25 Years

1986-2011

FUNDAÇÃO
FACULDADE DE MEDICINA

2011 Report

25 years of history

The creation of the Medical School Foundation (FFM) was one initiative of USP´s (FMUSP) College of Medicine School, whose Principal is Dr. Silvano Raia. At the same time, FMUSP Board of Directors invited the Association of Former Students (AAAFMUSP), which has been around since 1930, to be the official proposer of FFM´s creation, proposal that was accepted on August 16th, 1985 by the President, Dr.Fernando Proença de Gouvêa and his colleagues at the Board.
Several meetings followed in order to create FFM Statutes involving AAAFMUSP, the Board and FMUS Congregation.

Some factors that are part of the FFM Statutes had been preceded by interesting steps, as it follows: 1. The first names considered for FFM (adopted on January 16th, 1985 and homologated on January 30th, 1985) were: Foundation for Progress of Medicine (FPM) or Foundation to Support to HC; 2. It was AAAFMUSP who proposed that: a) The Board of Trustees had a Students Representative, who should be senior and had an excellent school curriculum; b) Its president would be a true member of the Board of Trusteees (effected); c) FFM, besides support to the School and Hospital das Clínicas, also provided the same support to Oswaldo Cruz Academic Center (CAOC); d) The Board of Trustees President were the FMUSP´s Principal and his/her mandates were conterminous.

Historical evidences show perfect understanding between FMUSP and AAAFMUSP for concretion of FFM up to its first Statute, approved on September 12th, 1985.

The procedures followed up along with the Curator (DA) Foundations of Public Prosecution of the State and approval of FFM was not until Septembert 18th, 1986, which led us to effusively celebrate its 25th anniversary of a laudatory existence on September 18th, 2011.

Medicine School Foundation - Board of Directors

Prof. Dr. Flavio Fava de Moraes

General Director - FFM

Prof. Dr. Yassuhiko Okay

General Deputy Director - FFM

Presentation

FFM is a private and non-profitable organization. It was founded in 1986 by FMUSP former students to work on promoting learning, research and assistance in health and support to FMUSP activities, HCFMUSP and other institutions interested in improving and developing actions in health area.
The aim of this Annual Report is to show FFM, its infrastructure, programs and activities developed in 2011, which brought in direct or indirect benefits to the population and SUS´s users

On September 18th, 2011, FFM completed 25 years of recognized administrative competence and transparency dealing with resources from the FMUSP/HC System. Get to know a little about the beginning of this path by reading the 25-year-old reading task" (page 2).

Have a general view of the social scope that FFM achieved in 2011 through the analysis of "FFM´s Social Achievement in Numbers" (page 7), which shows the representativeness of all free procedures carried out with support of FFM that accounts for 97%.

To meet its statutory objectives, FFM supports development of several actions of comprehensive health care (page 9) always prioritizing support to SUS´s patients. Guaranteeing execution of special procedures, such as transplants, implants and other highly complex procedures (page 13) is another of its priorities.

Maintenance of performance as obtained by the FMUSP/HC System (page 15) and other Health Units (page 22) has been secured by FFM through human and financial resources.

From qualification as a Social Organization, it has been possible for FFM to ensure four Management Contracts (page 25) that had outstanding results when promoting health comprehensive development to benefit the population, for instance, the Award as the Best Public Hospital within Sao Paulo State, according to evaluation of SUS´s users, certified by ICESP.

Recognized and certified as a beneficiary entity, FFM started supporting development of several social assistance projects (page 33) inside and outside FMUSP/HC System facilities, always focused on the needy layer of population, but without causing negative effects to SUS´s support. An example of it is "Equilibrio Project" (Balance Project), whose performance has made 188 children/teenagers who had been living on the streets finally return home to their families. As recognition of the relevance of such initiative for the scientific community and population in general, the "Equilibrio Project" has been awarded with the "People to People" certification by the Einsenhower Foundation.

AIDS and STDs (page 47) are confronted by "Casa da Aids" (House of Aids) (page 21) and several other programs supported by FFM in cooperation with many other institutions.

People with Disabilites (page 57) are offered, besides specialized support of IMREA (page 18) from Lucy Montoro Network (page 30) and Rehabilitation Mobile Unit (page 37), several other initiatives supported by FFM.

Children and Young People (page 60) besides hospital support of ICr and ITACI (page 18), they have had other initiates such as implementation of a Pediatric Center for Hematopoietic Cells Transplantation (page 61).

Women Families (page 65) have also benefited from, for instance, the "Mammography Task Force" support (page 38), which had performed 962 mammographies from July to December 2011, and the "Bandeira Científica Project" (Scientific Flag Project) (page 36), which has carried out over 7 thousand medical procedures to needy families in Belterra City, Pará State, nearby the Tapajós river banks.

Support Research (page 68) is one of FFM´s prioritary functions through its structure or by stimulating scientific production, besides support for development of clinical studies (page 83).

Support to Health Policy Projects (page 85), including training of professionals from the public, development of assessments, analysis of results, among others, are also part of FFM´s scope.

Supporting the development of Institutional Projects (page 95), which aims to improve physical and technological infrastructure of the FMUSP/HC System facilities is also part of FFM´s actions for 2011.

A brief background of FFM (page 108), the consolidated results (page 109), the strategies adopted (page 110), main partners (page 111), main certifications (page 112), the organizational structure (page 116) and the summary of the Financial Statement of 2011 (page 121) are also presented at the end of this Report. .

The abbreviations used in this Report (page 122) and the current composition of FFM´s Administration (page 124) complete the FFM´s Report of 2011.

Attached you can find the 2011 Financial Statements, with their related Explanatory Notes and Report of Independent Auditors.

Summary

FFM Social Scope in Figures

A – Procedures / Free Hospitalization to SUS Patients		Quantity	Page
High Complexity	ICESP (Management Contract)	(*) 389.100	26
	High ER Complexity (University Health Insurance)	(**) 166.695	14
	Transplants and Implants (University Health Insurance)	(**) 2.154	13
Disabled People	Lucy Montoro Rehabilitation Institute (Management Contract)	106.762	31
	IMREA - Vila Mariana (University Health Insurance)	162.331	19
	IMREA - Lapa (Added to University Health Insurance)	249.879	19
	IMREA - Jardim Umarizal (Added to University Health Insurance)	131.681	20
Aids Virus Carriers	Casa da AIDS (AIDS House) (University Health Insurance)	23.969	21
Children	ICr – Assistance to Children´s Health (University Health Insurance)	521.468	18
	ITACI – Childhood Cancer Treatment (University Health Insurance)		
Families	West Region Project (Management Contract)	595.320	28
	ERs - Lapa and Butantã (Management Contract)	200.760	29
	ICHC + PAMB – Assistance in Medical Specialties (University Health Insurance)	7.583.294	16
	InRad – Radiology Assistance (University Health Insurance)	350.843	16
	IOT – Assistance in Orthopedics and Traumatology (University Health Insurance)	364.931	17
	IPq – Assistance in Psychiatry (University Health Insurance)	137.588	18
	H.A.S. – Assistance to long standing patients (University Health Insurance)	7.229	20
	H.A.C. – Assistance in intermediary care (University Health Insurance)	613	20
	H.L.S. – Assistance in low complexity (Added to University Health Insurance)	21.337	22
	C.S.E. Butantã (University Health Insurance)	7.386	23
Pharmaceutical Assistance	Quantity of unusual Medicines	(**) 33.612.431	14
A - Subtotal Procedures / Free Hospitalizations of SUS Patients (Including Management Contracts)		10.854.491	
B – Free Procedures – Special Projects		Quantity	Page
Social Assistance	Equilibrio Project – Social-family Reintegration (Other Health Insurances)	12.143	34
	Financial Support to Students Program - AFINAL	45	35
	Bandeira Científica Project 2011 (Other Health Insurances)	9.163	36
	Rehabilitation Mobile Unit (Added to University Health Insurance)	662	37/38
	"Mammography Task Force" (Added to University Health Insurance)	962	38
	Future Vision Program (Added to University Health Insurance)	6.947	39
	Cochlerar Implant (Added to University Health Insurance)	43	40
	Cleft Lip and Palat Carriers (Other Health Insurances)	106	41
		Mental Health – CASA Foundation (Other Health Insurances)	(*) 24.000
B - Subtotal Free Procedures – Special Projects		54.071	
A + B – Subtotal Procedures / Free Hospitalizations of SUS Patients + Free Procedures – Special Projects		10.908.562	
C – Subtotal Additional Health Patients – ER and Hospitalization		342.197	11
A + B + C – General Total of Procedures / Free Hospitalizations + Additional Health		11.250.759	
Representativeness of Free Procedures (SUS + Other Procedures) on General Total		97%	
Representativeness of Additional Health Procedures on the General Total		3%	

(*) Approximated average Quantity
(**) Only informative Quantity; therefore, it is not taken into account in the Subtotal of Free Procedures of SUS Patients.

Part 1:

Comprehensive Health Care Actions

Part 1: Main Comprehensive Health Care Actions

1.1. University Health Insurance

The University Health Insurance, which has been in force since 1988 between SES-SP and HCFMUSP with intervention of FFM enables the accomplishment of free consultation to SUS patients at several different units of HCFMUSP.

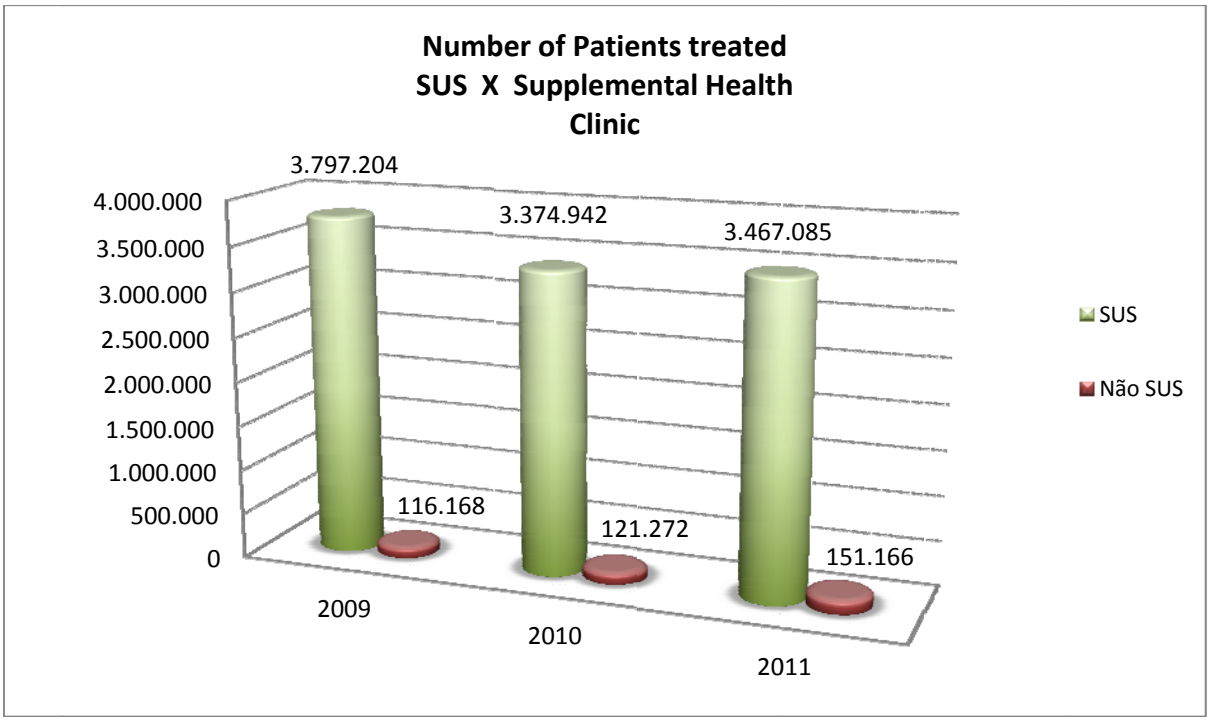
The access and support to SUS throughout HCFMUSP (except InCor) are ensured by FFM through human and financial resources of the System in the hospital, therefore enabling HCFMUSP to reach levels of support similar to SUS (ERs and hospitalizations) in an average percentage of 95%. The number of patients treated during the last three years is shown on the tables and graphs below:

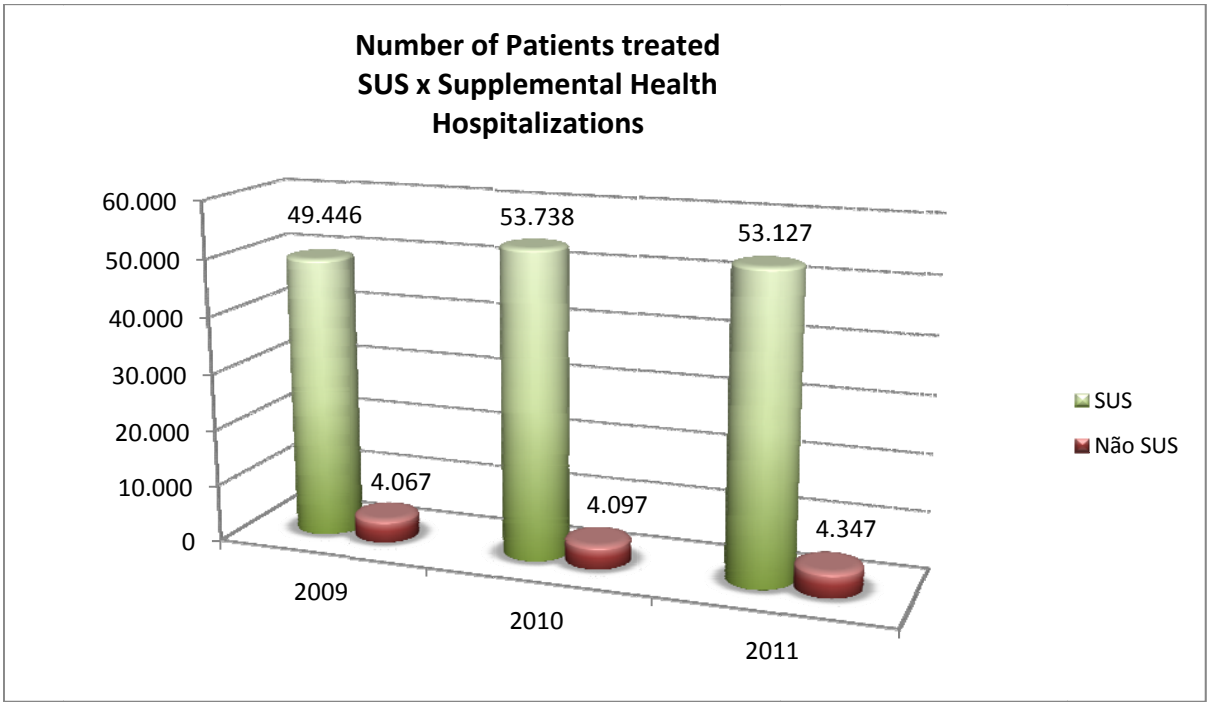
Number of Patients treated – SUS			
Type of Care	Period		
	2009	2010	2011
Clinic	3.797.204	3.374.942	3.467.085
Hospitalization	49.446	53.738	53.127
Total SUS	3.846.650	3.428.680	3.520.212
Obs.: Hospitalization Data refer to the first presentation and the patients data have suffered some changes			

Number of Patients treated – Supplemental Health			
Type of Care	Period		
	2009	2010	2011
Clinic	116.168	121.272	151.166
Hospitalization	4.067	4.097	4.347
Total Additional Health	120.235	125.369	155.513

Number of Patients treated - SUS + Supplemental Health SUS Representativeness				
Patient Profile	Type of Care	Period		
		2009	2010	2011
Total SUS + Supplemental Health	Clinic	3.913.372	3.496.214	3.618.251
	Hospitalization	53.513	57.835	57.474
General Total		3.966.885	3.554.049	3.675.725
Representativeness SUS	Clinic	97,0%	96,5%	95,8%
	Hospitalization	92,4%	93,0%	92,4%

The University Health Insurance in force since 1988 between SES-SP and HCFMUSP with intervention of FFM enables free consultations to SUS patients along with different units of HCFMUSP.


Number of Patients treated
SUS X Supplemental Health
Clinic
3.797.204
3.374.942
3.467.085
4.000.000
3.500.000
3.000.000
2.500.000
2.000.000
1.500.000
1.000.000
500.000
0
116.168
121.272
151.166
2009
2010
2011
SUS
Não SUS

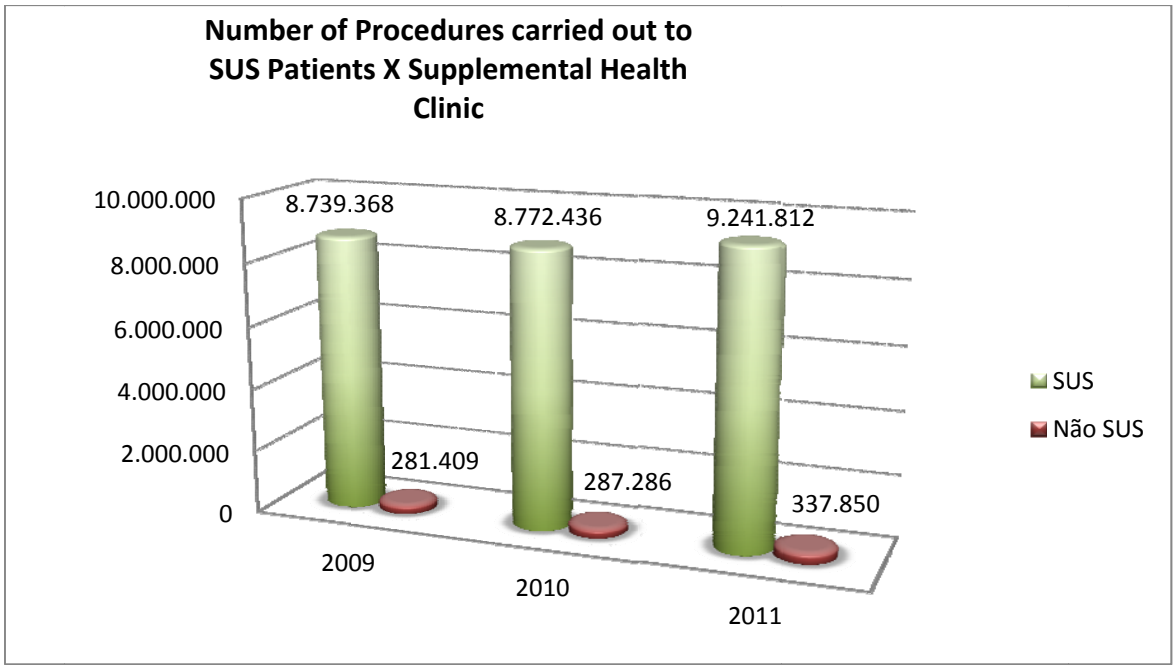

Number of Patients treated
SUS x Supplemental Health
Hospitalizations
60.000
50.000
40.000
30.000
20.000
10.000
0
49.446
53.738
53.127
4.067
4.097
4.347
2009
2010
2011
SUS
Não SUS

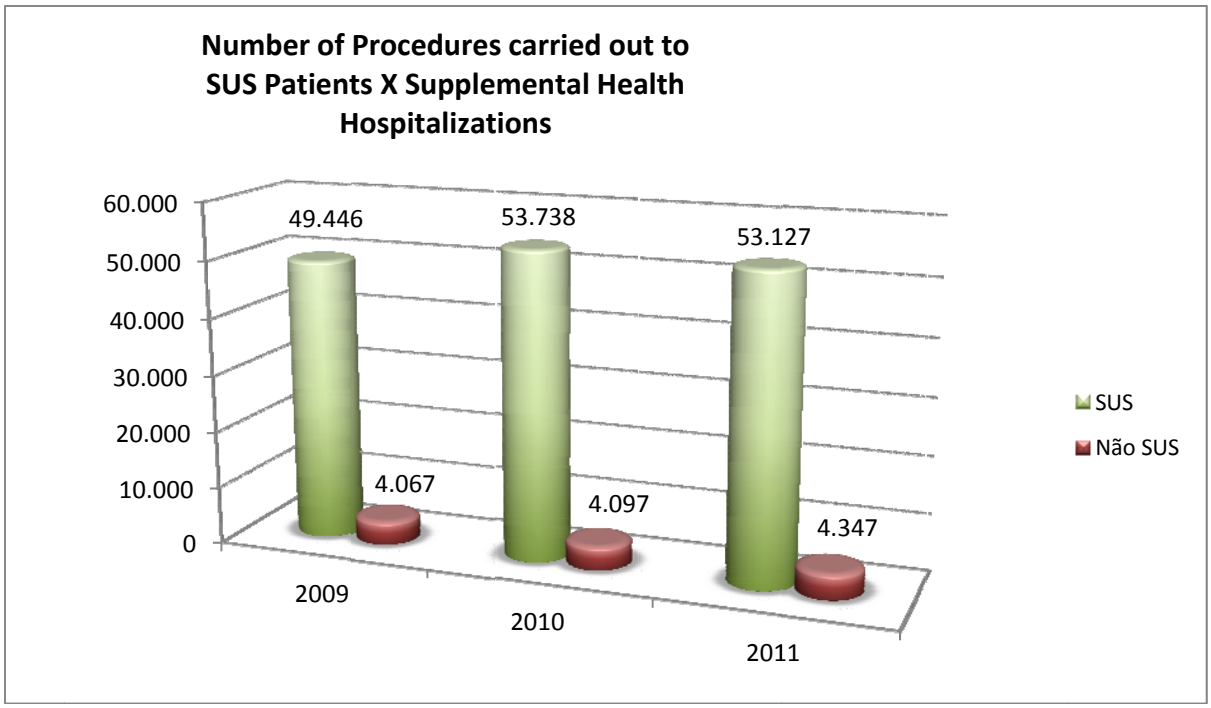
In operationalization of the University Health Insurance, FFM objective was to prioritize and continue forwarding all financial and human resources to maintenance of an average rate of 95% for free procedures to SUS patients in 2011, according to the tables and graphs below, which demonstrate the numbers of procedures carried out in 2009, 2010 and 2011:

Number of Procedures carried out SUS Patients			
Procedures	Period		
	2009	2010	2011
Clinic Procedures	8.739.368	8.772.436	9.241.812
Authorizations for Hospitalizations	49.446	53.738	53.127
Total	8.788.814	8.826.174	9.294.939
Obs.: Data on Authorizations for Hospitalizations refer to the first presentation.			

Number of Procedures carried out Supplemental Health Patients			
Procedures	Period		
	2009	2010	2011
Clinic Procedures	281.409	287.286	337.850
Authorizations for Hospitalizations	4.067	4.097	4.347
Total	285.476	291.383	342.197

Number of Procedures carried out - SUS + Supplemental Health Representativeness - SUS				
Patient Profile	Procedures	Period		
		2009	2010	2011
Total SUS + Supplemental Health	Clinic	9.020.777	9.059.722	9.579.662
	Hospitalization	53.513	57.835	57.474
General Total		9.074.290	9.117.557	9.637.136
Representativeness SUS	Clinic	96,9%	96,8%	96,5%
	Hospitalization	92,4%	92,9%	92,4%


Number of Procedures carried out to SUS Patients X Supplemental Health Clinic
10.000.000
8.000.000
6.000.000
4.000.000
2.000.000
0
8.739.368
8.772.436
9.241.812
281.409
287.286
337.850
2009
2010
2011
SUS
Não SUS


Number of Procedures carried out to SUS Patients X Supplemental Health Hospitalizations
60.000
50.000
40.000
30.000
20.000
10.000
0
49.446
53.738
53.127
4.067
4.097
4.347
2009
2010
2011
SUS
Não SUS

1.1.1. Special Procedures

One of the institution´s target and of great importance for the population, is the realization of special procedures, such as transplants and implants; high complexity procedures and supply of special medicines, considered as strategic by the Ministry of Health to support SUS.

1.1.1.a. Transplants and Implants

Accordig to objectives of the University Health Insurance agreed upon by HCFMUSP and SES-SP and with intervention of FFM, the realization of transplants and implants procedures becomes of great importance for the population and is considered by the Ministry of Health, as strategic for supporting SUS. The quantity of transplants and implants procedures made freely in the last three years through FFM has been the following:

Strategic Procedures - Transplants e Implants			
Description	Quantity		
	2009	2010	2011
Unilateral Nephroureterectomy for Transplantation	285	272	301
Renal Transplant Recipient (Living Donor)	267	232	277
Renal Transplant Recipient (Cadaver Donor)	402	451	591
CorneaTransplant	118	109	162
Cornea Transplant in Reoperations	43	16	21
Corneal Transplant in Combined Surgery	48	9	29
Cochlear Implant	274	279	271
Pancreas and Kidney Simultaneous Transplantation	49	17	19
Isolated Pancreas Transplantation	2	-	3
Allogeneic Bone Marrow Transplantation-Autogenic + Hematopoietic Stem Cell Transplantation Bone Marrow Akin	11	8	13
Partial hepatectomy for Transplant (Living Donor)	74	77	83
Transplant of Receptor Liver (Living Donor)	43	76	106
Transplant of Liver (cadaver donor)	443	349	266
Transplant of Sclrera	8	16	-
Autogenic transplantation of hematopoietic stem cells from peripheral blood	-	11	12
Total	2.067	1.922	2.154

1.1.1.b. Highly Complexity Procedures

Among the several care actions in Health Area, Highly ER Complexity Procedures can be highlighted, whose production during the last three years can be shown in the following table:

Clinical Statement Authorization for Highly Complexity Procedure - APAC			
Description	Quantity		
	2009	2010	2011
Diagnosis in Clinical Laboratory	7.146	8.292	14.964
Diagnosis by Radiology	23	14	35
Ultrassonography	-	10	12
Diagnostic Methods in Specialities	16.957	17.638	19.920
Consultations/ Treatments / Follow-ups	3.640	4.295	4.815
Cancer Treatments	104.417	86.619	82.812
Nephrology Treatment	14.493	15.030	15.972
Dental Treatments	1.041	950	(*) 43
Specialized Therapies	2.192	2.324	1.536
Vision Apparatus Surgery	5.839	5.281	5.652
Genitourinary Apparatus Surgery	121	243	285
Reconstructive Surgery	645	1.530	1.193
Nephrology Surgeries	67	26	42
Collection and Exams for Organs Donation	6.833	7.306	6.612
Follow up and Post Transplantation Intercurrent	7.027	9.584	9.665
Non-related to Surgeries OPM´s	2.562	2.751	2.797
Related to Surgeries OPM´s	461	359	340
Total	173.464	162.252	166.695
(*) The fall is result of a change in registration tool and/or classification of the procedure with SUS.			

1.1.1.c. Comprehensive Pharmaceutical Care

According to the agreement where objectives of the University Health Insurance are agreed upon between HCFMUSP and SES-SP and with intervention of FFM in comprehensive health care, the pharmaceutical assistance is a critical activity and with undoubtedly humanitarian focus. The guarantee to supply Exceptional (Unusual) Medicines of this program is critical not to risk patients lives and complement complex and highly costly hospital and medical procedures, such as transplants, for instance. In 2011 33,612,431 exceptional medicines were given away by FFM.

Besides, FFM, following its role supporter to the FMUSP/HC System, continued to focus its efforts on distributing medicines from the HCFMUSP Pharmaceutical Division, which annually, has presented a meaningful increase.

1.1.2. Institutes, Auxiliary Hospitals and Health Special Units of FMUSP/HC System

The access and support to SUS throughout the FMUSP/HC System (except InCor) are assured by FFM by the human and financial resources of the system in the own hospital

The University Health Insurance agreed upon since 1988 between SES-SP and HCFMUSP with intervention of FFM enables the realization of free consultations to SUS patients along with different HCFMUSP units and whose performance in 2011 is briefly detailed in the table below:

Performance of Institutes, Auxiliary Hospitals and Special units of HCFMUSP in 2011

Institute / Hospitals	Number of Hospitalizations	Number of Procedures	Number of Beds	Number of Beds in IUC
ICHC + PAMB	35.406	7.547.888	891	157
INRAD	-	350.843	08	-
ICr + ITACI	5.799	515.669	131	53
IOT	6.572	358.359	138	12
IPq	2.884	134.704	104	01
IMREA - Vila Mariana	-	162.331	-	-
Casa da Aids	126	23.843	09	-
HAS	1.484	5.745	120	-
HAC	443	170	48	-

1.1.2.a. ICHC

The Central Institute – ICHC consists of the Central Institute and the Clinic Buildings. It holds the most part of medical specialities of FMUSP/HC System: Surgical Clinic (General, Digestive, Liver, Head and Neck, Chest, Vascular), Medical Clinic (Hematology, Endocrinology, Pneumology, Nephrology, Allergy and Immunology, Rheumatology, Gastroenterology, Geriatrics), Clinic Neurology, Clinic and Surgery, Urology, Gynecology, Obstretics, Dermatology, Plastic Surgery and Burns, Ophtalmology, Otorhinologaringology, Endoscopy, Infectious and Parasitic Diseases, among others. In the Central Institute Building there is located the biggest Surgical Center and the Central Laboratory Division, first Laboratory of the Public Service in the country to have the ISO 9002 Certificate.

ICHC Central Building

Clinic Building Area

1.1.2.b. InRad

The Radiology Institute – INRAD is an excellence center and national and international benchmark in Radiology with technological pioneering in diagnosis, therapeutics by image and cancer treatment. It provides support in General Radiology, Ultra-Sonography, CT, MRI, Vascular and Interventionist Radiology, Neuroradiology, Diagnosis by Images for Breast Diseases, Radiotherapy and Nuclear Medicine. The modernization of its equipment by using cutting edge technology along with a highly skilled professional staff contributes for higher efficiency in diagnosis by image and therapies for several pathologies, consequently increasing the quality level of services provided to patients.

It was the first institution in Latin America to apply Nuclear Medicine techniques and the first in South America to have a high rate dose Brachytherapy Equipment. Also, it was the very first public hospital in the country to have a Production and Development Unit of Radiopharmacology Positrons emitters in Nuclear Medicine (Cicolotron Project) to be used in small tumors diagnosis exams and in research projects in molecular image field.

In 2011 350,843 clinical procedures were made by FFM.

Front of the Radiology Institute

Front of Nuclear Medicine Center

1.1.2.c. IOT

The Orthopedics and Traumatology Institute – IOT provides specialized support to patients that present orthopedics and traumatologic affections and it is a benchmark center in supporting orthopedics and traumatology with team members in several sub-specialties such as: knees, hips, feet, hands, physiatry, spine, brain damages, bone tumors and reimplantation of limbs and prosthesis.

The Orthopedics and Traumatology Institute has officially become the first Medical Center of Excellence for FIFA in South America and it has already started developing medical projects in partnerships and participating in all meetings involving the top Worldwide Soccer League.

The Laboratory of Movement Studies is specialized in functional movement assessing and is able to carry out all analyzes related to physiology. Also to be highlighted in this Institute, the Bank of Tissues for the Muscle-Skeleton System, the Prosthesis and Orthesis Division and the Emergency Unit, which is a reference for highly complexity orthopedic treatments.

In 2011 6,572 hospitalizations and 358,359 clinical procedures were carried out by FFM.

Front of the Orthopedics and Traumatology Institute

1.1.2.d. IPq

The Psychiatric Institute – IPq is an advanced support, research and learning center in psychiatry and functional neurological surgeries. It has been almost six decades since IPq firstly combined human sensitiveness and scientific progress and put together some of the best professionals in the country to offer patients customized and high level services. The IPq is a pioneer in creation of specialized programs and services covering all psychiastric disorders in different phases of life.

Its structure presents clinics, hospitalization units, laboratories, diagnosis service, hospital-day,
Rehabilitation centers, psychotherapy, dental care for psychiatrist patients besides a modern functional neurological surgery center.

Front of the Psychiastric Institute

It works through services, specialized groups and clinics with focus on different sub-specialties of psychiatry, among the following ones which are highlighted:

• SEPIA – Psychiatric Service for Childhood and Teens;
• GREA – Group of Studies on Alcohol and Drugs;
• GRUDA – Group of Affective Disorders;
• AMBAN – Anxiety Clinic;
• PROJESQ – Schizophrenia Project;
• PROTOC – Project on Obssessive-Compulsive Disorder;
• AMBULIM – Clinic for Bulimia, Anorexia and other eating disorders;
• PROTER – Senior Project;
• PRATO – Obesity Support Project;
• PROSEX – Sexuality Project;
• AMJO – Pathology Clinic;
• Psychotherapy Service;
• CRHD – Reference Center;
• Interconsultation Group
• Hospital-Day.

In 2011 2,884 hospitalizations and 134,704 clinical procedures were made by FFM.

1.1.2.e. ICr

Considered as a National Benchmark Center in Children´s Health by the Ministry of Health, the Children´s Institute – ICr is recognized by its quality, capacity of its professional team and incorporation of the most advanced treatment resources which gathers all pediatric sub-specialties of HCFMUSP. It provides support to children and teens ranging from 0 to 19 years old who present highly complexity pathologies. It offers a range of twenty-one sub-specialties.

The use of cutting edge technology by highly qualified professionals enables them to carry out highly complex diagnoses and therapies. Such procedures include transplantation of liver, kidney, bone marrow, chemiotherapy and dialisys for children, treatment of high risk to newly born babies, support by intensive care therapy, besides clinic support and hospitalizations for complex and chronic diseases during childhood and adolescence, always valuing humanization.

In 2011 through FFM, the joint production of Icr and ITACI made 5,799 hospitalizations and 515,669 clinical procedures.

Front of the Children´s Institute

1.1.2.f. IMREA

Made up of four Units - Vila Mariana, Clínicas, Lapa and Jardim Umarizal – it supports disabled people or potentially incapacitating diseases by developing their physical, psychological, social, professional and educational potentials. If offers rehabilitation and inclusion programs at Vila Mariana, Umarizal and Lapa Units. Clínicas Unit, which has been recently opened, will work as an attachment ward to Vila Mariana Unit. Support will be provided by a multiprofessional team specialized in rehabilitation and that relies on a complete infrastructure and the state-of-the-art technological resources for diagnoses and treatments.

