopoietic Stem Cell Transplants, **13** Autologous, **27** Related Allogenic and **14** Non Related Allogenic; and **8,170** ambulatory chemotherapy sessions, totaling **41,594** procedures.

Butantã School Health Center

The **Samuel Barnsley Pessoa School Health Center (CSEB)** is a faculty-health care unit of FMUSP, under the responsibility of Departments of Preventive Medicine, Pediatrics, Medical Clinic, and Speech Therapy, Physiotherapy and Occupation Therapy. The center is dedicated to education and research in the area of primary attention for undergrad students in the field of health, medicine and multiprofessional residency, in addition to the formation of technical level

professionals and others already working in services.

It is responsible for for the assistance in an area of 25 thousand residents in the Butantã region, encompassing two discontinuous nucleus, with socioeconomic, demographic, health conditions and susceptibility to disease heterogeneity.

In 2019, via FFM, CSEB carried out **5.958** outpatient procedures.

Várzea do Carmo NGA

By means of Agreements with SES-SP, FFM and HCFMUSP, via the Clinical Gastroenterology Service, they are responsible for the Várzea do Carmo Endoscopy and Hepatology Service of the Assistance Management Nucleus (NGA) **Várzea do Carmo**, a specialty outpatient facility of SES-SP that operates in central São Paulo.

The service was created to fulfill a gap in secondary patient care by SUS, solving the majority

of cases and referring the most complex cases for specialized treatment in HCFMUSP.

Várzea do Carmo ambulatory is a reference for 39 municipalities of the Greater São Paulo. The cases are referred from primary attention services, such as AMAs, UBSs and emergency Hospitals.

Aiming for the continuity of these actions, initiated in 2010, an Agreement was signed between SES-SP, HCFMUSP and FFM in 2018.

In 2019, FFM and HCFMUSP, in joint action, carried out **20,121 assistances**, 10,077 exams and

10,044 appointments.

Emílio Ribas Institute

The **Emílio Ribas Infectology Institute (IIER)** was one of the first Public Health institutions in São Paulo, inaugurated in January 8th, 1880.

IIER has a marked participation as a major health care, diagnostic, infectious disease treatment, and epidemics control center in the State of São Paulo and Brazil.

In parallel to health care activity, it is a reference center for education and research, contributing towards the training of health

professionals.

In 2014, an agreement was signed between SES-SP, FFM and HCFMUSP, with aim to execute the IIER Management, Actions and Services Operationalization Project, which was terminated in that same year. In 2016 and in 2017, new agreements were signed with SES-SP, with aim to execute laboratory services. These activities continued in 2019.

USP University Hospital

The **University Hospital (HU)** has the purpose of promoting education, research and extension of services to the community. In order to achieve their objectives, HU undertakes to: stimulate and promote education and research, providing them with a field of activities and development; developing disease prevention and treatment assistance activities, as well as health protection and recovery; and collaborate with education institutions in the development of assistance, educational and operational technologies.

At the end of 2018, an agreement was signed between SES-SP, FFM and HCFMUSP for assistance improvements at the USP University Hospital. The main pillar of this agreement is the hiring of

doctors via FFM, for the restructuring of teams in the main areas of the HU-USP. The Medical Assistance Management team of the Clinical Directorate is also involved in the construction of new care flows and processes, taking to the University Hospital initiatives that have already been validated at the HCFMUSP. In this way, the path is traced to optimize the hospital's productivity and resume teaching excellence, which has always been a hallmark of the institution.

From April to December/2019, an average of 3,852 surgeries and 18,270 visits were performed, totaling **22,122 care procedures**.

Management Contracts

Based on the qualification of FFM as a Social Health Organization (OSS), Management Contracts were signed, with the aim of managing ICESP and IRLM activities.

The Cancer Institute of the State of São Paulo (ICESP) and the Lucy Montoro Rehabilitation Institute (IRLM) base their management on the Social Health Organization (OSS) model through FFM.

In 2008, the Fundação Faculdade de Medicina (FFM) came to be recognized as a Social Health Organization (OSS), a private non profit legal entity, whose activities are directed to education, scientific research, technological development, environmental protection and preservation, culture and/or health, receiving this title from the Public Administration and authorized to sign with them management contracts to perform non exclusive services of the State.

Thus, it became responsible for the management of the ICESP and the IRLM.

Annually, more than 220 thousand medical consultations are held at **ICESP**, more than 43 thousand chemotherapy sessions and 47 thousand radiotherapy sessions, in addition to more than 7 thousand surgeries. Each year, the ICESP receives evaluations from the population and is always among the best evaluated.

Aimed at the care of patients in rehabilitation, interdisciplinarity is a hallmark of the **IRLM**, whose team is formed by physiatrists, physiotherapists, occupational therapists, social workers, psychologists, nurses, nutritionists, speech therapists, music therapists and physical educators.

Management Contract of the Cancer Institute of the State of São Paulo - ICESP

The **Cancer Institute of São Paulo Octavio Frias de Oliveira (ICESP)**, opened in May 2008, is the first public hospital dedicated to cancer treatment in the State and the largest in Latin America. It is internationally recognized for the studies carried out in its research center.

In the main building, located on Avenida Dr. Arnaldo with an installed capacity of 500 beds, it concentrates most of the consultations, including outpatient and multiprofessional consultations, hospitalizations, surgeries, emergency care, chemotherapy and radiotherapy sessions, rehabilitation, imaging exams and clinical analysis.

In 2014, a new ICESP unit was opened in the municipality of Osasco, dedicated to the care of patients in the region, with specialists in clinical oncology, chemotherapy and radiotherapy, in addition to a multidisciplinary team.

The Outpatient Pharmacy, located on Rua da Consolação, provides medication and nutrition for the treatment of patients, with a list of

standardized medications, including chemotherapy, antiemetics, analgesics and standardized nutrition.

ICESP offers its patients access to quality care and individualized assistance from outpatient consultations to surgery, chemotherapy, radiotherapy, diagnostic and therapeutic support services, intensive care, rehabilitation and palliative care, with all the resources for a comprehensive and specialized treatment for cancer patients.

There are approximately 5,000 direct and indirect employees, who make the Institute a benchmark in oncology, thus proving that it is possible to offer quality assistance to patients in the public health system with a humanized approach, while specializing professionals and developing science. The ICESP has been gaining recognition as a center of excellence nationally and internationally, with important seals and accreditations.



Since its implementation, the Institute has the focus of humanized care, considered a fourth pillar along with education, research and care for the population, which are the three pillars of the HCFMUSP Complex. The four pillars involve the assumption of quality and security.

Since its inauguration, the ICESP has served more than 105 thousand patients, of which 46

thousand remain under treatment. It is the first 100% digital public hospital, with electronic medical records and the digital certification process, which increase security levels, streamlining work and reducing paper and printing costs. The numbers reflect an expressive and highly representative assistance production, as shown in the two tables below:

SUMMARY OF ICESP ASSISTANCE IN 2019 – DR. ARNALDO UNIT	
Procedures Performed	Qty.
Medical appointments	213,052
Chemotherapy sessions	39,692
Radiotherapy sessions	43,482
Surgeries	7,538
Multiprofessional appointments and specialized therapies	122,052
Hospital discharges	18,087
Urgent assistance	27,813
Total	471,716

SUMMARY OF ICESP ASSISTANCE IN 2019 – OSASCO UNIT	
Procedures Performed	Qty.
Medical appointments	8,899
Multiprofessional appointments	7,156
Chemotherapy sessions	4,052
Radiotherapy sessions	4,004
Total	24,111

In addition to medical care, ICESP professionals carry out teaching and research activities according to the FMUSP guidelines. The objective is to transform the Institute into a reference research center at an international level in the area of cancer, including the study of new drugs and innovative treatments for the disease.



ICESP team performs microwave ablation: pioneering spirit

In May 2019, the ICESP, pioneering in Brazil, removed a tumor through microwave ablation, which treats injuries in a less invasive manner, preserving the function of the organs involved and reducing the length of hospital stay. The ICESP is not yet offering the technique to patients, which should happen just within a few months. However,

not all types of tumors can be treated by this innovative technique. This approach is most appropriate for those up to 3 centimeters in diameter, located in the liver, lungs, bones or kidneys.

Research by the ICESP Center for Translational Research in Oncology (CTO), in partnership with the Brazilian Institute of Cancer Control (IBCC), demystified the idea that cancer in young people is associated with heredity when investigating non-inherited genetic changes. A study shows that about 80% of breast cancer cases in young women are not hereditary.

A team from the Cancer Institute participated in the ESMO Congress 2019, one of the most relevant congresses in the oncology field in the world, which took place in Barcelona, Spain. Institution researchers were co-authors of international clinical studies in the areas of gastric, lung and breast cancer, showing the importance of the institute in conducting clinical studies for the development of new treatments.

The ICESP Oncology Gynecology team won the award for best work in the 2019 edition of the São Paulo Gynecology and Obstetrics Congress (Sogesp), the largest event in the area in the country. The scientific work presented by the team during the congress demonstrated that the staging,

which includes imaging exams, as practiced at the Institute since its inception, provide more accurate and effective treatments.

The Sustainable Ambulatory Project was one of the winners of the Benchmarking Brasil 2019 award. Focused on the good practices for rational use of natural resources, the Sustainable Ambulatory was developed by employees of the Institution. Experts from different countries evaluated the Institute's practices, which exceeded the technical index required in the exclusive methodology of the Benchmarking Brazil.

The ICESP received the Cancer Registry Gold Seal of Quality. The award was granted by the Municipal Secretary of São Paulo and by the Population-based Cancer Registry (RCBP SP). The 1st edition of the event was held at the Amphitheater João Yunes, from the School of Public Health at USP. The Institute was one of the 20 health institutions awarded the Gold Seal, a maximum degree of excellence in data recording, according to the evaluation of RCBP SP.

In an internal action, the Oncological Intercurrence Assistance Center (CAIO) was awarded the "Skin Friend Sector". The campaign organized by the Skin Integrity Group (GIP) aimed to encourage nursing teams about the importance of notification of Pressure Injury (LP) and the CAIO was the area involved with the highest increase in notification rates. During the first year of the campaign, the percentage of notifications received by the GIP grew by 248%.

In May 2019, approximately 2.5 million people gathered at Charles Miller Square to run for health at the 5th edition of the ICESP RUN. The test highlights the importance of regular physical activity as a cancer prevention measure. The event was attended by the illustrious presence of the First Lady of the State of São Paulo, Bia Doria, who covered the five kilometers of walking and participated in the delivery of trophies during the ceremony with the top runners.

About 150 women paddled together to celebrate life during the II Paulista Pink Rowers Festival, which took place on USP's Olympic streak. The event was attended by members of the ICESP Remama Program, which aims to rehabilitate patients through rowing. The festival featured competitions in the water, exchange of experiences between rower and participants, as well as a lecture on prevention, early detection of

breast cancer and the importance of physical activity.

On October 4 and 5, ICESP promoted the fourth edition of the Humanization Symposium and the second edition of the International Symposium on Patient Experience. The event discussed effective actions in the patient's experience and in medical assistance in order to deepen the exchange of experiences, innovations and aspects about the patient's experience and their entire journey throughout the treatment, in addition to discussing the importance of a comprehensive, ethical and humanized care culture.

In 2019, the ICESP promoted several humanization actions, among which stand out:

- Solidarity in Wires Project, in partnership with the Solidarity Social Fund of the State of São Paulo, which aims to train professionals to make personalized wigs and hairpieces. At the end of the course, these products are donated to ICESP patients.
- Creative Challenges - Project with the Elderly, which aims to: stimulate, through stories, visual and affective memory, making the patient the main protagonist of the theme; turning waiting moments into a pleasant, socializing and stimulating experience, by improving mood and self-esteem; developing an active and challenging posture in the face of the stimuli presented. The project started in February 2019 and is carried out by volunteers.
- Pink October - Self-Esteem Meeting, where 70 women were invited to learn beauty and style tips from fashion consultant Danielle Ferraz. After the presentation, the patients received makeup, clothes, jewelry, as well as underwent a professional photo shoot. The event also featured a lecture on the importance of self-care.
- Blue November - Experimental kitchen for patients with the band "Os Pitais", a voluntary project composed of well-known names of Brazilian music in order to bring joy to hospitals. Patients undergoing treatment for prostate cancer were invited to this action, where they learned how to make a recipe and had the opportunity to enjoy a true show led by the musicians.

Lucy Montoro Rehabilitation Institute Management Contract

The **Lucy Montoro Rehabilitation Institute (IRLM)**, located in the neighborhood of Morumbi, was designed with the purpose of offering more complex care for people with disabilities through integral and integrated rehabilitation treatment, with technological structure and qualified personnel in diagnostic and therapeutic resources.

Health care promoted by IRLM has a multiprofessional and interdisciplinary character, specialized in the Medicine and Rehabilitation field. They seek to promote the treatment of the limitation caused by the disability, with the objective of reaching the highest level of physical and functional independence of the patient, with the aim of his full rehabilitation and social inclusion, considering the characteristics and degree of disability presented.

The rehabilitation programs carried out encompass the set of assistances offered to the patient since his/her admission to the hospital until their discharge, according to their disability, including all assistances and procedures required to obtain or complete the diagnosis and therapies required for the treatment. Rehabilitation treatments are done in outpatient and admission programs, exclusively via SUS, which include: multiprofessional screening, medical ambulatory (evaluations and returns), rehabilitation program, orientation groups, staff meetings, educational activities for patients and caretakers, curative groups, technical aid ambulatory and neurochemical blockage ambulatory. It also includes home visits and engagement with community resources, when required. For such, it counts on a staff formed mainly by: psychiatrists; consultant physicians in the specialties of medical clinic, cardiology, neurology and urology; social workers; psychologists; physiotherapists; occupational therapists; speech therapists; nursing professionals; nutritionists, physical educators, in

addition to technicians in orthoses and prosthesis and in therapeutic workshops.