IMREA – Clinicas Unit, open at the end of 2011

IMREA Performance Vila Mariana Unit - 2011	
Clinic / Consultations and Exams	Quant.
Screenings	1.381
New Consultations and Returns	13.179
Extra Consultations	258
Exams	5.071
Appointed Consultations	17.374
Consultations	15.017
Multi-professional Support	Quant.
Total of Treatments/Year	92.718
Total of Treatments in the pool/Year	5.020
Total of Treatments/Day	495
Number of Procedures	162.331
Procedures/General	339.588

IMREA - Vila Mariana Unit

IMREA Performance Lapa Unit - 2011	
Clinic / Consultations and Exams	Quant.
Screenings	927
New Consultations and Returns	5.559
Extra Consultations	845
Exams	48
Appointed Consultations	7.899
Consultations	7.331
Multiprofessional Treatment	Quant.
Total of Treatments/Year	121.753
Total of Treatments in the pool/year	10.295
Total of Treatments/Day	586
Procedures/General	249.879

IMREA – Lapa Unit

IMREA Performance Jardim Umarizal Unit - 2011	
Clinic / Consultations and Exams	Quant.
Screenings	903
New Consultations and Returns	7.314
Extra Consultations	269
Exams	64
Appointed Consultations	9.679
Consultations	8.486
Multiprofessional Treatment	Quant.
Total of Treatments/year	55.296
Total of Treatments in the pool/Year	0
Total ot Treatments /Day	268
Procedures/General	131.681

IMREA - Jardim Umarizal Unit

1.1.2.g. H. A. in Suzano

Located in Suzano City, the **Hospital Auxiliar de Suzano** (Suzano Auxiliary Hospital) – HAS works as support to several Institutions of the FMUSP/HC System and aims to provide medical-hospital assistance specialized in care to HCFMUSP long standing patients. Due to its peculiarities, it presents as differential, hospitality in treatments where all multiprofessional teams work integratedly.

Hospital Auxiliar de Suzano

In the hospital several humanization actions are developed along with patients, family members and employees aiming to improve quality of life and prevent breaking social and family bonds, due to long standing hospitalizations. In 2011, 1,484 **hospitalizations** and 5,745 **clinical procedures** were made by FFM.

1.1.2.h. H. A. of Cotoxó

Located in Pompéia Neighborhood, the **Hospital Auxiliar de Cotoxó** (Cotoxó Auxiliary Hospital) – HAC works as a support hospital, providing specialized medical-hospital assistance for intermediate care to patients who have been transfered from the Instituto do Coração (Heart Institute), Instituto da Criança (Children Institute) and Instituto Central (Central Institute), and who presents sub-acute clinical noncritical status. The Hospital works as Administration School in Health and is a learning and research field in hospital administration, training managers by its own Advanced Studies in Hospital Administration and Health Systems – PROAHSA.

Front of Hospital Auxiliar de Cotoxó

In 2011 443 **hospitalizations** and 170 **clinical procedures** were made by FFM.

1.1.2.i. Casa da Aids

The Extension Service to support HIV/Aids Patients - Casa da Aids (Aids House) has been working since 1994. It is a clinic and hospital-day, aimed to teach, research and provide care to HIV and AIDS adult patients. It treats approximately 3 thousand HIV/Aids adult patients and has relied on support from FFM since 2004.

In the area of training in 2011, 85% of tertiary professionals were involved in educational activities, among others:

A Casa da Aids in SP downtown area

- Theoretical-practical activities of Medical Residency in Infectious and Parasite Diseases Program;
- Development of classes and activities for the HIV/Aids Preventive League of FMUSP;
- Students orientation on Scientific Initiation - FMUSP;
- Psychology, Social Service and Dental Hospital Programs - HCFMUSP;
- Speeches on DST/Aids Prevention in other institutions: Mackenzie Institute, CUT, Zerbini Foundation, ONG Ação Família (Family Action) and SIPAT of HCFMUSP.

In the training area in 2011, the main activities were:

- Capacity in Quick Tests for HIV Diagnosis, Coordination for Diseases Control – Reference and Training Center for DST/Aids – São Paulo State Health Office;
- Participation of SEAP HIV/Aids employees attending the II Simposium of Hearings - ICESP/SES.

In the research field the following points are highlighted, amont others:

- Around 38% of professionals, including administration staff, participate in the research project;
- Scientific Journey with presentation of results on research projects concluded.

In care area, 100% of professionals have been involved in individual care and 66% in interdisciplinary care. Treatment is offered in areas of infectology, mental (psychiatric and psychological) health, women´s health, oftalmology, cardiology, oral care and nutrition. It has a hospital-day equipped with nine beds, besides pharmacy for dispensation of antiretroviral and complementary medicines.

In 2011 a high point was the implementation of HIV Quick Test at SEAP HIV/Aids, whose speed of execution certainly made the access easier and allowed more people to get tested more efficiently.

In the table below, care activities developed by Casa da Aids in 2011 can be briefly viewed.

Casa da Aids Performance in 2011	
Activity	Quant.
Patients under follow-up	2.989
Medical Consultations	14.570
Dental Consultations	920
Ward Procedures	931
Psychological Procedures	1.565
Social Service Procedures	1.348
HIV Diagnosis Quick Test	176
PPD Test – Tuberculin Test	669
Patients vaccine ated against influenza virus and AH1N1	1.428
Daily stays of Hospital-Day	259
Prescriptions of antiretroviral medicines	29.901
Quantity of Clinical Procedures	23.843
Quantity of Hospitalizations	126

1.1.3. Other Health Units

Besides FFM actions developed along with the FMUSP/HC System, there are those which are aimed to improve other Specialized Hospital Units and Health Centers, equally aimed to provide free treatment to SUS patients.

1.1.3.a. Sapopemba Local Hospital

The Hospital Local de Sapopemba (Sapopemba Local Hospital) "Dr. David Capistrano Filho" – HLS, located in Jardim Planalto, Southeast of Sao Paulo has almost 1,900 m^2 of built area, with two floors, equipped with thirty active beds, seven doctors´offices for medical specializations and multiprofessionals, one surgery room, a physiotherapy room and SADT Services (X-Ray and Ultrasound).

Front of the Hospital Local de Sapopemba

HLS provides low complexity assistance to SUS users and supports Education and Research Program, besides contributing to Health Education to the population. It supports Vila Prudente, Parque São Lucas and Sapopemba districts, covering around 531,113 inhabitants.

The specialties for clinical treatment are: Dermathology, Cardiology, Rheumatology, Pain Therapy, Allergology, Orthopedics, Endocrinology, Neurology – Adults, Physiotherapy, Psychology and Nutrition.

The hospital started its activities on November 21st, 2005 and was officially opened on December 18th, 2005. Currently, the HLS relies on a total of 158 employees; 41 in administration area, 89 technicians (physicians, nurses, auxiliary nurses, technicians in Radioloy, Psychology, Nutritionist, Social Assistance and Physiotherapy) and 28 outsourced employees (transport, security, ordinance, telephone operators and cleaning services).

In the table below, care activities developed by HLS through FFM in 2011 are briefly viewed:

Sapopemba Local Hospital Performance in 2011	
Activity	Quant.
Consultations for Emergency Care	1.210
Hospitalizations	652
Clinical Treatments	14.331
Clinical Surgeries	713
External SADT – X Ray and USG	4.431
Total of Procedures	21.337

1.1.3.b. Health Center – Butantã School

The Health Center - Samuel Barnsley Pessoa School (CSEB) – CSE Butantã is an instructor/care unit of Medicine School – USP under responsibility of Preventive Medicine, Pediatrics, Medical Clinic and FOFITO (Speech, Physiotherapy and Occupational Therapy) for Butantã district population.

Since 1977, CSEB has contributed to the development of primary practices to Health in Brazil, specially through its training activities and research in service. The Center develops joint activities with West Region Project.

Health Center - Samuel Barnsley Pessoa School

In 2011 CSEB made 7,386 clinical procedures by FFM.

1.1.3.c. Emílio Ribas Institute

The Emilio Ribas Infectology Institute was one of the first Public Health Institutions in São Paulo; it was opened on January 08th, 1.880 - still in the Empire times through a collective contribution of Paulistas-Citizens population, who donated part of the money for its constrution, aiming to isolate and treat patients who have infectious diseases.

The Hospital, which initially provided treatment only against smallpox, was enlarged in 1894 so that it could fight the epidemics that took place in that time (yellow fever, typhus, pest and diphtheria); it became Hospital of Isolation in Sao Paulo (Capital), considered as one of the best in the world by the beginning of the 20th Century.

New Clinic of the Emílio Ribas Institute

In 1932, the Hospital had its name changed to Emílio Ribas Isolation Hospital, to pay tribute to the ex-director of the health service and patron of Public Health Service in Sao Paulo. The hospitalization building equipped with nine floors was opened in 1961. From 1986 to 1992, the Hospital underwent new reforms. A five-floor building was built, which is attached to the existing one where today there is the Hospital-Day, Pharmacy, Laboratory, Surgery Center and Sterilizing Material Center. With the Institution going through a reform and the need to increase number of treatments, Emílio Ribas II Hospital was opened, where currently there is the Reference Center and Trainings in DST/Aids – CRT-DST/Aids.

From the middle of 2010 to 2011, the following projects described below were made viable through Additive Terms to the Universitary Health Insurance agreed upon between HCFMUSP and SES-SP with intervention of FFM:

a) Recovery, Updating and Development Project;
b) Boarding Institutional Program – Hospital Training in Infectology at Emílio Ribas Hospital;
c) Laboratory Services by the Central Laboratory Division of ICHC-HCFMUSP to Emílio Ribas; and
d) Maintenance and Expansion of the headcount of Emílio Ribas Hospital.

1.1.3.d. Pam Várzea do Carmo

Through an Additive Term to the University Health Insurance agreed upon between HCFMUSP and SES-SP with intervention of FFM, the Gastroenterology Service – Central Institute Clinic of HCFMUSP has provided two types of specialized clinical treatments since 2010 in Pam Várzea do Carmo: Hepathology and Endoscopy and Colonoscopy.

The aim of the clinical traininig specialized in Hepatology is elective clinical medical consultations for patients with sheer and chronic affections in the liver. The forecast is to offer 576 medical consultations per month, a number that can be changed, according to patients needs.

Front of Pam Várzea do Carmo

The main aim of the clinical treatment specialized in Endoscopy and Colonoscopy is to provide highly digestive endoscopy exams and colonoscopy for Pam Várzea do Carmo patients. The forecast is to make 600 exams per month, number that can be easily changed according to patients needs.

1.1.3.e. Osasco Regional Hospital

In 1988 Castelo Branco-CEMEL Hospital underwent state intervention and became a public hospital financed and administrated by the São Paulo State Government through SSES-SP. In 1992 it became "Dr. Vivaldo Martins Simões" Hospital.

The hospital relies on over 1,600 employees, among health professionals and administration staff; it has capacity for 212 beds, considering 177 operational beds, supporting SUS patients. Integrated in the hierarchy and regionalization treatment program, it is a secondary reference in hospital treatments in Osasco, Jandira, Carapicuiba, Itapevi, Barueri, Santana de Parnaíba, Pirapora do Bom Jesus, Cotia, Embu, Embu-Guaçu, Itapecerica da Serra, São Lourenço da Serra, Juquitiba, Vargem Grande Paulista and Taboão da Serra cities.

Osasco Regional Hospital

From 2010 on, through Additive Terms added to the University Health Insurance agreed upon between HCFMUSP and SES-SP with intervention of FFM, the implementation and operational maintenance of a Hemodialysis Unit through the Nephrology of HCFMUSP took place, including: Hemodyalisis and PD, Secondary Level Clinic for chronic kidney disease, Nucleus of nephrology and dialysis for “acute renal” patients and Vascular Access Unit.

Hemodyalisis is the most commonly used therapy for treatment, control and vital maintenance to patients who have chronic renal insuficiency, when undergoing therminal phase. Hemodyalysis washes off the uremic solutes, abnormally accumulated, excess of water and restablishes the electrolitic balance and acid-base of the body. The first hemodyalisys sessions were made in Brazil in the beginning of 1949 on patients who presented acute renal insufficiency. Only in the beginning of 1960`s patients with chronic renal insufficiency could benefit from this therapy with the development of a safe access, efficient equipment and ethical changes that allowed to extend life of patients who had terminal uraemia.

1.2. Management Contracts

Promoting the development of comprehensive assistance to health, which brings benefits to the population, has been expanded and ractified from qualification of FFM as a Social Organization. Between 2008 and 2010 FFM managed to be part of four Management Contracts, whose activities were added to its range of operations sustainably, solidly and based on extension, improvement and training of its staff.

1.2.1. ICESP Statewide Management Contract

In 2008 FFM signed a Management Contract along with SES-SP for management of the activities for "Octavio Frias de Oliveira" Institute of Cancer – Sao Paulo State – ICESP, a tertiary hospital highly specialized in cancer treatment, which treats patients from all over the State for complex cases. The ICESP was designed to be the biggest institution in Latin America for comprehensive treatment of patients who have cancer pathologies. It was opened in May 2008 and the ICESP works strategically aligned with HCFMUSP in Education, Research and Care to SUS patients areas.

The services available at ICESP are spread on a 28-floor building in approximately 84.000 square meters of built area. The technological resources make up a complete structure for treatment and monitoring of cancer.

The Institute relies on the biggest and most advanced radiotherapy and image complex in Latin America, dedicated to cancer treatment.

The innovation on care provided, which allows patients to have all phases of their treatment integrated at the same place, as well as the concept of humanization disseminated throughout all institution are remarkable features of ICESP. The humanization policy covers humanized care and management in all levels of the instituition: a strategy to promote service quality involving multiprofessonal teams aimed to promote comprehensivel treatment to patients.

Front of ICESP Building

Since its beginning, ICESP has had absolute priority on quality treatment and patient safety, taking into account the cancer profile and recognizing its social, physical and emotional difficulties. ICEPS Quality Management has legitimacy on SUS Health Basic Principles (universality, integrality and equity) when treating its patients.

Therefore, in May 2011, ICESP was awarded with the Award of The Best Hospital in Sao Paulo State, according to assessmet made by SUS Users. The survey aims to monitor quality of treatment and users´ satisfaction, besides recognizing good serviced providers, identifying possible irregularities and extending the capacity of an efficient management in public health. During the survey the following items were taken into account for the assessment: satisfaction level with treatment received by patients, level of services and professionals that provided care, quality of accomodations and waiting time before hospitalization.

In 2011 the ICESP was also ranked in 4th position in the category: "services that result in medical procedures"; it was awarded with the Environment´s Friend Award with the "Reduce to Guarantee" Project (rational use of water); and also was granted with the ONA2 Acreditation Stamp, asssuring maturity in management and continuous improvement in result measurement processes. The level 2 of ONA Manual refers to the item – Organization (process) where care in the organization is evaluated, by checking documentation training to employees, routines, use of indicators for decision making in managerial level and auditing.

Besides care, the survey and education are strategic to ICEPS, which has an essential role in Society, that is research, standardize and disseminate the best practices in diagnoses and treatment of Cancer, as well as contribute to professional trainings of excellence in Oncology area.

Currently ICESP covers 68% of its planned capacity already installed and operating. Since the beginning of its activities in May 2008, over 1 million medical procedures have been made, among them: consultations, hospitalizations, chemiotherapies, diagnosis procedures, exams, "hospital-day" and prompt treatments.

In order to offer clinical consultations, 63 doctors offices are available, which were built and prepared for clinical specialities and surgeries; they are distributed in 04 (four) floors, resulting in more than 157 thousand medical consultations in 2011.

For clinical chemiotherapy treatment, the structure relies on 77 armchairs; it was responsible for 50,500 sessions in 2011. The month result already exceeds 4,500 sessions, since August last year.

Currently there are 290 beds in hospitalization units for patients who present complications or are in clinical, hemathologic, iodotherapeutic, palliative or cancer treatment, or in surgical monitoring. For intense therapy support, there are 48 ICU active beds. In 2011 there had been more than 11 thousand entries to hospitalization units.

In 2011, there was an increase of 17% of hospitalization beds, which corresponded to 21% of growth in hospitalizations.

The Surgical Center relies on 10 active rooms and approximately 15,500 surgeries performed up to December 2011, considering that more than 6,600 only in 2011. Even with the complexity of procedures, the monthly production has already exceeded 500 surgeries per month, since July 2010.

When considering the humanized treatment principle, ICESP relies on a multiprofessional team (psychologists, phonoaudiologists, nutritionists, social assistants, among others) to support patients and family members, aiming to welcome them when they feel weakened due to health issues; as a result, in 2011 there was a monthly average of 6 thousand multiprofessional consultations (77 thousand in 2011) and more than 1,700 non-medical therapies (20,800 in 2011).

The beginning of radiotherapy activities took place in July 2010, reaching a monthly production of over 5 thousand sessions made in December 2011 (53 thousand in 2011).

The average number of hospital dismissals in 2011 was 13,200.

Therefore, the average number of procedures made by ICESP in 2011 can be summarized in the table below:

ICESP Performance in 2011	
Procedures	Average Number
Medical Consultations	157,000
Chemiotherapy Sessions	50,500
Radiotherapy Sessions	53,000
Hospitalizations	11,000
Surgeries	6,600
Multiprofessional Consultations	77,000
Non-medical Therapies	20,800
Hospital Dismissals	13,200
Total	389,100

1.2.2. Municipal Management Contract for West Region Project- PRO

Starting in 2008, there is a partnership for reorganization of the Health Care Network through an agreement signed by SMS-SP and FFM along with FMUSP within a defined populational area, which covers families enrolled in the Health to Family Program, Micro-region: Butantã / Jaguaré. This re-organization of Health Care is hierarquically integrated with emphasis in strengthening primary care and is made by a instructing-care plataform of FMUSP and serves as interface to provide education, research and technological development.

Made up of six Administrative Districts (Butantã, Morumbi, Raposo Tavares, Rio Pequeno, Vila Sônia and Jaguaré), this Micro-region sits on the west side of the county and has an estimated total population of 420 thousand inhabitants. The aim of the partnership is the development of an educational, research and care plataform, therefore contributing effectively to development of SUS and establishing alignments between primary, secondary and tertiary levels, according to Public Health Policies.

On this side, West Region Project (PRO) aims to transfer assistential and managerial technology besides expertise that maximize its activities by offering SUS users treatments based on quality, efficiency, respect and human touch.

Aiming at reorganizing and taking public health actions and services into the Micro-region Butantã / Jaguaré, its activities were concluded in progressive and incorporational steps for health equipment following the cronological steps below:

Step 1: Management of three Health Basic Units (UBSs) and two Clinical Care Units (AMAs): UBS Jardim Boa Vista, UBS Jardim São Jorge, UBS Vila Dalva, AMA Jardim São Jorge and AMA Vila Nova Jaguaré.

Step 2: In the second semester of 2009, two other UBSs had been integrated to the management contract: UBS Jardim D'Abril and UBS Paulo VI.

Aisle of the 1st floor - UBS Vila Dalva before the reform

Aisle of the ground floor - UBS Vila Dalva after the reform

Step 3: in 2010 new actions were implemented, what helped to intensify the focus on organization by primary care; they also incorporated the other levels of care to the sub-system of health in West Region. In this period, two other Nucleus for Family Health Support (NASFs) were incorporated: UBS/AMA Vila Sônia, UBS Vila Nova Jaguaré, Municipal Emergency Rooms - Dr. Caetano Virgílio Neto (PSM Butantã) and Prof. João Catarin Mezomo (PSM Lapa).

2011 started off with the incorporation of two new units to the West Region Project: AMA Paulo VI and AMA Vila Sônia, UBS Vila Nova Jaguaré and UBS Vila Sônia, besides the Specialties Clinic (AE) Jardim Peri-Peri.

Care execution was made by introduction of Produciton and Quality Indicators and their evidences to the Technical Nucleus for Hiring Health Services - SMS-SP all over 2011. The scopes for 2011 are consolidated in the health locations listed below:

Health Units which benefited from the West Region Project		
Name	Location	Number of Inhabitants and Other Information
AMA Vila Nova Jaguaré	Jaguaré Neighborhood	49.863 inhabitants; 57,1% SUS users (SMS/CEINFO/tabnet, 2010). Presents 33.4% children and young people and 35.1% seniors. It is a reference for the following neighborhoods: Centro Industrial Jaguaré, Conjunto Butantã, Parque Continental, Vila Graziela, Vila Jaguaré, Vila Lageado and Jaguaré where the Nova Jaguaré Slum is located, at the Morro do Sabão.
AMA Jardim São Jorge	Jardim São Jorge Neighborhood, Administrative District of Raposo Tavares	24.840 inhabitants (IBGE 2000); approximately 14,059 (56,6%) SUS-Dependent inhab.(SMS). Territory of 3.66 Km^2 and population density of 6,787 inhab./Km^2 (IBGE 2000).
AMA Paulo VI	Jardim João XXIII Neighborhood, Administrative District of Raposo Tavares	25.159 inhabitants (IBGE 2000); approximately 14.240 (56,6%) SUS-Dependent inhab. (SMS). Territory of 3.54 Km^2 and population density of 7.107 inhab./Km^2 (IBGE 2000).
AMA Vila Sonia	Vila Sonia Neighborhood, Administrative District of Vila Sonia	89.927 inhabitants (IBGE 2000); approximately 39.927,59 (44,4%) SUS-Dependent inhab. (SMS).
UBS Jardim Boa Vista	Jd. Boa Vista Neighborhood, Administrative District of Raposo Tavares	18.432 inhabitants (IBGE2000); approximately 15.962 (86,6%) SUS-Exclusive inhab. (SMS). Territory of 2,.9 Km^2 and population density of 6,444 inhab./Km^2 (IBGE2000).
UBS Jardim D'Abril	Jd. D'Abril Neighborhood, Administrative District of Rio Pequeno	13.367 inhabitants (IBGE 2000); approximately 6,697 (50,%) SUS-Dependent inhab. Territory of 1,14 km^2 and population density of 11,725 inhab/Km^2 (IBGE2000).
UBS Jardim São Jorge	Jardim São Jorge Neighborhood, Administrative District of Raposo Tavares	24.840 inhabitants (IBGE 2000); approximately 14.059 (56,6%) SUS–Dependent inhab. (SMS). Territory of 3.66 Km^2 and population density of 6,787 hab./Km^2 (IBGE 2000) .
UBS Vila Dalva	Vila Dalva Neighborhood, Administrative District of Rio Pequeno	16.300 inhabitants (IBGE 2000); approximately 8,166 (50,1%) SUS-Dependent inhab. (SMS). Territory of 2.24 Km^2 and population density of 7,277 inhab./Km^2 (IBGE 2000).
UBS Paulo VI	Jd. João XXIII Neighborhood, Administrative District of Raposo Tavares	25.159 inhabitants (IBGE 2000); approximately 14,240 (56,60%) SUS-Dependent inhab. (SMS). Territory of 3.54 Km^2 and population density of 7,107 inhab./Km^2 (IBGE2000).
UBS Vila Nova Jaguaré	Vila Nova Jaguaré Neighbood, Administrative District of Jaguaré	41.628 inhabitants (IBGE 2000); approximately 23,770 (57,1%) SUS-Dependent inhab. (SMS).
UBS Vila Sonia	Vila Sônia Neighborhood, Administrative District of Vila Sônia	56.917 inhabitants (IBGE 2010); approximately 23,154 (44,4%) SUS-Dependent inhab. (SMS).

Production data of these units in 2011:

West Region Project Performance in 2011	
Health Units	Total of Procedures
AMA Vila Nova Jaguaré	38.290
AMA Jardim São Jorge	43.148
AMA Paulo VI	35.451
AMA Vila Sonia	47.307
PSF Jd. Boa Vista	85.497
PSF Jd. D'Abril	64.430
PSF Jd. São Jorge	84.376
PSF Vila Dalva	76.050
UBS Paulo VI	86.087
UBS Vila Nova Jaguaré	33.307
UBS Vila Sônia	1.377
Total	595.320

1.2.3. Municipal Management Contract for Emergency Rooms

In July 2010 the Management Contract including SMS-SP was signed for management of actions and health services for **Municipal ER Lapa** (Prof. João Catarin Mezomo) and **Municipal ER Butantã** (Prof. Dr. Caetano Virgilio Neto).

The Municipal Emergency Rooms are part of the network of SMS-SP Services Network, whose role is to provide not scheduled medical and dental treatment and treat emergency situations and medical emergencies involving patients who are forwarded from mobile pre-hospital services or from health units of Basic Care. Inclusion of these two new emergency rooms increases the coverage of treatments, as the PS in Butantã is located in a region nerby one UBS that is included in the contract; however Lapa Unit is located in a totally new region.

In these Municipal Emergency Rooms patients in severe conditions are treated, and will stay under observatrion for up to 24 hours and later on dismissed or forwarded to other hospitals whenever necessary. The PS of Butantã offers treatment in Medical Clinic, Pediatrics , General Surgery, Orthopedics and Traumatology and Dental treatment. The Management contract covers an average of 4 thousand monthly treatments, providing the Health Units of Borough of Butantã as reference. The Emergency Room of Lapa is located in Vila Leopoldina and offers treatment in all areas of PS Butantã and also in Psychiatry. The reference is for health units located in the regions.

Production data in 2011:

PSM Lapa Performance in 2011	
Specialty areas	Total
Surgery	11.784
Medical Clinic	65.538
Orthopedics	20.107
Pediatrics	15.896
Psychiatry	5.402
Dental Treatment	4.143
Total	122.870

Municipal Emergency Room - Lapa

PSM Butantã Performance in 2011	
Speciality Area	Total
Surgery	10.327
Medical Clinic	39.694
Orthopedics	16.847
Pediatrics	8.117
Dental Treatment	2.905
Total	77.890

Municipal Emergency Room - Butantã

1.2.4. Lucy Montoro State Management Contract

In 2010 FFM signed a Management Contract with SES-SP for management of health activities and services in Lucy Montoro Rehabilitation Institute (IRLM). The main aim of Lucy Montoro Rehabilitation Complex is to implement Care and Rehabilitation Network to meet the needs of extension and decentralization of care and supply of orthesis, prosthesis and auxiliary ways for locomotion, besides promoting technological development in the area and guarantee qualification of human resources in São Paulo.

Opened in September 2009, and still in implementation process, the IRLM Unit in Santo Amaro neighborhood was designed to be a center of excellence in treatment, education and research on rehabilitation. The ten-floor building has 13,5 thousand square meters and is totally adapted to provide services; it offers clinical treatment and hospitalization in an environment that never reminds you of a "hospital".

The unit treats people of all ages; however, children have an exclusive floor as they need a differentiated approach. The environment was designed so that children could connect therapies to fun; it is a totally decorated environment and the furniture is adapted for them.

This is the first unit in São Paulo to offer hospitalization to patients in severe conditions. In confortable and functional rooms patients receive care from a team especialized in rehabilitation, twice a day and can immediately start up their specific treatment. The new unit is equipped with 80 individual apartments, 20 doctors offices and a one-thousand-square-meter ward for diagnoses.

The modern facilities of the new IRLM Unit.

In 2011 IRLM met the needs for a hospital specialized in rehabilitation of people with physical disabilities, with their own human and technical resources, exclusively by SUS, offering health services which fit the specialties offered, according to their degree of complexity and its operational capacity fit for specific modalities and to be determined in the initial medical assessment at the hospital and clinical unit, besides human resources development in the rehabilitation area.

The initial medical assessment determines to the team which patient the team will work with, including teams of: a) SCI – lesions in the Spine with different ethiologies (traumatic, mielomeningocele, tumoral, etc.); b) Hemiplegia – Brain Lesions of different ethiologies (AVE, TCE, Tumors, etc.); c) Amputees – partial or total absense of limbs (Vascular, Traumatic, Malformation, Congenital, etc.); d) Children – Retardation of Neuropsychomotor Development (Brain Paralysis, Obstetrician Paralysis, etc.).

After initial medical assessment, the physician prepares the therapeutic plan in order to meet the OPM needs and support from the multidisciplinary team, besides building up a welcoming group, where the Social Service and Nursing service take part.

Among the technologies made available for care to disabled patients in 2011, the following are highlighted:

1. Baropodometry: assessment that identifies distribution in pressure areas of the feet plants during the march. The measurement is very useful for treating chronic pains; changes of sensitiveness on lower limbs, both in healing of wounds, correction of posture and movements and to prevent deformities.
2. Transcranial Magnectic Electrostimulation: A British methodology to stimulate the central nervous system, where it is possible to provoke and obtain favorable answers to physical reconditioning and progress on movements.

3. Teletermography: an temperature assessment system through emission of infra-red radiation on the body surface, which helps in the diagnosis and treatment of evolvement of some diseases, such as tumors in the muscle-skeleton system, eschars and trombosis on paraplegic and infecctions, etc.
4. IN MOTION Shoulder/Elbow: promotes rehabilitation of patients with reduced function on higher limbs, besides allowing assessment of muscle force on the shoulder and elbow, aiming to provide rehabilitation for patients with partial paralysis of arms, keeping and restoring their motor abilities and enabling them to learn new movement processes and improvement of their coordination skills, besides prevention of consequences on immobility caused by secondary effects to espasticity and muscle contractions. The system is indicated for the following affections: Brain Vascular Accident, Multiple Esclerosis, Brain Paralysis, Spine Lesion, Brain and Skull Trauma, Endoprosthesis (shoulder and elbow), Degenerative Joint Diseases on Higher Limbs, Spine Muscle Athrophy and Muscle Debilitation due to Immobility Syndrome.

5. IREX: equipment that uses virtual reality to guide interactively patients in exercises to work specific functions through games and other activities. The interactive scenario provides higher concentration on the game, therefore increasing tolerance to pain. The system is able to measure and store information about the patients performance and their evolution, enabling assessment on functional gains.

IREX Equipament

6. I-TOY: Through video capture technology, the patient sees himself as part of a game by having his own image projected onto a monitor, which stimulates him to move around. With ludic and animated games, the EyeToy Playstation is mostly indicated to children, who present retardation in their development, coordination problems and deficit of attention and thinking.

The number of procedures in 2011:

Lucy Montoro Rehabilitation Institute - 2011	
Procedures	Quantity
Clinical Activities – Physiatry	8.197
Clinical Activities – Urology	666
Clinical Activities – Medical Clinic	(*) 927
Clinical Activities – Social Service	9.678
Clinical Activities – Psychology	7.717
Clinical Activities – Physiotherapy	15.263
Clinical Activities – Occupational Therapy	14.927
Clinical Activities - Nutrition	4.390
Clinical Activities – Phonoaudiology	4.836
Clinical Activities – Physical Conditioning	4.052
Clinical Activities – Nursing	35.583
Hospitalizations	526
Total	106.762
(*) it also includes emergency consultations from January to May 2011	

Part 2:

Social Welfare Actions

Part 2: Social Welfare Actions

2.1. Main Projects on Social Assistance

In its statutory role and recognized and certified as a beneficent entity, FFM develops several programs and projects on social assistance, inside and outside FMUSP/HC System facilities, focused on the poor population without causing any damage to the treatment provided do SUS patients.

2.1.1. Children and teenagers living on the streets of São Paulo Downtown: the mental health of this population and the effectiveness of multidisciplinary intervention in the social-family reintregation process – Programa Equilíbrio (Balance Program)

This project, a result of an agreement signed in 2007 between FFM and SMS-SP is coordinated by IPq. Its main objective is to promote social-family reintegration of children/teenagers who live in risky situation and social vulnerability and whose majority live in street shelters. In case of those who are still living with their families, the aim is to strenghten this relationship in order to reduce conflicts and provide a safe stay for children/teenagers along with their families. To provide such integration, the Programa Equilíbrio (Balance Program) acts in a club-school in Barra Funda and it is open to the region community.

The Program offers sport activities, workshops (preparation for the labor market, communication and practical life activities), pedagogic activities, school reinforcement, besides psychological, psychotherapeutic, speech, physiotherapy, pediatrics, psychiatry treatment, besides general or family orientation, developed in a place focused on promoting health and away from hospital and other shelters environment.

The initial proposal for intervention was structured to assess and follow up 440 children / teenagers within 12 months. After four years working, the effectiveness of such intervention was clinically proved and measured through scientific evaluations and publicized in the magazine: Child Abuse & Neglect. From this finding, the Programa Equilíbrio was incorporated as a service model for graduating professionals and today it receives senior students from FMUSP for trainings, besides residents of Children and Teenagers Psychiatry of IPq.

In 2012 a new training will start in the Social Service area.

Presentation of "Bananas de Pijama" at the Projeto Equilíbrio site

CERT Facilities in Barra Funda

Programa Equilíbrio closed 2011 with 477 treated patients and 91 medical dismissals, considering that: a) 12,143 procedures (multidisciplinary) with an average of 35 procedures per patient; b) 77 new cases treated (an average of 1.4 new cases per week); and c) the family treatment area carried out 565 psychological treaments and 248 psychiatric treatments to patients´family members.

All children/teenagers underwent medical and psychiatric evaluations, considering that 88.89% presented enough symptoms to receive, at least one psychiatric diagnosys; 40.4% involved in drug abuse or dependency; 35.3% affection disorder; 16.2% of TDAH; and 8.8% of anxiety disorders. In this population it is frequent to see abuse, both physical and sexual, as well as maltreatment and negligency. Practically all of them have been neglected by their parents; 58.4% have suffered either physichal or sexual abuse, and 13.1% have been victms of both.

So far the FAMILY REINTEGRATION rate has been 39.8% (188 children/teenagers have come back to their families (their own or foster families).

Besides that, Programa Equilíbrio works along with techinical teams of Children and Teenagers Reference Centers (CRECA), Children and Young Civil Court Tutoring Assistances and Social Protection Agents of Permanent Emergency Support Central (CAPE) which are linked to SMADS. In 2008, Programa Equilibrio made part of a training to provide capacity to more than 120 Health Community Agents and Social Protection Agents, besides receiving more than 60 professionals who work in the city shelters every month, in order to discuss cases and provide further orientation. In 2011 they started putting together a team that aims to enable and advise educators and shelters technical teams at their own shelters, providing them with further stability when following up those children and teenagers cases.

As this is an innovative inititiative, it was necessary to know features of these populations and their needs for development of more suitable interventions. From that knowledge, new interventions have been developed and their effectiveness is evaluated constantly through surveys. The continuous analysis of results met allows repositoning of therapeutic interventions and activities offered. Therefore, therapeutic activities offered are constantly changing to meet better users´needs. There have been eight on-going research projects in these four years. Six research scholarships have been granted by FFM, a Scholarship on Master by CAPES, two Scholarships for Scientific Initiation by CNPq and two others by FAPESP Technical Training Scholarships. The scientific production was: 19 works were presented in Congresses; 28 conferences were given in scientific events; five articles were published; and the Program was introduced in three book chapters. .

The team of “Child and Adolescent Psychiatric Delegation” was welcome, a delegation made up by several professionals from different American Universities and coordinated by Dr. Thomas Anders, former president of the American Academy of Child and Adolescent Psychiatry - AACAP. The group recognized the importance of such innovative and of great relevance work, both for the scientific community and the general population granting them the *People to People Certificate from* Einsenhower Foundation.

2.1.2. Programa Equilíbrio- Best Friends Project – Multi-Disciplinary Approach in Therapies Attended by Dogs

A great deal of things have been studied and written about the approach of children and teenagers who live on the streets of big cities and the mobilization for changes (Gregori, 2000). The treatment services are being fit to new treatment orientations, consequently establishing a network on health, education and social assistance. However, one of the main difficulties is the maintenance of any meaningful bond for children and teenagers what would guarantee continuity of the case, essential for the approach involving the real reason why they had distanced from their families.

The Programa Equilíbrio aims to follow up the child since his situation on the streets of the city until his social-family reintegration. For such, since 2007, intervetions have been developed and its effectiveness evaluated, in order to find therapeutic interventions that can best treat specific needs of this population.

We, as human beings, have a natural tendency to get closer to pets. The bond made between man and his pet can be used in several ways.

The Therapy Assisted by Dogs aims to introduce such approach on individuals or groups, where the pet is part of in the treatment process. Therefore, dogs are used as facilitators and mediators for the therapeutic activities, both aiming to physical, emotional or social rehabilitation (Dotti, 2005).

The Therapy Assisted by Dogs is an excellent way for social-family reintegration and treatment of children and teenagers in risk. Being an animal, the dog does not present judgment capacity and is totally destituted of any prejudice, what makes its acceptance much higher by patients, who have developed strong affection and reliability on these animals, what can be worked on by therapeuts in several different ways (Dotti, 2005).

This project, to be initiated in 2012 and developed by Ipq through an agreement signed at the end of 2011 with the Participation and Partnership of Municipal Office and with intervention of FFM has as main objectives: 1. Provide therapeutics of Programa Equilíbrio as one extra tool for rehabilitation and social reintegration; 2. Provide necessary trainings to professionals who participate in the Programa Equilíbrio for development of Therapy Assisted by Dogs; and 3. Carry out individual or group treatments, aiming to reach social-family reintegration of children and teenagers.

Besides that, there are the following specificc objectives: 1. Offer treatments in areas of psychotherapy, physiotherapy and occupational therapy by using dogs as facilitators during the sessions; 2. Offer one extra alternative to increase motivation of patients in rehabilitation process; 3. Offer one more alternative to increase motivation of patients in rehabilitation process; 4. Develop, along with children and teenagers, groups to work with the dogs; 5. Provide basic health and hygiene notions on the animals; 6. Raise awareness on the responsible practice of having a pet; and 7. Develop and work on the social skills of these children and young people through sports with the dogs and trainings.

2.1.3. Financial Support Program for Students – AFINAL

Since 2007, a commission formed by representatives of FMUSP, HCMFMUSP, FFM, Graduation Comission of FMSUP Board of Directors, Association of FMUSP Former Students, Tutoring Program of CEDEM - FMUSP, current students´ representatives, Casa do Estudante, Ethics Comission, FMUSP Academic Advisory Group of FMUSP and Speech, Physiotherapy and Occupational Therapy Courses have developed Financial Support to Students Program (AFINAL), which helps graduates financially in order to contribute for a better leverage of their studies.

The annual application and selection process for the scholarship is organized by the Social Assistance Coordination (COSEAS), which receives students applications and makes the selection based on the socio-economic profile, which is similar to ways and values to Auxílio-FAPESP. In 2011 45 scholarships were granted, and FFM was responsible for 10 of them, while the other ones were obtained from a fixed source, former students parents and current students, all of them contacted by the Commission.

Students of FMUSP facing financial difficulties can stay at the Casa do Estudante and have some support from Afinal Project

The initiative arouse after many graduates facing financial difficulties decided to have a conversation with FMUSP Board of Directors in order to ask for some financial support to help them deal with transportation, materials for the courses and small daily expenses. The College offers accomodations in the Casa do Estudante with individual apartments and daily meals. The scholarship students spend great part of the money to buy food and course books; however, they also spare part of it to help their own families.

2.1.4. "Bandeira Científica 2011" Project

The Bandeira Científica project (Scientific Flag) is an academic project with some college extensions, which involves students from several different units in the University of São Paulo. The group organizes an annual expedition to communities that need health care, or are in specific health situations and need assistance; they do this by developing social activities related to education, research and support in the country-side due to a lack of these health services in the region.

The work is based on preventive and curative actions, besides developing activities in several technical areas related to health development and maintenance as a main characteristic of the individual welfare.

Structural data is also detailed through reports on the general local health conditions and the several social indicators related to it, besides technical reports and detailed information on the county, through a database available including all social, epidemic and health information during the expedition.

In the period from December 12th to 22nd , 2011 the expedition of "Bandeira Científica 2011" Project worked in the city of Belterra, in Pará State, at the banks of Tapajos River with support from Sanofi Group, Vivo Institute and Finnet and under intervention of FFM; it was also coordinated by the Pathology Department – FMUSP. In this expedition the folllowing results were obtained:

Bandeira Team on the Abaré Boat, which carried out procedures to the riverine community nearby Tapajós river during the project.

Dental Treatment during the Bandeira Científica

Bandeira Científica Performance 2011	
Description	Quant.
Participants - Academics	157
Participants - Professionais	64
Participating Universities	02
People treated – assistencial activities	3.720
People treated – total of the project	4.980
Activities	Quant.
Total number of treatments	7.650
Total number of exams	1.513
Total of Procedures	9.163
Treatments	Quant.
Medical treatments	4.664
Physiotherapy	762
Nutrition	326
Psychology	81
Odontology	1.530
Phonoaudiology	64
Other areas	223
Total of Treatments	7.427

Bandeira Científica performance 2011	
Description	Quant.
Speeches/Workshops	41
Interviewss	36
Meetings wih Managers/Professionals of the area	9
Glasses	605
Prosthesis	30
Material collection	15
Exams	Quant.
Glycemia – fingertip blood test	928
Blood sample	432
Cytologic Exams	85
Pathological Anatomo Exams	6
Electrocardiograms	62
Total of Exams	1.986

2.1.5. IRLM Rehabilitation Mobile Unit

In 2011 IMREA, through an Additive Term to the University Agreement, signed a contract between HCFMUSP and SES-SP and intervention of FFM, to keep offering treatment to disabled people through the Lucy Montoro Mobile Unit of Rehabilitation, which travels from city to city inside the state in order to make medical evaluations and provide prosthesis, orthesis, wheelchairs and bath besides other resources to people with physical disabilities.

The single unit in Brazil, the 15-meter-long and 2.60-meter-wide vehicle weights 20 tons and is equipped with special equipment for treatment , including a hydraulic elevator to support people on wheelcharis or on stretches, besides a bathroom totally adapted to support disabled people. The unit also relies on a waiting room, medical rooms, exams room, mini-kitchen, office, reversible stage and orthesis and prosthesis workshop which supports the poorest areas visited by the vehicle.

Special treatment, multidisciplinary team and cutting edge equipment are some of the points that make the Mobile Unit a differential for accessibiliy and functional gain for disabled people. In it SUS patients presenting spine lesions, amputations, brain lesions, skull traumatisms, cardiovascular accidents and movement restrictions are treated.

Cris Castello Branco

Truck where the Lucy Montoro Mobile Unit of Rehabilitation works

Worshop of prosthesis and orthesis of the Mobile Unit

The Mobile Unit aims to introduce patients to society from the development of their skills and potentials to multidisciplinary rehabilitation. It is intended to decentralized treatment of patients who have physical disabilities in the countryside of Sao Paulo State by carrying out assistential activities and training sessions in poor regions that cannot count on specialized treatment for rehabilitation.

In 2011 226 patients were treated and 327 pieces of equipment were delivered between the stations and distributed in the following way:

Quantity of Pieces of Equipment Distributed by the Mobile Unit in 2011	
Regions	Total
DRS-17 (Taubaté)	13
DRS-16 (Sorocaba/Capão Bonito)	11
DRS-6 (Avaré/Jaú)	09
DRS-10 (Piracicaba)	13
DRS-1 (Grande São Paulo)	61
DRS-7 (Campinas)	11
DRS-4 (Peruíbe)	23
DRS-15 (São José do Rio Preto)	03
DRS-12 (Registro)	183
Total	327

The traveling team aims to implement a mobile technical team to meet the demand for orhesis and prosthesis in Lucy Montoro Units with the following features:

- Measuring/molding, testing, delivery and reviews made by technicians;
- Use of the central manufacturing concept for production of orthesis and prosthesis;
- A partnership with orthesis and prosthesis suppliers and qualified orthesis and prosthesis workshops in order to provide additional services, such as lamination and finishing on prosthesis;
- Support from the IMREA technical team in logistics involving operation and technical training of the Mobile Technical Team.

Support from the traveling team in Presidente Prudente

In 2011 the traveling team treated 436 patients and dismissed 851 pieces of equipment, considering that 206 to DRS-6 (Avaré/Jaú) and 645 to DRS-11 (Presidente Prudente) equivalent to an average of 1.95 pieces of equipment per patient.

2.1.6. "Mammography TaskForce" Program

Considering the demand not supported at the UBSs, InRad makes available 100 (one hundred) monthly openings for mammography exams for SUS patients, with a promise to continue the diagnosis process through breast biopsies. In case any malignancy is evident, the proper follow-up forwarding takes place to the related specialist (mastologyst).

The aim of this taksforce, which started in the beginning of 2011 and developed by InRad and financed through an Additive Term to the University Health Insurance signed between HCFMUSP and SES-SP and with intervention of FFM, is to offer 300 treatments per month to SUS patients.

In 2011 962 patients were treated, who made mammography exams, according to the table below:

Number of Mammograpies made by the "Mammography Task Force"	
Period	Total
July/2011	129
August/2011	151
September/2011	113
October/2011	170
November/2011	240
December/2011	159
Total	962

All patients are from the UBSs of the capital and related regions; they have received the diagnosis and have been advised to return to their original doctors. Also, purchase of inputs has taken place to supply patients with biopsy indication.

2.1.7. "Visão do Futuro" (Future Vision) Program

This program, which started in 2009 and had its continuity in 2011, is developed by the Oftalmology Clinical Division of HCFMUSP in partnership with SEE-SP, SES-SP, SME-SP, SMS-SP, SMADS-SP through an Additive Term to the University Health Insurance signed between HCFMUSP and SES-SP with intervention of FFM – Medicine School Foundation.

Slitlamp Exam (Biomicroscopy)

Speech on "Personal Care"

The process was photographed with participation and authorization of the child´s responsible mother - Vitória Rodrigues do Nascimento, 08 years old.

Student of the EMEF Dep. João Sussumu Hirata School, Santo Amaro Region – São Paulo

Its objective is prevention and recovery of ocular health involving children from 6 to 8 years old who are in the first grade of Elementary School at state and municipal public schools in São Paulo through ophthalmological consultations and exams, and who have previously been submitted to visual accuracy tests at their schools, in order to improve learning and school performance.

The target is to carry out 12 thousand consultations to childrem, as well as ophthalmological exams in technical meetings. In 2011 4.717 consultations and 2.230 ophthalmological exams were made involving 4.717 children. The steps to be followed as described below:

Steps to be followed by the "Visão do Futuro" Program	
Action	Agent
Screening of state and municipal public schools	Responsible for the Education Network
Routing of students to HCFMUSP	Responsible for the Education Network and Government Departments
Welcoming students and helping to route them	Janitorial and Volunteering Service – HCFMUSP
Visual Accuracy Exams	Medical Professionals from the Ophthalmology Division - HCFMUSP
M.O.E. Exams – Extrinsic Ocular Motility	Medical Professionals from the Ophthalmology Division - HCFMUSP
Conducting ocular refraction, under cycloplegic (dilated pupil)	Team of Enfermary from the Ophthalmology Division HCFMUSP
Slitlamp exam (Biomicroscopy)	Medical Professionals from the Ophthalmology Division HCFMUSP
Self-refraction Exam	Medical Professionals from the Ophthalmology Division - HCFMUSP
Refraction exam (degree)	Medical Professionals from the Ophthalmology Division HCFMUSP
Eye fundus examination (Fundoscopy)	Medical Professionals from the Ophthalmology Division HCFMUSP
Corrective lenses prescription (glasses)	Medical Professionals from the Ophthalmology Division HCFMUSP
Medical Referral for contact lenses	Medical Professionals from the Ophtalmology Division HCFMUSP
Assistance in choosing and testing corrective lenses glasses frame	External Optical

2.1.8. Cochlear Implant

The aim of this program, which started in 2010 and developed by the otorhinolaringology Discipline of FMUSP and financed through an Additive Term to the University Health Insurance signed betwwen HCFMUSP and SES-SP and with intervention of FFM, is to change Speaking Processors – model Spectra Nucleus 22 by Speaking Processors – model Freedom, which present updated technology for Cochlear Implant for 43 SUS patients.

With the cochlear implant, a true revolution has taken place in severe and deep deafness treatments, where patients can hear again and in most cases, are able to even speak on the phone. In cases of congenital deafness, deep deafness can also harm the regular speaking development; for that, deaf people can also have their speaking abilities jeopardized, being popularly called as deaf-mute. In an ideal world, where all children were born deaf, could be properly rehabilitated with the cochlear implant in the right time, the figure of deaf-mute could be almost totally erradicated, as children with implants can develop their auditive comprehension and speaking abilities very closely to a child with regular hearing.

The cochlear implant is an electronic prosthesis partially implantable and made up of two main parts: one internal unit and another external one; the latter is visible on the scalp.

The internal unit is implanted by a surgery and is positioned under the skin behind the ear. From it, a bundle of electrodes comes out, which is placed in the cochlear inner part (organ responsible for hearing), which will electrically stimulate the hearing nerve.

1. Transmitting antenna *2. Speaking Processor and microphone*

The Cochlear Implant Group of HCFMUSP is pioneer in this kind of cochlear implant in Brazil and it has already made over 800 surgeries within their 21 years of existance; it is currently considered as one of the main implantation centers all over the world and the only one to carry out Brain brainstem implants in children, where cochlerar implant is not possible.

In 2011 a study to identify the technological contribution of the Speaking Processor – *Freedom* for the first generation of multichannel cochlear implants, *Nucleus 22* was made on the performance of speaking perception during silence and noise, and audiometric thresholds.

From the 43 patients mentioned above, 17 were chosen and whose criteria for inclusion was being effective users (more than 8 daily hours) and the exclusion criteria was not having any recognition of speak. When the contribution of the Processor *Freedom* for patients with *Nucleus 22* was analyzed, a meaningful different statistic could be observed in all tests involving speak perception in all audiometric thresholds, both individually and on the average. Therefore, the change of processors, from *Spectra* to *Freedom* showed that the technology has improved the speaking perception of *Nucleus 22* users.

2.1.9. Protocol for Patients with Cleft Lip and Palate Treatment

The Protocol of Craniofacial Surgery for Patients with Cleft Lip and Palate Treatment developed by the Plastic Surgery and Burns Discipline of HCFMUSP, had been made available through a donation from *Smile Train*, via FFM, which took place at the end of 2008, benefiting patients with cleft lip and palate who need reconstruction of lip, nose, alvel and palate and the related effects on speaking and facial growth and development.

During 2011, the table for totally free treatment was:

Number of Procedures in *Smile Train* Project in 2011	
Procedure	Quant.
Palatoplasty	15
Unilateral cheiloplasty	8
Bilateral cheiloplasty	8
Alveolar Bone Graft	2
Pharyngoplasty	30
Revision lip and nose	4
Correction Fistula	
Total of Procedures	106
Total of Patients	92

This partnership has allowed an increase and development of medical experience in this type of surgery, besides improving surgical skills and larger experience when treating patients who present these characteristics. The team involved in this process is made up of four Plastic Surgeons, one Resident Doctor specialized in Plastic Surgery, two Phonoaudiologists, two Orthodontists, one Otolaryngologist, one Geneticist and one Psychologist.

Year after year the number of these specialized treatments and procedures provided by this miltidisciplinary team has grown substantially. The aim is to increase the number of primary procedures to be made in the right moment, in order to reduce incidence of complications and future sequels.

2.1.10. Mental Health Capacity Project: Fundação CASA Professionals – Capital Module

Through the Agreement signed along with Fundação CASA and intervention of FFM, this project, which was approved by the end of 2009, is being developed by NUFOR-IPq. Its main objective is to keep clinical treatment program in specialties such as Psychiatric and General Clinic to the interns in social-educational measures in several units of Fundação CASA in São Paulo and Franco da Rocha counties.

The activities developed in 2011 were:

Psychiatrist Attention: a) Working on primary, secondary and tertiary prevention in psychiatrist field through assistential and educational activities in mental health; b) Clinical treatment to young interns of Fundação CASA; c) Creation of an individual medical report; d) Prescription of medication and periodic reevaluations for young interns submitted to such interventions; e) Medical referral to psychotherapy, whenever relevant; f) Support to the technical team of Fundação CASA (psychologists, social assistants, nurses and ward assistants) when conducting cases under psychiatric treatment; g) Creation of medical documents (declarations) to be issued whenever Judiciary requests them; h) Carry out initial psychiatric evaluations on young offenders who are starting social-educational rehabilitation with creation of medical reports along with the technical team and the Judiciary.

General Clinical Attention: a) Working on primary, secondary and tertiary prevention in the Medical Clinical Field through assistential and health educational activities; b) Clinical treatment to young interns of Fundação CASA; c) Creation of individual medical report; d) Prescription of medication and periodic reevaluation of young

interns submitted to such intervention; e) Support to the technical team of Fundação CASA (psychologists, social assistants, nurses and ward assistants) when conducting cases under clinical treatment; f) Creation of medical documents declarations) whenever requested by the Judiciary; g) Development of individual and collective measures aiming to prevent dissemination of infect-contagious diseases; h) Development of individual and collective measures aiming to clarify and advise on DST/AIDS prevention.

The Metropolitan Regional Divisions (DRM) benefited: DRM I - Franco da Rocha; DRM II – Tatuapé; DRM III – Brás; DRM IV - Raposo Tavares; DRM V - Vila Maria.

In 2011 around 2 thousand treatments/month were made including psychiatric treatments and neuropsychological evaluations to young people from 12 to 21 years old submitted to social-educational measures as patients of Fundação CASA in Sao Paulo and Franco da Rocha cities, who needed special attention in mental health.

Besides the treatment activities, several training sessions to the health team of Fundação CASA units were performed covering tables and criteria to refer to young people for medical treatment, for neuropsychological evaluation and supervision on psychtherapy programs.

2.1.11. "Expansion of Access to Preventive and Control Measures for Malarya Involving Vulnerable Populations of Brazilian Amazon" Project

Through a contract signed at the end of 2009 along with the Global Fund and intervention of FFM, the Pathology Department of FMUSP coordinated a project called: "Expansion of Access to Preventive and Control Measures for Malarya Involving Vulnerable Populations of Brazilian Amazon" in 2011 with partnership of Fundação de Medicina Tropical – FMT, which has as objective to strenghten the local capacity of health services to undertand the dynamics involving transmission of the disease and consequently advise programmed interventions of the project and regular actions of the malarya control actions more efficiently.

Logo for the Mobilization against Malarya Campaign

The target is to reduce the number of malarya cases in 50% within the next five years of the project in 47 counties of Amazon region, which accounted for 70% of malarya cases in Brasil in 2007.

The project aims to cooperate in reducing mortality in Amazon region, which accounts for 99% of malarya infections in Brazil by two interventions of recognized impact:

1. Guarantee proper treatment with highly efficient medication as a result of fast diagnosis, strenghtening of the diagnosis network and improvement of medication management and control; and
2. Meet a high coverage for prevention quickly with mosquito nets embedded with long lasting inseticides.

2.1.12. Preventive Actions at School Project – Family School Program

APE Project - "Preventive Actions at School", developed since 2004 along with the Family School Program of SEE-SP, has as its main aim to offer support to carry out preventive prac tice to individual and collective health protection in communities of state schools by helping educators in implantation, monitoring an implementation of educational policies to promote health e prevent worsening conditions in a practical, didactic and continued way.

The operational team of the Project is made up by educational monitors who promote strategic and directed actions at the 2.335 school units of the Family School Program based on a global diagnosis and definition of prioritary subjects such as: undue use of illegal drugs, STDs and AIDS, Hipertension, Diabetes, Nutrition (Healthy meals), Preventive Physical activities, Sustainability, Animal Care, Control of Urban Plagues, among the 44 existing subjects.

In 2011 APE Project enabled over 10 thousand University Educators and one thousand Professional Educators as part of the Family School Program.

The activities promoted for the community had participation of over 235 thousand people. Each person participates in an average of three activities promoted by the project. Over 800 thousand participations had been accounted in such activities.

The project also relied on over 850 regional partners in 2011, who subsidize the actions and projects implemented, contributing with educational material, informatives, clinical exams, food, among others.

In 2011 a survey on the Family School Program was carried out among users and managers. It presented the followiing result:

Evaluation of the School Preventive Actions Project - Aug/2011 conducted by Coordinator-Teachers of Pedagogic Offices of the Family School Program:

- 71% of the Educational Boards participated in the Survey.
- 96% have acknowledge on the Project, 4% has a superficial idea about it.
- 73% believe that the Project contributes a great deal in relation to Health; 20% reasonably and 7% just a little.
- 30% reported that the Project is very suitable and provides good results, 59% think it is suitable and with satisfactory results and 11% think it needs a review.
- In relation to Planning and Action Plan: 49% Excellent – the actions are planned according to local needs and are developed according to Planning, 46% think it is good and 4% think it is just okay.
- Results obtained: 37% Excellent – the results are outstanding, generally actions have continuity and are incorporated by the community and school unit, 63% think it is good and 3% think it is okay.

- 44% of survey participants requested increase in the number of professionals involved in the project (educational monitors) in order to intensify activities.
- 74% of the survey participants could notice a gradual increase in the number of activities promoted by the Project.
- 96% stated that the Project has great educational value.

Good performance and preparation of monitors contributed to the successful result of the activities proposed.

2.1.13. Family Health Program – PSF

Created by the Ministry of Health in 1994, the Family Health Program – PSF is currently responsible for taking care of the health of 118 million people enrolled (2011); it has as its main aim to improve the quality level of the population´s health by building up an assistential model of care based on prevention, promotion, protection, early diagnosis, treatment and recovery of health through treatment and support provided by the Family Health Units or at home.

Its actions have been developed in several Brazilian states, aiming to guarantee access of all people to health services.

The Program was implemented in 1996 in São Paulo under coordination of SMS with cooperation of 12 partnership institutions and responsible for administration of specific areas.

Logo of the Program created by the Ministry of Health

FFM, which has been a partner of PSF since 2022, supports the program in Health Technical Supervision at Lapa/ Pinheiros and Butantã Units, part of Central-West Regional Coordination of Health. Total population enrolled in 2011 was around 150 thousand inhabitants in 52 family health teams and made up by approximately 520 professionals: physicians, nursers, ward assistants and health community agents.

The Management Contract of the Micro-Region Butantã / Jaguaré, which was signed between FFM and SMS-SP in 2008 covers 31of these teams. A coverage of around 19,6% of the population in this Micro-Region was achieved, which is made up of six Administrative Districts: Butantã, Morumbi, Raposo Tavares, Rio Pequeno, Vila Sônia and Jaguaré. The Micro-Region is located in the West Zone of the county and has a total population of around 478 thousand inhabitants.

2.1.14. Creation of Motivational Videos for Education based on CG (Virtual Man) for the "Acessa Sao Paulo" Program

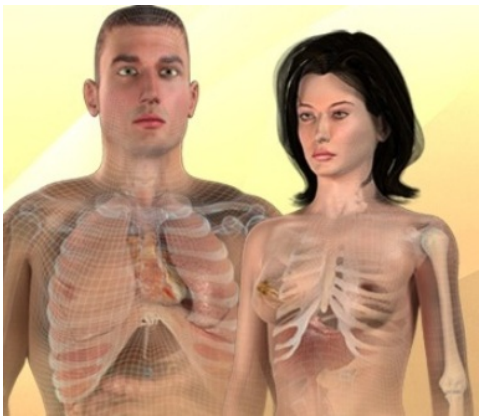
The Virtual Man Project of FMUSP is a dynamic and driven communication method (CDD). It gathers a great deal of specialized information in friendly, dynamic and objective way. By using graphical modeling technology in 3D, the Virtual Man videos are efficient in spreading knowledge about anatomy, physiology, physiopathology and molecular mechanisms. The project is a poweful iconograph resource that helps in education, once it facilitates and makes understanding a specific topic much easier and faster.

This project, which is backed up by FAT with intervention of FFM and initiated at the end of 2010 by the Telemedicine Discipline of FMUSP, has as general objective to develop a set of compact videos based on CG for health promotional purposes and use in areas of Acessa São Paulo Program.

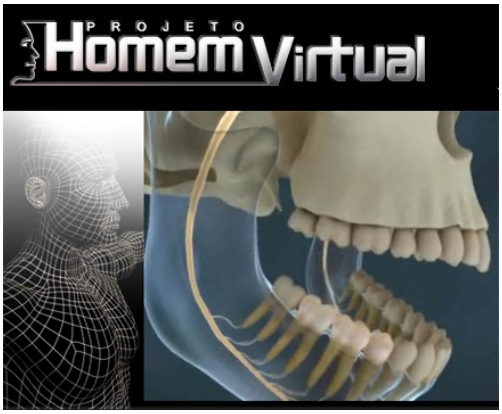
Created in July 2000, the Acessa São Paulo Program offers the state population access to new information and communication technologies (TIC's), specially to Internet, therefore contributing for social, cultural, intellectual and economic development of Paulistano citizens. In order to meet its targets, the Acessa Sao Paulo Program opens and keeps public areas equipped with computers with free access to Internet.

Taking into account that several telecenters, IT rooms in public schools, waiting rooms at health units and means of transportation can be important spots to spread knowledge, the creation of educational and motivational videos, which are compact and objective, can help to stimulate education on health by the general population.

The videos produced by the project make understanding easier on several subjects and can also be understood as a way to democratize knowledge on health issues, once it can facilitate understanding of the most complex information by a great number of people through CG, including iliterate/functional people. The videos show dynamic sequences of the human body through CG in 3D; they also present the audiodescription function, which facilitates access of visually disabled people.



The following subjects are covered by the project: 1. Knowning the brain, breathing system, digestive system and urinary system; 2. Alchool; 3. Drugs Addiction; 4. Tabagism; 5. Sight; 6. Hearing; 7. Fonation and Voice; 8. Locomotion; 9. Spine; 10. Fibromialgy; 11. Spine Lesion; 12. Trip to the Center of Skin; 13. Acne; 14. Photoprotection; 15. Skin Cancer; 16. Leprosy; 17. Temporomandibular Articulation; 18. Dental Structure; 19. Diabetes; 20) Contraceptive Methods; 21. STD – Syphilis and Gonorrhea; and 22. STDs – HIV and HPV.



Such activities were continued in 2011. The launch of the project at Acessa São Paulo Program is forecast for February 2012.

Part 3:
Welfare Projects

Part 3: Main Welfare Projects

FFM is responsible for development of a series of welfare projects which reflect directly and indirectly on the population. Women, children, poor families, HIV virus carriers, among others receive support from partnerships and agreements signed between FFM and other institutions linked to the FMUSP/HC System.

3.1. HIV-AIDS Virus and STDs Carriers

3.1.1. Specialization Course on "Prevention against HIV/AIDS on the Vulnerability and Human Rights Framework"

Through the Additive Term to the University Health Insurance signed with SES-SP and intervention of FFM, the Preventive Medicine Department of FMUSP and NEPAIDS-USP promoted a Specialization Course: “Prevention against HIV/AIDS on the Vulnerability and Human Rights Framework” in 2011.

The course aims to train technicians, municipal managers and members of civil society to analyze the DST/HIV/AIDS current status in a local context and help to plan, carry out and evaluate practices and technologies on prevention of vulnerability and human rights framework.

The course approach was based on a dialogue concept and deeply embeded in constructionist theories on sexuality and reduction of damages, notions of care and psychosocial care, theories of stigma and discrimination, training for analysis of database and use of financing resources and management as available for SUS.

Implementation of the course, material and pedagogic resources will be evaluated for future use in large scale by the state and national programs on STD/Aids.

3.1.2. Implementation of Genotyping Test for detection of mutations that generate more resistance to the Entry Inhibitor - Enfuvirtide – on patients submitted to HAART but without previous treatment with this type of drugs

This study is backed up by the Ministry of Health with intervention of FFM and developed by LIM 56 and started in 2011.

This initiative has as main aims: 1. Check HIV-1 profile of resistance to Enfuvirtide through gene sequencing to HR1 doman - gp41 of viral envelop on first time patients to treatment with this drug, but with multiple therapeutical failures facing HAART; 2. Research presence of accessory mutations on codons 126, 137 and 138 on domain HR2 - gp41 of the viral envelope, as previously described (Shafer, et al., 2003) and that have increased the replicative capacity of HIV-1 (fitness viral).

3.1.3. Dissemination of technologies based on the human rights and social vulnerability framework on promoting sexual reproductive health among young people

This project, which was started in 2011 by a contract signed between Ford Foundation and FFM through the Preventive Medicine Department of FMUSP and NEPAIDS-USP, has as aim to advertise works that contribute in the conception, implementation and evaluation of programs to mitigate inequality of gender and class when promoting rights to health for young people in the sexuality field – projects, programs and public policies for prevention of undesirable pregnancy, gender and sexual violence and exposure to STDs and Aids.

The process promotes areas for debate, which allows to increase quality of dissemination for an international audience – specially for Portuguese and English Speaking Countries in Africa, as well as for Latin America (Spanish) – texts and articles on work processes and technologies to promote sexual and reproductive health, based on the Vulnerability and Human Rights Framework".

The initiative aims to increase knowledge of young people about their own context, as well as provide knowledge of prevention, how to promote active innovation of their sexual scripts and gender in order to enable conscient decisions and how to promote and guarantee equity when accessing services involving health care.

3.1.4. São Paulo Clinical Trial Units

This project, which was approved by NIH IN 2010 and had its continuity in 2011, has been developed by LIM 60 with intervention of FFM.

This project nature is to create a clinical research structure for HIV/AIDS. The institution participates by carrying out clinical researches, initially on the development of preventive vaccine s against HIV/AIDS in these international research networks.

As it is a structural proposal, there is no forecast in this project, for effective inclusion of volunteers. Future projects involving volunteers and that might use the structure proposed will be further evaluated independently and will be submitted to all levels and regulatory processes as required by the legislation in-force.

An on-going study - on HVTN 084 and another one - HVTN 901 are under regulatory approval process.

3.1.5. Actions on HIV/Aids – Training Center for Treatment of Patients who present Gender Identity Disorder (transexualism) at HCFMUSP

This program, which started at the end of 2010, is being developed by the Preventive Medicine Department of FMUSP and is backed up through na Additive Term to the University Health Insurance signed with SES-SP with intervention of FFM.

Its main aim is to organize and keep a body of professionals from technical areas of Endocrinology, Psychiatry, Psychology, Urology, Plastic Surgery and Gynechology to provide treatment to transexual individuals by participating and providing a center of formation, education and enabling professionals from other institutions to create new treatment centers for these patients in other regions of the country according to regulations of Law in the Transexualization process.

These activities were continued in 2011.

3.1.6. Cohort of People with HIV in São Paulo State

This study, which started at the end of 2011 and has been developed by the Preventive Medicine Department of FMUSP, was financed through an Additive Term to the University Health Insurance agreed upon by SES-SP and intervention of FFM.

Its main aim is to support the Reference and Training Center in STD and Aids to analyze information on patients who started antirretrovial therapy in 2011 in three public services of Sao Paulo state in relation to effectiveness and toxicity of initial schemes prescribed and execution of the field work of HIV prevalence project in men who have homossexual relationships with other men who are frequently socializing in Sao Paulo downtown.

3.1.7. NKT Cells of Innate Immunologic System in Co-Infection by HIV/Mycobacterium Tuberculosis

This study was initiated in the middle of 2011 by LIM 60 through a contract agreed upon between the University of California and FFM.

The T Natural Killer (NKT) Cells are innate immunity cells with relevant immunoregulatory functions. They are able to recognize directly glycolipid antigens of bacteriam origin and respond to them by taking active part of the immmune replies against such pathogenes. Studies have shown that NKT cells compartment is severely damaged by HIV-1 in infections; however, it can be partially recovered through therapy with interleukin-2 (IL-2).

Its aims are: 1. Check whether treatment of individuals infeccted by HIV-1 with antirretroviral therapy (TARV) combined to IL-2 is able to induce a sustainable increase in frequency and function of circulating NKT cells; 2. Determine mechanisms and consequences of a negative regulation of CD1d in dendritic cells (DCs) infected by HIV; 3. Investigate relations between loss of NKT cells in individuals infected by HIV-1 and the emergency of microbaterian infections.

It is believed that these studies will contribute considerably for a better understanding both of NKT cells functioning in the disease caused by HIV-1 in relation to the ways the virus attempts to escape from activation of NKT cells and how these cells can contribute to the innate defense against infection caused by HIV-1 and other typical infections caused by AIDS.