The medical technologies for diagnostic and therapeutic support that help to sustain the Rehabilitation Programs offered at the IRLM are: virtual reality, urodynamics, robotics for upper and lower limbs, vesical biofeedback, balance system, cycloergometer with functional electrical stimulation, passive cycloergometer for upper limbs, ergometric bicycle, exoskeleton associated to virtual reality, game therapy, 3d digitizer, l.a.s.a.r posture (laser assisted static alignment reference), ultrasound, bone densitometry, equipment for equine therapy simulation, electrical bioimpedance and therapeutic pool.

For the rehabilitation programs in the admission, the IRLM is a benchmark in the State of São Paulo, sharing with the Institute of Physical Medicine and Rehabilitation of the Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo the position of the only health equipment in the State to offer this Service Modeling. Patients with acquired brain lesions, bone marrow lesions and other paralysis were treated.

In the ambulatory, the rehabilitation programs are focused mainly on the Child macroprocess (up to 6 years and 11 months), including physical disabilities resulting from cerebral paralysis, myelomeningocele, obstetric paralysis and congenital malformations of the limbs. Upon specific demands related to the needs of patients that have been submitted to the rehabilitation program in an Admission regime and the processes of education and research, assistance for acquired brain injuries, spinal cord injuries, amputations and other paralysis was also offered.

IRLM's assistance production in 2019 was as follows:

IRLM'S ASSISTANCE PRODUCTION - 2019	
Description	Quantity
Hospital Internment	420
Ambulatory Activity - Medical Specialties	5,850
Ambulatory Activity - Non Medical Specialties	27,951
Provision of Orthoses, Prosthetics and means of Locomotion	(*) 3,370
Grand Total	34,221

(*) Only informative quantity and not considered in the Total Assistance Production

The IRLM also promotes ongoing training for health professionals in the area of rehabilitation and carries out activities to contribute to the

support and development of teaching and research in the area of disabilities.

The IRLM supports the development of the RRLM, offering technical assistance and administrative support, in addition to sharing structures and systems that will assist the organization and coordination of this Network. This support is based mainly on Communication Advisory, Central Ombudsman, Information Technology, Quality Management and Humanization of Assistance, Orthopedic Workshop, Wheelchair Technology Center, Bioengineering Laboratory, Teaching, Research, Regulation and Professional Qualification Programs that include, among other actions, training, monitoring and development of specialized activities whenever necessary to ensure the modeling of services, work routines and technical improvements, ensuring sustainability to the RRLM Program.



Activity performed with patients in the Experimental Kitchen space

In October, the IRLM won an experimental kitchen, where it offers the rehabilitation patient the possibility of exercising the activity of cooking food. Installed in the first basement of the Institute, the kitchen receives joint workshops from occupational therapy and nutrition services, in addition to individual projects, with the aim of promoting nutritional education through culinary recipes. The space also hosts workshops for dysphagic patients, who have difficulty swallowing. They can develop and prepare recipes of their preference with the support of the nutritionist, but with the consistency indicated by the speech therapy team. In addition to activities aimed at inpatients and the children's outpatient clinic, the space receives workshops for employees. Currently, they participate in the Cozinha em Ação program, with monthly classes aimed at preparing healthy recipes.

On June 12, 2019, the IRLM held an educational activity with the caregivers of children undergoing treatment at the Morumbi Unit to

check out the flow of patients undergoing treatment, keeping the information regarding the health care of each patient always up to date. Previously, each professional on the multidisciplinary team gave a 15-minute lecture about their practice in rehabilitation. To make the activity more dynamic and favor the information assimilation, which is huge, the team proposed a pilot project that worked in the form of tests with multiple choice questions about the rehabilitation treatment.

In September of last year, the IRLM started the "Nutriteca" Project, carried out by the Nutrition service of the Morumbi unit, which developed a project that presented the importance of ludo-pedagogical materials for the nutritional education of pediatric patients in the rehabilitation clinic and the cost to be invested for the acquisition of these materials and adequacy of the space. In attendance, the professional talks to the child about food and the importance of each foodstuff, while interacting in a playful way, through educational materials from the room built to carry out the project, which reproduces a small market with toy food.



Nutritionist Luiz Henrique attending to patient Katarina Marques Rodrigues who participates in the Nutriteca project

During the month of May, the IRLM promoted a series of activities on the population's awareness for traffic risks, called Maio Amarelo, when the Unit's teams use the yellow tone to remember the actions and raise awareness for the need to follow the traffic legislation, respecting the maximum permitted speed, not using a cell phone, crossing only in permitted places, among other fundamental actions so that fewer lives are claimed by accidents.

A large teal graphic element consisting of a horizontal bar at the top and a vertical bar on the right side, forming an L-shape. The text is centered in the white space between these bars.

Social Work Actions

SOCIAL WORK ACTIONS

FFM develops, with the HCFMUSP and other partners, several social assistance projects, aimed at the poorest portion of the population, without prejudice to SUS service

Bandeira Científica Project 2019"



Images of the ophthalmologic and dental exams and home health care performed in 2019

ACERVO BANDEIRA CIENTÍFICA

The **Bandeira Científica** Project is a university extension project, which begun in 1957 upon the initiative of FMUSP students, focused on education and research. Its operations were interrupted in 1969, due to the political situation of the time, and the project resumed only in 1998. Ever since, the cycles have been held annually, with the inclusion of assistance along with education and research.

The project started to include the participation of more fields of activity, developing initiatives of direct attention to individual and collective health, in addition to activities with aim to improve the health-related organizational and structural conditions. Such actions follow the principles and guidelines of SUS and Primary Health Care, which encompass "the promotion and protection of health, prevention of diseases, diagnosis, treatment, rehabilitation, reduction of damage and maintenance of health, with the purpose of developing an integral action that impacts the health and autonomy status of people and the determinants and conditioners of the collective health" (BRAZIL, 2012).

Currently, the USP areas that partake in the project are: Polytechnic School, Pharmaceutical Sciences, Medical School, Veterinary Medicine and Animal Science, Dentistry, Public Health, and the Psychology Institute.

Every year, **Bandeira Científica** selects a Brazilian municipality and seeks to operate in a way to contribute the health development in the region. The guarantee to health transcends the scope of clinical-assistance activities, from thus arising health prevention and promotion, the public policies in effect, the articulation of the health care network, the work process of the users and workers as also key for the promotion of care. The project aims, above all, to increase the interconnection between the various areas of knowledge, as well as the dialogue with the municipality's care network as a way to enhance the actions of the project and those that already take place in the city, aiming at a comprehensive health care.

In respect to education, **Bandeira Científica** seeks to fulfill its role of a university extension project, having an effective action in the training of undergrad students of the several units that compose it.

In the period of **December 8th to 17th, 2019**, the "**Bandeira Científica** Project" operated in the town of **Capela do Alto**, in the state of **São Paulo**, including approximately 180 participants, among academics and trained professionals, who carried out assistances, exams and activities, listed below.

BANDEIRA CIENTÍFICA PROJECT PERFORMANCE 2019	
Assistances	Qty.
Medicine	295
Physiotherapy	52
Nutrition	35
Psychology	43
Dentistry	617
Speech therapy	35
Occupational Therapy	31
Pharmacy	57
Subtotal of Assistances	1,165
Exams	Quant.
Audiometries	39
Immittances	39
Scheduled Ultrasound	120
Anatomopathological exams	02
Collection of oncotoc colpocitology	13
Electrocardiograms	06
Subtotal of Exams	219
Participants	Quant.
Directors and area coordinators	33
Academics	79
Academics from Partner Universities	06
Professionals	47
Coordinator Professors	01

BANDEIRA CIENTÍFICA PROJECT PERFORMANCE - 2019	
Assistances	Qty.
Home assistances	20
Prevention and health promotion activities	26
Counter-reference discussion with the teams	04
Meetings with the municipal administration	09
Activities with professionals	09
Subtotal Activities	68
Other	Quant.
Provision of medical treatments	2,668
Subtotal Other	2,668
Other Procedures	Qty.
Dental prosthetics	48
Orthoses	04
IUD Implants	41
Adaptations	15
Donation of eyeglasses	686
Anthropometric evaluations	105
Subtotal Other Procedures	899
Assistances and procedures (approx.)	5,019

Homeless children and youth in Central São Paulo: the mental health of this population and the effectiveness of multidisciplinary intervention in the socio-familial reinsertion process – Equilibrium Program



ACERVO PROGRAMA EQUILIBRIO

Images of activities developed with children and youth, in 2019, by the Equilibrium Program

The Equilibrium Program, which resumed its activities in 2017 by means of an agreement signed between FFM and the State Secretariat for Social Development, is coordinated by the IPq.

Its main goal was assisting children and youth in a situation of vulnerability and social risk, and concurrently providing attention to the families, seeking to reintegrate the children to family and community life in a more agile and structured manner. For such, it worked jointly with the expanded network in place that also assists that population, in order to prevent, in the long-term, the growth in the number of children living on the

streets and the consequences of violence in the individuals and families formation process.

The beneficiaries of the initiative are: a) Children and youth that are estranged from their families - sheltered in Institutional Shelter Services for kids and youth (SAICAs); and b) Children and youth who are still with their families, but find themselves in situation of vulnerability and social risk.

The activities offered had the aim to promote development that is compatible with the potential of each child and adolescent, stimulating greater

autonomy in daily life activities, related to self-care, in the activities of practical life.

The project also had the goals of: stimulating neuropsychomotor development; improving cognitive aspects; increasing the playful and symbolic universe of the child/adolescent; developing social skills, self-control and improving self-esteem; improving communication and social interactions within the group, the family and society; guiding and providing therapeutic support during the process of falling ill or worsening of the status and maintaining the child bonded to their social environment. The result of these actions was reflected in greater school inclusion, improved learning and greater qualification of these children and youth. Hence they will be more prepared to receive professional qualification and initiate their activities in the labor market.

In parallel, the work with the families had the goal of promoting a more stable and healthy family environment, reducing the institutional sheltering rates and the illness of its members. With the increase in the autonomy of the youth, they become capable in helping their family sustenance

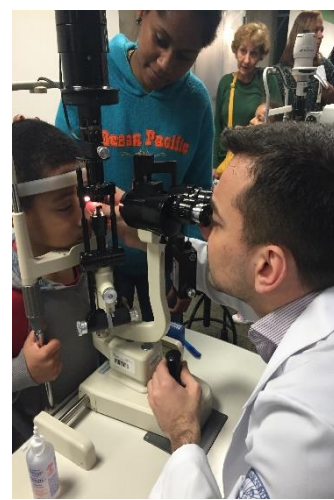
and also contributing to reduce stress and, consequently, family conflicts.

Also, the Equilibrium Project provided technical support and aid to SAICAs technical teams, assisting SAICA educators and teams for individualized orientation, as if they were the child's family members. The objective of this individualized support was reducing the labor distress of these professionals, in order to promote an environment with more stability for the sheltered children and youth.

The summary of the number of assistances performed in 2019 (from Jan. till May) is the following:

ASSISTANCES PERFORMED BY THE EQUILIBRIUM PROGRAM – FROM JAN. TILL MAY 2019	
Description	Qty.
Family Psychology Assistances	158
Speech Therapy Assistances	85
Psychology Assistances	166
Psychopedagogy Assistances	52
Social Work Assistances	58
Total	519

"Vision of the Future" Program



ACERVO PROGRAMA "VISÃO DO FUTURO"

Images of one of the Joint Efforts of the "Vision of the Future" program

The "Visão do Futuro" Program aims to prevent and recover eye health in children between six and eight years old, enrolled in the first grade of elementary education in public schools in the Municipalities and the State of São Paulo, previously submitted to the measure of visual acuity. In the city of São Paulo, the work was developed in partnership with the three main medical schools - Santa Casa, Unifesp and FMUSP.

FMUSP, due to Agreements signed with SES-SP, FFM and HCFMUSP since 2009 through its

Division of Ophthalmology Clinic, was responsible for assisting children screened in schools. The program started with the training of teachers from the state and municipal education networks to test the visual acuity of students aged six to eight years. After this screening, the children were referred to ophthalmological task forces, which take place, on average, five times a year at the HCFMUSP.

The detection initiatives made by observing both the child's eye and behavior (by parents, teachers, community health agents or any person

that spends time with the child), the evaluation of visual accuracy and early treatment of ocular disorders, made with eyeglasses, occluders, etc., enable the recovery and a normal development of their vision and, in result, a better school yield and greater social integration.

Each joint effort gathers approximately 600 kids, who arrive at the HCFMUSP on scheduled Saturdays in buses supplied by the government. The undergo all kinds of ophthalmological exams and, if a problem is detected, they are integrated to HCFMUSP assistance and continue with the care, or they are referred to the optical shops accredited with the project, which supplies frames and lenses for eyeglasses. The Program also includes orientation on the use of eyeglasses, how to take care of them and the need for periodical reviews.

Strabismus and amblyopia are the main ophthalmopathologies registered. They are more easily corrected if detected within that age range. Amblyopia is the abnormal development of one of the eyes, which leads the brain to try and compensate that underdevelopment by concentrating all vision to the normal eye. If the problem is not detected early enough, the brain

compensates such asymmetry by annulling the underdeveloped eye, which later can no longer be recovered.

With aim to continue these actions, initiated in 2010, an Agreement was signed in 2018 between HCFMUSP, FFM and SES-SP. Thus, four campaigns with the participation of 2,252 children were carried out in a joint action by FFM and HCFMUSP in 2019. Among them, 1,149 went through all ophthalmological exams, while 1,103 were dismissed for not needing corrective lenses.