3.1.8. Prospective evaluation of isoniazid use in prophylaxis prevention of lung turberculosis on patients infeccted by HIV

In spite of several studies that indicate isoniazid (INH) as a prophyulactic to reduce incidence of Tuberculosis (TB) in populations infected by HIV, such measure is not totally offered in all services in Brazil. Therefore, this study aims to evaluate incidence of TB in individuals, adhesion to prophylaxis, as well as its efficiency once compared to a historic series of services.

Through an agreement signed with the Ministry of Health at the end of 2010 with intervention of FFM, the research is developed by LIM 56 and its main aims are: a) Prevalence of reactivity to PPD on patients infected by HIV; b) Evaluate the impact of using INH on patients with PPD reactor (considered $\geq$ 5 mm) and the incidence of TB; c) Determine incidence of PPD virus on PPD non-reactor individuals; d) Study specific immune restauration on soropostive for HIV individuals and cured of tuberculosis and who present a supposedly immune restauration by using antirretroviral therapy (TARV).

This data can indicate relevance for the tuberculosis program and take a rather incisive guideline to dispose INH, considering that TB continues to be the most incident disease in population infected by HIV in Brazil. .

These activities have not been initiated yet, due to a delay in approving and releasing the related budget.

3.1.9. Adhesion to Antirretrovial Treatment of HIV/Aids on People under observation in Health Public Services in Brazil

The AVANT Project had been carried out from December 2009 to December 2011 by the Preventive Medicine Department of FMUSP through a contract agreed upon by UNESCO with intervention of FFM. The aims are: a) analyze prevalence of non-adhesion to antirretrovial therapy in Brazil and estimate non-adhesion factors according to characteristics of the Health Services and people; b) develop a monitoring system for the adhesion.

A sample including 53 services was chosen; they were chosen randomically according to quality groups defined by *Qualiaids System* in 2007 and its geographic locations. In these services, 2,604 individuals were invited to participate in the study on antirretroviral therapy; all of them are over 18 years old and not pregnant. The adhesion was measured through WebAd-Q, a multimidia questionnaire, which is annonimous, self-applicable, where an animated individual asks three questions on taking antirretrovirais in the previous week. This questionnaire automatically generates an online database. Factors associated to non-adhesions were estimated by interviews conducted in a sub-sample calculated in 600 patients from 16 services spread according to the geographical regions.

A total of 2.424 people answered the WebAd-Q and out of this figure, 598 were also interviewed for the survey on factors associated to non-adhesion. There was no difficulty in answering the questionnaire by patients. The average time to answer it was 07min09s medium time was 04min21s. Percentage of non-adhesion, considering different combinations for the set of three questions reaches 60%. As far as associated factors are concerned, there was a high percentage of non adhesion for use of illegal drugs (92,8%), time of soropositiveness ≤ 90 months (82,3%), treatment time ≤ 90 months (77,8%), previous non-adhesion (84,6%), absence to medical appointments (91,1%) and depression symptoms (95,1%).

The WebAd-Q was well accepted by patients and provides a collective measure of useful adhesion for several levels of AIDS Brazilian Program. Factors associated with non-adhesion enable identification of groups with higher probability of non-adhesion and should be a prioritary target of actions aimed to better adhesions to drug therapy.

3.1.10. Clinical-laboratorial Segment of individuals submitted to therapeutic vaccine against HIV based on dendritic autologous primed cells with innative vírus

This research was approved by the end of 2010 and developed in 2011 by LIM 56 through a Cooperation Term signed with UNODC and intervetion of FFM.

Since the beginning of the epidemic, several products have been considered for anti-HIV vaccine in diferent studies aiming to induce a immune reply. In a therapeutical context, the use of vaccine s based on dendritic cells has show to be a promissing strategy, largely used in several pathologies and able to estimulate the immunological system and allow the body to fight more efficiently against the targeted agent for the vaccine ation. Prototypes of vaccine s including dendritic cells (DCs) were initially developed from observations that in neoplasies, such as melanomas and metastatic renal tumors, there was a disfunction of DCs and significant reduction of them. The idea that the same phenomenum could occur in infections by HIV resulted in researches on DCs determination of number and function on patients with HIV/Aids. Immunetherapy with primary dendritic cells with innative virus consists in a safe and well-succeeded procedure, where the manipulation of immunological reaction for HIV control on patients cronically infected has shown good results.

Specifically regarding infection by HIV, where the affected individual is not able to erradicate the virus, the immune system should stay constantly “alert”, allowing the infection control. In spite of the great number of studies carried out, lack of knowledge on corrrelate of immune protection in HIV infection results in absence of biomarkers able to anticipate a clinical result up to now. Therefore, in anti-HIV vaccine researches, it is mandatory not only the knowledge of correlates for protection but also the dynamics in establishing an immune memory facing a potential product.

The current proposal for a project has as its main aim to study possible parameters for immunogenicity, induced in a cohort of individuals infected by HIV and submitted to vaccine ation with a product composed of autologous dendritic cells with HIV autologous innativate, correlating them with efficiency data.

So far 23 individuals have been recruited, considering that 11 have been excluded (none of them after having started taking the vaccine). Three individuals have already finalized the vaccine ation and the fourth one is concluding the scheme as originally proposed. No adverse events related to the product have been noticed so far and the laboratory evaluation on these individuals has not brought any relevant and different evidences pre x post vaccine ation.

3.1.11. Study on specific immune responses and genetics aspects on patients infected by non-progressor HIV-1 for long term or slow progressor for AIDS

Long Term Non Progressor individuals – LTNP or also called Slow Progressors (PL) stay free of progression for Aids for several years and make up around 1-3% of total individuals infected by HIV. These individuals stay asynptomatic and with a number of lymphocytes T $CD4^+$ stable and above 500 cells./mm^3 of blood without any treatment with antirretrovirals (ARTs) for more than 8-10 years. Factors that determine the non-progression or slow progression on these individuals are not totally clear and have been little studied in our country. The response of lymphocytes T against HIV has a fundamental role in immune control of HIV and vaccine strategies, profilatic or therapeutics..

This study, which became feasible due to an agreement signed with the Ministry of Health at the end of 2010 with intervention of FFM is developed by LIM 56 and intends to analyze HIV-1^+ PL individuals by comparing them with typical and fast progressors for Aids, paired by evolution time, gender and age.

Therefore the following points will be followed: A) detection of viral genetics markers and host, associated with fenotype of slow progression for Aids infection, of polymorphisms in components of the immune system involved in viral infection, as in delation of 32 pairs of basis genes CCR5, besides polymorphms in CCR promoting region (CCR5-P-59029A/G), CCR2-V64I, and SDF-1-3'A; B) Determination of haplotypes of HLA that could be associated to disease progression; C) Verification of Anti-HIV immune response *in vitro* by determination of specific lymphocytes T against *pools* of gag, nef and RT peptideos, *B subtype*.

A cohort of patients infected by HIV originally from several specialized services of treatment in São Paulo state will be made up, aiming to select 100 individuals with pre-defined criteria for a slow progression. Its activities were started by the end of 2011 due to a delay to approve and relase related budget.

3.1.12. Study on health worsening factors due to use of antirretroviral medication on people who have HIV/aids and treated in Brazilian Reference Services: 2003 to 2008

This research started by the end of 2009 and had its continuity in 2011; it was developed by the Preventive Medicine Department of FMUSP through a contract signed with UNESCO and intervention of FFM.

The project is focused on the extension of a study that analyzes occurrency of severe toxicity events on people who have HIV and Aids, related to the use of ARV medication in Fortaleza, Porto Alegre, Rio de Janeiro, Salvador and São Paulo cities. Sites in the North Region will be added to the list, noticibly Belém and Manaus and in the state of Minas Gerais. At the end, a total number of 1,705 new patients will be added to the cohort.

Data have been collected, considering exclusion of adult people with HIV-1 and that have initiated TARV on the study services, excluding pregnant women, with exclusive use of medication for vertical transmission prevention.

The study contributed to improving a policy of rational use of antirretrovial medication (ARV), subsidized by the Ministry of Health in creation of therapeutical consensus and advising health professionals decisions when

prescribing more effective-efficient treatments with lower degree of toxicity and suitable to the profile of people who have HIV in the country.

The study is important due to the fact that in Brazil occurrency of toxicity of ARV is very little known, due to a limited number of studies and absence of a pharmaco-vigilant structure. Studies on toxicity of ARV medication also allows deepening knowledge on similar medication produced by domestic pharmaceutical industry, therefore contributing to create consistant parameters for perfecting pharmaceutical technological development policy in the country.

The data collecting in services selected has been concluded, what results in inclusion of 5.341 patients in the cohort of people living with HIVin use of ARV in Brazil (1,533 patients from the four services covered by the current project and 3,808 of services covered by the projects financed by CNPq/DECIT and OPAS). Currently the input and analysis of consistency for database is being finalized. The forecast is that, by the end of January 2012, the database will be concluded, what will allow execution of the final phase of the project.

3.1.13. Support for evaluation of toxicities associated with Use of Antirretroviral Medication for HIV in Health Services in São Paulo County

Through agreement signed with OPAS and intervention of FFM, this study made by the end of 2009 was concluded in 2011. Developed by the Preventive Medicine Department of FMUSP, it aimed to support state and municipal health services to systematize information of HIV patients reports, taking into consideration the use of medicines as therapies and occurrence of grievance resulting from toxicity, including consequences for health services, such as hospitalizations, change of schemes and existence of sequels.

Its specific objectives were: 1. Select, hire and enable teams of researchers in the field for systematization of information of people living with HIV and Aids at the STD and Aids Reference and Training Center of Sao Paulo State, Emilio Ribas Hospital, Casa da Aids of HCFMUSP and clinics of the Aids Municipal Program of SES-SP; 2. Prepare database and registrations of HIV patients data who started antirretroviral treatment at health public services chosen by São Paulo from 2003 to 2008; 3. Systematize information from around 2,750 patients in two state services: STD and Aids Reference and Training Center and Emilio Ribas Infectology Institute into a service of education and research of FMUSP and at 12 clinics from the municipal network of Health; 4. Create descriptive reports on adverse events that took place on patients who were observed at the health services included in this phase of work.

4,267 reports had been reviewed on the 18 services included in the studies; from that 2.819 (66,1%) were excluded as they did not meet the inclusion criteria, specially for having initiated the use of ARV before 2003. At the end, 1,555 patients were included in the study, considering that the larger proportion (37,9%) belongs to PMSP Network, followed by CRT (34,4%) and SAE-SJRP (21,8%).

The project enabled creation of a database of people with HIV using antirretroviral medicine in São Paulo State, involving a network of services made up of 18 specialized clinical units located in São Paulo capital and in São José do Rio Preto city. Epidemiologies and clinical information are included covering 1,555 adult patients who had started antirretroviral therapy from January 2003 to December 2010, representing the scope of patients who met eligibility criteria for the services included, or, in case of PMSP network, that were sampled.

This database will enable the STD and Aids State Program to create a cohort of people with HIV in the State of São Paulo and longitudinal epidemiologic studies, which are strategic to design and evaluate policies to face the disease in the state, as the ones directed for proper handling of antirretrovirals and adverse events associated with the use of this therapy.

3.1.14. Quimioprophilaxy for HIV Prevention on Men, Travestites and Transexual Women

This study started in 2008 and continued until 2011. It was developed by LIM 60 throug a contract signed with The J. David Gladstone Institutes and with intervention of FFM; it aims to evaluate the safety and efficiency of a combination of antirretroviral medicines, such as pre-exposure prophylaxis to prevent infection by HIV-1 on people who present high vulnerability, in use of standard interventions of prevention.

A total number of 3 thousand participants from six countries participated in this study in 11 research centers. The HCFMUSP is the only center in the State of São Paulo and included 200 out of 600 volunteers who participate in Brazil. All volunteers are healthy people (men, travestites, transexual women) with high vulnerability for HIV infection and will be advised on safe sex and free distribuition of condoms.

Besides that, volunteers are allocated randomically to receive the medication under study or placebo once a day, during a period from 48 to 144 weeks. Every month volunteers make regular tests for HIV detection and clinical and laboratorial exams, in order to check possible adverse events and related sexual transmission infections. Recruitment of volunteers is made in the community, with direct interaction of the research team, advertisements in public places and registration via Internet at FMUSP webpage (www.iprex.org.br). The results of the study will be of great use to offer a complement to current strategies for HIV infection prevention in more vulnerable populations.

The main objectives of this clinical essay are: 1- Determine whether FTC/TDF via oral and daily can be associated with adverse events rates (EAs) comparable to the ones with placebo between HIV-1 non-infected men and who have sex with other men (MSM); 2- Determine whether FTC/TDF via oral and daily reduces soroincidence of HIV-1 among MSM not infected by HIV-1.

The initial results were publicized in December 2010 in one of the most prestigious international scientific magazines (Preexposure Chemoprophylaxis for HIV Prevention in Men Who Have Sex with Men. New England Journal of Medicine, 363(27):2587-99, 2010).

3.1.15. "Development and Validation of Tools to Evaluate Adhesion of Patients to Antirretroviral Treatment at SUS" Project

This research started in 2008 and was concluded in 2011. It was developed by the Preventive Medicine Department of FMUSP through a Cooperation Term signed with UNODC and intervention of FFM; it aimed to develop and validate applicability of measurement tools for adhesion, usable for operational researches in a collective context and for clinical use on individual plan in order to contribute to monitoring and evaluation of adhesion by PN DST/Aids health teams.

The methodology used was:

a) Development of questionnaires for standardartization of adhesion based on literature and focal groups and interviews with patients and consultations to professionals from two reference services;
b) Analysis of validity and reliability of questionnaires developed and based on electronic monitoring as gold-standard in samples from patients at a service of reference;
c) Analysis of applicability of validated questionnaires based on interviews and structured and semi-structured observations in services of different characteristics of SUS Network.

Recruitment of patients for the validity test with electronic monitoring started on August 19, 2009. Three questionnaires were developed: one pictorial analogic questionnaire for self-filling out in WEB Language and two other questionnaires for individual use in the clinical context for health professionals. The questionnaires were piloted in a reference service.

3.1.16. Decyfring genetics and the KIR function in recent infections by HIV-1 by Bioinformatics

This study started in 2009 and continued in 2011. It was developed by LIM 60 through a contract signed with *University of California*, and with intervention of FFM; it aims to develop new immunological methods for prevention and control of infection caused by HIV-1 in a long run.

The intention is to map genetic variations of *KIR* receptors (killer Ig-like receptor) and then compare them to markers of disease and the function on NK cells, in a cohort of HIV-1 recently infected adults. These receptors are potent and polymorphic regulators of *Natural Killer cells* (NK) that connect themselves to allele of HLA – class I. previously active on responses from T cells, the NK cells are a efector component of the innate immune response of fast action and can have a fundamental role in the combat against HIV-1. Its functions are controlled by a group of surface regulatory molecules, among them the KIR receptor polymorphic. This work intends to map the ways by which NK cells responses can be modulated in order to generate a new protection mechanism against HIV-1.

3.1.17. HIV-1 Protease CD4+T cell Epitopes and Drug-Induced Muttions

This research, coordinated by LIM 60 and approved through an agreement signed between FFM and NIH was initiated in 2007 and concluded in 2011. The main aim of this project was to investigage whether neo-epitopos of protease of HIV-1 originated by mutations selected by inhibitors of protease (IP) are targets of responses of T CD4+ cells and evaluate whether such responses affect the virological control on patients who carry mutations selected by IP.

During the second year, the team was focused on carrying out experiments that are part of Objective 1 (protease sequencing HIV-1 and typing HLA of all 81 samples collected in the first year and essay on proliferation CFSE of 58 samples), as well as collecting blood samples of patients for the longitudinal study (objective 2).

The response of proliferative cells CD4+ and CD8+ T against HIV-1 peptides protease was also analyzed through the essay of CFSE diluted in PBMC. In order to analyze the profile of proliferative responses for peptide protease only those patients whose sequence of endogenous proteases were taken into consideration; a combination of 100% with peptides tested was included. Only 17% of these patients recognized a peeptide identical to its own peptide protease sequence. Paradoxically, the most frequent standard of recognition (83%) was PBMC, which recognized unequal peptides for endogenous proteases sequences, not recognizing identical peptides to endogenous sequences (not specific recognition). This indicated that absence of recognition of endogenous sequence was not due to variation of spurious sequence that was not included in peptides, but because of the real absence of recognition of such combination involving endogenous peptides. In order to reach the target 2, 60 individuals enrolled out of 81 patients infected by HIV-1; then they were submitted to protease inhibitors therapy (PI) after one year of the first blood taking.

3.1.18. Tools for creation and analysis of indicators for clinical and molecular data of HIV Patients for PN-DST-Aids decision management

Considering that the STD, Aids and Viral Hepatites Department needs Bioinformatics tools to help in the analysis of its own results, this project, which is backed up by the Ministry of Health and with intervention of FFM and developed by LIM 31, aims to meet: 1. Technical expertise for understanding the computer environment and the systems source code: DBCollHIV, HIVdag and extraction and analysis of indicators of clinical and molecular data; 2. Domain and application of classification techniques and analysis of clinical and molecular data, as well as automated identification of associations between mutations and drug resistance. 3. Development of algorithm for identification of mutations, having FASTA sequence files; 4. Transactional systems for introduction of clinical and molecular data that are reliable and available on the Internet.

In other words, the aim is the development of computerized tools for creation and analysis of clincal and molecular data indicators for HIV patients for management and decision making of STD, Aids and Viral Hepatites Department, as well as implementation of the Genotyping Test for detection of mutations which generate resistance to the Entry – Enfurvirtide Inhibitor – on patients submitted to HAART, but without previous treatment with this class of drug. This study was initiated at the end of 2010 and continued in 2011.

3.1.19. Alcohol Consumption and Risky Sexual Behavior on People Infected by HIV

The general aims of this research, which is financed by Senad and with intervention of FFM and developed by GREA are as follows:

1. Evaluate the relation between alchool consumption and risky sexual behavior on peolple with HIV+ on antirretroviral treatment.
2. Evaluate the impact of a behavioral intervention with focus on training social skills and problem resolution, on alcohol consumption in this population.

The specific objectives are:

1. Evaluate sexual behavior according to the following criteria: use of condoms for sexual intercourse; number of partners; status of the relationsihp with the sexual partner; sex in exchange for drugs, money, shelter and/or food; sex under the effect of alcohol and/or other drugs; and previous historic of contamination by other sexually transmited diseases (STDs) such as syphilis, gonorrhea, hepatitis B, among others; 2. Evaluate the frequency of alcohol, tobbaco and other drugs consumption during the last year and thirty days prior to the interview, before and after the intervention;
3. Evaluate list of social skills (assertiveness) and problem resolution before and after the intervention;
4. Evaluate symptoms of depression and anxiety before and after the intervention;
5. Develop behavioral intervention with focus on social abilities train (assertiveness) and problem resolution;
6. Evaluate efficiency of intervention (social skills train- assertiveness and problem resolutions) in consumption of alcohol by reapplying the tools, one, two, three and six months after its conclusion;
7. Check changes in risky sexual behavior after the intervention.

This initiative started in 2010 and continued in 2011.

3.1.20. Vif Specific Response by CD8 in Individuals who Control HIV Replication

This research was started by LIM 60 in 2010 and concluded in 2011 in cooperation with University of Bahia and University of Wisconsin, in Madison, United States and with intervention of FFM.

The study aims to define the role of T CD8+ lymphocites to control infection caused by HIV. It is believed that this project shows that rarely do HIV infected people and who are able to control multiplication of such virus have special immune responses mediated by lymphocites T CD8+ and special types of HLA. Knowing these aspects in details could help in the discovery of new ways to control HIV on infected people and help the development of an efficient vaccine .

The first study has already been published, what is object of a Master Thesis. Other manuscripts are under creation.

3.1.21. The biology of HIC Transmission ("AMPLIAR 020 Protocol – Cohort Study HIV Transmission Biology Prospective – version 1.1 de 10.02.08 Site Version")

Research initiated in 2010 and concluded in 2011 by LIM 60 with financing from University of California with intervention of FFM; it had as its main aim to obtain demographic, behavioral information and biological samples aiming to HIV study, to immunological response of host and immunogenetics factors and treatments related to HIV transmission to a balanced viral point on infected individuals.

It is a prospective cohort study of individuals who present sheer and recent infection by HIV and their partners for a better understanding of biological mechanisms of HIV transmission. Information generated by this research is critical for development of preventive vaccine strategies in relation to viral characteristics before the presence of

development of immunologic response, what contributes to eventual decisions on therapeutic intervention of HIV recently infected patients. Besides, the program evaluates low costs technologies that could contribute substantially for a management of public health issues related to HIV/AIDS in Brazil and globally.

In 2011 23 cases were identified involving recent infection and whose samples were received by LIM 60 for proper processing. A manuscript was publicized in 2010 with the first analysis made by the project.

3.2. Disabled People

3.2.1. IMREA Clinical Units

Through an Additive Term to the University Health Insurance signed with SES-SP and with intervention of FFM, IMREA opened, on December 22, 2011 its Clinical Unit, which will work as attachment organ to that Institute in Vila Mariana district, sharing the administrative and structural support service but with a differentiated work scheduled and focused on its own specific interests, once it will have its own therapeutical and ward team.

IMREA Clinical Unit will be the central axis of Lucy Montoro Network, a network of units focused on rehabilitation of handicapped individuals throughout São Paulo state, and which represents a real possibility of rehabilitation treatment for people with restrictions to move to rehabilitation centers under clinical regime. It will also allow treatment and orientation on rehabilitation to those people who live in parched regions in the state and who do not have such resources available where they live.

Facilities of IMREA Clinical Unit, opened at the end of 2011

Once reversion of structural lesions is many times not possible, rehabilittion at IMREA Clinical Unit shall have its work focused on estimulating and training development of functional independence along with their patients. Another fundamental working pattern will be orientation to patients, family members and care takers on the current clinical status, therapeutical options and objectives of rehabiitation during hospitalization, besides initiating the process of planning life after the hospital dismissal. Besides, IMREA Clinical Unit will be focused on training laborforce and development of procedures, which will serve as parameters to other centers.

Reception Hall of IMREA Clinical Unit

With investiments of R$ 25 million, 10 thousand patients will be treated per month, enabling access to highly qualified clinical treatment and hospitalization, aligned to technological innovations and more comfort to users. The unit will be equipped with a polysports court, therapeutical workshops, orthesis and prosthesis workshops, special swimming pool for hydrotherapy, pulmonary function laboratory and analysis of movement, room for physical conditioning, physiotherapy rooms and occupational therapy.

3.2.2. "Lucy Montoro Implantation, Implementation and Execution of Rehabiiltation Network" Project

An agreement between IMREA and SEDPD-SP was signed at the end of 2008 with intervention of FFM for development of Lucy Montoro Rehabiitation Network in the state of São Paulo and aiming to implement a Network for Assistance and Rehabilitation, within SUS parameters in order to meet needs and to extend and decentralize assistance and supply of orthesis, prosthesis and auxiliary means of locomotion, linked to technological development in the area and a guarantee of qualification in human resources for rehabilitation.

Its main aim is to guarantee quality for comprehensive care and supply of Technical Help, giving continuity to existing programs, besides operational support of the Mobile Unit, which relies on an Orthesis and Prosthesis Laboratory equipped with a plastering room, machine room, modeling room, testing room, medical office and waiting room. Based on its strucuture, it provides treatment to disabled people and who live in regions of Sao Paulo State where there is a lack of resources.

Lucy Montoro rehabiliation Network has met the need for expansion and decentralization of care and supply of orthesis and prosthesis and auxiliary means of locomotion through selection and capacity of its own professionals through traveling teams and the Mobile Unit, besides interaction with Municipality involved by care and inclusion of disabled people.

These activities continued in 2011.

3.2.3. ICESP Rehabilitation Center

IMREA, beneficiary of a donation from a public civil action by MPT against one company, as a replacement repair for moral damages in 2008 allowed the installation of ICEPS Rehabilitation Center, which was opened on September 22nd , 2008.

The Rehabilitation Service of ICESP has its focus on treating disabled people (transitory or permanent) aiming to optimize its functional potential in physical, psychological scopes, besides social participation. Rehabilitation has its focus on estimulation of functional potential and independence, but it also tries to help patients to adapt to their own limitations, in order to live better and independently. For so, it relies on physicians, physiatrists, physiotherapeuts, phonoaudiologists, neuropsychologists, occupational therapists, nurses specialized in rehabilitation and physical educators.

The team performance is involved througout the Institute and follows its growth. It works in hospitalization units, which are equipped with a rehabilitation room focused on hospitalized patients in the clinics and Rehabilitation Center.

These activities continued in 2011.

3.2.4. Technologist in Disabled People Care – Training Course based on Interactive Tele Education

This project, which is backed up by FAT and with intervention of FFM, was started at the end of 2010 by the Telemedicine Discipline of FMUSP; it has as general aim the structuring of a multiprofessoinal course, based on Interactive Tele-education to graduate professionals with focus on quality life planning and promotion for disabled people.

Their specific objectives can be therefore numbered: 1. Structuring of a course with thematic approach in administration/secretary, conduct and attitudes, disabled people´s rights and accessibility, nutrition knowledge, oral health and safety in domiciliar environment and general basic notions of health for disabled people; 2. Creation of organizational planning formularies and alert signs files for health worsening/health; 3. Creation of an educational environment based on Internet for qualification of professionals with evaluation environment; 4. Creation of a Social Network for students participating in the course; 5. Development of educational modules based on multivideos (educational and audio videos): a) Creation of a eight-video DVD; b) 15 educational reinforcement audios.

3.2.5. Agreement for Technical-Educational Cooperation with Paula Souza State Center of Technological Education (CEETEPS)

This agreement signed with CETEPS (São Paulo State Government autharcy) with intervention of FFM is coordinated by the Legal, Medicine, Medical Ethics and Social Medicine Department and Social Medicine and Labour of FMUSP. Its main aim is to develop technical-educational cooperation aiming at implementation and functioning of professional license for othesis and prosthesis technician and intermediary qualification in health area. In the multiprofessional, theoretical and practical course, the content enables students to produce assistive technology equipment (wheelchairs, orthesis and prosthesis, walking sticks, surgical vests and other items). The course is coordinated by IMREA and developed by its tehcnical team.

These activities continued in 2011.

3.2.6. Basic Project for management of prevention, diagnosis and intervention workers in the schooling process for students who present special educational needs through the Specialized Pedagogic Support Center – CAPE

CAPE – Specialized Pedagogic Support Center – was created by the Secretary of Education – São Paulo State in 2001 to offer support to the process of school inclusion for students who present special educational needs in the Educational State Network. The center works in managing, following up and providing support to regional actions on special education, in continued educational process and provision of resources and articulation of schools with the community, by providing orientation and referrals.

This project, which is supported by FFM, gives continuity to actions developed at CAPE, aiming to guarantee quality education at schools from the state network, according to the principles of school inclusion by integrating schooling of students who present special educational needs in the school pedagogic project. The target audience is made up of specialist teachers and regular class teachers of elementary and secondary educational level of 89 Boards of São Paulo State Educational System, what involves supervisors, technical assistances and 1,422 specialized teachers.

The project covers disabled students, parents and members of the community (630 people/year) supplying material to around 350 schools of the state public network per year. Its main aims are: a) offer support for development of schooling process for students who present special educational needs with emphasis on support to specialized teachers and teachers from regular classes, therefore facilitating their actions through a centralized and decentralized support; b) provide conditions under a forum of orientations, capacity and other issues so that these students can attend classes at public schools, guaranteeing quality and success until conclusion of the educational and learning process; c) contribute with a continued education of teachers in relation to didatic-pedagogic demands of students who present special educational needs; and d) offer pedagogic support by subsidizing and developing actions to promote participation and clarification to educators and school community in general for a well-succeeding inclusion and schooling of students who present special needs.

These activities were continued in 2011.

3.3. Children and Young People

3.3.1. Development, availability and distribution of interactive support materials to promote health at schools, communities and UBS by approaching on Drugs, Alcohol, Tabagism, Dengue and Breastfeeding

This project, which was initiated at the end of 2011 and developed by Telemedicine Discipline of FMUSP through an Agreement Letter signed with OPAS and intervention of FFM, has as aim to develop, update and make available supporting materials for creation of Learning Interactive Environments in Health by using 3 D CG on the human body (Virtual Man Project), interactivity (expanded reality and social network based on *website*), communication multimidias (videos, audios and visual communication) and a knowledge card to monitor students gathered in collections called "Cultural Box on Health".

This kit will be distributed to schools, communities and UBS and will be followed up by interactions with college students and tele-health professionals for training and tutoring of students and multiplying agents at school through interactive tele-education, aiming to motivate participants to pursue more knowledge on health.

The idea originated from the point that scientific knowledge for the proposed issues, associated with directed communication techniques to promote access to knowledge in a contextualized and humanized way, aligned with interactive technologies of Internet, could be an efficient way to promote a longer lasting social education on health, in larger scale and without losing quality. The use of multiways to involve the target audience is a differentiated and not formal educational model, suitable for the modern world, and which has as scenario, the use of more and more interactive technologies to keep people informed.

3.3.2. Especialization Course to Promote Children Development (ID)

Through a Term of Donation signed between FMSV and FFM, EE-USP made this course viable at the end of 2011 and whose general objective is to fill a gap for qualified professionals for local policies management focused on strengthening of children development. With 12 months of duration and 420 hours, the innovative initiative intends to train specialists to be able to contribute for improvement of public policies aimed at children development, specially about professionals who deal with care and stimulus with children whose age ranges from zero to three years old.

Its specific objectives are: a) prepare professionals who work with children development with theoretical densification and practice qualification from the reality experimented; b) instrumentalize professionals to plan, manage, assess and disseminate knowledge and practices in ID; c) support the advertisement of knowledge produced in the training process by monographies when concluding a course; d) form ID policies managers based on methodological fundamentation and theoretical foundation to work with challenges of intersectoriality and social communication for development of local programs.

3.3.3. Children Cancer Treatment Institute – ITACI

In 2011 FFM in partnership with SES-SP and HCFMUSP through an Additive Term to the University Health Insurance, supported activities of ITACI - ICr.

ITACI started its activities on December 17th, 2002 by activation of 12 medical offices and two rooms for procedures inside the clinic, besides 12 hospital beds/per day for chemiotherapy. On June 16th, 2003 support in hospitalization area started, opening six from the 17 beds installed. Since 2009, it has had two beds for Transplants of Allogeneic Bone Marrow.

The educational, research and care activities are developed for children and teenagers from 0 to 19 years old, who present onco-hematologic diseases from SUS or the Additional Health System.

The hospital is divided in three thematic floors with the following elements: Water (1st floor), Earth (2nd floor), and Air (3rd floor), properly decorated with the character Nino, ITACI´s mascot, placing all structure to welcome children and teenagers, parents and families.

ITACI – 2nd floor – Use of Earth themes

Today ITACI works with its full capacity of beds and treats 3,200 patients who present onco-hematologic diseases. There are around 1,100 consultations, 550 chemiotherapies and one thousand consultations by the multiprofessional team every single month.

After three years of reforms and extensions, seven beds in the ICU, six beds in Semi-intensive Care Unit, six beds for Allogenic Bone Marrow Transplants, one room for minor surgeries and two beds for post-annesthesia recovery were open in the first semester of 2012. In this site, there is also a hospital/day, with extension for 20 boxes of chemiotherapy, as well as Clinic with 13 treatment rooms.

In 2011 there were: 16,033 medical consultations, 21,566 multiprofessional treatments; 25 transplants of bone marrow (considering 13 autologous and 12 alogeneous); and 4,467 chemiotherapies.

3.3.4. Implantation of the Pediatric Center for Transplants of Hematopoietic Cells - ITACI

In 2011 FFM in partnership with SES-SP and HCFMUSP through an Addiative Term to the University Health Insurance supported activities from the Implementation Project of Pediatric Center for Transplants of Hematopoietic Cells of ITACI - ICr. The project has as main aim to constitute a Specialized Center for Sao Paulo state, to carry out a greater number of transplants of hematopoietic cells on children, both autologous and autologous and heterologus types, including patients who present neoplastic diseases and also others that can benefit from such procedure. The start of full-capacity functioning is forecast to middle of 2012.

The hematopoietic cells, also called stem-cells, are cells from the immunologic system. They are generated by bone marrow and have the capacity of self-renewal, but its main characteristic is its pluripotency: they are able to differentiate themselves from several types of cells. By doing that, they can be used in treatments of several types of diseases, specially tumors, blood and immune system diseases.

ITACI has carried out autochthonous transplants of bone marrow cells since October 1989 for treament of children who present solid tumors, specially neuroblastomas. The cells are removed from the patient and used in his own treatment.

Area of the reformed Clinic

Since then, ITACI has been preparing itself to extend its treatments with possibility of receiving cells donated by relatives or from donated cell banks and from umbilical cord. However, treatments with this type of material demand physichal and human adaptations, that are now being concluded.

To carry out this type of transplant, the patient needs to stay in the hospital on special beds, proper isolation and air filtering. Currently there are two working beds and ITACI has just made the very first transplant with a not-blood-related donor to the receptor. The cells came from abroad for the transplant.

Besides the physical structure adaptations, the team has also undergone an intensive training process. Now ITACI can follow up two or even three transplanted patients at the same time. Sao Paulo state still lacks this kind of treatment. Mostly patients come by the reference and counter-reference system at the health area of the state and/or by direct search to ITACI. Around 30% of patients are from other Brazilian states and even from other Latin America countries.

3.3.5. National Center of Reference for Children Care

With the agreement signed in 2001 with SES-SP, FFM, through an Additive Term to the University Health Insurance, has supported actions of the National Center of Reference for Children Care, located in ICr, which had its continuity in 2011. The Center integrates educational, research and health assistance activities for children with an comprehensive concept of health and aiming to implement strategies for promotion, protection, prevention, proposition for intervention actions and capacity of human resources in health area for children and adolescents.

The activities developed by the Center with support from FFM in 2011 were:

1. Continuity of the reforming, adequacy and maintenance of physical areas of the Health District - Butantã; acquisition and maintenance of equipment; training and capacity of professionals and health;
2. An International Scientific Forum on Children Development in partnership with Harvard University and FMCSV, which took place on October 25th and 26th, 2011;
3. Weekly supervisions to Family Health Teams of Butantã school, conducted by two pediatric doctors;
4. Conclusion of the national research on “Implementation of Committees of Research on Children and Fetal Deaths”, which resulted in the creation of Children and Fetal Death Office; production of “Research Manual on Children and Fetal Deaths”, of investigation formularies (hospital, home and clinical) and synthesis-files (technical material available on SES-SP site);
5. Structuring of a research line called “Developmentalist Origin of Health and Disease” with creation of a group of researchers, one Research Center and two study platforms: Butantã Cohort and West Region Project;
6. Finalization of clinical essay of the study on evaluation of safety and immunogenicity of one tetravalent wanna-be vaccine against dengue and shipment of the protocol for Ethics Committees and ANVISA;
7. Finalization of a study called: “Evaluation of tolerability Safety and immunogenicity of vaccine s created against pandemic influenza A (H1N1) added of adjuvants”, whose results have enabled identification of four wannabe vaccine s which could be produced by Butantã Institute;
8. Finalization of a study called: “Evaluation of Safety and immunogenicity of vaccine against pandemic influenza A (H1N1) without adjuvant” produced by Butantã Institute - Sanofi Pasteur on patients immunosuppressed, who have shown the vaccine was safe in all populations studies; however, presented varied immunologic response, according to the population studies;
9. Start of the “Molecular study of epigenetics modulation in umbilical cord blood and its relations with family ancestors and birth conditions”;
10. Start of the “Study of evaluation for vaccine against Rotavirus phase 2 – evaluation of safety, tolerability and immunogenicity”;

11. Start of the Study: “Transcritional Signature of fat tissue in fat children followed up in Butantã Cohort”;
12. Start of the Study: “Weight at birth and perinatal conditions and its association to cardiovascular disease on adults in Butantã Cohort”;
13. Start of the Study: “Relationship between weight at birth, growth and subclinical arteroscelrosis on adults in Butantã Cohort”;
14. Start of the Study: “Kindergarten Teachers Training to follow up psychic development of children from zero to three years old”;
15. Start of the Study: "Economic evaluation of low weight impact at birth";
16. Start of the Study: "Weight impact at birth when placing the individual into the labor market";
17. Start of the Study: "Assessment of performance – Family Health Program in West Region Project".

3.3.6. Implementation of a children´s library inside the Clinic at Hospital Dia - ITACI

This project was made available through a donation from ABADHS to Icr with intervation of FFM at the end of 2010. The project aims to implement a children´s library inside the clinic of Hospital Day, which is one ITACI unit. The room will have children´s books, shelve-carts for books, rugs, cushions, tables and chairs of several sizes and heights. The project will support children in pre-literacy age (0 to 6 years old) and children and teenagers in school age (6 to 18 years old).

The story telling mediation will take place interactively with children and teenagers, where they will be able to make up their own stories. Four mediators will be hired and trained to tell stories and answer to children and tennager´s questions about their own diseases, without harming their emotional structure.

The project intends to organize a collection of 500 children books that can bring excitement to mediators and children as target audience, the books will be presented in a familiar environment and accessible to everyone. These books will be rigorously selected for each phase of the children and teenagers develpomental phase.

The proposal has a specific aim: to contribute to quality when treating hospitalized children and help to transform the hospital environment in order to have a better acceptance and cooperation from children and teenagers to procedures and their own hospitalization. Besides, it presents the following general objectives: 1. Reduce tensions and emotional intercorrences resulting from hospitalization process and hospital treatment; 2. Provide quality improvement for children and teenagers´lives during cancer treatment; 3. Promote reconstitution of a ludic room for children and teenagers in hospitalizations; 4. Expand rooms where reading could be offered for populations with reduced access to purchasing books; 5. Improve the image of hospitalization process as a whole; and 6. Facilitate integration to hospital environment.

3.3.7. “I National Survey on the Use of Alcohol and other Drugs Among College Students in 27 Brazilian Capitals” Project

The use of drugs is worldwide phenomenon that has transcended the category of simply a “health problem”. In Brazil, alcohol is the most commonly consumed drug, and also 12 million of Brazilians have already consumed at least, one illegal drug.

In face of the need to understand this issue more deeply among Brazilian College Students, GREA has developed this project along with Senad through an agreement since August 2008.

The field work started in May 2009 and was finalized in the middle of December 2009. A probabilistic and stratified sample was chosen taking into account college students registered in institutions of Tertiary Courses (IES) of the public and private network in 27 Brazilian capital cities, recruited by unequal sizes conglomerates. The five administrative regions and the type of administrative organization of IES (whether public or private) were defined as sample extracts. All over the country, 114 IES were randomically selected with at least two public IES

and two private IES per capital, keeping a minimum number necessary of IES for calculation of estimatives of variability. The number of groups selected was proportional to the number of students of IES located in the capital, with a total number of 929 groups of students in the country. A total number of 100 (88%) out of 114 IES drawn accepted to participate in the survey; 654 (70,6%) out of 929 groups drawn, covering a total participation of 12,711 college students. Out of the total number of interviews, 6,206/12,711 (48,8%) were made with college students from 51 public IES and 6,505/12.711 (51.2%) with college students from 49 private IES. Considering the number of college students interviewed at Sao Paulo University – USP, one of the eight sub-groups involved in the survey, the current study relied on the participation of over 151 groups of students and more 4,841 interviewed students, resulting in participation of around 800 groups of students and almost 18 thousand college students.

In the national survey, college students were asked to answer voluntarely a structured questionnaire including 98 closed questions, for self-filling out, individual and anonimous; it was intended to know the profile and lifestyle of the Brazilian college student, with emphasis on the use of drugs, risky behaviors and psychiatrist co-morbities (eg.: depressive, psytchotic symptoms and non-specific psychological suffering). Identification of use of drugs was made through measures of use in life (experimental use, or "at least once in a lifetime"), during the last twelve months (in the year, or "at least once in the last twelve months before the interview") and in the last thirty days (in the month, or "at least once in the last 30 days before this interview"). The drugs investigated were: alcohol, tobbaco, marijuana, cocaine hydrochloride, merla, crack, anphetamins, anticholinergics, tranquilizers, painkillers, opioids, barbiturics, anabolic androgenic steroids, inhalants, hallucinogens, anticholinergics, ecstasy, codein based xirups, cetamin and heroin.

In the national survey, most part of the sample was made up by: women (55,0%); young adults from 18 and 24 years old (67,5%); singles (80,6%); white (55,5%); from A and B social-economical classes (72,0%); Catholics (53,0%); attending evening classes (36,8%) and in Mathmatics area (47,2%). Almost 87% of college students (86,2%) reported that they had already tried alcohol (*use in life*) and almost 46,7% had already tried tobbaco. As far as the use of other ilegal drugs, almost half of college students (48,4%) reported they had already made this use *in life*, a little more than one-third of them (34,3%) in the last twelve months and around one-quarter (24,6%) in the last 30 days. When analyzed individually, marijuana, anphetamins, tranquilizers, inhalants and hallucinogens were the five drugs most frequently used among college students, in this order, for all measures of use evaluated.

The main results of the survey were detailed in a report, which was launched and publicized in a closing seminar that took place in Brasília, on June 23rd, 2010. This report had already been translated into English and Spanish and will soon be distributed. These activities had continuity in 2011.

3.4. Poor Families and Women

3.4.1. Social Iniquity and responses of women to domestic violence: a partnership in survey – Brazil and United Kindom

This project was started in 2011 and is being developed by the Preventive Medicine Department of FMUSP, through a contract signed with The London School of Hygiene & Tropical Medicine and with intervention of FFM.

Its main aims are: 1. Reinforce tights between two well established research groups that work with violence against women and health: Gender, Violence and Health Centre at the London School Hygiene and Tropical Medicine, and the research group Violence and Gender at Health Practices of Preventive Medicine Department of FMUSP; and 2. Support a group analysis from a database in Brazil, in order to exploit how socio-economic factors and availability of services influence women response to violence and the impact of these strategies.

Specifically, the general objectives of the project are:

1. Reinforce the partnership between the two innovative and consolidated groups to facilitate future research on violence, gender and health;
2. Support the exchange of students, knowledge and skills between the two groups;
3. Support joining two different Brazilian databases and analysis of how socio-economic factors and availability of services influence women´s response to violence and the impact of these strategies;
4. Develop capacities and share experiences in quantitative analysis created by approaching methodological challenges of multi-level analyses in research of a complex social problem;
5. Share the lessons learned in relation to terms and methodologies with other OMS partners, therefore creating opportunities for comparative research;
6. Use information as a basis for Brazilian initiatives for reinforcement of intersectorial network of support women in situations of violence.

3.4.2. Intestine and Multivisceral Transplant Program

This project was approved at the end of 2010 and will be developed by the Digestive Apparatus Transplant Service of HCFMUSP through an agreement signed with Ministry of Health and intervention of FFM. Execution of ten intestine and multivisceral transplants are forecast, which will be made in a rate of one procedure every 36 days.

Intestine Failure (FI) is one condition where the gastrointestinal tract is unable to keep adequate nutrition, hydro-electrolic balance, growth and development. The use of NPT at home is expensive (in the USA it costs around 150 thousand dollars per year, without considering expenses with hospitalizations) and results in severe complications, such as cirrhosis, complications of venous access (infections, thrombosis and loss of catheter) and psychological disturbs. The continuous use of NPT worsens the quality of life, it takes to frequent hospitalizations and a mortality rate from 5% to 25% per year. On complicated and pediatric patients, mortality rate exceeds 60% per year. For these reasons, intestine transplant has been indicated to treat patients with irreversible FI isolatedly, or as multivisceral transplant, where the intestine is transplanted along with other organs (liver, estomach, duodene and pacreas) to treat multiple failure of organs from the digestive apparatus.

Global survival rate of the total intestine transplants made all over the world is 73% for one year, 59% for three years and 50% for five years. This rate is similar to survival of patients submitted to NPT permanently, made in international centers. However, it is worthy remembering that the high mortality of patients in NPT at home in our society and that patients with TI can be observed with significant improvement in their life quality.

It is estimated that 200 people per year have indications for these transplants in our country. However, there is not an active program for these transplants in Brazil, what limitates the treatment. Some patients are able to legally guarantee access to such transplants abroad. This situation is very expensive for the public service and makes the development of these transplants more difficult in Brazil.

In the recent past, six intestine transplants have been made in Brazil. HCFMUSP was a global pioneer of TI made by Professor Okumura in the 60´s. Three other institutions have made four intestine transplants recently; howevere, the results were disappointing, resulting in early death for all receptors. It is suggested that in this project a better structure and continued planning could help to achieve compatible results with the centers which have been making this procedure in other countries on regular daily basis.

Part 4:
Research Projects

Part 4: Research Projects

4.1. Main Research Projects

In this statutary role, FFM supports development of several research projects that reach global visibility, with hundreds of original works publicized in indexed magazines.

4.1.1. Treatment and combat against Flu Virus H1N1 dissemination

The aim of this program, which was started at the end of 2011 by the Clinical Board of HCFMUSP and financed through an Additive Term to the University Health Insurance agreed upon by HCFMUSP and SES-SP and with intervention of FFM, is a periodic search of H1N1 cases in the institution and monitoring of recommendations to deal with patients infected by flu virus, continuously.

Besides, recommendations for UTIs will be evaluated and updated on the elevated number of cases, purchase of inputs for diagnosis of cases confirmation.

4.1.2. Survey for Evaluation of Reduced Dose of H1N1 Flu Vaccine

This study, initiated in 2010, is being developed by the Clinical and Allergy Immunology Department of HCFMUSP and was financed by an Additive Term to the University Health Insurance agreed upon between HCFMUSP and SES-SP with intervention of FFM.

Its objective is to develop a survey for evaluation of reduced dose of H1N1 flu vaccine taken intradermally by using needleless pressure injectors with disposable syringe, to know its serology protecting response. This technique will allow expansion by five times of the contingent of vaccine for population, reducing costs of vaccine strategies against flu.

These activities had continuity in 2011.

4.1.3. New strategies for rehabilitation for brain vascular accident

The vascularbrain disease is the number one cause of inability in western countries. The castastrophic load imposed by brain vascular accidents (AVC), and the lack of interventions for rehabilitation based on evidences represent a great challenge for health systems all over the world.

There is a discrepancy between the sheer impact of inability imposed by AVC and the availability of neuro rehabilitation strategies to restore functional independence. Basic infrastructure to implement research on AVC rehabilitation has been developed in the Neurostimulation Laboratory of HCFMUSP; however, there is a lack of skilled and trained employees to continue the research.

This proposal, financed by NIH in 2011 through FFM has as aim to design a program that will strengthen training in neuroscience, rehabilitation, neuromodulation and biomedics engineering to provide develoment of new strategies which are viable, in order to reduce inability caused by AVC.

4.1.4. Epidemiology of receptor and evaluation of donors - REDS III Study – International Post

This proposal, initiated at the end of 2011 by LIM 31 through a contract signed with Blood Systems Research Institute and intervention of FFM, counts on a partnership of four major hemocenters in Brazil (Fundação Pró-Sangue / Hemominas / Hemope / Hemorio). The study aims to establish a basis for a National Research Program on blood safety in Brazil and it forecasts expansion from three centers during the REDS-II Program to four centers during REDS-III; maintenance of database including donors and donations; and the continuation of specific aspects of the two projects from REDS-II: re-evaluation of patients who have participated of Cohort studies Barber Bug Fever Disease and continuation of analysis of viral characteristics and risky factors involving blood donors infected by HIV.

Two new main protocols are proposed for REDS-III. The first project will focus on an extremely relevant threat for blood safety in Brazil and all over the world, which is Dengue´s virus (DENV). The second main protocol is an observational project for blood recipients with focus on epidemiology and transfusional therapy for anemia Falciforme (SCD).

The combination of continued activities, new protocols and efforts in trainings will guarantee that Brazil continues to evolve to become a Center of Excellence in Research of Transfusional Medicine in Latin America.

4.1.5. Acuraria Diagnosis and prediction of response to treatment on individuals with TDAH and bipolar disorder: individual classification of Magnetic Nuclear Ressonance for skull combined with genotyping

This research, developed by the Psychiatric Department of FMUSP is supported by NARSAD - The Brain and Behavior Research Fund and started in 2011.

The psychiatric diagnosis, highly dependent on observation of behavioral and personal reports made by patients and family members in several cases can be inaccurate. In spite of the great evolution of studies on meurimage and molecular genetics, there have not been so far, valid biomarkers that allow applicability of findings in psychiatric clinical practices. One important diagnostic question on daily routine at any psychiatric clinic is the diagnosis of disorder and attention deficit and hyperactivity (TDAH) on adults and their relation to bipolar affective disorder (TAB).

The main aims of this study are: a) apply a non-linear automated high dimmension standard classification to morphometric magnetic nuclear ressonance images (RNM) to investigage the degree of accuracy where it can discriminate individually patients who present TDAH from patients with TAB and healthy controls; b) evaluate whether addition of indexes of *diffusion tensor imaging* (DTI) to such classification will increase diagnostic accuracy; c) test the hypothesis that variations on the individual standard of brain anomalies inside the TDAH+TAB group will meaningfully forecast suitable medical treatment to meet a satisfactory clinical response in 1.5 years of using it; and d) check exploratorily, the impact of the presence of aletic variants of polymorphisms of genes that codifies dopaminergic transporter (DAT1), previously implicated in vulnerability for TDAH in the individual classification of images of people who have TDAH and TDAH+TAB and present such genotypical characteristics.

4.1.6. Latin America Regional Initiative of the WorldWide Antimalarya l Resistance Network – LARIWARN

This research, which was initiated at the end of 2011 by ICB-USP, counts on financial support from University of Oxford and with intervention of FFM.

The WorldWide Antimalarya l Resistance Network – WWARN will supply a central database with comprehensive information, duly updated and quality-guaranteed from countries with malarya endemics, on efficiency of medicines against malarya and resistance to medicines to control and erradicate this infectious disease.

Analysis of data collected by this project is aimed to development of spacial and temporal trends of resistance to medicines against malarya, based on regional studies on clinical efficiency of medicines and analysis of parasites through laboratorial and molecular methods carried out by partnership groups in the region. The pharmacological module will provide additional information on optimization of doses of different medicines against malarya.

When considering these different aspects of resistance and gathered in a large international database, WWARN aims to test and validate the use of molecular parameters *in vitro* for parasites as causers replacements of resistance. This general objective will provide a great variety of approaches for tracking resistance to medicines, which could help in the traditional evaluation of efficiency of clinical medicines.

4.1.7. In Vitro Cultivation of Plasmodium Vivax Parasite – Sanguineous Stage Project

This research, initiated at the end of 2011 by ICB-USP, counts on financial back up from Harvard School of Public Health and with intervention of FFM.

Around 85% of the 300 thousand clinical cases of malarya reported annually in Brazilian Amazon happened because of Plasmodium vivax. From 1989 on, resistance of P.Vivax to Chloroquine, the blood schizonticide used in vivax malarya treatment since 1946 could be observed. Initially described in Papua Nova Guiné, soon it was dissiminated in the Southwest and South Regions of Asia and more recently, in South America. In Brazil, the only available ones come from 109 patients treated in Manaus; out of this figure, 10% present parasidic relapse up to 28 days after treatment.

Knowing the resistance standards to chloroquine in different endemic areas in Amazon, it becomes vital for planning malarya controlling strategies in Brazil. This project aims to: (a) investigate whether Plasdmodium virax isolatedly in Western Brazilian Amazon presents evidences of resistance to chloroquine, based on essays of ex-vivo resistance with fresh parasites and cryopreserved parasites; and (b) investigate whether presence of a fenotype of resistance to chloroquine, determined in ex-vivo essays can be predicted by typing of four non-sinomim polymorphisms (N89S, N500D, L908M, Y976F and F1076L), previously described in PvMDR1, homolog glycoprotein potentially associated with resistance to multiple antimalarya ls.

Hereby it is proposed for the first time in P.vivax populations in Brasil a simultaneos study of polymorphisms in pvmdr1 and fenotype resistant to CQ ex-vivo. I*n vitro* fenotype analysis, which is pioneer in Brazil, is based on a largely used protocol in Southeast Asia and previously standardized in field laboratories in Acre.

4.1.8. European Network of National Schizophrenia Networks studying Gene-Environment Interactions (EU-GEI)

This research, initiated at the end of 2010 by the Preventive Medicine Department of FMUSP counts on financial back up from Maastricht University – School for Mental Health and Neuroscience and with intervention of FFM.

Schizophrenia and other psychotic disorders (EOP) are highly prevailing conditions with substantial morbi-mortality. However, data on EOP incidences and evolvement all over the world are still scarce, specially in developing countries. EOP ethiology is multifactorial, involving several biological and social factors; it is an effective advancement in understanding EOP and fundamentally it depends on an integrated approach of different factors implied in the incidence, physiopathogeny, evolution, prognostic and response to treatment of those mental disorders, mainly in initial steps of clinical manifestation.

The current proposal, part of a multicentric project, the European Network of National Schizophrenia Networks Studiyng Gene-Environment Interactions (EU-GEI; http://www.eu-gei.eu/), international consortium to investigate ethiology, mechanisms and prognostics of EOP, aims to stimulate incidence of EOP in Ribeirão Preto-SP region and investigate possible interaction between social and biological factors resulting from such mental disorders.

Specifically, it is intended to: a) investigate existence of variations in incidence of EOP, considering urbanicity and internal migration; b) investigate association between individual risk factors, families and geographical areas and the incidence of EOP; c) verify existence of anatomic and functional alterations in brains of individuals with EOP compared to healthy controls and individuals with EOP risk (healthy brothers); d) check ocurrence of genetics and immunological alterations in individuals with EOP compared with healthy controls and population in risk of EOP (healthy brothers) by using strategies of Genome Wide Associations; and e) investigate occurrence of interactions between social, genetics, immunological and neuroanatomic factors in incidence of EOP.

In a three-year time, there will be a case-control study of EOP incidences with a populational basis of around 800 thousand people at risk per year, or 2,4 million people-year in a total of three years. A sample of 300 cases incidents, 150 siblings and 300 controls are estimated. All participants will be submitted to an extensive series of social-demographics, environmental, clinical, neuropsychological and family background evaluations, besides genetics, immunological and neuroimage assessments. The ineditims of such study is based on this approach, which is ample and integrated to different components of etiology and mechamisms involved in EOP. Besides, this international multicentric consortium, with methodologic consistance and uniform protocols, constitutes a pioneering strategy, which will allow great integration and cooperation between the several groups of investigators involved in this research network.

4.1.9. The relation between differences of genic expression and clinical and pathological characteristics of human cancers

This research, initiated at the end of 2010 and concluded at the end of 2011, was developed by LIM 15 Molecular and Celular Biology Laboratory and relied on financial support from Ludwig Institute for Cancer Research and with intervention of FFM.

The team developed several works involving tumors on the central nervous system with focus on the search for potential therapeutic targets. The results were published in the following scientific works:

1. Analisys of expression for genes related to celular differentiation;
2. Analysis of expression and functions for several target genes aiming to search for predictive markers for prognosis and therapeutic responses and also new therapeutic targets;
3. Research on mutations in tumors on the central nervous system by sequencing in large scale.

4.1.10. Cancer Treatment. Innovation in the use of oxysteróls incorporated to Lipidic Nanoemulsion as inductors for cell death

This project, promoted by LIM 31 researchers and made feasible through an agreement signed between FFM and FINEP at the end of 2010, had as main aim the pioneering introduction of a new tool in Pharmaceutical Nanotechnology for cancer treatment.

In its more specific targets, the project proposes to: 1. “in vitro” study on several oxysterols in relation to its complex capacity in nanoemulsion, in such way to create citotoxicity and citostatic effects on tumor cells; 2. “in

vivo" more specifically on rats and dogs which present lymphoma, toxicity study of several formulations, its characteristics for compartimentalization, its plasmatic depuration, effectiveness of use of one, two or even more formulations, tumor evolvement and overlife of the animal; and 3. On patients who present big B celled lymphoma, check toxicity and proceed with compartimental analysis, including plastmatic depuration.

These activities had continuity in 2011.

4.1.11. Health Longitudinal Study on Adults – Wave 2 – SP

This project, under responsibility of HU-USP and made feasible through an agreement signed between FFM and FINEP at the end of 2010, has as main general aims to check the incidence of diabetes and cardiovascular diseases, study its natural history and investigate associations in biological, behavioral, environmental, occupational, psychological and social factors related to these diseases and related complications, pursuing a causal model that covers its inter-relations. It is also intended to describe temporal evolution of these factors and determining factors for such evolution, besides identifying effective modificators in associations as observed and compare patterns of risk among participating centers, which could express several regional variations related to this disease in the country. In order to allow realization of future studies, including genetic exams, stock of biological material and DNA extraction will be kept.

Giving continuity to the first step of data collection (Wave 1), the current project aims to meet the following specific objectives: 1. Give proper continuity to vigilance of cohort denouement for identification of new cases of diseases related to the term proposed; 2. Plan Wave 2 with interviews and study exams, including: definition of protocol, pre-test of interviews, exams and measures; study-pilot; and preparation of data system; 3. Carry out data collection as forecast for Wave 2; 4. Carry out analysis by using data collected in Wave 1, write scientific articles and submit them to publication; 5. Increase SP library for stockage of biological material collected in Wave 2; 6. Carry out biochemical exams and dosage of hormones in blood and microalbuminuria in urine at the central laboratory in SP; e 7. Interpretate, codify and send data on ultra-sonography as made in Wave 1 to the Data Center.

These activities had continuity in 2011.

4.1.12. Medical Images of Tomographies by Electrical Impedance for Annesthesya and Neonatos Patients

This project, developed by LIM 09 researchers and made feasioble through an agreement signed between FFM and FINEP at the end of 2010, has as main aim the development of two pieces of equipment for diagnosis, prevention of complications and monitoring of therapies in neonatos and annesthesical procedures. Two modules dedicated to Tomographies by Electrical Impedance (TIE) will be developed, a portable and inexpensive technology, which generates images in real time, of body transversal sections, without using contrasts or radiation.

The following points are being developed:

1. Annesthesia Module (for Surgical Center): development of specific hardware with software for detection of accidental disconnection, inadequate ventilation, misplacement of orotraquel tube and atelectasis;
2. Neonatos Module (for neonatal ICUI): development of specific hardware, with software for CPAP monitoring and adjustment, mechanical ventilation adjusment and high frequency ventilation, severity diagnosis to bronquitis.

These activities had continuity in 2011.

4.1.13. Validation for the rk39 immunocromatographic test on humans by using total blood and exsudate from oral mucosa (saliva)

This research was approved at the end of 2010 and it is being developed by LIM 38 through an agreement signed with Health Ministry with intervention of FFM.

Up to this moment, the diagnosis of visceral leishmaniose based on parasitological and immulogical methods available for use, has presented a huge variation in sensitiveness and specificity, besides delaying the diagnosis, due to the need of using materials that are not always available, such as ELISA reader, opthic microscope and fluorescence and yet the need of trained and skilled staff for inputs handling.

In the present moment, fast tests with rk39 are validated for use of serum as specimem, not having validation for use of other clinical specimens with total blood and saliva, which would make diagnosis faster and could help to use it in the field, at the moment patients who are suspisious of LVA are treated. This way, this study intends to validate the immunocromatographic fast test with rk39, for use in total blood and saliva, by comparing it with the use of serum and with other serological methods, which use total antigen and parasitological methods.

These activities had continuity in 2011.

4.1.14. Cost-effectiveness analysis of replacing the vaccine against atenuated living virus polyomielite and oral use (VOP) by schemes containing innativated vaccine g (VIP) in the National Immunization Program Routine

This study was approved at the end dof 2010 and will be developed by the Preventive Medicine Department of FMUSP through an agreement signed with OPAS and intervention of FFM.

The vaccine strategy against polyomielite is a great challenge for the National Immunization Program (PNI) and health system managers. There is a need to keep high level of vaccine in all coverages to avoid reintroduction of a wild virus. However, continuity of the oral vaccine used against poliomielite (VOP) implicates in the risk of paralitical polio associated to the vaccine al virus (VAPP). There is one efficient and safe alternative – the innativated virus vaccine against polyomielite (VIP). In spite of VIP higher costs, this strategy reduces, or even eliminates, ocorrence of flacid paralisy associated to the vaccine al virus (VAPP).

This study aims are to made a synthesis of the literature on the epidemiology, strategies and schemes for vaccine action and environmental impact of the vacinal virus, besides stimulating costs of different strategies for vaccination.

Scientific publications available in Medline and LILACS, data of national and not publicized research, information systems of health, documents and national and international guidelines will be analyzed.

These activities had continuity in 2011.

4.1.15. Peruvian/Brazilian Amazon Center of Excellence in Malarya

This research, initiated in 2010 by ICB-USP and financed by University of California and intervention of FFM, has as main aims: a) stimulate prevalence of assyntomatic infection by plasmodium and distinguish risk factors for development of symptoms in the vigency of malarical infection; b) stimulate prevalence and risk factors for presence of gametocytes in symptomic and assintomatic infections; c) estimate risk of subsequent symptomatic infection among people who present assymptomatic parasitemia and non-infected individuals; d) determine, based on genotyping of parasites, if subsequent episodes of symptomatic malarya take place due to persistance of parasite lineages, originally found on assymptomatic patients; and e) compare the genetic diversity levels of parasites in symptomatic and assymptomatic infections.

The entomologic component of this proposal, centered on the main vectors of malarya found in the area of study, aims to: a) determine diversity of vectors in this region, by molecular tools for identification and genotyping of vectors; and b) evaluate the impact of different economic activities in the populational structure of vectors.

These activities had continuity in 2011.

4.1.16. Determination of average factors involving pollutant emission of light and heavy fleet of vehicles in São Paulo City, by using experiments in tunnels and evaluation of toxicity of emissions generated by diesel, gasoline and etanol engines

This project, coordinated by LIM 05, was made feasible through a contract signed between FFM and ÚNICA by the middle of 2010.

The study intends to estimate the actual rates of average emissions involving Sao Paulo automotive fleet, divided into light fleet whose engines are powered by basoline and ethanol and heavy fleet whose engines are powered by diesel, from samplings collected inside tunnels.

The tunnel is a confined physical space, where it is possible to monitor pollutants originated from vehicles exhausting systems and where dispersion of these pollutant agents take place, which happens at the entrance of tunnels and inside ventilation ducts, allowing calculation of an average between emissions and external concentrations. In case of São Paulo City, the existence of tunnels that present limited access to part of the fleet, only allowing light vehicles to circulate, also obtains specific emission rates of such fleet. Therefore, use of combined experiments inside tunnels with restricted and non-restricted access becomes viable to collect data on emission rate related to heavy fleet by difference.

In 2011 two experimental campaigns were made: the first from May 2nd to 13th, 2011 with measurements that took place inside Janio Quadros Tunnel (TJQ), and the second one from July 4th to 19th, 2011 with measurements that took place inside Tunnel 1 of Rodoanel – West Side (TRA). In experimental campaigns there was participation of several research groups involved in the air pollution issue and interested in the determination of vehicle contribution for air quality in São Paulo.

CO, SO2, Nox gases were identified and measured by automatic monitors of CETESB Mobile Laboratory, which was set up inside the tunnels. The volatile organic components (COV) were sampled and analysed according to three different methods for hydrocarbonets and carbonilic components.

To obtain a traffic volume in TJQ, cameras were installed, which kept filming during all experiment, and the counting was made a posteriori, in the Atmospheric Sciences Department. Inside TRA, there is an automatic counting system controled by CCR Concessionaire (company responsible for operating Mário Covas Rodoanel), which provided information on number of vehicles, type and average speed, every 15 minutes.

4.1.17. Methodology and data sources for estimating health services utilization - Review and support the development of the HPV cost-effectiveness model

These studies were approved at the end of 2010 and are under development in the Preventive Medicine Department of FMUSP through an agreement signed with OPAS and intervention of FFM.

The projects are being developed in ProVac Network for Centers of Excellence in Economic Evaluation and Analysis on OPAS Decisions, which aims to develop products to support realization of studies on economic evaluations and analysis for vaccine decisions and immunization programs in the region of Americas and Caribean. Two Centers of Excellence in Brazil (FMUSP, UERJ) are part of ProVac Network, two ones in Colombia (Universidad Nacional de Colombia and Universidad de Cartagena), one in Argentina (Instituto de Efectividad Clinica y Sanitaria, IECS) and another one in Mexico (Instituto Nacional de Salud Pública).

The Center of Excellence of USP is responsible for two projects:

1. Development of guidelines to use secondary data in the development of estimatives to use services in studies of economic evaluation;
2. Development of analytical model of referece for CE studies for vaccine against HPV.

These activities had continuity in 2011.

4.1.18. Development and application of Strategies for Active Search of Ex-Interns of Cristo Redentor Shelter, Duque de Caxias, RJ, Supported by Data Remote Reception

This research had its start in the middle of 2010 and is being developed by the Preventive Medicine Department of FMUSP through an agreement signed with the Ministry of Health and intervention of FFM.

The problem resolution for environmental contamination and human exposure to organoclorate compounds in Cidade dos Meninos region, Duque de Caxias county, Rio de Janeiro, involves complex and long lasting issues; it also presents short and long term implications for populations that are exposed to environmental risks. This project represents the beginning of a partership between MS and the scientific community to advance and find a definitive solution for the problems related to potential human exposure to top pesticides produced in the old factory of the Malariologia institute, which has been little investigated. It is the identification of ex-interns from Cristo Redentor Shelter from 1950 to 1996 when, by legal decision, shelter activities in the area were finally suspended.

Aiming to develop and apply an active search strategy of ex-interns from Cristo Redentor Shelter, it crucial to evaluate methodologies to be implemented and create procedures to collect and analyze data. The final product should be a database with identification and possible location of ex-interns. It is forecast that this database could be accessed remotely by using a safety protocol of Internet (HTTPS), and that can be continuously updated, therefore serving as a supporting tool to managers involved in follow-up and solutions to problems related to Cidade dos Meninos.

In a likely second step of the project, individuals whose information on wherabouts is available, should be contacted and invited to participate in the enrollment for health monitoring.

These activities had continuity in 2011.

4.1.19. Epidemiologic Evaluation of electromagnetic fiels of Furnas Facilities

This research, approved at the end of 2009, was developed by the Preventive Medicine Department of FMUSP, through a contract signed with Furnas Centrais Elétricas S/A, and intervention of FFM. The initiative aims to establish parameters on levels of human exposure to Electromagnetic Fields (CEM) generated by broadcasting systems and other pieces of equipment and build up an epidemiologic model to evalute the possibility of effects on the population health who live nearby this equipment.

Its main specific aims could be numbered as it follows: a) a critical review on epidemiologic studies by associating population exposure to electromagnetic fields and effects on health, with emphasis on methodological aspects and evaluation of exposure; b) development of a geographical information system (SIG) to identify levels of CEM in the population who lives nearby the transmission lines (LT) and other electrical systems for energy generation and distribution; c) quantify populations potentially exposed to CEM through this SIG and characterize them according to demographics aspects and socio-economic position; d) characterize the exposure levels of the population in relation to limits adopted by ICNIRP; e) develop mathematical models to estimulate the potential impact on their health exposed to CEM as observed and taking the characteristics and effects related to international literature into account; f) develop an epidemiologic study on some segments as selected for highly populated urban areas to evaluate the mortality risk for certain types of cancer and other possible biological effects associated to CEM exposure.

Information on mortality for the counties in Metropolitan Area of Rio de Janeiro have already been collected and georeferenciated. A map covering transmission lines has also been produced and at this moment, the statistic analysis of the association between exposure to electromagnetic fields evaluated considering their proximity to transmission lines and mortality by leuchemy and brain cancer are being processed. Preliminary results indicate an increased risk; however, it is not statistically significant for deaths generated by this cause versus proximity of transmission lines. The final report of the research will be handed in by March 2012.