The summary of the number of assistances performed from 2012 to 2019 is the following:

ASSISTANCES PERFORMED BY THE VISION OF THE FUTURE PROGRAM - 2012 TO 2018		
Year	Campaigns	Children Assisted
2012	05	3,000
2013	06	3,000
2014	05	2,600
2015	05	3,225
2016	05	3,512
2017	06	2,725
2018	06	3,316
2019	04	2,252
Total		23,630

RRLM Mobile Unit

In 2018, through an Agreement signed with SES, FFM and HCFMUSP, in a joint action, performed the activities of RRLM's Mobile Unit for multidisciplinary assistance and provision of technical aids to 207 patients of the Jacareí municipality, fulfilling the demand from the São Paulo State Government by force of a Civil Public Suit.

Unique in Brazil, the 15m-long, 2.6m-wide vehicle weighs 20 tons and is 100% accessible, embedded with a hydraulic elevator to receive people in wheelchairs or stretchers, in addition to a fully adapted restroom. The Mobile Unit also includes a waiting room, medical office, test room, administrative room, makeshift stage, and an orthoses and prosthesis workshop.

RRLM's Mobile Unit enables access close to the patient's residence and has the aim of providing orthoses, prosthesis and auxiliary means of locomotion, in addition to technical aids that may help in the rehabilitation process and minimize mobility restrictions. For such, the multiprofessional team offers guidance to family members and qualification to health professionals

from the municipalities so the patients may receive the proper training to use the equipment.



RRLM Mobile Unit Installations

In 2019 there were 73 patients assisted and 169 prescribed orthoses, prostheses and auxiliary means of locomotion, as well as 8 adaptations and corrections, totaling **250 assistances and deliveries of OPM.**

Psychological Assistance to the Suzano population

In March 2019, two former students from the Professor Raul Brasil State School, located in the municipality of Suzano, in Greater São Paulo, invaded the school shooting and killing five students and two employees. The two snipers killed themselves on the spot and, among the 11 wounded treated, one also did not survive.

The tragedy that befell the city left emotional scars on the residents. According to the SES, there was a significant increase in anxiety attacks, compulsive conditions resulting from anxiety disorders, in addition to the manifestation of psychosomatic symptoms among the population. A balance sheet by the Suzano Municipal Health Secretariat reported that more than 1,100 people were affected, in some way, by the tragedy and sought care at the Basic Health Units or Psychosocial Care Centers (CAPS) in the municipality.

With an estimated population of 294 thousand inhabitants, the municipality of the Alto Tietê region has seen the demand for health services grow exponentially.

To meet this demand, SES, in partnership with the HCFMUSP and FFM, created an emergency

care plan with the hiring of 47 psychologists to work in UBSs, CAPs and state schools in the region.

The project aims to provide welcoming and qualified listening to the population, offering assistance in brief individual and group therapy and guidance to parents, caregivers and educators. The contracted psychologists will also act in the interface with other departments, mainly with the one of Education, in the elaboration of reports of the accomplished activities and in the participation in multiprofessional meetings.

In order to support the activities of psychologists, four administrative professionals were also hired in order to develop activities such as frequency control of contracted professionals, support in the organization and consolidation of execution reports, support in the organization of appointments and summoning of patients, among other activities linked exclusively to the project.

Starting in June, the project will last eight months, of which six will be dedicated to service and two to the evaluation of results. From July to December 2019, **18,621 assistances** were performed.

Assistance in the Emergency Care Center for Reconstructive Microsurgery and Hand Surgery of HCFMUSP's IOT (CEMIM)

The creation of HCFMUSP's IOT CENIM is owed to the high growth in the number of patients bearing high complexity traumas. The phenomena of motorcycle accidents, urban violence, chaotic traffic and speeding have contributed to this situation.

Since the 1980s, multiple publications have shown scientific evidences of the importance of treatment in the trauma's acute phase. The proper primary treatment promotes better results, reduces the rate of complications, the incidence of infection, the hospitalization period and the

health-related costs, in addition to reducing mortality and the amputation rates associated to the trauma.

With aim to continue these actions, which started in 2014, an Agreement was signed between HCFMUSP, FFM and SES-SP, in effect from 2017 to 2019.

In 2019 a total of **1,104** surgeries were performed, by highly qualified and trained professionals, among which reimplants, revascularizations and flaps, in addition to **10,803** outpatient assistances, totaling **11,907 procedures**.

Air transport for the organ capturing team for liver and pancreas transplants

With aim to benefit HCFMUSP patients in a waiting list for digestive system organ transplants, private airway transport services are used for the HCFMUSP Transplant Division teams for Liver,

Pancreas and Digestive System Organs, upon the removal of organs for transplants outside the São Paulo capital city.

The targets of this initiative, developed in joint action by FFM and HCFMUSP, are the growth in the number of transplant collections and the reduction of the average organ wait list period, ensuring quality in the conditions of cold ischemia recommended for transport.

Aiming for the continuity of these actions, initiated in 2014, an Agreement was signed between SES-SP, HCFMUSP and FFM in 2018, whose actions continued in 2019, when six air transports were carried out, to perform capturing outside the São Paulo capital area.

ICESP Rehabilitation Center

IMRea, beneficiary of a donation from the public civil suit authored by the Labor Prosecutor's Office against a private company, carried out in replacement of a collective moral damage reparation, enabled in 2008 the installations of the ICESP Rehabilitation Center, inaugurated on 09/22/2008.

ICESP's Rehabilitation Service is focused in attending disabled persons, whether transient or definitive, with aim to optimize their functional potential, within the physical, psychological and social participation scopes. Rehabilitation is focused in stimulating functional and independence potential, but it also seeks to aid patients while adapting to their limitations, in order to live in the fullest and most independent manner possible. For such, it relies on physiatrists, physiotherapist, speech therapist, neuropsychologists, occupational therapists,

physicians, rehabilitation nurses and physical educators.

The Rehab Center became a pioneer in the field of oncology in Latin America to attain the Commission on Accreditation of Rehabilitation Facilities (CARF) accreditation, an entity recognized globally for establishing strict standards to accredit such ambulatory service.

In 2010, it was acknowledged by the National Accreditation Organization (ONA), in the following year, ONA level II and, in 2014, by the Joint Commission International (JCI), methodologies which establish specific requirements and certify the quality and safety of the health services. The permanent, continuous and participative evaluation processes that contribute to quality and safety are also part of ICESP's humanization policy, focused on sheltering patients and their companions.

These activities continued in 2019.

Implementation of the State Network of High Cost Medication Provision Centers - CEDMAC

The State Network of High Cost Medication Provision Centers - CEDMAC is a partnership with SES-SP to provide immunobiological medication in Rheumatology.

CDMAC and HCFMUSP activities encompass two main lines: **1)** assisting the patient with a rheumatologic disease that requires special medication; and **2)** CEDMAC Network coordination. The first includes evaluation and orientation to the patient, medical infusion, pharmacovigilance actions, in addition to the assistance and evaluation of the patients from SES-SP administrative processes.

Aiming for the continuity of these actions, initiated in 2009, an Agreement was signed between

SES-SP, HCFMUSP and FFM, in effect from 2017 to 2019.

In 2018, HCFMUSP's CEDMAC received the final assessment and reached the highest scoring level, becoming rated in the Diamond category. CEDMAC was the first public service in Brazil to obtain International Accreditation in that category, enabling access to international excellence and innovation standards.

In 2019, FFM and HCFMUSP performed jointly, via the Rheumatology Division, an average of 892 monthly routine assistances (10,704/year); 13.4 monthly visits to administrative processes (160.8/year); and 84.6 monthly applications of zoledronic acid, (1,015/year), totaling an annual average of **11,880 assistances** for 10,704 patients.

Protocol for the Treatment of Labiopalatine Cleft Patients

The Cranial-Facial Surgery Protocol for Treatment of Patients with Labiopalatine Clefts, developed by the HCFMUSP Discipline of Plastic Surgeries and Burns, was enabled via the Smile Train donations, through FFM, begun in 2008, benefiting labiopalatine cleft patients who need reconstruction of lips, nose, alveolus and palate defects, and their repercussions in speech and facial growth.

In 2019, 96 patients were treated in 101 surgical procedures, distributed among primary

cheiloplasties, primary palatoplasties and other secondary procedures.

In addition to the surgeries, outpatient care was performed for approximately 26 patients a week, making a total of about 1,226 patients/year.

In 2019, a total of 277 patients were attended by **Speech Therapy**, totaling **538 patients**.

Therefore, in 2019, **639 procedures** (both surgical and related to speech therapy) were performed.

Students Financial Support Program - AFINAL

Since 2007, the Students Financial Support Program (AFINAL) financially aids undergrad FMUSP students, in order to contribute to a better performance in their studies.

A commission formed by FMUSP, HCFMUSP and FFM representatives gathers on a monthly basis, or extraordinarily if so required, to make all decisions and discuss new ways to raise funds and other subjects.

Family income and the necessity profile of freshman and seniors are assessed, in parallel

to USP's inclusion program, focused mainly on students from public schools and who live at far from the campus.

The counterparts required are that the student be involved in some academic project and have not failed any classes.

In 2019, with the financial support from FFM, FMUSP, AAAFMUSP, HCFMUSP Superintendency, Zerbini Foundation, and a donation from the private sector, **88 scholarships** were granted.



Research Projects

MAIN RESEARCH PROJECTS

In a shared action with the HCFMUSP and FMUSP, FFM takes part in relevant projects and research, mainly focused on the prevention and treatment of diseases that affect the health of the Brazilian population

Establishment of a reference genome for the Brazilian population - Brazilian Reference Genome Project

This project, to be developed by the USP Biosciences Institute, was made possible through an Agreement signed between FFM and the Ministry of Health, at the end of 2019.

Our population is very heterogeneous in relation to its genetics, which is little investigated. The study proposes genomic sequencing and the

creation of a clinical and genomic database of the Brazilian population, using cohort studies funded by the Ministry of Health. This will allow better diagnosis/prevention of diseases with genetic components in Brazilians, and design of public health policies based on our genetics.

Evaluation of the effectiveness of Nivolumab in prostate adenocarcinoma with and without abnormalities in DNA repair pathways

This project, developed by ICESP, made possible through a Contract signed between the *Conquer Cancer Foundation of ASCO* and FFM, started in 2019.

The research aims to determine the antitumor effect of Nivolumab in patients with metastatic prostate cancer resistant to castration after progression to taxane-based treatment in positive and negative DRD tumors.

Diagnosis and monitoring of Alzheimer's disease using volumetry of the locus ceruleus

This project, developed by InRad, made possible through a Collaboration Letter issued by the *Grinberg Laboratory - University of California San Francisco*, started in 2019.

The aim of the study is to develop an algorithm based on magnetic resonance imaging,

histologically validated to assess volumetric changes of the *locus ceruleus*, which capture the neuropathological progression associated with the Alzheimer's Disease for clinical use.

Optimizing rehabilitation for phantom limb pain using mirror therapy and transcranial direct current stimulation

This project, developed by IMRea, made possible through a contract signed between FFM and *The Spaulding Rehabilitation Hospital*, started in 2019.

The aim of the study is to evaluate the effectiveness of transcranial direct current stimulation and mirror therapy, as rehabilitation tools for the treatment of patients with chronic phantom limb pain.

Diagnosis of the main barriers to the treatment of atrial fibrillation in primary care and in a community hospital

This project, developed by the HU-USP, made possible through a contract signed between FFM and the *University of Birmingham*, started in 2019.

The objective of the study is to investigate patients with atrial fibrillation and, together with

health professionals who attend to these patients, get to know the existing barriers to the implementation of appropriate treatment using vitamin K antagonist anticoagulants in primary care.

Trends in greenhouse gas emissions from Brazilian food using GGDOT (Greenhouse Gas and Dietary choices Open source Toolkit)

This research, developed by the FMUSP Department of Preventive Medicine, made possible through a contract signed between FFM, FMUSP, the *University of Manchester* and the *University of Sheffield*, started in 2019.

The study aims to assess the trend of greenhouse gas emissions from food in Brazil and verify its relationship with changes in the population's dietary patterns, considering the degree of food processing.

Intervention to improve clinical monitoring in outpatient care services for people with HIV

This research, carried out by the FMUSP Department of Preventive Medicine, made possible through a contract signed between FFM and ViiV Healthcare UK Ltd., began in 2019.

The study aims to promote the effective implementation of the use of the Clinical Monitoring System, in outpatient services for the treatment of HIV infection in four regions of the State of São Paulo.

Community Violence and Adolescent Mental Health in the Municipality of São Paulo

This research, developed by the FMUSP Department of Preventive Medicine, made possible through a *Collaboration Agreement* signed between the *University College London* and FFM, FMUSP, the Federal University of Pelotas, the Federal University of Bahia, the Brazilian Association of Public Health and the Foundation

for Support to Research and Extension, started in 2019.

The general objective of the study is to investigate the association between the exposure to community violence and mental health problems, especially the Post-Traumatic Stress Disorder.

Uncovering causal factors related to neurotoxicity of the tau protein in Alzheimer's disease

This research, developed by the FMUSP's Geriatrics Discipline, made possible through a Collaboration Letter issued by the *University of California's Grinberg Laboratory*, started in 2019 and should continue in 2020.

The objective of this study is to elucidate which are the specific cellular factors that

contribute to the accumulation of tau in neurons, in order to advance the understanding of the neurodegeneration cellular mechanisms and to identify therapeutic targets for the Alzheimer's disease.

Effect of the intestinal microbiota profile on the occurrence of delirium in acutely ill elderly hospitalized

This project, developed by the LIM 66, made possible through a contract signed between FFM and Hebrew Senior Life, with NIH subsidy, started in 2019.

This study is a protocol aimed at the occurrence of delirium in seniors and changes in the intestinal microbiota, which aims to investigate possible dysbiosis in this population.

Evaluating the trend of prevalence of serological markers for infectious diseases subject to blood transfusion among blood donors in three national blood centers: Fundação Pró-Sangue / Hemocentro de São Paulo (FPS / HSP), Hemocentro de Minas Gerais (HEMOMINAS) and Hemocentro de Pernambuco (HEMOPE)

This research, developed by the FMUSP Department of Infectious and Parasitic Diseases, made possible through a contract signed between the *Vitalant Research Institute*, FFM and FMUSP, began in 2019.

This program will continue some studies that were part of REDS III, such as the follow-up of the cohort of patients with sickle cell anemia and the

database of blood donors in participating blood centers (Hemorio, Hemope, Hemominas and Fundação Pró-Sangue), as well how to continue surveillance of epidemics related to arboviruses and new infectious agents, in addition to extending the range of the database to two sites, which will now include information on blood bags and blood recipients.

Uncovering causal factors related to neurotoxicity of the tau protein in Alzheimer's disease

This project, developed by the FMUSP Geriatrics Discipline, made possible through a Collaboration Letter issued by the *University of California's Grinberg Laboratory*, started in 2019.

This proposal is based on the premise that the degree of selective neuronal vulnerability to injuries with accumulation of tau protein depends on protective or sensitizing factors, expressed differently in different neurons.

Dengue, Zika and Chikungunya - Neurological Manifestations during a Multiple Epidemic of Emerging Arboviruses in Fortaleza / CE

This research, developed by the IMT-FMUSP, through a *Grant Letter* signed between FFM and *The Encephalitis Society*, started in 2019.

This pilot study aims to investigate clinical and laboratory aspects of 18 patients, who developed

encephalitis during a triple epidemic of Dengue, Zika and Chikungunya in northeastern Brazil, from June 2015 to December 2017.

The use of sexual pre-exposure prophylaxis (PrEP) by people with high exposure and vulnerability to HIV in the context of Brazilian health services: effectiveness of use on demand and the predominantly remote clinical follow-up protocol - (Projeto Combina - phase 3)

This research, carried out by the FMUSP Department of Preventive Medicine, through a Letter of Agreement signed between the OPAS and FFM, began in 2019.

Its objective is to analyze the degree of protection and safety of the on-demand sexual

pre-exposure prophylaxis (PrEP) scheme used by men who have sex with men, transvestites and transsexual women, with reference to the occurrence of HIV infection, adverse events and viral resistance.

One Health Brazilian Resistance - Integrated Genomic Base for Surveillance, Diagnosis, Management and Treatment of Antimicrobial Resistance at the Human-Animal-Environmental Interface

This research was initiated, in 2019, by ICB-USP, through a Cooperation Term signed between FFM and FIOTEC.

The project proposes the creation of OneBR (One Health Brazilian Resistance), the first genomic

database, cured and integrated with algorithms based on artificial intelligence, to be used by different Brazilian professionals, which will allow to trace the origin of bacteria and know their resistance profile.

Improving the Detection and Treatment of Acute Kidney Injury (ARI) in Low and Middle Income Countries: An Implementation Project

This research was initiated, in 2019, by the LIM 12, through a contract signed between FFM and the International Society of Nephrology.

Considering that Acute Renal Injury (ARI) is a frequent, preventable and treatable syndrome,

this implementation project was designed to include sustainable improvements in the clinical care of the disease and to improve the approach to patients with diseases that can progress to ARI.

Phase IV, double-blind, randomized, non-inferiority clinical trial to assess the safety and immunogenicity of the Butantan Institute's seasonal trivalent influenza vaccine compared to the Sanofi-Pasteur seasonal trivalent influenza vaccine

This study, developed by the HCFMUSP Infectious and Parasitic Diseases Division and the ICr, was made possible through two Scientific Technical Cooperation Agreements signed in 2019, between the Butantan Foundation, HCFMUSP and FFM.

The study seeks to determine whether the immunogenicity caused by the single dose of the Butantan Institute's trivalent seasonal flu vaccine is not inferior to that elicited by a single dose of Sanofi's trivalent seasonal influenza vaccine in adult and elderly populations.

Consulting to develop curriculum and collect data to evaluate a parental group intervention in Boa Vista

This study, developed by the FMUSP Pediatrics Discipline, was made possible through a Contract signed, in 2019, between FFM and the International Development Bank - IDB.

The goal is to raise families' awareness for the importance of stimulating their babies from birth, by talking, playing and interacting with them in various ways, without the need for expensive and sophisticated toys.

The pilot project involved around 800 children aged 9 to 12 months, born to vulnerable families in the west zone of São Paulo.

The second stage will be developed in the city of Boa Vista (RR), which accounts more than 300 thousand inhabitants. The objective is to impact all vulnerable children up to 2 years of age.

Clinical and epidemiological and histological study of neoplasms in the population living with HIV / AIDS and in individuals without HIV infection who died at ICESP

This project, developed by the HCFMUSP Infectious and Parasitic Diseases Division, made possible through a Purchase Order issued, on behalf of FFM, by *The George Washington University*, with NIH subsidy, started in 2018. In 2019, a contract was signed Agreement between

FFM and *The George Washington University*, with a NIH grant, to continue the research.

Its purpose is to comparatively analyze neoplasms in HIV-infected and non-infected individuals, monitored by ICESP, which eventually led to death.

Strengthening care for violence against women in sexual and reproductive health actions in primary care in São Paulo

This is a multicultural study funded by the NIHR-UK, through the Bristol University (UoB) and the LSHTM. The study, started in 2018, continued in 2019 and is developed by the FMUSP Preventive Medicine Department.

The initiative seeks to implement an intervention regarding the violence against women

in eight UBSs and evaluate: changes in the identification, reception and referral of cases of violence against women; and changes in sexual and reproductive health in the experiences of violence of the women identified in the services.

Effect of inhaled terlipressin on coagulation, tissue perfusion, hemodynamics, on airway mucosa and early mortality in the rescue of controlled hemorrhagic shock in swine

This research, which began in 2018 and continued in 2029, is developed by the FMUSP Digestive Surgery Discipline at the Department of Gastroenterology and was made possible through a Partnership Agreement signed between the Ferring Laboratory, USP and FFM, whose project was approved in the company's innovation notice.

The hypothesis is that terlipressin accentuates the "protective" effect of organ damage, since it can have a direct action on the changes observed in the microcirculation. In addition, it can have a beneficial hemodynamic effect, preserving systemic pressure and portal and renal flow.

Study of Functional Treatment of Disabling Pain Due to Knee Osteoarthritis in the Unified Health System Program

This project, to be developed by the IMRea, was approved at the end of 2018 by the Ministry of Health (MS), within the scope of PRONAS, which provides for the raising of funds from individuals and companies with deduction of income tax. The beginning of its activities, however, depends on the solution of bureaucratic issues with the Ministry of Health.

The aim of this study is to rank the current

rehabilitation treatment of knee osteoarthritis in the SUS, in patients with severe pain and severe osteoarthritis, associating it with the conventional treatment described by Skou et al., 2015, cognitive orientation, segmental desensitization with paraspinal block (Imamura et al., 2016) or with radial and focal shock waves and treatment with intra-articular injection of hyaluronic acid.

Treatment of cervical metastases of thyroid carcinoma by percutaneous thermal ablation guided by ultrasound

This project, to be developed by the ICESP, was approved at the end of 2018 by the Ministry of Health (MS), within the scope of PRONON, which provides for the raising of funds from individuals and companies with deduction of income tax. The beginning of its activities, however, depends on the resolution of bureaucratic issues with the Ministry of Health.

Through this study it will be possible to bring new information about the diagnosis and treatment of thyroid cancer, especially in those patients who have metastatic cervical lesions subject to percutaneous treatment by thermal ablation.

Parent-child interactions and children's language development in low-income families in Brazil

This study is developed by the IPq, through a contract signed between the FFM and the President and Fellows of Harvard College, started in late 2018 and continued in 2019.

Its main objective is to identify the breadth of variation in the quantity and quality of language

input that mothers, in a poor urban area in Brazil, use during a play interaction with their children at 12 months of age, determine their variations and understand the similarities and differences in the language input of parents in Brazil compared to those in the USA.

Using the Cohort of 100 million Brazilians to establish critical air pollution limits for Child Health in Brazil

This study, developed by the FMUSP Pediatrics Department, through a contract signed between FFM and the Bill and Melinda Gates Foundation, started in late 2018 and will continue in 2019.

The objective is to use the Cohort of 100 million Brazilians, along with spatial data on air pollution in high quality and resolution, to analyze the associations between air pollution and health

problems at birth, in addition to defining critical limits for air pollution in Brazil.

Evaluation of the impact of the Family Health Program on child development - ROC cohort

This study is developed by the FMUSP Pediatrics Department, through a contract signed between FFM and the Swiss Tropical and Public Health Institute, started in mid 2018 and will continue in 2019.

Through this study it will be possible to investigate the impact of adversity, in early life, on children and adults and to identify the most critical interventions to improve the population's health in low and middle income countries.

Phase I randomized double blind placebo-controlled clinical trial to assess safety and immunogenicity and dose determination of influenza H7N9 antigen adjuvanted with two different adjuvant formulations in healthy adult volunteers in Brazil

This study, which is being carried out by the HCFMUSP Immunology Department and the HCFMUSP Children and Adolescents Institute, was made possible through Technical Scientific Cooperation Agreements signed in 2018 between the Butantan Foundation, the HCFMUSP and FFM.

The study seeks to assess the safety, immunogenicity and dose-saving effect of candidate vaccines against H7N9 influenza formulated with two different adjuvants.

The research continued in 2019.

Randomized trial on the enteral use of glutamine to minimize thermal lesions - RE-ENERGIZE

This study, developed by HCFMUSP's Anesthesiology Department, was enabled by means of a contract signed in 2018 between the Kingston General Health Research Institute, HCFMUSP and FFM, continued in 2019.

Its general objective is obtaining information about the use of glutamine as a nutritional supplement in severely burnt patients, which are under greater risk of developing infections.

"Potential lost pregnancy days" (DPGP): an innovative measurement of the pregnancy age to assess interventions and results of maternal-child outcomes

This study is developed by the Public Health School, by means of a contract signed between FFM and the Bill and Melinda Gates Foundation, and began in the end of 2018 and continued in 2019.

The idea is to develop and explore an innovative measurement of pregnancy age, called "potential lost pregnancy days" (DGGP), to produce evidence of its association with maternal and child death, morbidity and mortality at short, medium, and long terms.

The effect of the program Visitation for Young Pregnant Women over Child Development: A Pilot Study

This research was initiated in the end of 2018 by FMUSP's Psychiatry Department, via a contract signed between FFM and the Lemann Institute, continued in 2019.

This study consists in the encoding and secondary analysis of data collected as part of a research project in São Paulo, Brazil ("Father-son interactions and child language development in low-income families in Brazil" - page 64 of this report).

Its main goal is to identify the amplitude of the variation of the quantity and quality of the language inputs that mothers in a poor urban area in Brazil use during their playful interactions with their children, at 12 months of age, determine its variations and understand the similarities and differences in the language of parents in Brazil versus those of the US.

Developing and testing the Motherly application: an automated intervention to promote mental health of young mothers

This research was initiated in 2018 by FMUSP's Psychiatry Department, via contracts signed between FFM, FMCSV and between FFM and the GCC. In 2019, a Grant was signed with The Open Society Policy Center, aiming at continuing the study.

The objective of this research is developing an application (app) that will monitor pregnant women, in order to ensure the mental health of young mothers. The app will be installed in the

patients' smartphones, so they may report their daily life and receive support messages that help ensure their well-being.

The project seeks to obtain data that will either prove or disprove the improvement in the mental health of the patients and will monitor mothers as of the second quarter of the pregnancy up to the child's first months, also measuring the baby's development in this beginning of life.

Randomized clinical essay controlled by clusters to reduce the blood pressure among the elderly with hypertension and depression attended by the Family Health Strategy in São Paulo, Brazil

This study, developed by LIM 23, via an Agreement signed between FFM and the Harvard T. H. Chan School of Public Health, was approved in mid-2018 and continued in 2019.

This study will compare the effectiveness, and

the cost-effectiveness and the improvement ratio in the control of blood pressure (secondary outcomes) between the control group (routine care) and the group that will receive psychosocial intervention.

Characterization of astrogliopathy by Tau in aging and in neurodegenerative diseases

This study, developed by the CHFMUSP Neurology Department, by means of an Application signed between FFM and Alzheimer's Association, was approved mid-2018 and continued in 2019.

This study allows to identify possible risk factors for early development of the Alzheimer's

type pathology; analyze the presence of the Alzheimer's type pathology in brains of individuals with less than 65 years of age; and identify socio-demographic, clinical and genetic risk factors associated to the early development of the pathology and the development of symptoms.

Classifiers for early diagnosis of Autistic Spectrum Disorder using sight tracking

This project, to be developed by the IPq, was approved in the end 2017 by the Ministry of Health, within the scope of **PRONAS**, which provides for fund raising from natural persons and legal entities with income tax deductions. The commencement of the activities, however,

depends on clearance for the funds by the Ministry of Health.

The main objective is to develop computer methods that contribute with earlier and more objective diagnosis of the Autistic Spectrum Disorder (TEA) based on sight tracking signs, as well as developing classifiers and analysis of clusters to define TEA subtypes.

Mammary Portraits

This project, to be developed by the ICESP, was approved in the end 2016 by the Ministry of Health, within the scope of PRONON, which provides for fund raising from natural persons and legal entities with income tax deductions. The commencement of the activities took place in 2019.

Through this study it will be possible to: a) analyze the molecular alterations of breast cancer by the sequencing of the full exoma; correlate the molecular findings with other data and develop a computer system that integrates the different databases of patients with breast cancer for integrated analyses.