4.1.20. "Clinical Research Network and Techonogical Evaluation on Health" Project and "Morbidity on Hypertense Patients and Sleep Obstructive Apnea – MORPHEUS Study" Sub-Project

Systemic Artery hypertension represents one of the most serious public health problems, with impact in incidence, mortality and lethality of brainvascular, coronarian diseases and cardiac and renal deficits. In spite of the considerable increase of therapeutic arsenal and base of pharmacological products, in last decades, the proportion of patients who present refratary hypertension and that are not able to reduce their pressuric levels to safer levels (in spite of proper treatment with, at least, three drugs including diuretic medicines) has been large enough to allow that other therapeutical ways are tested. There increasing evidences that sleep obstructive apnea (AOS), recognized by repetitive episodes of partial (hypopnoea) or complete obstructions of airways (apnea); it is very common on hypertense patients, particularly among patients who present refratary hypertension. Besides, there are increasing evidences that AOS also contributes, independently, to the increase of artery blood pressure; however, the impact of AOS treatment on patients who present refratary hypertension is not well established.

The aim of this current project, developed by InCor and approved by FINEP, in the middle of 2010, with intervention of FFM, is to test the hypothesis that an effective treatment of sleep obstructive apnea, with a continuos positive pressure device on airways, contributes for reduction of arterial blood pressure.

These activities had continuity in 2011.

4.1.21. "Evaluation of impacts on health due to Atmospheric pollution levels in Brazilian Cities and policies to control air pollution generated by automotive vehicles" Project

The impact of air polution on health has been studied globally. In Brazil, several studies have shown that pollution is responsible for deaths and hospitalizations, particularlly due to breathing and cardiovascular diseases. However, almost all these studies in Brazil have been made inside Sao Paulo City, what does not measure the diversity of different pollution situations and Brazilian populational characteristics. The small representativeness of such analysis makes difficult to extrapolation of results to other metropolis and makes creation and development of vigilance activities not viable, taking into account the characteristics of locations. Besides that, it is important to deepen the knowledge of the process associated to formulation, political and technical viabilization and results obtained by policies that involve air quality control (ex. PROCONVE), on three governmental levels.

The aims of the "Evaluation of impacts on health of atmospheric pollution levels in Brazilian cities and policies of air pollution control generated by automotive vehicles" research, concluded in 2011 by the Preventive Medicine Department of FMUSP through an agreement signed at the end of 2008 with the Ministry of Health and intervention of FFM were:

1. Identify the influence of international guidelines towards the control of air quality related to urban transportation, with special focus on São Paulo City, where there is updated data on automotive vehicle and collective transportation fleets;
2. Supply data on the effects of air pollution on health in Brazilian Metropolis which contain data on pollution and climate conditions, therefore corroborating to the structuring of Program of Vigilance on Health Related to Air Quality (VIGIAR) and international scientific literature.

The first of these objectives could not be carried out, due to dismissal without prior notice of one technicians responsible for the project, and who would be responsible for developing analysis of vehicle pollution control policies. On the other hand, and related to the second objective, hystorical series of data on hospital mortality, pollutants and meteorological data for all counties have been gathered for which the Environmental Vigilance Programs confirmed to have monitored air quality. The same information was systematized for Mato Grosso cities, which have more than 100 thousand inhabitants. As additional activity to the project, an online information portal has been created, which is available for all state and municipal participants of VIGIAR. Yet, the impact on

health has been evaluated for atmospheric levels of pollutants measured in several participating cities with priority to particulated material, as exposure indicator.

In general way, this project, which was concluded in 2011, contributes for solidifcation of VIGIAR activities in Brazilian metropolian areas.

4.1.22. The Effects on Eicosanoid Pathways: Implications for Altered Innate Responses in Asthma

A worsening of ashma occurs, frequently when infectious stimulus, such as viral infections, are overexposed to inflamatory "micro-environments" characterized by Th2 cells and mediators, which is a characteristic inflamation of airways on asmthmatic people. In the specific objective of this project, developed by the Pathology Department of FMUSP through a contract signed in the middle of 2007 with the University of Pittsburgh, and intervention of FFM, 20 lungs will be studied, originally from autopsies of patients who died as consequence of asthmatic conditions (fatal asthma) and ten patients who died due to non-pulmonary causes (controls).

Between January and December 2011, the following activities were developed:

1- Presentation of the work briefly called "Inducible nitric oxide synthase increased in large airways of fatal asthma", as a poster, in the Congress of American Thoracic Society from May 13th to 18th, 2011.
2- Analysis of blades marked by immuno-histochemistryCOX-2 which is on-going and close to conclusion.
3- Histochemistrycoloration for marking eosinophils on tissue samples was made and analysis was concluded. Coloration of neutrophils by immuno-histochemistrymethod was carried out and analysis of blades is under its way.

4.1.23. "Population structure and transmission Dynamics of Plasmodium vivax" Project

The aim of this research, which is financed by NIH, with intervention of FFM and developed by ICB-USP, is to characterize the genetic structure and dynamic of transmission of human malarya parasite, Plasmodium vivax, aiminig to, in a long term, obtain comprehension of evolutive biology of such specimem and potential implications for malarya treament and control. Plasmodium vivax is associated to 70-80 million malarya clinical cases reported every single year, with 2.6 million people in risk of infection all over the world.

The specific objectives of investigation are: 1. Estimulate levels of microsatelites diversity, single-nucleotide polymorphism (SNP), density and rates of recombination and study of geographic structure of global populations for P.vivax; 2. Analyze the P.vivax genetically distinct lineages on transmission dynamics in a well characterized area, cohort of individuals exposed to malarya and determine at what speed new haplotypes disappear or are introduced on the population; 3. Carry out SNP and microssatelites discovery through a 300-kb cromossome segment of four representative P.vivax lineage to standardize highly strategic throughput for input of great scales of these SNPs isolated in the field; 4. Compare these 300-kb of DNA sequence of P.vivax with corresponding sequence in one of its closest relatives, the parasite monkey of malarya P. knowlesi, to obtain estimatives on unique nucleotide-SNP mutation rates and density of several DNA sequence types of P. vivax and to allow identification of genes in a scope for positive selection in all this cromossomic segment. These activites had continuity in 2011.

4.1.24. Evaluation of implementation of control program for Leprosy in basic network in Aracaju, Sergipe, Brazil

This study was approved at the end of 2010 and concluded in 2011 by the Preventive Medicine Department of FMUSP through an agrement signed with OPAS and intervention of FFM.

Development of the study relies on support from Aracaju Municipal Health Office through Coordination of the Municipal Service of Epidemiologic Vigilance and Coordination of Leprosy Control Program. The aim is to evaluate implementation of the Leprosy Control Program developed in Aracaju city – SE through the following studies: 1. Devise the epidemiologic profile of leprosy in the previous five years and posterior five years to the decentralization process of actions to control the disease; 2. Evaluate the process involving leprosy controlling

actions in services of basic care; e 3. Estimate prevalence and gradation of physical incapabilities and awareness of patients on such incapabilities.

With such information, it is intended to suggest preventive medicine and collective health strategies which enable strengthening of PMCH actions and improve care provided to people who have leprosy.

4.1.25. "Production of Transgenic Rabbits for Hydridoma-Free Generation of Monoclonal Antibodies" Project

Monoclonal Antibodies (mAb) of mice are produced from the fusion of lymphocyte B originated from a mouse estimulated by antigen and one B Cell (myeloma) transformed in a several steps process. The immortilized clones (or hidridomas) always produce the same monoclonal antibodies, which recognize a protein of the structure by linking to their only recognition epitope. Monoclonal humanized antibodies are used for diagnoses and therapies of tenths of human diseases. As example, Herceptin (anti-ErbB2) has been used in breast cancer and Remicade (anti-TNF) in treatments of reumatoid arthritis.

The current project, financed by ICGEB, with intervention of FFM and developed by ICB-USP, has as main aim, to generate genetically modified rabbits through introduction of codifying gene of antegen SV40-tsA58 (antigen T of virus Simian 40 from monkeys). And, in second place to show that B cells of these transgenic rabbits are capable of producing clones of B cells monoclonal antibody producers after activating the transgene (cell immortalization) during growth at 33^o C (permissive temperature for transgene expression). In a second phase, it is intended to use such transgenic rabbits for production of humanized monoclonal antibodies against cytokines, growing factors and its receptors.

Its activities had continuity in 2011.

4.1.26. "Serological evaluation of Chickenpox in Vaccines administered by pressure injectors of disposable needleless syringes" Project

Through the Additive Term to the University Health Insurance signed with SES-SP and intervention of FFM, the Preventive Medicine Department of FMUSP is developing this research of comparative serological evaluation on 600 children between one and two years old, institutionalized at kindergartens of São Paulo City, for a vaccine against chickenpox, injected intradermally, with a reduced volume of 0,1 ml by pressure injectors of disposable needleless syringes, compared to the conventional method with a volume of 0,5 ml and with syringes and needles.

The methodology to be adopted is: 1st phase: Planning and preparation of randomic sample of children to be vaccinated at several kindergartens, including formularies for data collection to be filled out manually and by computers, elaborated on Web-Software-Base for configurated data. 2nd phase: Vaccination and colection of two blood samples from 600 institutionalized children at kindergartens supported by São Paulo City. 3rd phase: Laboratorial processing of blood samples collected and processing of results with analysis and conclusion of information generated from the Research with presentation on a research report. These activities had continuity in 2011.

4.1.27. Study on effects of coffee and heart

Result of an agreement signed between FFM and Embrapa, which started this research, coordinated by the Cardiopneumology Department of InCor at the end of 2007. In brief the research aims to:

1. Estimulate and develop research, projects and medical studies on development and evaluation of efficiency for human health on nutraceutic and medical effects of coffee, in order to evaluate biodisposition and pharmacocinetic profile of clorogenic acids and their derivatives on regular voluntaries and patients who present ischemic heart disease and type 2 diabetes.

2. Evaluation of several ways to prepare coffee, including decaffeinated and soluble on regular individuals and those who present coronary diseases.

3. Evaluation of the influence of coffee ingestion in glicemic homeostase on type 2 diabetes and on-diabetes patients, aiming to obtain scientific evidences for industrialization and commercialization of healthy products for consumers, both in prevention and treatment of cardiovascular diseases besides other human body systems.

In 2010 six sub-analysis were made with several types of coffees on different individuals with several varied results.

Voluntaries who participated in the study in 2011: Healthy and Coronarian ones. There is some difficulty to find voluntaries who present Mellitus Diabetes. New forms and new places to select this specific group of patients are being searched in order to make the selection more dynamic.

In 2011 sub-analysis with several different types of filtered coffee on different individuals were made with varied results.

4.1.28. Pilot-Project of Monitoring Subsystems for populations exposed to chemical substances

This project, coordinated by the Preventive Medicine Department of FMUSP was made feasible through an agreement signed between FFM and the Ministry of Health at the end of 2007; however, due to a delay to release the budget, it only had its start by the end of 2008.

Due to the growth and development of production processes in Brazil, exposure to a multiplicity of substances has become one of the most serious consequences for health of human populations. Aiming to create and develop the First National Investigation of Populations Exposed to Chemical Substances, which could evaluate potentially exposed populations to chemical products, it becomes indispensable to carry out a pilot project to evalute methodologies and procedures to be implemented for collection and analysis of data.

The main objective of this study, which was concluded in 2011, was to evalute populations potentially exposed to chemical substances, by obtaining biological indicators of exposure and their information using questionnaires. Besides that, it aimed to create a future National Investigation of Populations Exposed to Chemical Substances, once the pilot project had been carried out to examine the practicability, test and suitable methodologies and establish partnerships.

A biomonitoring was made with blood matrixes and hair on conscripts and blood donors, and with nail and hair matrixes on school students. The levels of the following substances were therefore determined: lead (Pb), cadmium (Cd) and mercury (Hg), in blood matrix and residues of organoclorate pesticides also found in this matrix. In the hair matrix, the following elements were analyzed: Pb, Cd, Hg, Al, Ni, As, Ba, Sb, Ag, Sn, Bi, Be, U and Th; three studies of transversal cut were made with blood donors who live in the Metropolitan region of São Paulo, conscripts of the Brazilian Army and school children who live in Rio de Janeiro city. The samples collected were then analyzed for several chemical elements and residues of organoclorate substances. It can be concluded that it is feasible to perform a National Investigation; however, the strategy to obtain biological samples should be defined for each population sub-group. Besides, it is recommended to take advantage of the existing structure to obtain samples, use traditional matrixes to have more comparability and guarantee its periodic realization.

4.1.29. Development and Validation of Vascular Endoprostheses (Stents) releasing drug products

This project, approved through an agreement made between FFM and FINEP in 2007 and concluded in 2011, was coordinated by the Hemodynamic and Interventionalist Cardiologic Service of InCor and resulted in the development of the very first pharmacological coronary stent of Latin America: a strategic medical device for Ministry of Health - Decree number 978/GM/MS of May 19th, 2008 and Decree number 1.284/GM/MS of May 26th, 2010.

Besides that, the project also enabled:

1. Transformation of an existing technical-scientific expertise at the University in value market;
2. Consolidation of all technological route for pre-clinical validation of vascular endoprostheses in the country with emphasis on tehcnical and specialized capacity of human resources and improvements for InCor: new processes, new equipment and new installations;
3. Increase of competition in Brazil and abroad for a 100% brazilian company, which is also partner and co-financier, Scitech Produtos Médicos Ltda., according to national policy for development of Health Industrial Complex – Market for Minimally Invasive Medical Devices;
4. Improvement of “know-how” by the Brazilian Company Innovatech Ltda: design laser cut on cobalt alloys – Metallic stents chromo (platforms).

In a first phase, one metallic piece was developed, which is nowadays used both at SUS and Additional health. For testing and pre-clinical validation procedures, a special laboratory was created to test it on animals. After all tests have been made, the “stent” proved by be efficient and with good economic feasibility.

In a second phase, a way to aggregate one anti-healing product to the “stent” body was studied, once the natural process of healing patients causes problems related to obstruction of vases.
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Laboratory for validation was created by using resources from the project

To solve this problem, applying one anti-healing medicine as coating for the “stent” was considered. For such, it was necessary to discover a way to fix it on the “stent” metal body with a very thin layer of at maximum 5 micra thick and calculate the speed of release for the product so that it could become stable and suitable. The new “stent”, called pharmacologic stent, has already presented outstanding results in tests on animals. The first test on human beings has already been made.

4.1.30. Retrovirus Epidemiology Donor Study-II (REDS-II) International Component – Blood Center

The "Retrovirus Epidemiology Donor Study-II (REDS-II) International Component – Blood Center" is a Research Project of Hematology Service of HCFMUSP, which was made feasible through a contrat signed between FFM and Blood Systems Research Institute at the end of 2006, whose activiites will have their continuity until August 2012. The study has resulted in three projects:

PROJECT 1: data collection ended in March 2011. The aim of this study was: 1. Establish and monitor predominance and incidence of HIV on a distinct population of Brazilian blood donors, related to types of donations (voluntary vs repositional) and behavioral and geographical characteristics of donors; 2. Estimulate and monitor residual risks of infection by HIV and protect the impact of new filtering technologies, such as HIV test, risk RNA; 3. Identify risk factors and other donor characteristics that could serve as basis for development of new screening procedures or policies for exclusion of donors to intensify blood safety; and 4. Track the rate of donor infections with deriving sub-types and groups resitant to HIV drugs, with focus on the analysis of HIV molecular characteristics on donor plasma samples recently infected and donors exposed to varied risks.

PROJECT 2: Identify key factors for motivation of donors who cause impact on safety and feasibility of blood donors in Brazil, as well as estimate effectiveness of exclusion policy for donors in Brazil. This project involved a great number of people who participated in this research, who had recently donated blood successfully, as well as collection of samples and interviews with donors who were differed at the donation. This data collection was concluded in March 2011.

PROJECT 3: This project, which is based on the Barber Bug Fever disease, will develop a retrospective cohort study, which will define the natural history and laboratorial correlated information of Barber Bug Fever disease among soropostive donors previously identified by using PCR T.cruzy and one quantitative study on antibodies and clinical estimatives. The sample collection of this project was concluded in October 2011.

The preliminary data analysis has already allowed publication of 12 articles in international magazines, and other eight articles are under submission phase.

4.1.31. Immuno-histochemistryCharacterization of New Antibodies of Cancer Interest

This research, which was coordinated by LIM 14, was made feasible through an agreement signed in 2006 between FFM and PR&D Biotech S/A and relies on support from FINEP and Fundação Butantã.

It has as main aims:

a) anatomo-pathological review of selected cases for TMA´s creation and preparation of a database in Worksheets format, with all information related to different casuistics;
b) selection and marking of glass slide areas and related blocks of paraffin, for further TMA´s preparation;
c) supervision and technical support on preparation of TAM´s blocks;
d) preparation and presentation of seminars related to subjects on the on-going research;
e) analysis and interpretation of immuno-histochemistryresults obtained from casuistics available on TMA´s, with data tabulating in own matrixes for futher statistic evaluation; and
f) involvement in preparation of data consolidation reports and activities, as well as prepararation of results, for publication in periodics.

These activities had continuity in 2011.

4.1.32. Monitoring of Air Quality in Six Brazilian Metropolitan Regions

This project, which was coordinated by LIM 05, was made feasible through a contract signed in 2010 between FFM and Controlar S/A. This collaboration focused mainly on the support to tehcnical staff who does such research, mainly when operating the analytical laboratory responsible for identifying the inhalable and fine particulated material which is in suspension on the atmosphere, sampled in filters.

In 2011 the main activities and benefits were the following:

1. Support to the analytical laboratory operation for analysis of filters sampled with inhalable particulate materials, considering the gravimetry and reflectancy processes, which are crucial to characterize exposure in studies on impact of atmospheric pollution on human health and animals in toxicological studies;

2. Support use of portable samplers for fine particulated materials (PM2,5) proper for use on vehicles (taxi drivers and traffic operating police offices) or personal use (traffic operators), experimental equipment whose follow up operation needs observation and development;

3. Support to scientific production in analysis of data generated by the automotive vehicular inspection in São Paulo, from annual data with estimative of impact to environment and health of population, in such way to provide input to responsible people for public policies in environmental area, besides the related publication of information to civil society.

4. Support to field staff training to use samplers;

5. Support to development of calculation tools that, from environmental concentrations of atmospheric pollution, estimate the impact on health in short and long term epidemiologic consequences, with its economic appreciation;

6. Suport to development of a mobile laboratory project dedicated to scientific investigation of atmospheric pollution effects on human beings at the end of assembly;

7. Support to mobile laboratory projects dedicated to studies on biological mechanisms for atmospheric pollution effects on animals at the end of assembly.

4.2. Clinical Studies

FFM, by supporting the FMUSP-HC System, has participated actively in Clinical Studies whose results are of great interest to the academic community and society as well. .

FFM, by supporting HCFMUSP and FMUSP, has participated actively in the realization of Clinical Studies, whose results are of great interest to the academic community and society as well. The realization of Clinical studies, under supervision of professors from the institution, aims to evaluate efficiency, tolerance and safety of medicines and research on human beings and animals, under technical-scientific, ethical aspects and adequacy to the in-force legislation for the specimems involved, research financing, origin of resources, return of investments, compliance to the Institutional Policy Guidelines, integration with several other sectorial actions and interest and convenience to the Public Service.

This job done in parternship with NAPesq, which was created in the beginning of 2005 and is connected to the Clinical Board of Directors of HCFMUSP; it has as main aim to support researchers, adequate procedures and provide support to areas of FMUSP/HC System that carry out scientific investigative processes involving human beings.

It is understood by clinical studies, any investigation on human beings, whose aim is to discover and verify the pharmacodynamic, pharmacological, clinical and/or other effects of product(s) and/or identify adverse reactions to product(s) under investigation, aiming to check its safety and/or efficiency. Clinical Research, clinical essay or clinical study are terms used to denominate a scientific investigation process involving human beings.

In this context, FFM managed in 2011 around 370 clinical studies, properly approved by the Ethics Comission for Analysis of Research of HCFMUSP (CAPPesq) and coordinated by researches from the FMUSP/HC System.

Part 5:
Health Policy Projects

Part 5: Health Policy Projects

5.1. Main Health Policy Projects

FFM also supports development of several Health Policy Projects, including trainings of Public Network professionals by developing tools for evaluation, analysis of results, among others. .

5.1.1. Planning for introduction of a vaccine against dengue in Brazil

Considering that dengue is one of the biggest concerns of Public Health in Brazil in the present moment, and that there have already been vaccines against it being tested in expanded phase II protocols, and with a perspective of introduction in vaccine al routine within next years, it becomes necessary to conduct a series of systematic studies, aiming to obtain solid base of knowledge, which is scientifically validated and in order to enable the National Program of Dengue Control from the Secretariat of Health Surveillance and Ministry of Health to participate actively in the decision making process on the best vaccine strategy to be adopted within domestic territory.

It is important to point out the need to fill some gaps on dengue-related knowledge, for instance, mechamisms, adverse reactions, inflamatory patters which take to high rates of morbi-mortality and efficiency/safety of possible vaccines considered to be used, in a near future. Other examples of important gaps to be filled on knowledge of epidemiologic patterns of dengue in our environment are the need for identification of the highest risk zones for transmission, the need to identify populations, cohorts and specific groups that are more sensitive to dengue, in order to base upon priorities of vaccination and increase efficiency of control.

For such, this project to be developed by Medical Discipline of Informatics of FMSUP through an agreement signed at the end of 2011 with the Ministry of Health and intervention of FFM proposes test and validation of a computerized dynamic model, minimally estocastic for determination of epidemiologic variables which are critical for planning introduction of vaccines against dengue in Brazil, as well as for providing competitive analsysis of cost-effectiveness and cost-benefit among several different strategies that aim introduction of a vaccine against dengue in our population.

This model will serve to propose the first approach for the best vaccine strategy considering optimum age for introduction of the vaccine in our national calendar of vaccination and for eventual proposition of an initial vaccine campaign aimed to abbreviate the protecting effects of vaccination introduction in Brazil.

5.1.2. Proposal from the Strategic Committe for Develpment of New Transplant Centers

One of the problems that deserves more attention on public health treatment in Brazil is the difference of regional quality among seaside states and the others. Easy to understand it due to historical implications, such difference is becoming more and more innacceptable, considering the recent socio-economic development that is taking place in country-side states. In this sense, high complexity actions acquire special positions and, among them, organs transplant.

In 16 states with around 60 million inhabitants, transplants just cannot happen or just kidney transplants take place, sporadically and with living donors. Therefore, room for research about the most suitable method to

develop centers that are capable of starting such surgical procedure practice and that implies in development of a series of related specialities.

This proposal, financed by the Ministry of Health through an agreement signed and with intervention of FFm at the end of 2011, has as basis, research and qualification: a) evaluation of a qualification method; and b) qualification of multiple organs transplant reception.

The aims depend on the interaction of several specialties, showing the opportunity to qualify, concomitantly, all variants inerent to the process in the states where, due to geographical position, will be regional poles and those which had better use in previous courses and trainings. Therefore, the states of AM, MS, PA, PB and RN are included due to their location and the states AC, AL, GO, MA, MT, PI and SE due to their qualification already obtained in reception (Courses on Sad News, Diagnosis of Brain Death and Ocular Enucleation).

5.1.3. SUS Humanize Network (RHS) – Expansion and New Developments

In an increasingly interdependent world, as the public level and its communities, like those connected to areas of education and health, only evolve with practices supported on quality and synergy of human relations. The intervention forecast in the current project is to create a favorable field, so that such relations take place truly and implicatedly, guaranteeing socialization of affections, collective construction of knowledge and innovation in cognitive and relational technologies plan.

Intelligence is always a move of composition and interdependence. The more a group or community wakes up to the potential of composition, more activated their collective intelligence will be. And what does that mean? Collective intelligence when activated, enlarges the capacity to produce, circulate innovations, relate, exchange, create, know, increase its cohesion degree, sharing, synergy and results.

Therefore, the current project to be developed by Preventive Medicine Discipline of FMUSP through an agreement signed at the end of 2011 with the Ministry of Health, and intervention of FFM, intends to work with methodologies and strategies to increment collective intelligence simultaneously from instances of coordination and management of the National Policy of Humanization (PNH) in RHS level and professionals, collaborators and users of the network.

Therefore, the focus is on increasing RHS scope, what requires co-implication ethics of all these players with the policies and actions that PNH promotes or intends to implement.

5.1.4. “Matricial of Medical Residence Programs at Acre State Hospital Foundation” Project

Aiming to promote training of specialists in Medical Residence in prioritary regions defined in common agreement with SUS managers, the current project, which is financed by OPAS and intervention of FFM, initiated in 2011 and is developed by COREME of FMUSP, aims to improvement of the Medical Residence Program (PRM) at Fundação Hospital Estadual do Acre, in areas of Anesthesiology, Clinical Cancerology, Neonatology and Radiotherapy.

Matricial support is understood as a management and articulation arrangement in a network, where a technical, pedagogic, scientific and management cooperation is established where exchange of knowledge and experience acquired by an institution of excellence favors adoption of more adjusted practices for the results intended.

5.1.5. Telehealth Brazil Project in Support to Primary Care - São Paulo Nucleus - 2011

Through an agreement signed with OPAS and intervention of FFM, this project, approved in the middle of 2011 and developed by Telemedicine Discipline of FMSUP, intends to develop mechanisms of cooperation among SUS managers and Educational Institutions, aiming to achieve continuous qualification of professionals of Family Health Strategy (ESF) through interactive telesupport and teleeducation, standartization of the Second Formative Opinion, according to normatives of Decree Telehealth number 402/2010 of MS.

The following points can be highlighted as specific objectives of this project: 1. Consolidate activities in points implemented of Telehealth Brazil Program with ESF trainings on use of telemedicine and telehealth technological resources (digital inclusion); 2. Consolidate activities of teleconsultancy and Second Formative Specialized Opinion among professionals from different health areas; 3. Availability of capacity courses with approach of subjects under a multiprofessioonal focus by using educational environment based on Internet (Cybertutor) with inclusion of resources such as videostreaming, discussion list and webconferences; 4. Development and implementation of interactive materials for assistencial support in order to form repositories of learning units based on competences to structure a source of information of good evidence in primary health care to subsidise processes of clinical decisions, training and management in the area; 5. Promotion of joint actions with SES, COSEMS and CIB to build up a management committe and implementation of action strategies of Telehealth Brazil Program in São Paulo state; 6. Make videos, audios and posters available and based on the Virtual Man Project, for use at UBS aiming to achieve education and prevent diseases; and 7. Distribution of interactive educational materials for public schools, as part of the Health Program at Schools with subjects related to mental health, care with drugs, tabagism and alcohol, environment care, health nutrition and oral care.

5.1.6. Transfusional Safety: "International REDS" Project and proposal of a Research Network on Transfusional Safety for the Ministry of Health

This study, approved at the end of 2010, is being developed by the Hemathology Service of HCFMUSP through an agreement signed with the Ministry of Health and intervention of FFM.

It is a network of blood banks from USA and supported by NHLBI; it has as main aim to develop research focused on blood banks. Three Brazilian Hemocenters make part of this network: Fundação Pró-Sangue-Hemocenter of São Paulo (FPS/HSP) / Hemocenter of Pernambuco (HEMOPE) and Hemocenter of Minas Gerais (HEMOMINAS).

The foundation of this project is the construction of a unique database with information from the three Hemocenters, which allows evaluation of the current status and progression of blood donation in Brazil. .

The aim of Ministry of Health is to give proper continuity to this initiative and increase the network to other four additional Hemocenters. This way, the Ministry guarantees collection and analysis of data related to Hemotherapy practiced in the main public Hemocenters in Brazil and it will help to make data available what will allow, among other things: a) elaborate recruitment programs for blood donors; b) discuss and implement issues related to clinical screening; c) define criteria for temporary or definitive refusal with more rigor and basis; d) calculate prevalence of transmissible diseases by blood in several regions of the country; e) calculate the residual risk of transmissible diseases by blood according to prevalence of each region; f) elaborate strategies to increment the percentage of voluntary donations and repetiton in our country; g) identify epidemiologic differences among donors from each region.

5.1.7. Integration of Competences in the Development of Judiciary Activity with Drug Addicts

This project, approved at the end of 2010, is being developed by GREA through an agreement signed with Senad and intervention of FFM.

Drug abuse is a complex and multifaced phenomenom, which imposes society and public power a joint action from intersectorial policies in Juridic areas of education, health and social assistance pursuing solutions to

minimize damages resulting from this behavior. In the legislative field a public policy related to causes and consequences of abusive drug consumption, Law number 11.343/06, which institutes the National System of Public Policies on Drugs (SISNAD) and prescribes measures for prevention of undue use, attention and social reintegration for drug users and drug addicts, it is a legal landmark to change a paradigm and penal procedures upon acceptance to the presupposition of our National Policy on Drugs (PNAD), which sees recognition of differencees between drug user, the person in undue use, the addict and the drug dealer, treating them differently, without, neglecting and not taking proper care of mechanisms against drug dealing.

Until publication of the related law, the user and addict were seen, in the imaginary world of our society, as a risk or threat. Procedures were restricted to police action (punishment) and referral to psychiatric hospitals (mental disease). On the contrary, under the scope of the new Law, the individual who is sued due to drug possession for his personal use will have the right to participate in individual therapeutic projects (resocialization) and will be advised for social inclusion and reduction of risks and social and health damages (article 22, inc. III). In this context, users and drug addicts will not be subject to freedom privative punishment, but to socio-educational measures applicable by Special Criminal Courts.

This new paradigm is found on Article 28 of related law; therefore, the presupposition of educational action as foreseen in this Law is that the State, with participation of our society, can and must formulate and implement policies or programs to provide services to the community. As a consequence of the new Law number 11.343/0 and considering its more efficient and suitable application by Operators of the Law of Special Criminal Courts and Courts for Children and Youth involved in prosecution, it is necessary to improve theoretical-methodological knowledge in areas that focus on drug related problems (out of the science of rights scope) and adequacy of joint action (multidisciplinar focus) among Operators of the Law (judges, prosecutors, defenders, deputies, conciliators, lawyers and other Justice servers), professionals from psychosocial care areas (social assistants, pedagogs, psychologists, among others) and professionals from Public Safety Area.

These activities had continuity in 2011.

5.1.8. "V Specialization Course on Mental Health " Project

Through an agrement signed at the end of 2008 with the Ministry of Health and intervention of FFM, EE-USP concluded in 2011, the V Specialization Course on Mental Health, aiming at capacity of deinstitutionalization project managers in support and research for ward in health, enabling development of consonant research with the psychiatric reform in Brazil.

Its main aim was training of professionals in health area for planning and development of mental health care for the population, enabling them to influence processes to transform reality in their regions by registering such care area in the field of collective health.

The course was given to tertiary level professionals (physicians, psychologists, nurses, social assistants, occupational therapeuts and others), liable to be part of multidisciplinar teams on mental health and have managerial functions in the public network of Mental Health Services in São Paulo state. 636 applications had been received, and out of that number 50 registrations were made free.

5.1.9. Observatory Network of Human Resources on Health

Through an agreement signed with OPANS and intervention of FFM, this study, approved at the end of 2009 and concluded in 2011 and developed by EE-USP, aimed to build up a methodology for evaluation of ward workers educational programs for public and private sector health services in São Paulo city and has as main actions: a) establish criteria for evaluation of ward workers educational programs; b) advertise on production of EE-USP on curricular reform for the Ward Graduation Course and also participation of the School in the Pro-Health Project of the Ministry of Health; c) evaluate results of the ward workers educational programs made in one public and private institution of the Health sector in Sao Paulo city; d) update the design and content of the Work Station of EE-USP website.

With such measures, development of innovative and reflexive pedagogic practices are intended as second formative opinion applied to permanent education of nurses and other health professionals, besides development of new competences which will allow action on determinant factors for life and health conditions of social groups.

5.1.10. "Permanent Institutional Support to Health Regions in São Paulo State" Project

The current project, which was concluded in 2011 and developed by the Preventive Medicine Department of FMUSP through an Additive Term to the University Health Insurance signed with SES-SP and intervention of FFM provided the institutional permanent action along with Collegiates of Regional Management (CGR) covered by the IV Health Regional Department (Baixada Santista Region) and by the Regional Department of Health II (Central, dos Lagos and Consórcios Regions) and has as main aim to contribute for structuring and operationalization of the health system in the scope of related collegiates.

The main objectives of this initiate were: 1. Build up the necessary tools for planning and implementation of the health system regionalization, according to SUS principles along with managers; 2. Share knowledge and experiences with managers to build up the Health System Regionalization; 3. Identify and homogenize concepts and approaches related to health regionalization; 4. Appropriate scientific production and identify procedures and information sources relevant to implementation of a health regional system in DRS scope; and 5. Support managers for performance of its specific action in the health regional system.

The main activities developed in 2011 were:

a) DRS II (Araçatuba): 1. Application of field work at 116 UBSs from the 40 counties covered by DRS; 2. Presentation of results in the collegiate; 3. Availability of Database to DSR II; 4. Diagnosis of capacity installed in the basic network to health care in the region; 5. Exchange of experience between academy and services on structuring and adaptation of research tools for qualification of the basic care structure in cities covered by DRS.

b) DRS IV (Santos): 1. Availability of scientific production survey on services and the health status in the region; 2. Presentation and adaptation of tools for qualifiction of basic care by city, approaching the existing physical structure, professional capacity of ESFG and availability of equipment, inputs and pharmacological items; 3. Discussion on children mothers health status in the region according to a DSR-IV request; 4. Exchange of experience between academy and services on structuring and adaptation of research tools for qualification of the basic care structure in cities covered by DRS.

5.1.11. "Monitoring and Evaluation of Implementation of National Policy of Permanent Education" Project

The "Monitoring and Evaluation of Implementation of National Policy of Permanent Education" Project is being developed by the Preventive Medicine Department of FMUSP through an agreement signed at the end of 2008 with the Ministry of Health and intervention of FFM. The initiative proposes a study that allows to identify the content and methodology for creation and implementation of state and regional plans of permanent education on health and the organizational designs given for implementation of a permanent education policy through four research modules.