Randomized study to prevent vascular events in HIV – REPRIEVE (A5332)

This research, developed by the FMUSP Disciplines of Immunology and Preventive Medicine, through agreements signed between FFM and Partners Healthcare (founded by Brigham and Women’s Hospital and Massachusetts General

Hospital), with NIH subvention, started in 2017 and continued in 2019.

Its objective is to evaluate the effects of pythavastatine in preventing major adverse cardiovascular events in patients undergoing HIV infection treatment.

From basic science to clinical practice: infusion of modified lymphocytes to promote viral eradication - Study BELIEVE

The project developed by LIM 60, through a contract signed between FFM and The George Washington University, with NIH subvention, started in 2017 and was concluded in 2018. In the same year of its termination, a new contract was signed with Joan & Sanford I. Weill Medical College of Cornell University, with NIH subvention, thus enabling the continuity of the Study in 2019.

With this study, it will be possible to understand ways to improve the ability of cytotoxic T lymphocytes to eliminate HIV; amplify the function of NK cells; and harness T and NK cells and antibody-mediated responses in the context of HIV infection in adults and children.

The use of pre-sexual exposure prophylaxis (PrEP) by people with high exposure and vulnerability to HIV in the context of the Brazilian health services: Project Combina - phase 2

This research, developed by the FMUSP Preventive Medicine Department, via an agreement signed between UNESCO and FFM, started in 2017 and was finished in 2019.

Its objective is to proceed with the observation of participants who started use of pre-sexual exposure prophylaxis (PrEP), with aim to analyze the prophylaxis and an eventual disinhibition of sexual practice, for a period of over 12 months.

Binding and retaining people with HIV in public health services: a demonstrative project in the city of São Paulo, Brazil

This research, developed by the FMUSP Preventive Medicine Department, via an agreement made between FFM and the Aids Healthcare Foundation Brazil, commenced in 2017 and continued in 2019.

Its objective is studying the frequency, the barriers of access and the profiles of binding

vulnerability and different retention standards for people infected with HIV in public health services in the city of São Paulo; as well as analyzing the effects of health care techniques with aim to reduce such events within the Brazilian context.

Improving the primary health care response for violence against women in middle and low income countries - the case of SP, Brazil

This research was initiated in 2017 by the FMUSP Preventive Medicine Department, via contracts signed between FFM and the University of Bristol, and was finished in 2019.

Violence against Women generates impacts on health and socio-economic aspects, rendering its

prevention and confrontation by the health system a global priority. The objective of this initiative is developing and testing the feasibility of

an intervention, to be carried out in the scope of primary health care, in Violence against Women.

TOC Project - Research of Brain Markers associated to Obsessive-Compulsive Disorder

This research developed by IPq, through a contract signed between FFM and the Research Foundation for Mental Hygiene (The New York Psychiatric Institute) with NIH subvention, began in 2017 and continued in 2019.

The objective of this research is identifying reproducible cerebral markers that match specific

measurable behaviors pertaining to OCD symptom dimensions. These cerebral markers may eventually be used to reveal OCD manifestations that also manifest in other mental disorders.

Arbobios: A Translation study for the identification, characterization and validation of severity biomarkers in arbovirus infections

This study, developed by USP's IMT, via an agreement between FFM, USP, FAPESP and BioMérieux S/A signed in 2017, continued in 2019.

Its overall goal is to identify and validate prognostic biomarkers for disease by Dengue,

Chikungunya and Zika, which allow early stratifications of the risk of developing evolutionary forms that represent greater morbidity and mortality.

Clinical outcomes of Zika virus infection in patients with Sickle Cell Disease

This research was initiated in 2017 by FMUSP's Infectious and Parasitic Diseases Department, via contracts signed between FMUSP, FFM and the Blood Systems Research Institute, and was continued in 2019.

The study intends to broadly characterize the clinical impact of the Zika virus in sickle cell disease and identify the main routes involved in the Zika virus physiopathology. In turn, this data shall provide strategies to screen, monitor and treat the Zika virus in a potentially vulnerable population.

Clinical Trial phase III for the evaluation of the effectiveness and safety of Dengue 1, 2, 3, 4 (attenuated) vaccines of the Butantan Institute

This research was initiated in 2017 by the FMUSP LIM 60, via contracts signed between FFM and the Case Western Reserve University, with NIH subvention, and was continued in 2019.

The vaccine is produced with weakened viruses, which have no potential to cause the

disease, and must protect against the four dengue serotypes in single dose. Currently, it is in phase III of tests, the last one before being submitted to Anvisa's evaluation.

Path to a Global Integrated Tool for the Evaluation of Transport and Health (TIGTHAT)

This research was initiated in 2017 by the FMUSP Preventive Medicine Department, via contracts signed between FFM and the University of Cambridge, and was finished in 2019.

Urban land transport has both positive (physical activity) and negative (traffic accidents, noise pollution, and atmosphere pollution) side effects. Studies in high income cities found substantial benefits for the population's health

when there is change towards active travels, with a prevalence of physical activity (FA). However, works developed in Brazil, India and Malaysia have identified a more varied and complicated situation. Its objective was creating the basis to build a modeling and evaluation tool on the impact of the transport types in health, which may be promptly applied in cities of low and medium income countries.

Study of the Incidence of influenza among children and youth in Araraquara, Brazil, 2016-2017

Este This study, developed by the IMT-SP, through a contract signed between the HCFMUSP, FFM and Sanofi Aventis Farmacêutica Ltda., commenced in the end of 2016 and continued in 2019.

It is an amendment to the project called "Study of the Incidence of dengue in Brazil, in municipalities of high and medium endemicity Goiânia

– GO and Araraquara- SP" (page 73 of this report)

The main goal of this study is to determine the incidence of symptomatic infections by the influenza virus and other respiratory viruses in the cohort studied, which could subsidize the evaluation of future vaccination strategies against dengue.

A 2b/3 phase double-blind study, on the safety and effectiveness of injectable cabotegravir in comparison to tenofovir desoproxil / emtricitabine fumarate (TDF / FTC) daily and orally, for a pre-exposure prophylaxis in cisgen males and transgender women not infected by HIV and who have sex with men

This research, developed by the FMUSP Disciplines of Immunology and Preventive Medicine, through agreements signed between FFM and Family Health International, with NIH subvention, started in 2016 and continued in 2019.

Through this study it will be possible to compare the incidence of HIV among the participants; make assessments of factors related to HIV infection, hepatitis, or sexually transmitted infections; and analyze possible drug interactions between sex hormone therapies for transsexuals.

Use of Laser fluorescence with SPY ELITE, PINPOINT and the FIREFLY Robotics Platform systems in Surgical treatment of Cancer

This project, initiated by ICESP in mid-2016, and which was continued in 2018, was approved by the Ministry of Health, within the scope of PRONON, which provides for fund raising from natural persons and legal entities with income tax deductions.

Through this study it will be possible to: 1) determine the incidence of complications related to postoperative tissue ischemia in short and medium terms; analyze and compare the influence

of circulatory mapping; evaluate the effectiveness of the method for the identification of lymphonodal structures of interest in the state and treatment of patients with digestive, urological and gynecological tumors; and evaluate the impact of the general and systemic complications over hospital costs in surgical cancer treatment and the influence of the use of fluorescence in surgical cancer treatment.

Protection against AIDS mediated by GBV-C

This subproject initiated in 2016 by HCFMUSP's LIM 60, via a contract signed between FFM and the University of Wisconsin – Madison, with NIH subvention, was continued in 2019.

GBV-C virus causes asymptomatic infection, which is persistent and has a high viral load in humans; but after years of research, little is known about the in vivo biology of that virus,

due to the lack of functional in vitro model in animals.

This study has the goal of determining one of the most important aspects of the virus' biology: tissue tropism of the virus in humans, in order to determine which cells, permissible to viral replication, are responsible for the high viral load found in vivo.

Factors of risk and protection for violent behavior among adolescents in the Municipality of São Paulo - São Paulo Project for the social development of children and youth

This study, developed by FMUSP's Preventive Medicine Department, by means of a contract signed between FFM and The Chancellor, Masters and Scholars of the University of Cambridge, began in the end of 2016 and continued in 2019.

With this cross-sectional study of about 3,300 adolescents, it will be possible to estimate the

prevalence of violent behavior and victimization; investigate the association between individual, situational-relational and contextual characteristics; and to analyze the prevalence and factors associated with violent behavior and victimization in São Paulo, Montevideo and Zurich.

Study of Ancestry in neurodegenerative diseases

This study, developed by FMUSP's Geriatrics Discipline, by means of a contract signed between FFM and the Rush University Medical Center, with NIH subvention, was approved in the end of 2016 and was finished in 2019.

The study proposed will identify genomic variants in loci of European and African Ancestries, associated with neuropathological rates of Alzheimer's Disease, Cerebrovascular Disease, Lewy Body Dementia, Hippocampal Sclerosis and Tar binding DNA protein 43 kDA.

VIA T HELPER 17 in Autoimmune Type 1 Diabetes Mellitus

This study, developed by the LIM 18, via a contract signed between FFM and the European Foundation for the Study of Diabetes, began in 2016 and continued in 2019.

Its objective is to evaluate genes polymorphisms involved in the Th 17 pathway in healthy control individuals and patients with autoimmune type 1 diabetes mellitus.

Programs and policies for obesity prevention in countries with low and average income and in transition - studies in foment to evidence and evaluation of programs

This project, developed by NUPENS of USP's Public Health School, through an agreement signed between FFM and The University of North Carolina at Chapel Hill, began in 2016 and continued in 2019.

This research shall enable the production of: studies on food consumption patterns and temporal trends in household purchase of foods in

Brazil; 2) Studies on the prevalence of obesity, hypertension, diabetes and other transmittable chronic diseases related to nutrition in Brazil; studies about the elasticity of prices for non essential beverages and foods; and database with the nutritional composition of industrialized beverages and foods marketed in Brazil.

Participation of astrocytes located on the ventrolateral surface of the bulb in ventilatory responses to hypercapnia and hypoxia

This study, developed by the ICB-USP, via an agreement signed between FFM and *The Ohio State University* in 2016, continued in 2019.

The incomplete maturation of neural cells, involved in respiratory control, causes a significant change in homeostasis and these changes can be

crucial for life. A basic understanding that neural networks are necessary and how they are impaired in pathological conditions is essential for devising possible pharmacological interventions for certain pathologies that affect the respiratory system and improve population survival.

Multiplex Test for the evaluation of Chagas disease cure

This study, developed by the LIM 46, by means of a contract signed between FFM and the

University of Georgia, with NIH subvention, was approved in the end of 2016 and continued in 2019.

Its objective is developing a cure test that may identify individuals previously exposed to infection

by the *Trypanosoma cruzi* protozoan and who have evolved to cure, with or without therapeutic treatment.

Clinical Trial phase III for the evaluation of the effectiveness and safety of Dengue 1, 2, 3, 4 (attenuated) vaccines of the Butantan Institute

This study, developed by the HCFMUSP Immunology Department, was enabled via a Technical-Scientific Cooperation Agreement signed in 2016 between the Butantan Foundation, HCFMUSP and FFM and continued in 2019.

At this time, there is no licensed vaccine for dengue prevention with protection against the four dengue serotypes. Thus, its objective is to assess the effectiveness and the safety of Dengue Vaccine 1, 2, 3, 4 (attenuated) produced by the Butantan Institute.

Assessment of New Alternatives to Increase the Accuracy in Determining Cause of Death: An Approach Based on Autopsy

This study, developed by the FMUSP Pathology Department, by means of a contract signed with the Bill and Melinda Gates Foundation, with FFM intervention, was approved in the end of 2016 and was finished in 2019.

The project is dedicated to developing and validating the methods that enable to identify the cause of death of people in areas where there is lack of professionals or training for such. These methods shall enable to determine the immediate cause and the basic cause (main disease) of death.

Cohort study with pregnant women to assess the risk of congenital malformations and other adverse consequences for pregnancy after infection by Zika Virus - ZIKAlliance Consortium

This research was initiated in the end of 2016 by the FMUSP Infectious and Parasitic Disease Department, via a contract signed between FFM and the European Union.

Its objective is evaluating the causal relationship between the infection by the Zika virus during pregnancy and the congenital malformations.

These activities continued in 2019.

Evaluation of the Safety and Effectiveness of Synthetic Phosphoethanolamine with Advanced Solid Tumors

Cancer diseases represent today in Brazil the second main important advancements have been observed in the treatment and in the care to oncology patients in the last decades, and the number of patients that reach cure or survive the cancer diagnosis with quality of life is crescent. However, for an expressive share of patients, the therapeutic options currently available have

proven to be insufficient, which makes the search for new treatments a constant challenge to Medicine.

In 2016, the Government of the State of São Paulo requested this study to be carried out by ICESP and was finished in 2019.

Bloomberg Initiative for Global Roadway Safety: Observational studies of speed, use with helmet, seat belt, retention equipment for children and driving under the influence of alcohol, in the city of São Paulo

This research is being developed by the LIM 40, via a contract signed in 2015 between FFM and the Johns Hopkins University and continued in 2019.

It is an observational study of the cross-sectional type, where shall be collected, in a manner that is not interactive with the research subjects, data from five risk factors for traffic accidents: use of helmets by motorcyclists, seat

belt use, use of equipment for the retention of children in vehicles, driving with excess speed,

safety and use of alcohol.

Production of recombinant proteins from different systems of expression

This study, developed by the LIM 25, via a contract signed between Ouro Fino Saúde Animal Ltda., FMUSP and FFM, began in 2015 and continued in 2019.

The general objective of this research project is to enable the unprecedented recombinant

production of therapeutic proteins of interest in animal health, in a way to preserve the in vivo biological activity of these proteins both in lab animals and in target species.

Verbal Autopsy in Brazil: Instrument Validation

This project, developed by the FMUSP Pathology Department, via an agreement signed between the Ministry of Health and FFM in the end of 2015, started in 2017 and was finished in 2019.