Implementation of four modules covers methodological strategies and diversified investigation designs. Besides that, there are situations that make more comprehensive studies viable,such as documental analysis of Regional Plans of a sample of regions and situations that demand case studies with data and information obtained through a combination involving analysis of documents and in-deep and semi-structured interviews. The general study covers a national sample selected with different criteria for effectiveness of different modules according to their objectives.

Its main objectives could be numbered as it follows: 1. Generate knowledge on current efforts to build up new organizational designs and new interaction and articulation procedures of players involved in the regionalization of a national and permanent policy of education on health; 2. Identify procedures that shape the interaction strategy among states and local health managers, or their procedures that cover the interaction strategy among states and local health managers or their representatives, in shaping decisions of instances of regional policy on permanent education; 3. Produce and make information available for decison making process, therefore facilitating monitoring and improvement of guidelines and mechanisms of a health regionalized management.

These activities had continuity in 2011.

5.1.12. "Analysis of data from national health vigilance systems on Brazilian adult and teenagers populations" Project

Two national systems of vigilance of risk factors and health protection for teenagers and adults have been planned or operated in the country since 2006 by the Secretariat of Health Vigilance of Ministry of Health with support from several academic institutions in the country.

The vigilance system related to teenagers population studies probabilistic samples of individuals group registered on the 7th grade of public and private schols of the elementary educational levels of Distrito Federal and each one of the capitals from 26 federation units. The vigilance system related to adults population studies probabilistic samples of groups of individuals who are 18 years old or older, who live in houses that have telephone lines in Distrito Federal and in any of the capitals of the 26 federation units. In both cases, information that allows to estimate the frequency, socio-economic distribution and tendency of evoluton for risk factors, which determine great part of morbity and mortality in the country, for relevant groups.

This study, developed by the Public Health School of UPS through an agreement signed at the end of 2008 with the Ministry of Health and intervention of FFM has as main aim to support the Ministry of Health in analysis of data collected by the national systems of health vigilance of Brazilian population including teenagers and adults, ensuring that this valuable piece of information collected by these two systems, is quickly and efficiently analyzed.

Its activities were concluded in 2011.

5.1.13. "Strengthening of Regional Management in São Paulo State" Project

This intervention project, developed from January 2009 by EE-USP through an Additive Term to the University Health Insurance signed with SES-SP and intervention of FFM, aims to support development of Health Managment at DRS of Presidente Prudente (and, therefore, along with five CGRs that are part of it) and along two CGRs of DRS in Sao Paulo CGRs - Bandeirantes and Source Route. The main aim of this project is, therefore, qualify attention to health in the regions by supporting construction of the Management Pact, aiming at commitment of sanitary responsibilities that aim to guarantee attention to the population needs and having the city and state competences as basis, the territories, the organization of services and system management.

As main issues, objective of this project, we can identify: 1. The insipient performance of managers as leaders of the organization of Health Regions and the new role of a state manager in this restructuring, bringing the challenge of new managerial competences, among them negotiating and pact in CGR scope; 2. Little recognition of the importance of Basic Care as way to increase access and resolubility of health needs of the population and overvaluation of midia attention and high complexity; 3. The difficulty of several social players in their realization of health diagnosis that are able to inform planning on health for implantation of regional health networks that support CGR during discussions and prioritization of the region needs; and 4. The difficulty of keeping intersectorial actions and social participation that provide sustainability for development of the regions.

As result of phase 1 of the Support Project, it could be noticed that one of the greatest problems to strengthen the management in scope of CGR is the lack of managerial capacity of Health secretaries and technicians that provide support to them. Another question is the small social participation in health in this region.

Activities developed in 2011 were: 1. Identification and mapping of the network components: attention spots, systems for diagnostic and therapeutic support; logistics; management system for each one of the collegiates and for DRS as a whole; 2. Visibility of collegiates in COSEMS Congress; 3. Construction of indicators and actions agreed at PPI and re-elaboration of the Health State Plan.

5.1.14. Advanced data analysis Models for effects of air pollution on the population health: an experimental and epidemiologic approach

This project, coordinated by LIM 09, was made feasible through an agreement signed between FFM and the Ministry of Health at the end of 2007; however, due to delays to release the budget, it only started at the end of 2008 and was concluded in 2011.

The proposal aimed to increase and institutionalize the training model and capacity of professionals of the public health area, aiming to create a critical mass of agents capable of helping the Ministry of Health to formulate public policies to promote health, and have exposure to atmospheric pollutants as a orientation view.

The specialization course on Environmental Health, called "Air Pollution and Human Health" was given in nine VIGIAR participating states. Considering the impossibility of sending over all participants to Sao Paulo, the proposal for Interactive Teleeducation Course could be considered as a tool of great importance for such professionals. Therefore, the on-line course that started in August 2009 and was concluded in December 2011 covered all VIGIAR participating states of Brazil – more than 20 units of the federation, and provided all participants wih one certficate as "Environmental Health Specialists".

The execution dynamics for epidemiologic studies, biomonitoring, check of alternative methods for measurement of air pollutants levels in places where they are not measured, associated with statistic methods and knowledge on the increase of hospitalizations or deaths with the increase in levels of pollution, could help with prevention measures.

The course initially relied on 66 participating students, indicated by VIGIAR; out of this number, 50 students could study all modules and TCC and were granted with a Specialist Certificate.

5.1.15. Mellitus Diabetes Project– Permanent Education – Formation of Human Resources in Professional Education and Post-Graduation: Stricto and Lato Senso on Health

This project, coordinated by the Endocrinology Department of FMUSP, was made feasible through an agrement signed between FFM and the Ministry of Health at the end of 2007; however, due to delays to release the budget, it only started at the end of 2008. Its main objective is to implement a program for reorientation for treatment of people who suffer from diabetes by providing capacity courses on new ways of treatments and prevention against its complications by using film techniques, "on-line" interactive discussions and implantation of a communication line by Internet (DISCUSS YOUR CASE), enabling discussion of difficult clinical cases and orientation on problems considered complex by professionals of the basic area.

Telemedicine of FMUSP is responsible for creation of the material used in several medias, such as Internet, DVDs, leaflets and audio-books, thanks to technological resources developed by the department, among them the "Virtual Man" Project. Currently there are 14 videos being produced in the area of Educational Communication Design of Telemedicine, which blend contextualized images, classes of teachers involved and excerpts of the Virtual Man, developed according to the class subject. For each video there is also a synthesis in audio-format, to be made available on Internet for download by Cybertutor (www.estacaodigitalmedica.com.br/cursotelemedicina/), one teleeducational system on the Internet.

Screens produced by Telemedicine for Diabetes Project

The project will count on a risk questionnaire available on the Internet, where adults can calculate the possibility of developing diabetes, besides the "Prato Feito" Program, which teaches pysichians from any area, how to suit the patient´s diet, according to his clinical case.

The Center of Diabetes in Bahia is responsible for programming face-to-face participations and next step, discussions on clinical cases and deepening of contents initially presented will be made.

These activities had continuity in 2011.

5.1.16. Support to Ministry of Health in Operation and Perfecting the VIGITEL System

Since 2006 Brazil has relied on a vigilance system for DCNT main and determinant factors in our environment, which is supported by telephone interviews made in probabilistic samples with adult population who lives in houses where there are telephone lines. This system, called VIGITEL (Vigilance of Risk Factors and Protection Against Chronic Diseases by Telephone Questioning) was tested by NUPENS/USP in São Paulo city in 2003 (Monteiro et al 2004) and pre-tested in the same city and in other four capitals of Brazilian states in 2005.

This project, coordinated by the Public Health School of USP through NUPENS/USP, was made feasible through an agreement signed between FFM and the Ministry of Health at the end of 2007; however, due to delay to release the budget, it only started at the end of 2008. The initiative has as main aims: provide technical support to Secretariat of Health Vigilance of Ministry of Health - SVS/MS in activities related to VIGITEL questionnaire review, analysis of data collected and production of technical reports and scientific articles.

With support from NUPENS, VIGITEL was implanted by the Secretariat of Health Vigilance of Ministry of Health - SVS/MS in all capitals of the 26 Brazilian states and in the Federal District in 2006, (Ministry of Health 2006). The current agreement ensures maintenance of support from NUPEN/USP to the Ministry of Health in operation and perfecting VIGITEL System. These activities were concluded in 2011.

5.1.17. Research Commitees on Children Deaths in South and Southest of Brazil: a strategy to be implemented and qualified

This project, coordinated by Pedriatrics Department of FMUSP was made feasible through an agreement signed between FFM and the Ministry of Health at the end of 2007; however, due to a delay to release the budged, it only started at the end of 2008.

Considering the importance of investigation on children deaths and creation or implementation of Children and Fetus Death Prevention Committee, the present project aims to evaluate whether these strategies were adopted in the country, specifically in South and Southwest Regions and promote its implementation in cities that still have not started this process yet. The project forecasts evaluation of investigative processes on children deaths in cities with more than or equal to 80 thousand inhabitants, grouped in Southest region, excluding (Minas Gerais, Rio de Janeiro and Espírito Santo) and South (Paraná, Santa Catarina and Rio Grande do Sul).

In 2010 data collected was input into the database, which was created and the results presented to the Ministry of Health and then distributed to State Secretariats of Health. Besides this, a second step of the project took place, where eight state Workshops were created for presenting the results and conclusions of the first study to managers and techinicians from the State and Municipal Secretariat of Health, support and qualification of work developed by municipal and state committes.

These activies were concluded in 2011.

Part 6:
Institutional Projects

Part 6: Institutional Projects

6.1. Main Institutional Projects

FFM also supports development of institutional projects that mainly aim to improve the physical and technological infrastructure of facilities of the FMUSP/HC system.

6.1.1. Project for Computerization and Modernization of The Educational Program of Residence in Urology - HCFMUSP

Urology Discipline of FMUSP has developed an electronic report, which is used with all patients registered in the Clinic, what represents a valuable advancement in quality of services for these patients. Besides registering all background and medical data of each patient, including their exams and image studies, surgeries made and treatment in other clinics, this report allows in some seconds to recover all data filed, as for instance, the total number of cases presenting the same pathology or a list of patients submitted to the same surgery. This way, the members of Discipline can easily and quickly receive high quality and precison tables and comparative graphs, what facilitate preparation of presentations, creation of thesis and publication of qualified scientific thesis.

The current project, made feasible through a Donation Term signed between FFM and Monte Cristalina Ltda. In 2011 aims to supply and introduce the use of iPads for filling out electronic files and clinical evolution and prescription of hospitalized patients can be made close to the patient´s beds on daily basis. These iPads will be distributed to all resident-doctors and to some teachers and they will present some applications that will enrich the learning processes for interns. Each clipboard will have the basic books on Urology, Surgeries and Internal Medicine, guidelines on how to treat the main clinical and urological diseases, anatomy and physiology files, pharmacological data and interaction of medications available in the Brazilian market and will be provided with access to all main international medical magazines by Internet. Besides, through the clipboard, there will be intense real time communication among teachers and resident-doctors, providing assistance to patients registered or hospitalized more dynamic in Urology Discipline.

6.1.2. Project in Search of Excellence in Medicine of USP Medicine School

Through a Donation Term agreed upon between FFM and Monte Cristalina Ltda., the Urology Department of FMUSP started to create trainings to be developed abroad by professors from different areas of the Institution when pursuing medical excellence and perfecting the human resources formative system, production of scientific research and service quality that are provided to society.

This way, a basic project was devised, aiming to provide different alternatives for trainings, scholarships abroad, targeted at several levels of the academic hierarchy, all of them supported on the principles that such trainings are to promote acquisition of knowledge applicable to Brazil in areas of health management and economics, academic leadership, new educational methods in medicine, computerization and on-line learning, creation of multi-use research platforms, training of public health managers and new techologies on medical assistance and exchange programs with other highly reputed international universities.

6.1.3. Draft for Collaboration Center on Alcohol and Drugs - HCFMUSP

This proposal was approved by Senad at the end of 2010 with intervention of FFM and will be developed by GREA.

This project presents the proposal from Collaboration Center on crack and other drugs - HCFMUSP, which aims to provide care, learning and research related to use, abuse and addiction to crack, alcohol, tobbaco and other drugs.

This center shall present its own physical area and will be developed aiming at an integrative model to treat patients and family members in clinical and hospitalization level, associated to services of highly complex social reintegration, totally incorporated to a research functional structure, as it is expected from a collaboration center of excellence, including activities on technical development in multiprofessional residence.

6.1.4. Project of Strengthening Center of Studies and Maria Cecília Souto Vidigal Laboratories of Hematology Services

The concept of Permanent Education, known as Continued Education is associated with the idea of training and development aiming at adaptation of professionals facing a constantly changing world and that requires constant updating. However, Permanent Education is one of the most important strategies so professionals can ensure their own updating to new knowledge, methods and work processes from a scientific and technological development, which takes place continuously.

Particular importance should be given to on-line education as an educational-learning process in Permanent Education, where teachers and professionals are permanently and/or temporarily far away from each other but connected through technologies, mainly telematic ones such as Internet. However, mail, radio, television, video, CD-ROM, telephone, fax and similar technologies can also be used.

This proposal, made feasible through a contract signed with FMCSV in the middle of 2010 with intervention of FFM, gives proper continuity to a proficuos relation that was established between Hematology and Hemotherapy fields in Brazil and the role of FMCSV. For a long time, professionals and technicians have been trained in FMCSV laboratories and made use of their important library and provided valuable services to different medical-hospital entities in Brazil and abroad. In recent years, counting on a parternship made between FMCSV and Hematology and Hemotherapy Department of FMUSP through FFM, the laboratories have been offered in comodatum to the Hematology Service of HCFMUSP and the library has been donated to be added to the department collection.

These activites had continuity in 2011.

6.1.5. Parlyamentery Ammendment that Benefits Digestive Tract Surgery Department of HCFMUSP

This project, approved at the end of 2010 to be developed by the Digest Tract Surgery Department of HCFMUSP through an agreement signed with Ministry of Health and intervention of FFM aims to invest in infrasctructure and equipment that allow use of cutting edge technology in digest tract surgeries, that enables support to highly complex and especific procedures.

The main aim of this project is to perfect the physical and technological infrastructure of the clinic and surgical centers for digestive tract and coloproctology surgeries by acquisition of diagnosis and surgical microcomputers and printers that enable checking exams results, prepare results, check images, collect all kinds of information related to the patient electronic reports in the hospital and all processes of supporting areas.

This proposal on restructuring the surgical rooms shall offer an increase in the number of surgeries made and triple the number of treatments from 1,600 surgeries per year (around 1,000 highly complex ones) to 3,500 within two to three years time.

By December 2011 the budget related had not been released yet by the Federal Government.

6.1.6. Project on Modernization on Research Infrastructure and Innovation to Health - FMUSP/HC System

This project, approved in the middle of 2010 is being developed by LIMs Executive Board through an agreement with FINEP and intervention of FFM. It has as main aim to optimize existing resources to ensure development of research in FMUSP/HC System, attempting to increase participation of the Institution and their researches in the national and international scenario by collaborating for development of strategies as defined by Ministry of Health, specially on the most relevant problems of public health, such as trauma, violence, population aging, pollution, besides cardiac, vascular and cancer diseases, responsible for the largest number of deaths, sequelae and permanent disabilities on population and high socio-economic impact for the country.

The project aim is, therefore, to provide proper continuity to implementation of research support infrastructure rationally and optimally through the following new multiusers laboratories: 1. High Performance Sequencing; 2. Increase of animals production capacity of FMUSP/HC System; 3. Center of animal behavior for pre-clinical research of FMUSP/HC; 4. New image technologies for structural and functional analysis "in vivo"; 5. Platform for development of new strategies for modulation and reversion of Multiple Organs Disfunction; 6. Facility to train advanced robotic techniques for biomedical research.

In 2011 the following projects were on-going:

High Performance Sequencing: Purchase of equipment (Automatic DNA Analyzer and MassaRRAY QGE) it will take place in 2012

Increase of animal production capacity of FMUSP/HC System: The microisolator equipment for mice and accessories have been purchased. There is a need of adequacy of the physical area for instalation of one piece of equipment, which will happen at the end of 2012.

Center of animal behavior for pre-clinical research of (Behavioral Vivarium) System: Execution of the reform for physical adequacy and electrical, hydraulic and refrigeration installations for implementation of an animal behavior center, which will take place in 2012.

New image technologies for "in vivo" structural and functional analysis: Acquisition of an Ivis Spectrum Image System.

Modernization of Gama Ray source of FMUSP/HC System: import process for Gammacell 300 Elan equipment will take place in February 2012.

Platform for development of new strategies for modulation and reversion of Multiple Organs Disfunction: Acquisition of Ultrassonic fluxometers, fans and accessories.

6.1.7. Modernization of Research and Innovation Infrastructure for SUS Health Project

The 62 laboratorial units of LIMs Institute show the competence installed at FMUSP System HC, which relies on 722 doctors and around 120 groups of independent research. These groups are associated to training around 19% of doctors in the health area in the country.

The strategy is to provide the institution with a research infrastructure compatible to the level of scientific production generated and international insertion. It is about availability of a reliable physical infrastructure, which is suitable and safe to create multidisciplinar laboratories for collective use and skilled workforce that meet this increasing demand. These multiusers laboratories allow the use of more modern equipment due to the largest possible number of researches of the System, allowing use of cutting edge techniques on experimental medicine

rationally. This way, there is optimization of financial and human resources already available in the institution by placing them in conditions to compete for external resources (domestic and international agencies), which is fundamental for development of high quality biomedical research.

The aim of this agreement signed with FINEP at the end of 2008 with intervention of FFM is to give continuity to implementation of the infrastructure for research support project in a rationally and optimally through execution of reforms in the FMSUP building and acquisition of materials and equipment that, besides the fire alarm detecting system, will support more three multiusers laboratories:

1. Platform for development of new strategies for modulation and reversion of Multiple Organs Disfunction (Surgical Techniques – UPAC): the reform of physical area for construction of an experimental unit for intensive therapy is on its final step and should be concluded in the middle of Abril 2012.

2. R3 Laboratory for culture of tissues from genetically modified animals and hybridoms generation: purchase of a Microscope (inverted with contrast); it should take place in 2012.

3. Molecular Biomarkers Validation Laboratory: The reform of the ICr building area for implantation of the genomic Nucleus complement and acquisition of Palm Cycler, Termociclador, Immunospot and DASA QIA should happen in 2012.

In 2011 the site for instalation of fire alarm detecting system was on-going and whose conclusion is forecast for July 2012.

6.1.8. HC-FMUSP Clinical Research Center

Coordinated by the Clinical Board of Directors of HCFMUSP and approved through an agreement signed between FFM and FINEP at the end of 2005, the objective of the Clinical Research Center Project of HC-FMUSP is to optimize the existing resources to ensure development of Clinical Research of HCFMUSP through implantation of a Central Nucleus, which will provide support to the Institute areas.

NAPesq develops actions focused on the capacity of human resources and technical and financial assessories for clinical research projects. The Symposium of Clinical Research gathers 200 professionals on heath every year, who exchange experiences, evaluate learning processes and update knowledge. Another important activity adds to the technological evolution: from 2008 the *Tutorial for CInical Research* was made available; it is a on-line e-learning with classes on regulatory subjects and clinical good practices. NAPesq started offering courses for clinical research coordinators where they expect to provide capacity to several coordinators who have already been working in FMUSP/HC System. With these actions, NAPesq has as main aim to estimulate development of clinical research teams of FMUSP/HC System and program best practices on research which are in compliance with internationally recognized criteria.

Creation of a clinical center for creation is forecast for common use with specialized people and suitable physical infrastructure, besides apropriate infrastructure for follow-ups of national and international research protocols, unicentric ou multicentric, and that will allow to meet the increasing demand for participation of Brazilian Centers in great clinical studies. The research activities for each single institute must be firstly sent to the Ethics Committee for Research in the institution (CAPPesq), since 1996, right after the publication of Resolution 196/96 of Health National Council. Since 2002 this committee has received an annual average of thousand research protocols for evaluation.

Among all alterations that have been made, the following ones can be highlighted: participation of the institution and its researches in national and international scenario of Clinical Research, collaborating for development of strategies defined by the Ministry of Health; and integration of several different disciplines to improve quality of clinical investigation and increase capacity for development of all phases of clinical essays for drugs, procedures and diagnostic devices.

Another initiative is the creation of national cooperative groups for development of research protocols that focus, prioritarily, on public health policies of the country; training and capacity of professionals. Harmonization of clinical

studies with reform and increase of specific infrastructure for research and also, purchase of equipment, setting up doctor´s rooms in the Clinic Building of HCFMUSP, including administrative rooms and operational support rooms.

The reform and increase in number of doctor´s rooms and supporting rooms also covers settting up ten special beds for research patients, whose adequacy of physical area allows 40 beds and 32 doctor´s offices for exclusive use of research and supporting rooms for monitoring, medication, testing, nursery, files, secretaries, waiting rooms and meeting rooms. In the Clinic Building seven doctor´s office have been set up.

In this context, the Clinical Research Center of Central Institute of HCFMUSP is able to carry out clinical research thanks to approval granted by AIDS Division of NIH for executing research protocol called "iPrEx - Chemioprofilaxy for HIV prevention on Men, Tranvestite and Transexual Women".

InCor has been developing intense research activity since its creation and counting on efficient infrastructure to do so, both experimental and clinical research. The support received from Public Calling will enable to finance part of the reform on the first floor, entirely dedicated to clinical research.

The Research Center of HU–USP, besides ELSA Project – study of prospective cohort that studies risk factors associated to cardiovascular disease and diabetes, will provide support to more 22 clinical research projects in chronic diseases field. In its physical area of 650 m^2 it will acts with a 75 scholarship recipients team and well trained interns to perform follow-up epidemiologic studies.

These activities had continuity in 2011.

6.1.9. Support Infrastructure to Research FMUSP/HC System

This project, coordinated by LIMS Executive Board of Directors and approved through an agreement signed betwwen FFM and FINEP at the end of 2007, was concluded in 2011 and had as its general aims: a) optimize existing resources to ensure development of research in FMUSP/HC System, aiming to increase participation of the Institution and its researchers in the national and internal scenario, by collaborating for development of strategies as defined by the Ministry of Health; b) facilitate integration of different research groups, aiming to develop quality of investigation and increase capacity of develoment of research projects; c) foster creation of national corporate groups for development of research protocols that focus on, prioritarily, publich health policies of the country; d) facilitate transfer of knowledge acquired for assistantial purposes, benefiting pacients by accessing new medicines, our diagnostic procedures, prognosis.

The 62 laboratorial units of LIMs institute have shown the competence installed in FMUSP/HC System and which today counts on 716 doctors and around 120 groups of independent researchers. These groups are associated to training of around 18% of all doctors in the health area of the country. The strategy thas has been adopted is to create common use laboratories, which count on skilled workforce and can meet this demand.

These multiusers laboratories allow use of more modern equipment by the highest possible number of researchers of FMUSP/HC System, enabling the use of cutting edge techniques in experimental medicine rationally. This way, there will be optimization of financial and human resorces already available in the institution by placing them in fair competing conditions due to external resources, which are fundamental for development of a high quality biomedics research.

6.1.10. Multiusers Equipment Network Program (PREMiUM)

Aiming at estimulating research activities and innovation of FMUSP/HC System, FMUSP Board of Directors and LIMs Executive Board of Directors with support of FFM and resources from agencies such as FAPESP and FINEP, have implanted the Multiusers Equipment Network Program (PREMiUM). This programs is intended to create decentralized Nucleus but organized in a network that would have cutting edge pieces of equipment and useful technology not only for one, but for several types of Experimental and Clinical Researches and it could be used for more than one research group, at the same time.

This practice allows optimization of physical space, equipment, human and material resources, besides making viable hiring of preventive maintenance, services that are pratically impossible to be hired today both for FMUSP / HC and for other institutions. Yet it is possible to try the acquisiton of latest pieces of equipment and their continous improvement. The following multiusers Nucleus have been implanted:

1. Tissue Microarray and Immuno-histochemistry;
2. Electronic Microscopy;
3. Laser Microdissecation;
4. Confocal Microscopy;
5. Transgenic Animals;
6. DNA Sequencing;
7. Cell Separation;
8. Freezers – 80C,
9. Bioinformatics,
10. Animal Images via micro PET/CT;
11. Ecocardiographic image system of high resolution for small rodents;
12. Storaging and tracking of long term biological samples; and
13. Microarray.

Services provided by the multiusers Nucleus are available on the Internet – webpage: www.premium.fm.usp.br

The option to create a piece of equipment in network park values the existing initiatives of the institution and optimizes human and financial resources available. In the current moment of this consolidation, it is essencial that:

1. suitable conditions are created in the working environment related to infection prevention;
2. ensure connectiveness between the several different laboratorial units and a network of multiusers equipment;
3. Consolidate the Celular and Molecular areas applied to Medicine within norms and in-force legislation;
4. Create conditions for generation and difusion of knowledge on prioritary areas for the Ministry of Health and SUS;
5. Show that all elos of the chain are represented in the System by stimulating innovation in biomedical area and fostering creation of agreements with productive sector.

6.1.11. Modernization of Infrastructure for Research of Medical Investigation Laboratories of HC-FMUSP (LIMs)

Supported by FINEP and with intervention of FFM, the Subprojects “Development of genetically modified animals and availabiity of Technologies of Criopreservation and Storage of Embryos” and “Increase of techonology offers for generation of digital images of biological specimems”, both connected to “Modernization of Infrastructure of Research on Medical Investigation Laboratories of HCFMUSP” Project, were intiated in 2005 and concluded in 2011.

This project is made up of six sub-projects, grouped into two main components. The first component aims at modernization of physical structure of the building where most part of LIMs laboratorial units are located. 39 units located in the Main Building of FMUSP, ten units located in the buildings of Instituto de Medicina Tropical (IMT) and two units located in Instituto Oscar Freire (IOF). This component had as objective, improvement of general conditions of electricity supply; and the implementation of an emergency circuit and fire alarm detecting system, so that it could be considered as a unit which has modern, reliable and compatible infrastructure to the technology installed in the laboratories and excellence in research developed there. The second component aims at implamentation of multiusers laboratories which will meet the demand as identified and will support all 62 laboratorial units of LIMs.

In 2008 the following activies were implemented:

1. Reforms for electrical adequacy in the FMUSP headquarter building, considering that the new entry cabin and all electrical substations are currently working; besides, three groups of generators have already been installed along with all related cabling and electrical distribution board and there are only some electrical adequacy work to be done in the Tropical Medicine Institute;

2. Implantation of the Development Center for Genetically Modified Animals.

Transformation cabins before the reform

Transformation Cabins after the reform

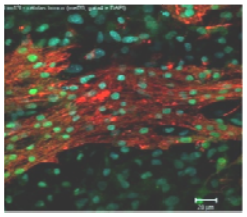
In 2009 the electrical adequacy work at FMUSP headquarter building and Oscar Freire Institute were concluded.

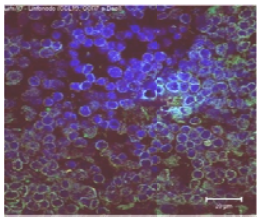
In 2010, after being granted with the last parcel for the project, the electrical adequacy for Tropical Medicine Institute was reviewed for publication of edital to contract services, as well as, along with Fapesp resources, also purchased electrical material necessary to carry out such work at FMUSP installations.

In 2011 the project was finally concluded with the purchase of electrical material and installation of the energy board.

6.1.12. Multiusers Nucleus of Confocal Microscopy

Coordinated by the Vascular Biology Laboratory of HCFMUSP (InCor) and supported by FFM, this Nucleus was created in 2007 to be part of the Multiusers Equipment Network Program (PREMiUM).





Images obtained by confocal microscope

The Confocal/fluorescence Microscopy Nucleus of Multiusers Network of FMUSP/HC System is a center that aims to provide microscopy by fluorescence services by using confocal module for all researchers of FMUSP/HC System, as well as for other educational and research entities.

The equipment and its accessories were acquired by the Multiusers Project - FAPESP (number 04/08908-2) and therefore, are available for use, according to some specific rules. The following pieces of equipment are offered: Confocal microscope with laser scanning, 3D Confocal microscopy, total reflection by fluorescence, Laser UV Confocal Microscopy, Differential Interference Contrast (DIC) and regular microscopy of fluorescence with inverted basis.

These activities had continuity in 2011.

6.1.13. Multiusers Nucleus of Electronic Microscopy

Coordinated by the Celular Biology Laboratory of HCFMUSP and with support from FFM, this Nucleus was created in 2007 to be part of the Multiusers Equipment Network Program (PREMiUM). Its main objectives are: 1. Be a center for interaction among researchers of FMUSP/HC System, that aims at application of techniques and interpretation of data obtained through light and electronic microscopy for solution of biological problems; 2. Collaborate for the multidisciplinary research growth inside FMUSP/HC System through partnerships and trainings of young researchers in contact with experts, technicians, physicians and teachers that belong to the FMUSP/HC System staff. The combination between technical training and scientific supervision promoted by the sector should have a multiplying effect inside the institution. These activities had continuity in 2010.

General Services: collaborate in all steps of material processing for light and electronic microscopy, from the collection to final remarks and data analysis by applying correct procedures when processing material in order to obtain suitably oriented cuts and reliable preparation, both for histopathological diagnosis and morphometric studies.

Electronic Microscopy: drying to critical point procedures, gold coating, crioreplacement, ultramicrotomy and crioultramicrotomy. Assistence for observation of materials on the electronic microscope and interpretation of results in ultrastructural images.

Light Microscopy: processing of material for inclusion in paraffin (4µm cuts) and historesin (1µm cuts); serial and semi-serial cuts; application to research of several classic and special histopathological methods, such as Picrossirius-polarization (for colagen studies) and Resorcina-Ficsina with and without previous oxidation (for studies on the elastic system).

Morphometric Studies: specialists in experimental drawing advise applicatioin of stereologic methods for morphometric studies in biological material, both in light and electronic microscopy.

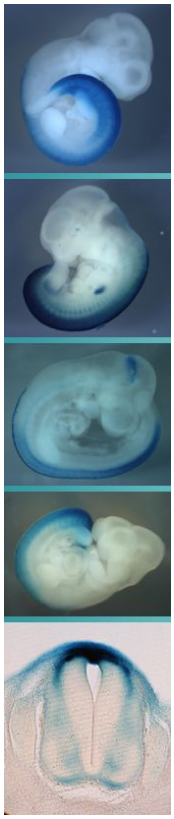
Image Documentation: the documentation quality for light and electronic microscopy material is guaranteed by specialized treatment of digital and conventional images, with photo printing and expansion for electronic micrographies.

6.1.14. Multiusers Nucleus of DNA Sequencing

Coordinated by the Renal Transplant Research Laboratory of HCFMUSP and support from FFM, this Nucleus has been in implementation phase since 2007 to be part of Multiusers Equipment Network Program (PREMiUM). DNA Sequencing is one of the essential basic tools for molecular biology to use in basic and applied research. Development of new technologies, automation and development of softwares for sequencing analyses allow detection of mutations, polymorphisms (microsatellites, SNPs), metilation of DNA, or typing of bacterias and viruses in large scales.

The DNA sequencing service was organized aiming to provide researchers of FMUSP/HC System (or from other institutions) access to DNA Sequencing technique with quality and at low costs. The service offers two MegaBACE DNA Analysis System 1000 sequencers, with capacity for analyses of 96 samples every three hours and readings of 500-800 bases per sample. These activities had continuity in 2011.

6.1.15. Multiusers Nucleus for Production of Transgenic Animals



Coordinated by Genetics and Molecular Cardiology Laboratory of HCFMUSP (InCor) with support from FFM, this Nucleus was created in 2007 to be part of the Multiusers Equipment Network Program (PREMiUM).

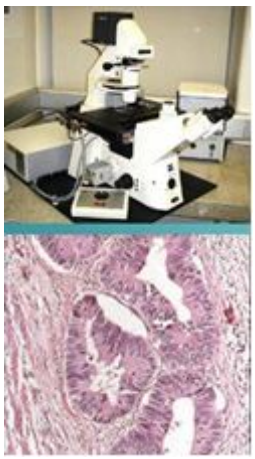
This unit aims to offer internal and external users the opportunity to manipulate the murine genome. The capacity to manipulate genome has been critical to approach biological problems realistically in a natural context of a living animal and therefore, it is fundamental technology for medical and biological investigations. Pro-nuclear microinjection, injection of embrionary stem cells, murines in murine blastocysts and transfection by injection of lentivirus in sub vitelinic space services will be offered, consequently enabling generation of transgenic animals and knockouts.

The Transgenic Unit will also develop genetically modified animals, of great use for a large number of investigations, such as transgenic animals that show fluorescent proteins ubiqually. Transgenic mice with ubiqua expression of eGFP+ are already available and matrixes could be obtained after contact.

This unit is under implementation phase; acquisiton of equipment and building up the technical team have already started. The Transgenics Unit is commited to offering a professional and friendly service by providing consultancy services for better realization of experiments as planned.

These activities had continuity in 2011.

6.1.16. Multiusers Nucleus of Laser Microdissection



Coordinated by Pathology Department of FMUSP with support from FFM, this Nucleus was created in 2007 to be part of Multiuser Equipment Network Program (PREMiUM).

The laser microdissection technique developed in 1996 by researchers from *National Cancer Institute* of USA brought an extremely important tool for biological research, potentially increasing the use of existing techniques for Molecular Biology.

With this technique it is possible to obtain homogeneous celular material of tissues or heterogeneous citologic preparations. The material extracted could be previously fixed on paraffin (filing material) or frozen. Groups of similar cells, multicelular structures or even unique cells and cromossomes could be isolated.

The material obtained could be used in a series of *downstream* techniques, such as gene expression (RNA or DNA), Western blotting and proteomic techniques, among others.

In 2006, through some support from FAPESP, the Pathology Department acquired the PALM Microbeam IP Z System, that uses laser microdissection system coupled to catapulting by a pressure system. This piece of equipment is available for the community of FMUSP/HC System and other researchers interested in incorporating such technique in their own research. These activities had continuity in 2011.