Having a proper information system about deaths and its causes is extremely important,

for it provides subsidies to evaluate the health situation of the populations and promote planning, monitoring and evaluation of health services.

The general objective of this project is to assess and validate the verbal autopsy form for adults in Brazil.

Vaccine against *S. pyogenes* for the prevention of Rheumatic Fever and Rheumatic Heart Disease: clinical study phase I / IIa

This study, developed by InCor, via a Contract signed between the HCFMUSP, the Butantã Institute, BNDES and FFM, started in 2015 and continued in 2019.

Its main objective is to carry out phase I/IIa clinical trials of a vaccine produced entirely in Brazil against *Streptococcus pyogenes* to prevent new cases of rheumatic fever and rheumatic heart disease.

Development of an Anatomical Atlas with Computed Tomography for Application in Tomography Equipment by Electric Impedance

This project, developed by the HCFMUSP LIM 09, was initiated in 2014, via an agreement signed between FINEP, FFM, HCFMUSP and Timpel S/A, and continued in 2019.

Its objective is developing an Anatomical Atlas, i.e. a unified database with anthropometric information, tomographic images and data on the

pulmonary function of approximately 600 patients, from a Computed Tomography (CT) database. This new technology will have applications in Tomographers by Electric Impedance, reaching a precision and spacial resolution much better than that available in current tomographers.

Combination of Brain Stimulation and Peripheral Nerve Stimulation to Increase the Beneficial Effects of Functional Electric Stimulation on the Paretic Hand After a Stroke

This study, developed by the Neurology Department, via a contract signed between FFM and NIH, began in 2012 and continued in 2019.

There are no universally accepted treatments to reduce the incapacity in patients with severe motor commitment in the chronic phase after a stroke (CVA).

Neuromodulation techniques, such as transcranial direct current stimulation (tDCS) and somatosensory stimulation in the form of peripheral sensory stimulation (ESP), are emerging

techniques with great potential to improve motor performance or increase the effects of motor training in CVA patients.

This study will test the hypothesis that tDCS and ESP shall increase the effects of functional electric stimulation (FES) and the task-specific training over motor function.

In February 2019, this initiative received the Paul Dudley Award during the International Stroke Conference promoted by the American Heart Association, in Honolulu, Hawaii.

Genome of landscapes in latitudinal gradients and ecology of *Anopheles darlingi*

This project, developed by the Epidemiology Department of USP's Public Health School, through a contract signed between FFM and Health Research Incorporated, with NIH subvention, began in 2014 and continued in 2019.

Its objective is to examine the three biological aspects of *Anopheles darlingi*, which have been underestimated, with the aim to identify the major mechanisms responsible for the malaria transmission vector's success: broad plasticity or genetic specialization.

Study of the Incidence of dengue in Brazil, in municipalities with high and medium endemicity Goiânia-GO and Araraquara-SP

This study, developed by the IMT-USP, via a contract signed between Sanofi Aventis Farmacêutica Ltda., FMUSP and FFM, began in 2014 and continued in 2019.

Its main objective is to outline and implement epidemiological studies that subsidize the evaluation of future vaccination strategies against dengue.

Latin America Treatment & Innovation Network in Mental Health

This study, initiated in 2014 and supported by the NIH, through a contracted signed with FFM and developed by the FMUSP Preventive Medicine Department, continued in 2019.

Its objectives are to evaluate the effectiveness of an intervention, by automatic mobile phone

messages attended by nursing assistants, in the treatment of depression in individuals with chronic physical diseases (diabetes and/or hypertension) who were attended in Family Health Strategy units in the city of São Paulo, Brazil.

Perspectives of eliminating residual malaria in the rural Brazilian Amazon: strategy for the investigation of *Plasmodium vivax* reservoirs

This study, developed by the ICB-USP via an agreement made between FFM and the Ministry of Health in the end of 2013, continued in 2019.

Its objective is implementing and evaluating a strategy to detect symptomatic and asymptomatic

carriers of the parasite in areas of residual malaria transmission, focused on monitoring the potential transmission hotbeds in the surroundings of clinical episodes (index cases) diagnosed by BA or BP of fever cases.

Research Center for Biomarkers in Neglected Tropical Diseases of São Paulo-Minas General

This research was initiated in 2012 by the HCFMUSP LIM 46, via a contract signed between FFM and NIH, and was continued in 2019.

The objective, in the long-term, is to establish a Center of Excellence for research in Biomarkers

of Neglected Infectious Diseases in Brazil. The initial focus will be Chagas disease, with the aim of finding biomarkers that may be used to infer the risk of disease progression.

Receiver epidemiology and donor evaluation - REDS III Study - International Post

This proposal, initiated in the end of 2011 by the FMUSP Infectious and Parasitic Diseases Department, through a contracted signed between FMUSP, the Blood Systems Research Institute and FFM, relies on the partnership of four major blood centers in Brazil: Fundação Pró-Sangue (SP), Hemominas (MG), Hemope (PE) and Hemorio (RJ). The study aims to establish the basis for a National

research Program on blood safety in Brazil; maintenance of the donors and donations database; the reevaluation of the patients who participated in the cohort study of Chagas disease and the continuation of the analysis of viral characteristics and risk factors in blood donors infected with HIV.

These activities continued in 2019.

Peruvian/Brazilian Amazon Center of Excellence in Malaria

This study initiated in 2010 by the ICB-USP, via a contract signed between FFM and the University of California with NIH subvention, was finished in 2018. In 2019, a contract was signed between FFM and the Yale University, with a grant from NIH, in order to continue the study.

The entomological component of this proposal, centered in the major malaria vectors

found in the area of study, aims to determine the vector diversity in that region, by means of molecular tools for vector identification and genotyping; and to evaluate the impact of the different economic activities in the vectors' population structure.

Study of specific immune response and genetic aspects in HIV-1 infected patients who are not long-term progressors or slow progressors for Aids

This study, enabled via an agreement between FFM and the Ministry of Health in the end of 2010, is developed by LIM 56 and was initiated in the end of 2011, due to a delay in the release of funds by the Ministry of Health, continuing in 2019.

The Long Term Non Progressors (LTNP), or also called Slow Progressors (SP), remain free from the progression to Aids for many years and amount

to 1-3% of the total of individuals infected by HIV. These individuals remain asymptomatic and with a stable number of T CD4+ lymphocytes, and above 500 cells/mm³ of blood, without any use of antiretroviral (ARTs) treatment for more than 8-10 years. This study intends to analyze HIV- 1+ PL individuals by comparing with typical and rapid Aids progressors, matched by time and evolution and matched by gender and age.

Prospective evaluation of the use of isoniazid in the prevention prophylaxis of pulmonary tuberculosis (PT) in HIV-infected patients

This research, developed by LIM 56, enabled via an Agreement between FFM and the Ministry of Health in the end of 2010, was initiated in the end of 2013, due to a delay in the release of funds by the Ministry of Health, and continued in 2019.

Despite several studies indicating isoniazid (INH) as a prophylactic to reduce the incidence of

Tuberculosis (TB) in the HIV-infected population, such measure is not broadly assisted in all Brazilian services.

This study aims to evaluate TB incidence in individuals, adherence to the prophylaxis, as well as its effectiveness compared to a historical series of service.

Clinical Studies

Clinical Research, also known as clinical trial or clinical study, is considered the main instrument to validate innovation in the health sector.

One of the areas with the highest growth among FFM's duties was the management of clinical studies, developed under the supervision of FMUSP professors and with the support of the CPCs of the HCFMUSP Institutes.

Clinical Research, clinical trial or clinical study are the terms used to name a scientific investigation involving humans. These are all investigations in human beings whose objective is discovering or verifying the pharmacodynamic, pharmacological, clinical and/or other effects of products and/or identifying adverse reactions to the products under investigation, with the aim to verify their safety and/or effectiveness.

It enables to evaluate new drugs, new treatments, new vaccines, in addition to a broader understanding of diseases and population behavior, which reflects into benefits to patients and society. Thus, it is considered the main

instrument to validate innovation in the health sector.

Clinical Studies also aim to ensure that research is carried out according to technical-scientific, ethical, legal parameters, and within the framework of current legislation, in addition to ensuring fairness in terms of research funding, source of resources, ROI, adaptation to the guidelines of the Institutional Policy, integration with other sectorial actions, and the best interest and convenience for the Public Service.

It is also Worth highlighting the important role of Clinical Research in the training of human resources, in addition to the generation of financial resources, which enable investments in the area.

In 2019, FFM managed **464 clinical studies** (number on 12/31/2019), approved by the Ethics Commissions and coordinated by researchers of the FM/HCFMUSP System.



Training Projects

TRAINING PROJECTS

Training projects aim at the transmission of knowledge, with a high level of quality

Main Training Projects

Specialization Course in Health Education at the University of São Paulo for Teachers at the Higher School of Health Sciences at the State University of Amazonas

This project, prepared by the FMUSP Clinical Medicine Discipline, was initiated in late 2019, through a contract signed between FFM and the State University of Amazonas (UEA).

Its objective is to develop a Specialization Course in Health Education at FMUSP for teachers at the School of Health Sciences (ESA / UEA),

whose proposal for the formation of health professions in the 21st century is to transform education centered on the **transmission** of content into an education based on content **integration**. Such a paradigm shift fundamentally depends on the transformation of the educator, so changing education begins with the teacher development.

Upgrade Course on the Production and Maintenance of Lower Limb Prosthesis, Fixed and Articulated Suropodal Orthoses, and Maintenance in Means of Locomotion

This project, submitted by the IOT, through FFM, to the Ministry of Health, for the presentation and approval of projects within the **PRONAS** scope, which provides for fund raising from natural persons and legal entities upon income tax deductions, was approved in the end of

2018, but the start of activities depends on a request for budgetary readjustment approval.

This course is focused on the upgrade of orthoses and prostheses workshop employees, with aim to improve competences and technical skills in the process of manufacturing and producing orthoses, prostheses and adjustments of wheel chairs.

Training in Critical Oncology Patient Care and Imaging Diagnosis in Oncology

This project was approved in the end of 2016 by the Ministry of Health, within the scope of PRONON, which provides for fund raising from natural persons and legal entities with income tax deductions. The project only started in the end of 2018, due to a delay in budget release by the Ministry of Health.

This project has the objective of training professionals working in SUS service of the State of São Paulo, in patient attention via ICESP, in the following modalities: a) performance of exams such as Magnetic Resonance Imaging, Computed Tomography, Bone Densitometry, Contrasted Exams, Mammography, Radiological Protection and Digital Radiology.

Training in oncology, palliative care and pain for the cancer network of the State of São Paulo

This project, initiated in the end of 2015 by ICESP, was approved by the Ministry of Health, within the scope of PRONON, which provides for fund raising from natural persons and legal entities

with income tax deductions, and continued in 2019.

Its objective is to carry out free permanent education courses for professionals working in the

SUS Oncology Network of the State of São Paulo in the following modalities: technical training in Radiotherapy; technical qualification for Dosimetrists in Radiotherapy; permanent education for physicians in Radiotherapy;

permanent medical education in pain and palliative care; permanent multiprofessional education in pain and palliative care; and permanent multiprofessional education in oncology.

Tutoring Activity for the State of Tocantins

The objective of this project, developed by the HCFMUSP's Liver Transplant Service, by means of an agreement signed between the Ministry of Health and FFM, in the end of 2013, is to aid the implementation of the organ donation and transplant service in the State of Tocantins

promoting the improvement of the already authorized services and qualifying the local health professionals, thus enabling the development of the **multiple organ capturing** services and the performance of **cornea and kidney transplants**.

These activities continued in 2019.

Tutoring Activity for the State of Roraima

The objective of this project, developed by the HCFMUSP's Liver Transplant Service, by means of an agreement signed between the Ministry of Health and FFM, in the end of 2013, is to aid the implementation of the organ donation and transplant services in the State of **Roraima**,

promoting the improvement of the already authorized services and qualifying the local health professionals, thus enabling the development of the **multiple organ capturing** services and the performance of **kidney transplants**.

These activities continued in 2019.

Tutoring Activity for the State of Goiás

The objective of this project, developed by HCFMUSP's Liver Transplant Service, by means of an agreement signed between the Ministry of Health and FFM, in the end of 2013, is to send trainees from the State of **Goiás** to HCFMUSP's

Liver Transplant Service, which will enable, after the term of one year, performing with autonomy the procedure of **liver transplants**.

These activities continued in 2019.



Health Policy Projects

HEALTH POLICY PROJECTS

Health Policy projects are aimed at defining processes and technologies, developing assessment tools, analyzing results, among others.

The Judicialization of the Incorporation of Technologies in the Unified Health System (SUS) and in Complementary Health

This project, to be developed by the FMUSP Preventive Medicine Department, was made possible through an Agreement signed between FFM and the Ministry of Health, at the end of 2019.

The research aims to understand why patients go to court in search of health technologies; what

are the technologies, medicines and treatments claimed in the lawsuits filed against SUS and health plans in the State of São Paulo; as well as the understanding of the Judiciary and any regulatory gaps regarding these claims.

Use of artificial intelligence and mobile app to estimate vaccination protection coverage

This project, to be developed by the USP Innovation Center, was made possible through an Agreement signed between FFM and the Ministry of Health, at the end of 2019.

The project contemplates the development of an application that will use artificial intelligence to

digitize the vaccination cards of the population; inform the health worker which vaccines a person still needs to receive; and send the collected information to the Government's database, SI-PNI.

Research Project for Implementation of Intestine and Multivisceral Transplantation Program in the Unified Health System - SUS

This project, to be developed by the HCFMUSP Surgery of the Digestive System Department, was made possible through an Agreement signed between FFM and the Ministry of Health, at the end of 2019.

The study will make it possible to build a complete and consistent history for the procedure, generating opportunities for surveying costs and

developing work processes and clinical protocols to support the future creation of an Intestine Transplant Program within the SUS, in addition to opening precedents for new therapeutic perspectives in the treatment of chronic intestinal failure in the country, offering quality of life and social benefit for affected patients and their families.

Development of technical support to support decision making at ANVISA, especially those related to technology assessment processes, preparation of the Agency's regulatory framework and production of regulatory impact studies

The present project, started in 2019, was developed by the NIT-HCFMUSP and made possible through an agreement signed between ANVISA, HCFMUSP and FFM.

Its objective is to develop scientific

technical support services to support decision-making at Anvisa, especially those related to technology assessment processes, preparation of the Agency's regulatory framework and production of regulatory impact studies.

Research program on the environmental impact of the Brazilian diet

This project, to be developed by NUPENS of the School of Public Health at USP, through a Grant signed between FFM and Climate and Land Use Alliance, started in 2019.

The research will allow the integrated assessment (nutritional quality and environmental impacts) of the predominant Brazilian food

standards, which will be used to strengthen the recommendations already present in the Food Guide for the Brazilian Population, particularly those related to the reduction in the consumption of red meat, which were not so emphasized as to the reduction in consumption of ultra-processed foods.

Creation of Hospital Evaluation Instruments to Obtain the Elderly Friend Hospital Seal

ICESP was the first and only 100% SUS hospital to obtain the Elderly Friend Hospital Seal, whose objective is to identify actions that enable greater resolutiveness in assisting the elder and the prioritization of safety and comfort required for quality care to this population.

In 2018, an agreement was made between SEDS-SP and FFM, with aim to develop the

following instruments: **a)** Manual for Elderly Friend Hospitals; **b)** Guide for Evaluators of hospitals applying for the Elderly Friend Hospital Seal; **c)** Plan of the Training Course for Evaluators of hospitals applying for the Elderly Friend Hospital Seal; and **d)** Program of Elderly Friend Hospital indicators available on the SES-SP website.

Systematization of the Xenotransplant Method in Brazil

This project, started in 2018 and developed by the HCFMUSP Immunology Department, was enabled through a Technical-Scientific Cooperation Term signed between EMS S/A and FFM.

Due to the progressive increase of candidates on the organ waiting list, xenotransplantation (transplantation carried out between different

species) offers the best perspective to meet this need.

Due to the need for additional organs in Brazil and the new perspectives of clinical application of swine xenotransplant, this project aims to systematize such new methodology in Brazil.

These activities continued in 2019.

Health Insurance and Plans in Brazil: judicialization, regulation and interfaces between the Public and Private spheres

This research will be developed by the FMUSP Preventive Medicine Department, through an agreement made between the Ministry of Health and FFM in 2018.

Through this study it will be possible to map and systematize data and point out the tendencies

regarding prices of medical-hospital activities, private expenses and use of health services.

These activities got started in 2019, due to the delay in the release of the budget by the Ministry of Health.

Organization and structuring of an Educational Platform to implement a strategy for Education 3.0 / Blended Learning, Learning Objects Library and a Telemedicine and Telehealth Discipline (Virtual Man)

This project, started in 2018 and finished in 2019, developed by the FMUSP Immunology Department, was enabled through a Technical-Scientific Cooperation Term signed between EMS S/A and FFM.

Its main objective is to organize and structure an Educational Platform, in order to modernize educational methods in sync with the evolution of technological and social realities.

Evaluation of cost-effectiveness and budgetary impact of dengue vaccine introduction in Brazil's PNI

This project, developed by the Department of Infectious and Parasitic Diseases of FMUSP, was enabled by means of an Agreement Letter signed between OPAS and FFM, in the end of 2017, and was finished in 2019.

Through this study it will be possible to estimate the load of the disease and the costs of dengue in the country, by age range, and estimate the costs associated to the dengue vaccine in the routine immunization calendar of PNI and its epidemiological and budgetary impact.

Project of Research, Development and Innovation, for the Department of Assistance Pharmaceutics and Strategic Inputs of the Ministry of Health

The objective of this project, to be developed by HCFMUSP's Technological Innovation Nucleus, via an agreement signed between the Ministry of Health and FFM, in the end of 2017, is supporting the Ministry of Health (MS), in the implementation of a laboratory to promote and develop

projects in the area of automation and innovation, and their respective applications.

These activities got started in 2018, due to the delay in the release of the funds by the Ministry of Health.

Control Center for the Logistics of Thermolabile Drugs

This project, to be developed by HCFMUSP's Technological Innovation Nucleus, via an agreement signed between the Ministry of Health and FFM, in the end of 2017, is justified by the Ministry of Health's need to define processes and technologies capable of structuring a logistics control center for thermolabile medication that

may be operationalized and integrated by any supplier of the Ministry, whether presently or in the future.

These activities got started in 2019, due to the delay in the release of the budget by the Ministry of Health.

Structuring of the Surveillance and Monitoring System for Health Products

This project was initiated in 2017 by the HCFMUSP Technological Innovation Nucleus, via an Agreement Letter signed between PNUD, HCFMUSP and FFM.

The initiative has the general objective of elaborating standards, prototypes, simulations,

tests, innovations and propose regulations to support the processes of implementation, acquisition and interoperability of the SNCM, as well as publishing the project's results.

These activities continued in 2019.

1st National Survey on Drug Use and Associated Vulnerabilities within the Brazilian Prison Population and Adolescents and Youth in Liberty Restriction and Deprivation in the National Socio-Educational Assistance System

This project, to be developed by GREA, was enabled via an Agreement signed in the end of 2017 between FFM and Senad.

The general objective of this study is identifying the incidence and prevalence of the use of alcohol, tobacco and other drugs, and the use-related consequences, as well as the consumption

standards (quantity and frequency) and associated vulnerabilities of the Brazilian prison population and the teens and youth in a socio-educational assistance, with liberty restriction or deprivation.

These activities should get started in 2019, however, the project was canceled by Senad due to budget constraints.

Intestinal and Multivisceral Transplant Program

This program, to be developed by the FMUSP Liver Transplant and Surgery Discipline and funded by the Ministry of Health, via an agreement signed with FFM in 2011, is the result of the Ministry of Health (MS)'s National Transplant System (SNT) in

having reference institutions available for the implementation of this care modality in Brazil.

These activities started in mid-2016, given they were waiting for the approval of a request to reorganize items of the project budget, and were continued in 2019.

ARENA Project (Organ and Tissue Donation for Transplants)

The Arena Project, developed by OPO - Organ Seeking Organization of HCFMUSP, via an agreement made between the Ministry of Health and FFM in the end of 2013, continued in 2019.

The initiative aims only at raising awareness among the population as to the importance of organ donation, providing information that conveys them a feeling of safety to decide about

the act of donating and, eventually, reduces the high rates of family denial observed to date.

The project includes ten capturing and transplant centers under construction in the following states: Acre, Amazonas, Goiás, Maranhão, Mato Grosso do Sul, Pará, Paraíba, Piauí, Rio Grande do Norte and Rio de Janeiro.

Development and validation of a methodology to evaluate secondary and tertiary level SUS services that provide reference outpatient assistance for Tuberculosis

This project, developed by the FMUSP Preventive Medicine Department, via an agreement signed between the Ministry of Health and FFM, in the end of 2013, was finished in 2019.

Its aim was to develop and validate quality indicators of the organizational dimension of the

assistance of the tuberculosis control programs, whose indicators will compose an electronic questionnaire - the QualiTB -, will produce quality measures usable by the National Tuberculosis Control Program (PNCT).

Proposal of the Strategic Committee for the Development of New Transplant Centers

This proposal, funded through the agreement signed by the Ministry of Health and FFM, in the end of 2011, and developed by the HCFMUSP Liver Transplant Service continued in 2019.

The initiative is based on: a) evaluating a training method; and b) the qualification of hubs in multiple organ transplant capturing.

In the States of AM, MS, PA, PB, RN, AC, AL, GO, MA, MT, PI and SE, transplants are not performed or only kidney transplants, sporadically and with a living donor, occur. The project aims to qualify the centers in capturing multiple organ transplants in order to develop centers capable of initiating the practice of this surgical act.

Institutional Projects

INSTITUTIONAL PROJECTS

Institutional projects are mainly aimed at improving, expanding and maintaining the physical and technological infrastructure of the FM/HCFMUSP System.

Maintenance of the Research and Innovation Infrastructure of the FMUSP and HCFMUSP System

This project, to be coordinated by the LIMs Executive Board, was made possible through an Agreement signed between FFM, HCFMUSP and Finep, in 2019.

The objective is to guarantee, through preventive maintenance services and parts acquisition, the maintenance of two important

research infrastructures, which are the Multiuser Equipment Network Program (PREMIUM Network) and the FMUSP Central Vivarium, which serve the entire community of researchers from the FM/HCFMUSP System, Brazilian and foreign researchers from other institutions, from public and private services.

Infrastructure for Multidisciplinary Research in Medicine, Engineering and Physiotherapy - INFRALIMS 20182018

The Academic System of the HCFMUSP and FMUSP boast the PREMiUM Network – Multi-User Equipment Network Program of the HCFMUSP and FMUSP System (www.premium.fm.usp.br) (page 93).

In 2019, an agreement was signed between FINEP, HCFMUSP and FFM for the development of the following subprojects, which have a highly multidisciplinary character, intense interaction with Engineering, exploit the expertise of

researchers and the existing infrastructure, and will allow the introduction of new lines of research and the training of professionals prepared for innovation projects:

- 1) Implementation of a multidisciplinary laboratory of thoracoabdominal mechanics and postural balance; and
 - 2) Update and expansion of the infrastructure for the development of circulatory assistance devices.
-

Renovation of the ICHC Trauma Center

This project, to be coordinated by the ICHC General Surgery and Trauma Department, was made possible through a Transfer Agreement signed between FFM, Caixa Econômica Federal and the Ministry of Health, at the end of 2019.

With the execution of the reform, the diagnosis and treatment of critical patients will be carried out in the same physical location, with the

following phases: resuscitation, endovascular interventions and invasive surgical procedures.

It is expected that there will be a decrease in the mortality rate, which today is 30% in severe cases (ISS > 16), fundamentally representing a true paradigm shift in the care of trauma patients, as well as in the formation of the trauma team.

Acquisition of Equipment and Permanent Materials for the IMRea

This project was made possible, at the end of 2019, through an agreement signed between FFM and the Ministry of Health and aims to acquire

equipment and permanent materials for the outpatient and inpatient areas of the IMRea.

Replacement of the ICr's equipment due to obsolescence

This project was made possible, at the end of 2019, through an agreement signed between FFM and the Ministry of Health and aims to replace

equipment used by the ICr to perform digestive endoscopies, bronchoscopies, colonoscopies and endoscopic retrograde cholangiopancreatography.

Acquisition of Equipment for the HCFMUSP LIM 04

This project was made possible, at the end of 2019, through an agreement signed between the FFM and the Ministry of Health and aims to acquire equipment for the LIM 4, which will enable

research on therapeutic strategies for the treatment of encapsulation of the breast implant after radiotherapy.

Readjustment of the Microsurgery room of the HCFMUSP Orthopedics and Traumatology Institute

The Microsurgery Lab - CEMIM, located on the 8th floor of HCFMUSP's IOT, has been in operation for seven years and it is the main center of the country for orthopedic surgeons in the field of microsurgery and reimplants and also for the development of research in the area.

The reform, which aimed to meet the growing demand for qualification and training of students and doctors from all over Brazil, was made possible through a Donation Contract signed in 2018 between Fundação Itaú Social and FFM, and was terminated in 2019.

Acquisition of Permanent Equipment and Materials for IMRea

This project was enabled via an agreement signed, in the end of 2017 between FFM and the Ministry of Health, and which has the objective of acquiring and replacing permanent equipment and

materials for the outpatient and admissions area of IMRea.

These activities were started in the end of 2018, due to the delay in the release of the funds by the Ministry of Health, and continued in 2019.

Technological update and replacement of Monitors, Laparoscopy Video System, Hard Endoscopes of the Surgical Center and Server replacement

This project, enabled via an agreement signed in the end of 2017 between FFM and the Ministry of Health, has the aim of a technological upgrade in ICESP on their Monitors, Laparoscopy Video

System, Hard Endoscopes of the Surgical Center and replacement of servers due to obsolescence.

These acquisitions got started in 2019, due to the delay in the release of the funds by the Ministry of Health.

Technological update and replacement of Image Area equipment

This project, enabled via an agreement signed in the end of 2017 between FFM and the Ministry of Health, has the objective of replacing ICESP's equipment in the Imaging area.

These acquisitions got started in 2019, due to the delay in the release of the funds by the Ministry of Health.

Technological update and replacement of ambulatory equipment, Surgical Center, CME, Assistance, Physiotherapy, Day-Hospital, admission, Radiology, Rehabilitation, ICU and other areas

This project, enabled via an agreement signed in the end of 2017 between FFM and the Ministry of Health, has the aim of a technological upgrade in equipment for ambulatories, Surgical Centers, Materials and Sterilization Center (CME), Assistance, Physiotherapy, Day-hospital, Admission, Radiology Rehabilitation, ICU and other

areas, in addition to the replacement, due to obsolescence, of computers and barcode scanners, used in several areas of ICESP.

These acquisitions got started in 2019, due to the delay in the release of the funds by the Ministry of Health.

Technological update and replacement of ICESP's Diagnostic support and Therapy equipment

This project, enabled via an agreement signed in the end of 2017 between FFM and the Ministry of Health, has the objective of acquiring radiological diagnosis monitors and a flexible endoscope, used in imaging diagnosis.

These acquisitions got started in 2019, due to the delay in the release of the funds by the Ministry of Health.

Infra-LIMs 2015 - Expansion of the equipment park of the HCFMUSP PREMiUM Multiuser Network

The HCFMUSP Academic System and FMUSP boast the PREMiUM Network - Multi-User Equipment Network Program of the HCFMUSP and FMUSP System (page 93).

In the end of 2017, an agreement was signed between FINEP, HCFMUSP and FFM to expand and update that Network with the introduction of essential technologies to develop new lines of research in technological levels that at the frontier

of knowledge: 1) Creation of a Nucleus for 3D printing of nano, micro and macrostructures for application in regenerative 2) Creation of the Multiuser Nucleus for Cardiac Optical Coherence Tomography and the expansion of the Imaging Platform in the Autopsy Room; 3) Expansion of the Multiuser Nucleus for Bioinformatics and the Information Technology Nucleus.

These activities continued in 2019.

Maintenance, Operation and Consolidation of PREMiUM - the FMUSP-HC System Network Multiuser Equipment Network Program

With aim to consolidate PREMiUM - Multiuser Equipment Network Program of the HCFMUSP and FMUSP System (page 93), an agreement was signed between Finep, HCFMUSP and FFM in 2017 and continued in 2019.

The general purpose is to enable preventive and corrective maintenance of the high cost and advanced technology equipment installed in the Network; and the purchase of equipment to complement the existing nuclei and hire highly specialized labor.

Structuring of the laboratories network as centers for continuous professional training and technical support for the attention to patients with hereditary coagulopathies and plaque diseases

This project, approved in the end of 2016 via an Agreement signed between the Ministry of Health and FFM, to be developed by HCFMUSP's Hematology Service, has the objectives of: **a)** Improving the structures, in regard to the

equipment, labs qualified in laboratory diagnosis hemorrhagic hereditary diseases; **b)** Creating professional training centers; and **c)** Acquire equipment that may function as technical support.

These activities continued in 2019.

Renovation of the Technological Park and Furniture of the HCFMUSP Children's Institute

This project, enabled via an Agreement signed between the Ministry of Health and FFM, in the end of 2016, has the goal of replacing Anesthesia Devices, Thermal Washer Disinfectors and

furniture installed in the Children's Institute for more than 10 years, which no longer offer the minimum safety and quality conditions to be used.

These activities continued in 2019.

Renewal of the Technological Park - Replacement of Hospital Conservation Chambers and Computers of the HCFMUSP Children's Institute

This project, started in the end of 2016 by the ICr, via an agreement signed between the MInistry of Health and FFM, has the objective of replacing the current refrigeration chambers for suitable equipment to store medication, and replace the

old and obsolete computers for modern equipment, improving the assistance and safety of the patients, medical professionals and multiprofessional teams.

These activities were finished in 2019.

Replacement, due to obsolescence, of equipment for ICESP

This project, approved in the end of 2016, was enabled through an agreement made between FFM and the MInistry of Health and has the objective of updating the ICESP's echocardiograph, oximeters, computers and server, in addition to acquiring an otoscope and TV sets.

Its termination in 2019 or its continuity in 2020 depend on the approval, or not, by the MInistry of Health, of a request to extend the agreement's validity.

Renovation of the facilities of HCFMUSP's Hematology Service

Via a Donation Term, signed between HCFMUSP, FFM and Crefisa S/A Crédito, Financiamento e Investimentos, in the end of 2016, the project to Renovate the area of HCFMUSP's Hematology Service was enabled as well as the feasibility of studies retrospective to the

construction and update of the scientific Hematology Service database, via studies that involve the survey and analysis of clinical and biological data by specialized professionals.

The works were concluded in 2018, but the studies continued in 2019.

Acquisition of a Computerized Tomographer for Interventions for ICESP

This project, approved in the end of 2016, was enabled through an agreement made between FFM and the MInistry of Health and had the objective of updating the technology of the interventionist radiology tomography equipment

of ICESP, enabling to increase the number of interventionist procedures with greater imaging quality and effectiveness in the evaluations.

This agreement was finished in 2019.

Acquisition of Videogastroscope, Shower chairs and Air Conditioner Splits for ICESP

This project, approved in the end of 2016, was enabled through an agreement made between FFM and the MInistry of Health, and has the objective of replacing the flexible endoscope (Fibroendoscopy), and shower chairs and the

acquisition of air conditioner spits to install in the logistics area of the medical-hospital materials supplies.

These acquisitions continued in 2019.

Replacement, due to obsolescence, of the monitoring center and multiparametric monitors for ICESP

This project, approved in the end of 2016, was enabled through an agreement made between FFM and the MInistry of Health and has the objective of acquiring the monitoring central and

multiparametric monitors for ICESP, which currently are rented.

Its termination in 2019 was due to the non approval of an extension request of the agreement validity by the MInistry of Health.

Acquisition of hospital beds for ICESP patients with high risk of falling

This project, developed via an agreement signed in the end of 2015 between FFM and the Ministry of Health, had the objective of acquiring

proper beds for patients with high risk of falling for ICESP's clinical and surgical units,
This agreement was terminated in 2019.

Acquisition of a monitoring center, multiparametric bedside and transport monitors for ICESP

This project, developed via an agreement signed in the end of 2015 between FFM and the Ministry of Health, has the objective of acquiring for ICESP a monitoring center and multiparametric bedside monitors for the areas of the ICU, ambulatories,

post anesthesia recovery (RPA), and transport monitors for the surgical center, in replacement of the current equipment, which are rented.
These activities continued in 2019.

Technological suitability of the Radiotherapy service of the São Paulo State Cancer Institute

The objective of this project, started in the end of 2015, developed via an agreement signed between FFM and the Ministry of Health, was to supplement the quantitative aspect of the ICESP

Radiotherapy Service's planning system with the acquisition of two Radiotherapy Planning Systems
This agreement was terminated in 2019.

Project of Acquisition of Videolaparoscopy and Fibroendoscopy System for the São Paulo State Cancer Institute

The objective of this project, started in the end 2015, developed via an agreement signed between FFM and the Ministry of Health, is the acquisition of Video Laparoscopy / Rigid Endoscopy

System and Flexible Endoscope for oncological treatment.
These acquisitions continued in 2019.

Renovation of the ICHC Surgical Center

This project, developed jointly by FFM and HCFMUSP via an Agreement made in 2014 with SES-SP, aimed to carry out improvement works in 23 rooms of the ICHC Surgical Center, currently formed by 33 surgical rooms, divided into four blocks.

The full renovation totals 1,326 m², enabling an improvement in patient safety and in the work conditions of the technical staff.
Its termination in 2019 or its continuity in 2020 depend on the approval, or not, by SES-SP, of a request to extend the agreement's validity.

Preliminary Draft for the HCFMUSP Alcohol and Drugs Collaborating Center

This project, funded through an agreement signed between Senat, FFM, and HCFMUSP in the end of 2010, and terminated in 2019, proposes to equip the Collaborator Center for crack and other drugs, which aims to provide assistance, education, assistance and research related to the subject of

use, abuse and dependency of crack, alcohol, tobacco, and other drugs.
This center should have an own physical area, included in the "Cotoxó Hospital Complex" (page 41).

Multiuser Equipment Network Program (PREMiUM)

In order to stimulate the research and innovation activities of the FM/HCFMUSP System, the FMUSP Board and the LIMs Executive Board created the Multi-User Equipment Network Program (**PREMiUM**). This Program aims to create conditions so that all researchers in the FM/HCFMUSP System, and outside, have access to the latest technologies of contemporary biomedical research and, at the same time, optimize the application of financial and specialized human resources.

The implantation of this Network, therefore, aims to avoid duplication and underutilization of equipment, allowing researchers to have access to the most advanced technology installed in the Institution and necessary for the different types of Experimental and Clinical Research.

Organized as services, the laboratories involved in this Program are coordinated by researchers with recognized experience in their respective areas of expertise.

The cutting-edge equipment in the PREMiUM Network is operated by highly trained technicians to offer the best possible result.

The services provided by the multi-user centers are available on its own website with

forms, guidelines and rules of procedures available on the page itself. (www.premium.fm.usp.br).

The Program is structured in such a way that each set of equipment with the same purpose constitutes a multiuser nucleus. The Network today has 42 active nuclei. The equipment and services currently offered are distributed in the following groups:

Equipment:

1. Cytometry;
2. Experimental Models;
3. BioBank;
4. Structural and Functional Genetics;
5. Special Analyses;
6. Imaging; and
7. Microscopy and Microscopic Technique;

Services:

8. Scientific Documentation;
9. Publishing;
10. Cell Line Authentication; and
11. Biological Sample Storage Center.

The PREMiUM Network model has been presented at national and international research management events, and has received a positive evaluation both in Brazil and abroad.

Abbreviations used in this Report

AAAFMUSP	Alumni Association of the Faculdade de Medicina da USP
ANVISA	National Sanitary Vigilance Agency
AMA	Medical Ambulatory Assistance of the Municipal Health Secretariat of São Paulo
APAC	Authorization of Ambulatory Procedures
CARF	Commission on Accreditation of Rehabilitation Facilities
CCR	Rebouças Convention Center
CEAF	Specialized Component of Pharmaceutical Assistance
CEBAS	Charitable Social Work Entity Certificate
CEDEM	Center for the Development of Medical Education "Prof. Eduardo Marcondes" of FMUSP
CG	Management Center
CNES	National Registry of Health Establishments
CNPq	National Scientific and Technological Development Council
CONDEPHAAT	Defense Council for the Archaeological, Artistic and Touristic Heritage Municipal Council for the Preservation of the Historical, Cultural and Environmental Heritage
CONPRESP	of the City of São Paulo
CONFAP	National Council of the State Foundations for Research Support
CPC	Clinical Research Center
CREMESP	Regional Medical Council of the State of São Paulo
DEPAVE	Parks and Green Areas Department
STD	Sexually Transmitted Diseases
EARSF/FGV	Fundação Getulio Vargas's São Paulo School of Business Administration
EEP	Continuing Education School
FAPESP	Research Support Foundation of the State of São Paulo
FFM	Medical School Foundation
FMCSV	Maria Cecília Souto Vidigal Foundation
FMUSP	Medical School of the Universidade de São Paulo
GREA	Interdisciplinary Group for the Study of Alcohol and Drugs of the HCFMUSP IPq
HAC	HCFMUSP's Cotoxó Auxiliary Hospital
HAS	HCFMUSP's Suzano Auxiliary Hospital
HCFMUSP	The Clinics Hospital of the Universidade de São Paulo Medical School
Hemominas	Foundation of the Hematology and Hemotherapy Center of Minas Gerais
Hemope	Hemope Foundation (Pernambuco)
Hemorio	State Hematology Institute Arthur de Siqueira Cavalcanti (Rio de Janeiro)
ICB-USP	Biomedical Sciences Institute of the Universidade de São Paulo
ICESP	Cancer Institute "Octavio Frias de Oliveira" of the State of São Paulo
ICHC	Central Institute of HCFMUSP
ICr	HCFMUSP Children and Youth Institute
IMRea	HCFMUSP Physical Medicine and Rehabilitation Institute
IMT	Tropical Medicine Institute of São Paulo, Universidade de São Paulo
InCor	HCFMUSP Heart Institute
IOT	HCFMUSP Orthopedics and Traumatology Institute
IPq	HCFMUSP Psychiatry Institute
IRLM	Lucy Montoro Rehabilitation Institute
ITACI	Children's Cancer treatment Institute of the HCFMUSP Children's Institute
LIM	HCFMUSP Medical Investigation Lab
LIM 04	Microsurgery Lab – Plastic Surgery
LIM 09	Pneumology Lab
LIM 18	Carbohydrate and Radioimmunoassay Lab
LIM 23	Psychopathology and Psychiatric Therapy Lab
LIM 25	Cellular and Molecular Endocrinology Lab
LIM 40	Immuno-Hematology and Forensic Hematology Lab
LIM 46	Medical Parasitology Lab

LIM 56	Dermatology and Immunodeficiencies Investigation Lab
LIM 60	Clinical Immunology and Allergy Lab
LSHTM	London School of Hygiene & Tropical Medicine
MS	Ministry of Health
NIHR-UK	National Institute for Health Research-UK
NIH	National Institutes of Health
NIT-HCFMUSP	Nucleus of Technological Innovation of the HCFMUSP
NUPENS/USP	Nucleus of Epidemiological Research in Nutrition and Health of the Universidade de São Paulo
WHO	World Health Organization
ONA	National Accreditation Organization
OPAS	Pan American Health Organization
OPM	Orthoses, Protheses and Means of locomotion
PAMB	HCFMUSP Ambulatory Building
PNI	National Immunization Program
UNDP	United Nations Development Programme
PROAHSA	Advanced Studies Program in Hospital Administration and Health Systems
PRONAS/PCD	National Program of Health Care Support for the Disabled
PRONON	National Program of Support to Oncologic Attention
PSA	Prostatic Specific Antigen
PSF	Family Health Program
RRLM	Lucy Montoro Rehabilitation Network
SCOL	On Line Query System
SEHAB	Municipal Housing Secretariat
SEE-SP	State Education Secretariat of São Paulo
SEMPLA	Municipal Planning, Budget and Management Secretariat
Senad	Justice Department National Secretariat for Policies on Drugs
SES-SP	São Paulo State Health Secretariat
SI-PNI	Information System - National Immunization Program
SSO	Occupational Health Service
SUS	Public Health Service
SVMA	Municipal Green Areas and Environment Secretariat
SVOC	Death Verification Service of São Paulo
UBS	Basic Health Units of the São Paulo Municipal Health Secretariat
UEA	Amazonas State University
UNESCO	United Nations Educational, Scientific and Cultural Organization
USP	University of São Paulo

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The information in this report has been provided by all areas of FFM and the FM/HCFUSP System and by the Coordinators of the Projects herein described.

Fundação Faculdade de Medicina

Avenida Rebouças, 381, Cerqueira César

São Paulo-SP, 05401-000

(11) 3016-4948

www.ffm.br

ggpp@ffm.br

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