6.1.17. Multiusers Nucleus of Tissue Microarray & Immuno-histochemistry

Coordinated by Hephatic Pathology Laboratory of HCFMUSP with support from FFM, this Nucleus was created in 2007 to be part of the Multiusers Equipment Network Program (PREMiUM). This multi-user activity is available to all researchers from the FMUSP/HC System and it includes confection of Tissue Microarrays (TMAs) and/or realization of immuno-histochemistry reactions in previously approved projects.

Besides the outstanding economy of reagent costs, such procedure allows multiple researches in very well defined areas for the same neoplasia whose morphologic details have already been registered, therefore ensuring detailed correlations of types and degrees for lesions with expression of molecules (and not only analysis on the "set of lesion").

Its use in Molecular Pathology research is growing steadly in the present moment, due to its easiness for comparison of proteins expression and nucleic acids in hundreds of tissue samples in only one single glass slide.

This strategy results in a significant reduction of costs, due to great reduction of technical time, consequently reducing the amount of reagents. It also allows to increase consistency of quantifications and semi-quantifications for immuno-histochemistry reaction results and several other "in situ" molecule researches, as all analysis start to be made under identical conditions in the same reaction, alllowing duplicating or tripling studies, what had not been previously viable.

These activities had continuity in 2011.

6.1.18. Reform of the Urology Surgical Center of HCFMUSP for development of a study called "Establishing guidelines in Brazil for surgical treatment of prostate cancer"

As a result of a donation made by Banco Alfa S/A that happened in 2011 through FFM, a ward of Urology Division of HCFMUSP was totally reformd and won two modern surgical rooms to treat SUS patients. The opening was held on October 25th, 2011.

This investment will allow a monthly increase in the number of urological surgeries from 400 to 560. The growth of 40% in the capacity will reduce the number of patients on the waiting list, which now exceeds 800 people.

One of the Surgical Center Rooms, which is equipped with individual lumination, curtains to isolate beds and Led TV sets.

The new rooms are equipped with coupled tables and X-Ray equipment, surgical microscopes, radiofrequency devices to destroy tumors, cryotherapy, laser for treatment of stones, and focus on led. In one of them, it will be possible to broadcast live images to an anfitheater and one auditorium so that students can follow up such interventions.

6.1.19. Technology Transfer for development, implantation, implementation of Hospital Management System to promote expansion of SUS/SP operational capacity

This project is a result of the agreement signed between FFM and SES-SP in April 2005. Coordinated by the IT Department of FFM, it aims to join efforts to support technology transfer for development, implantation and implementation of the Hospital Management System to promote expansion of operational capacity of SUS/SP.

This agreement proposal, besides implementation of the Hospital Management System, is to bring knowledge acquired by HCFMUSP in the process of computerization of a hospital environment to the network of state hospitals linked to SES/SP.

Application of this "know-how" means to improve efficiency by adopting best practices of management to the Health Units of São Paulo state.

In 2011 the activities covered in the projects presented the following results:

1. Hospital Management System (SI^3): After implantation of the SI^3 Application in Emílio Ribas Hospital and CRT-AIDS, it is kept and customized within the needs of each installation. In database of SI3 System it is informed that in these two institutions there has been admission of 1,420,032 patients considering that 160.617 distinct patients, who have their own administrative and assistential data available for consultation.
2. SES/SP Informatization: Created to support the Health Information and IT Group to keep the infrastructure to support specific demands of SES-SP. The systems developed within the team represent specific needs of the institution. Changes are continuous and alterations of business rules demand time and specific knowledge. The local development by professionals who are used to the needs of the institution facilitates manipulation and changes on rules. The products developed by the team have as aim to facilitate manipulation of information, better distribution of resources and increase of health assistance service offers, therefore improving support to the population. WEB Platform was used and in most cases, technologies of software are free for development of applications, what allows reusing them in other projects or institutions more easily.
3. Dispensation of Excepcional (unusual) Medicines (MEDEX): MEDEX is a medicine dispensation program financed by the Government of São Paulo and whose main aim is to deliver medicines to population to treat specific pathologies (treatment of chronic and rare diseases) covering a limited number of patients, and that represent high costs, due to the unit value or due to use of extended time. MEDEX application resulted in Mario Covas Award to FFM in December 2007 in the category: "Use of Information and Communication Technology". Mario Covas Award was created to award successfull practices in public management.
4. Maintenance of Systems for HC-FMUSP: This project keeps a minimum infrastructure to support demands related to work of corporate systems in use by HCFMUSP and that serves as part of technological references for hospital information systems for São Paulo state. The Information systems of HCFMUSP are responsible for treating thousands of patients per year. Its internal modules: laboratory, consultation appointments, registration and enrollment of patients in PS, hospitalizations, surgical centers, hospital infections, pharmacy and others are responsible for all activities related to assistential support. These systems are fundamental for adequate working of the institution and without whom, it would not be possible to treat patients in organized and systematic way. Maintenance of systems includes activities responsible for the correct and perfect computerized working of these systems. The aim to keep and develop new functionalities in the systems and softwares for management of patient data and improvement of the health system of Sao Paulo state has been met.

5. Dispensation of Medicines due to Legal Action: São Paulo state annually supports around 40 thousand patients who request medicines, ward materials, treatments, products related to nutrition and others by legal or administrative demands . The state of São Paulo supports around 40 thousand patients at the present moment; they request medicines, ward materials, treatments, nutrition related-products and others with legal or administrative requirements. The purpose of the project is to implement and manage the SCODES/SCJ program for registration of legal and administrative demands in the state of São Paulo. The project covers registration of all legal demands of the state into the SCODES system, registration of administrative

demands into SCJ, implemention of the dispensing unit system for products requested along administrative and maintenance/management of these demands into the SCODES system. Currently the S-CODES system has around 70 registered demands, among active ones (40,099) and innative (31,153).

6. Technical Consultancy to SES-SP: actions involving technical consultancy, review of work plans, preparation of documents, support in selection and capacity of human resources, support to the board and project coordination, follow-up and supervision of action plans aiming to ensure a sustainable development of Health in São Paulo state, preparation of reports on project performance and techinical meetings.

Part 7:
FFM Profile

Part 7: FFM Profile

7.1. A Brief History

Creation of FFM was a FMUSP initiative. At the same time, FMUSP Board of Directors invited the Association of Former Students (AAAFMUSP) to be an official proponent of FFM creation; the proposal was accepted on August 16th, 1985. FFM oficialization only took place on September 18th, 1986.

The proposal to create a foundation to provide support to FMUSP activities came to life in 1985 by initiative of the own School, which invited AAAFMUSP to be a proponent in the creation of the Foundation, which was made official on September 18th, 1986.

As time went by, FFM became responsible for receiving payments from SUS and Additional Health due to the fact that HCFMUSP provided agility and seriousness to the flow of domestic and international purchases and allowed technological updating, increment and capacity of their functional staff for better development of activities. From 2000 to 2008 FFM coorddinated and collected resources and invested in the restoration and modernization project for FMUSP. The initiative aimed to bring value to historic asset and adequacy of spaces to physical activities developed in the present moment, therefore improving infrastructure and logistics of work processes. The deep changes made in the infrastructure brought a very important human contribution consequently renewing the commitment of students, professors and employees with the institution, which today has a more pleasant and functional work place.

Nowadays FFM is also responsible for management contracts with important offices in state and health area, besides keeping several partnerships with national and international public and private institutions.

In state level, it is the social organization responsibile for managing financial and human resources of ICESP and one Rehabilitation Unit of Lucy Montor Network. In municipal level, it is the social organization responsible for the West Region Project, which includes Basic Health Units, Assistential Medical Clinics, ERs in Butanttã, Jaguaré and Lapa regions.

Front view of FFM Headquarters on Rebouças Avenue in São Paulo

In December 2011 518 projects were active at FFM covering social assistance, comprehensive health care, academic, research, production of scientific and technological reports, health policies and institutional works, including 370 clinical studies that brought direct or indirect benefits to the population.

7.2. FFM Consolidated Results

Partnerships with public and private, national and international institutions have allowed FFM to develop several programs, mainly in areas of health and education, what brings benefits to the population. The annual result of such turnover has presented a significant rise.

The University agreement signed in 1988 between SES-SP, HCFMUSP and FFM enabled FFM to focus its efforts in promoting comprehensive health care to SUS users, besides development of actions and services to improve and expand the operational capacity of HCFMUSP, creation and improvement of human resources in health area and promotion of education and research.

Partnerships with public and private, national and international institutions allow FFM to achieve development of several programs, mainly in the area of health and education and which bring benefits to the population. The annual result of such revenues can be detailed in the table below, from 2005 to 2011:

Consolidated Results - FFM							
(In thousands of R$)	2005	2006	2007	2008	2009	2010	2011
Revenues	**344.595**	**378.108**	**407.377**	**521.136**	**691.848**	**863.169**	**961.418**
SUS Medical Assistance	195.864	197.505	209.576	219.434	221.830	211.941	222.270
Private Medical Assistance	44.206	45.102	51.268	57.834	62.312	63.671	73.464
Subventions and contributions	49.159	78.052	92.948	178.640	311.072	496.602	559.163
Financial Revenues (net)	20.973	20.042	16.476	19.368	22.113	26.522	37.767
Technical Services	21.872	21.884	20.619	24.542	26.037	28.571	27.560
Others (courses, donations, etc.)	12.521	11.523	14.490	21.318	44.484	35.862	41.194
Expenditures	**297.023**	**331.772**	**370.897**	**450.896**	**550.200**	**690.101**	**809.317**
Personnel	181.297	200.587	217.001	258.031	301.463	381.372	468.362
Consumption materials	59.945	61.324	65.654	91.815	116.264	154.080	174.784
Professional services	42.721	56.037	54.394	71.200	88.603	98.765	118.943
Others (general, depreciations, etc.)	11.060	15.824	31.848	27.850	41.870	55.884	47.228
Result	**47.572**	**44.336**	**36.480**	**70.240**	**141.648**	**173.068**	**152.101**

When analyzing FFM total revenue, it can be observed that in 2011 there was an increase of 179% compared to 2005. The revenue resulting from medical treatments made by SUS presented a rise of 13% in that period, which was obtained mainly through re-evaluations of fixed values agreed upon in formal agreements that regulate transfer of funds.

However, the percentual increase observed in SUS revenues was much lower compared to the revenues of private medical assistance (Additional Health and similar services), which increased by 66% in the period, a result from joint efforts of HCFMUSP to increase treatments and from FFM in improving flows, controls and collection. FFM has reverted integrally this substantial progression of operational revenues in favor of the own operation and execution of projects. However, the biggest point in 2011 was the increase of revenues generated from subventions and contributions, which increased by 13% in relation to the previous year.

Investments in infrastructure and equipment made by FFM in 2011 reached an approximate total of R$ 60,6 million. R$ 30,5 million were invested in HCFMUSP, R$ 3,7 million in FMUSP, R$ 21,9 million in ICESP, R$ 3,2 million in IRLM and R$ 602 million in other agreements. FFM made investments of around R$ 700 mil with emphasis on equipment and IT systems.

Consolidated Results - FFM							
(In millions of R$)	2005	2006	2007	2008	2009	2010	2011
Total	**29,3**	**35,0**	**37,0**	**33,6**	**106,5**	**136,4**	**60,6**
Equipment	8,2	10,8	12,2	14,8	41,0	77,6	22,5
Buildings and Installations	15,5	19,1	17,7	8,1	51,3	46,6	27,7
IT	3,6	2,5	4,1	4,5	6,6	5,2	4,6
Others (furniture, vehicles, etc.)	2,0	2,6	3,0	6,2	7,6	7,0	5,8

7.3. Strategies

FFM is a private and non-profitable entity, created to promote education, research and assistance in health at FMUSP and its Hospital das Clínicas, besides preservation of the Academic Center assets of FMUSP - CAOC.

Since its creation, FFM has been loyal to the commitment to support the FMUSP/HC system by developing an integrated work interconnected with its ten managements.

FFM is a private and non-profitable entity, created to promote learning, research and health assistance for FMUSP and FMUSP and HCFMUSP, besides preservation of Academic Center asset – CAOC. FFM was created in 1986 and has had a surprising growth along all these years. Nowadays it is responsible for administration of operational accounts and assistentical procedures made for SUS and Additional Health.

It is also responsible for management of clinical research projects and the academy and for administration of contracts that cover state and municipal health equipment management. This is typically the case of ICESP, wholy administered by FFM.

Since its creation, FFM has been loyal to the commitment of supporting FMUSP/HC System; it has been developing an integrated work among its ten managements. Established to control responsibilities and competences of the institution, the management includes: Controlling, Billing Control, Legal Coordination, Invoicing, Financial Department, IT, Materials, Projects and Communication, Human Resources and Additional Health.

FFM Activities are in synergy with decisions from several collegiated bodies of FMUSP/HC System that go through tight control made by Trusteeeshp of Foundations - MPSP, Audit Office of São Paulo State and City and by indepedent external auditing, showing total transparency at how its Board of Directors is based on.

During its 25 years, it has always pursued constant improvement for its service standards and has simultaneously been dedicated to meet its targets and provide treatment and services to meet needs of its partners. Continuous modernization of its technical structure, adaptation to current technological demands and training and specialization of its professional team are other priorities; therefore, investments in human resources and internal infrastructure and maintenance of FMUSP/HC System are represented by several positive indicators along its existence.

The financial guideline has kept a pursue for positive working capital by basing its own decisions involving expenses or investments on previous existence of financial resources for such ventures.

In 2011 the Employees Appreciation program had its continuation by direct administration of FFM, where analysis of positions, functions and merits continued to be focus of attention by the Board of Directors. Paralelly the Capacity and Training Program for its team of professionals resulted in the Foundation´s improvement on final results.

A cooperation agreement with SES-SP has been kept since 1988, which foresees development of a number of managerial activities, from simple billing of medical-hospital supporting services and human resouces management of FMUSP/HC System to reforms and purchase of pieces of equipment and inputs, among others. It also supports programs of the FMUSP/HC System, its extension courses, events, research projects, among other initiatives.

Besides, it developed in 2011 along with FMUSP/HC System, partnerships with institutions that were interested in the development of medical sciences, such as:

- Ministry of Justice: National Secretariat of Policies on Drugs – Senad;
- Ministry of Health – MS;
- Ministry of Science and Techonology: FINEP – Financer of Studies and Projects;
- Ministry of Science and Technology: CNPq – National Concil of Scientific and Techonological Development;
- Brazilian Company of Agricultural Research – EMBRAPA;
- Secretariat of Health – São Paulo State – SES-SP;
- Secretariat of Education – São Paulo State – SEE-SP;
- State Secretariat of Disable People´s Rights – SEDPD-SP;
- State Secretariat of Public Safety of São Paulo;
- Fundação CA – Foundation Center – Center of Socio-Educational Support to Teenagers Foundation;
- Municipal Secretariat of Health - São Paulo;
- Municipal Secretariat of Education - São Paulo – SME;
- Municipal Secretariat of Disabled People and Reduced Mobility - São Paulo;
- Municipal Council of Children and Teenagers´ Rights – CMDCA;
- Global Health Organization – OMS;
- Pan American Organization of Health – OPAS;
- United Nations Organization – for Education, Science and Culture – UNESCO;
- United Nations Office Against Drugs and Crime – UNODC;
- Institute of Energy and Environment;
- Center of Information on Health and Alcohol – CISA;
- Administrative Development Foundation– FUNDAP;
- Support to Research and Extension Foundation – FUNAPE;
- Support for Technology Foundation– FAT;
- Furnas – Centrais Elétricas S/A;
- Maria Cecília Souto Vidigal Foundation;
- Alfa Group;
- Dixtal Biomédica Indústria e Comércio Ltda.;
- Union of Sugarcane Agroindustry of Sao Paulo State – ÚNICA;
- Alzira Denize Hertzog da Silva Beneficient Association – ABADHS;
- National Institute of Health – NIH;
- World Health Organization;
- Blood Systems Research Institute;
- London School of Hygiene & Tropical Medicine;
- International Centre for Genetic Engineering and Biotechnology – ICGEB;
- University of Pittsburgh;
- University of California;
- University of Wisconsin
- Maastricht University – School for Mental Health and Neuroscience;
- The Smile Train;
- The J. David Gladstone Institute;
- The Ford Foundation;
- International Atomic Energy Agency – IAEA;
- Ludwig Institute for Cancer Research;
- The Brain and Behavior Research Fund – NARSAD.

A fundamental point of its institutional strategy is transparency, given the ample supervision which it is submitted to. FFM has all its activities audited by Trusteeship of Public Ministery Foundations, by independent and external auditors and by the State Audit Office, besides reporting on its projects to entities such as Ministries, Secretariats of the State and City and to several other public, private, national and international institutions. In relation to its partners, it operates according to regulations agreed upon case by case, always ensuring transparency and austerity in the process.

Due to the credibility that FFM has had along with subventioned offices, the volume of value managed by FFM has increased significantly year after year. In face of the substantial evolution of operacional revenue, projects, contracts and agreements, FFM has derived expressive amounts of revenue on financial investments, totally invested in favor of the own operation and projects carried out by FFM.

In 2011, it obtained a consolidated superavit of around R$ 152 million, a revenue leap of around R$ 348 million. Financial management of such resources is made through movement of bank accounts and Management Centers or CGs (around 2 thousand active accounts), according to guidelines approved by the Board of Trustees of FFM, Deliberative Council of HCFMUSP and Congregation of FMUSP.

Paralelly, FFM has given proper continuity to management of 148 assistencial learning and research programs/projects, besides 370 clinical studies developed in FMUSP/HC System.

The Project of Restoration and Modernization of FMUSP, developed between 2000 and 2008, relied on fundamental support from FFM, which shared the project coordination and resources raising with FMUSP. The initiative aimed to value the historical asset and suit its physical room to activities developed at present moment by improving infrastructure and logistics of work processes. The project promoted not only a single reform, but also a deep human and cultural change throughout the FMUSP/HC System community. The maintenance work continued in 2011 and is now incorporated to the routine of work at FMUSP.

A sequence of images at the FMUSP headquarter building: on the left, the building in 1931, right after it was open; in the middle, the back part of the building before the reform; and on the right, the building after the reform.

During its 25 years, FFM has been publicly recognized due to its performance as beneficient entity involved in social assistance being granted with several certifications, which are listed below among others:

- State and Municipal Declaration of Federal Public Value;
- Certificate of Registration and Certificate of Beneficient Entity for Social Assistance - CEAS along with National Council of Social Assistance - CNAS, registration number 71010.000905/2004-41;
- Certificate of Registration number 0308/SP/2000 of State Council of Social Assistance – CONSEAS;
- Certificate number 018/2008 for Qualification as Social Organization of Municipal Secretariat Management – São Paulo City;
- Certificate of Qualification as Social Organization of State Health Secretariat – São Paulo State Government;
- Certificate of Registration number 647/2002 of Municipal Council of Social Assistance – COMAS;
- Registration number 1088/ CMDCA/2004 of Municipal Council of Children and Teenagers´ Rights.

All along 2011 FFM received, through Donations, the amount of R$ 16 million, which were invested in purchase of equipment and medicines for the Medicine Shool of USP and treatments offered by FMUSP System/HC and ICESP.

From 2007 on, FMUSP/HC System, through FFM, started being beneficiary of some donations made as compensations for collective moral damages lawsuits from public civil actions carried out by Public Ministry of Labor against some companies. These donations accounted for R$ 1,5 million and benefited ICr and o ITACI in 2011.

In 2011 FFM participated effectively as Member or Consultancy of the following Comissions, Committees, Work Groups and other initiatives of FMUSP/HC System.

- ✓ Permanent Education School;
- ✓ Clinical Research National Network;
- ✓ Financial Support to FMUSP Medicine Students;
- ✓ Fitting in Positions and Salaries Plan;
- ✓ Clinical Studies of HCFMUSP Clinical Board of Directors;
- ✓ Implantation of Ciclotron Project;
- ✓ FMUSP Research Comission;
- ✓ Planning and Control Comission – HCFMUST Deliberative Council;
- ✓ HCFMUSP Central Comission as Special Autarchy;
- ✓ HCFMUSP Strategic Planning Comission;
- ✓ HCFMUPS Assistential Integration Comission;
- ✓ Pólo Pacaembu Real State Comission;
- ✓ LIM's Building Comission;
- ✓ Emilio Ribas Institute Management Comission;
- ✓ IT Techology Committee;
- ✓ Manager Committee for Management Contract of West Region with Municipal Health Secretariat;
- ✓ Council Diretor of Morumbi Unit/Lucy Montoro Network;
- ✓ MUSP Congregation;
- ✓ Zerbini Foundation Consultivo Council;
- ✓ HCFMUSP Psychiatrist Institute Consultive Council;
- ✓ HCFMUSP Deliberative Council;
- ✓ ICESP Diretor Council – Institute of Cancer – São Paulo State;
- ✓ Group of Technology – West Region Project;
- ✓ Manager Group for Implementation of HCFMUSP Corporate System;
- ✓ HC/FMUSP/FFM Operative Group;
- ✓ Personnel Management Nucleus ;
- ✓ HCFMUSP/FFM Targets of Pact;
- ✓ IT Diretor Plan.

FFM also supports insured individuals in developing their own several events. In 2011 it was present and participating in the organization and coordination of the following technical-scientific and institutional events: Support to "IX CIAD – Brazilian Interdisciplinary Congress of Home Assistance"; support to VI National Congress of Nurses of Hospital das Clínicas – CONAEN; Support to X Forum of Hospital Hotel, and Support to Symposium of Public Health of Public Ministery of Sao Paulo.

Besides all these events, it also provided financial support to FMUSP/HC System in the following technical-scientific and/or institutional initiatives, whose targets were in complicance with its Social Statute:

Aproval	Event
26/08/10	Mellitus Diabetes Control League
08/12/10	4th Course for Introduction to League of Otorhinolaryngologic Skills
08/12/10	XV Course for Introduction to Gamia League
08/12/10	4th GIACAD – USP Academic Assistants Meeting
20/01/11	Preliminary Course of Mad Alegria
01/02/11	XIV Preliminary Course to Anesthesiology, Pain and Intensive Therapy League
01/02/11	College Extension Project of College Students – São Paulo University 2011
01/02/11	Academic Medical Extension (EMA)
01/02/11	MedEnsina Preparation Course
23/02/11	II Preliminary Course to Clinical Neurological League
23/02/11	XII Preliminary Course to Intensive Therapy League
23/02/11	Preliminary Course to Childcare League
23/02/11	VI Preliminary Course to Neonatal Paediatrics League
23/02/11	LVI preliminary Course to Fight Against Rheumatic Fever League
23/02/11	Annual Preliminary Course to Trauma Surgery League
23/02/11	Psychiatric Clinic Project
14/03/11	Preliminary Course to Blindness Prevention League
17/03/11	Scientific Symposiums of LIMs
13/04/11	I Mellitus Diabetes InterLeagues
13/04/11	Preliminary Course to Primary Immunodefficiencies League
13/04/11	Preliminary Course to Syphilis fight and other STDs League
13/04/11	III Preliminary Course to Thyroid League
13/04/11	IV Preliminary Course to Surgical Technique and Experimental Surgery League
13/04/11	VI Preliminary Course to Posture and Movement League
13/04/11	Award of XXX College Medical Congress of FMUSP
13/04/11	XI Forum for Social Policies Discussion – Updating in Social Previdence
13/04/11	IX CIAD – Brazilian Interdisciplinary Congress of Home Care
13/04/11	IV Preliminary Course to Clinical Emergencies League
02/05/11	Oswaldo Cruz Academic Center
02/05/11	I Preliminary Course to Academic League of Artificial Cardiac Stimulation
05/05/11	Preliminary Course to Surgery and Liver Transplantation League
15/06/11	Mad Alegria Project
15/06/11	Fifth edition of Course on Infecction in Transplantations and II Symposium on Infection and Immunosupression
15/06/11	Preliminary Course to Esophagus, Stomach and Small Intestine Surgery League
15/06/11	I Preliminary Course to Pediatric Cardiac Surgery League
15/06/11	II Preliminary Course to Gynecological Surgery League
15/06/11	Preliminary Course to Medical Bioethics League
15/06/11	XIV Preliminary Course to Sport Medicine and Rehabilitation League

15/06/11	V Speech Journey of Sao Paulo University
19/07/11	7th Event of The Employee´s Day (Government Employee)
19/07/11	Symposium on the Contemporary Challenges of SUS and Public Ministery Performance
05/08/11	XXX Preliminary Course to Mellitus Diabetes Control
05/08/11	University Hospital
17/08/11	XXII Preliminary Course to Women Primary Assistance League
17/08/11	XIX Preliminary Course to Sleep Disorders League
17/08/11	X Preliminary Course to Academic League of Systemic Arthery Hipertension
17/08/11	Preliminary Course to Cardiac Transplantation League
17/08/11	Preliminary Course to Anxiety, Phobias and Panic League
17/08/11	IV Preliminary Course to Phonoaudiology in Face Functions Academic League
17/08/11	III Preliminary Course to Multidisciplinary Support on Operative Period League
17/08/11	X Forum on Hospital Hotel
17/08/11	Bandeira Científica Project
17/08/11	Icr Transplantations
17/08/11	Generations Meeting
17/08/11	II International Symposium on Primary Immunodeficiencies
24/08/11	30 Years of University Hospital
28/09/11	V Preliminary Course to Metabolic Syndrome League
28/09/11	VI Paulista Symposium of Trauma Leagues
28/09/11	XXVI Preliminary Course to Prenatal Support Multidisciplinary League
28/09/11	Preliminary Course to ICC and Cardiac Transplantation on Children League
28/09/11	Preliminary Course to Urology Academic League
28/09/11	Preliminary Course to Palliative Care League
28/09/11	II Preliminary Course to Psychosomatic Medicine League
28/09/11	Chronic Renal Disease League
28/09/11	1st Preliminary Course of LiFiNi
05/11/11	MedEnsina Preparation Course
07/11/11	Musical Presentation of FMUSP Students
07/11/11	IV Preliminary Course to Clinical Anatomy League
07/11/11	Tretaments Made by Academic Medical Extension - EMA
07/11/11	Obesity Fight League
07/11/11	I Symposium on Endemic Diseases and Immunosupression
07/11/11	XIII Journey of Studies on Seniors and Oral Health – Aging & Smiling Project
14/12/11	Donation of dental equipment to ITACI

7.4. Organizational Structure

Establlished to organize and control its responsibilities and competences in development of assistance, education and research, FFM organizational structure is divided by strategic area of specialization in order to meet the needs of its partners and population.

Established in order to organize and control its responsibilities and competences in development of assistance, education and research, FFM organizational structure is divided by strategic area of specialization, in order to better meet needs of its partners and population.

The Human Resources department managed 14,213 employees in 2011 among FFM direct admnistrative staff , employees of FFM in service of FMUSP/HC System, addional employees and people allocated in specific projects for assistance to population. Out of this figure, 324 employees are allocated in its direct administration focused on supporting hundreds of social programs offered by the entity, as well as assistential activities, comprehensive care to health and treatment to SUS patients developed by the other professionals. These last ones are hired for additional or entire working time, therefore trying to estimulate production of works in didatic, assistential and research areas through material support and suitable remuneration. Following a appreciation strategy of its direct employees, continuity to the Capacity and Training Program was given to personnel (7.364 hours/class), that, aiming to develop competences in teams, resulted in improvement in final results of the Foundation. Paralelly, recruitment and selection activities of all FMUSP/HC System, as well as in new projects and in existing ones (3.526 openings), administration and payment of social benefits (R$ 45 million) and salaries, involving expenses in Payroll of around R$ 460 million, besides coordinating the hiring process, dismissals, leaves, vacations, posts and salaries, food basket, meal-allowance, transport-allowance, among others. In 2011, for instance, around 231 thousand food baskets were granted to employeees of all FMUSP/HC System of several projects, besides pensionists.

Billing for services provided by different units of FMUSP/HC System to SUS patients and Additional Health is made by the Billing Department of FFM. Among other activities developed by this Department in 2011, the following ones can be pointed out:

1. Creation and approval of the new BPAI Report (Individual Bulletim of Clinic Production) electronically by SES-SP, which provides automation of the process, savings on paper and physical room for storage;
2. Survey of billing data from January/2008 to May/2011 fo creation of HCFMUSP indicators, which has been monthly informed to HCFMUSP for its constant updating;
3. Billing of exams made by the Emílio Ribas Institute of Infectology to HCFMUSP;
4. Creation of billing/accountability for procedures/exams made by HCFMUSP on ICESP patients;
5. Continuity of the Accounts Recovery Process for Additional Health off deadline.

Realization of collection operations, control and distribution of values related to services provided by different units of FMUSP/HC System to SUS customers (AIH – Hospitalizations, Clinic including APAC - Authorization of High Complexity Procedures) and Additional Health patients is made by the Billing Control Department of FFM. Besides, it developed other activities in 2011 and among them:

1. In the segment of Additional Health:
    a) Through negotiations, it has gotten closer to Health Plan Operators, resulting in meaningful improvements in operational processes, such as cost reduction and reduction to bill payments date and feature disallowance;
    b) Recovery of disallowance from previous years through financial negotiations made with Geap, Amil and Gama Aeronautica operators;
    c) In partnership with the Information Technology Department, it has improved the resource of disallowance, devolutions and payments of medical fees;

d) It has supported the Financial Economic Nucleus (NEF/HCFMUSP) to build up financial indexes, aiming to contribute with an extra assessment tool;
e) it has provided technical and financial support to Management Centers and Clinical Team of HCFMUSP.

2. In the segment of Health Single System – SUS:

a) it has provided improvements in the process of prescriptions along with the system, which allows generation of writing-offs of more than one billing security SUS MAC – Medium and High Complexity and FIDEPS by competence;
b) it has implemented a distribution system of budgets and transfer of applications of retroactive fees by billing reference, which will be used from January 2012 on;
c) In a parternsip with IT Department, it has remodeled the registration system of the Institute, Management Center and billing clinic;
d) it has improved the consultation and invoice data printing systems, in order to allow verifications/analysis by Management Centers;
e) it has improved the consultation and AIH printing systems of billing previous competences (Accumulation).

Implemented in 2006, the Additional Health Department continued actions focused on HCFMUSP incrementation of participation of HCFMUSP in the Additional Health Segment. In administrative area in 2011 the following points are outlined:

a) Maintenance of FFM Qualification as Collaborator Center of Regulatory Agency – Additional Health Sector – ANS granted to entities with reconized capacity for development of Research and knowledge of Additional Health Sector.
b) Qualification of FFM as Member of Association of Hospitals of São Paulo State, awareded to Entities with recognized capacity of hospital management.
c) Permanent negotiations with Health Plan Operators aiming at increasing services hired and improvement of conditions and rules of compensation and payment;
d) Constant development of the Additional Health Data Operational System, which is based on the single Operational System with concept of integration and uniformization to all Institutes of FMUSP/HC System under FFM management;
e) Administration of Private Treatments: development and support to data uploading of Multimed System so that all mandatory information and collection registrations for private treatments are carried out through such System;
f) Standard for information electronic exchange on Additional Health as established by ANS, which guarantees safety in the treatment, billing and receipt processes and has added implementation of the Single Table of Additional Health - TUSS during Additional Health operation of FMUSP/HC System.
g) Contracts with Hospital Entities and Laboratories, pursuing Serviced Providing for collecting Revenues of FMUSP/HC System with special emphasis on Hematology Area, LIMs and Central Laboratory.

The Medical Auditing Department is dedicated to analyse medical reports (medical reports, clinical files, clinical treatment files and other documents on patients) to assess whether the procedure carried out x procedure billied that is described in the patient´s bill has actually been invoiced according to in-force Health Single System norms and regulations, in compliance with all legal precepts as cited by the Ministry of Health.

It also works as authorizer (issuing AIH´s – Authorization for Hospital Hospitalizations and high costs procedures) and promotes the educational process (by advising CGs) aimming to improve quality of billing as created by CGs. In 2011 it also provided support to the Central Institute of HCFMUSP in analysis and audits of AIHS as issued.

The Financial Department started using integrally the Electronic Payment Request - SP-e, which completely replaces the Service Ordero-OS in 2011.
The SP-e offers accountholders standartization in format, registration and electronic filing for the request, besides its trackability and payment status indication, upon receipt of the document at FFM.

From SP-e it has been possible to implement a fast and efficient communication channel along with accountholders and suppliers by using punctual reminders/warnings to accountholders and e-mails to suppliers, taking information and procedures as required due to the legislation dynamic or launching tools that facilitate and help the payment procedure.
The Electronic Receipt Request - SR-e, after implementation tests at the beginning of January, was modified in order to meet two distinct groups of correntistas, who can make use of SR-e by Internet through SCOPL or by integration of their own management systems. Such facility changed the procjec scope, resulting in a prorrogation of its implementatoin to 2012.
The recebimentos and payments made by seven CNPJ's of FFM moved na average amount of R$ 318 milllion in 2011 with na increase of 22% once compared to 2010.
The increasing challenges demand constat updating, improvements and adaptations in routines, flows and tools in the rentless search for quality, agility and transparency.

The IT Department, in continuity to providing support to the technological innovation process, adequacy of new systems, treatment to users and modernization of Information Technology parque provided to FMUSP/HC System in 2011 also developed the following activities:

a) Conclusion of 94 out of 108 projects forecast in the Work Plan for 2011, considering that 69 are projects to support administrative areas of FFM, and one of them is HCFMUSP and 24 belong to the own IT Area;
b) Realization of investments of around R$ 540 million to update the equipment parque; updating of softwares; updating the servers parque and increase infrastructure; servers virtualization solution; increase of the access link to Intranet; development technology (framework); and implementation of Oracle Rac;
c) in Mendex Project (delivery of high cost medicines to population) the following activities have been performed: layout review for the Specialized Medical Laudo; implementation of replication mechanisms for quantities dispensas for next delivery competences; alert on the limit of medicine dosages by patient´s weight; alert on doubledelivery for the same medicine (SUS protocol) to a determined patinet; consistency of equivalent medicines (pathological group) in the same delivery competence; development of nine modalities of managerial reports to pharmaceutical units; survey, creation and approval of screening module scope; implementation of agil control on resending movimentação of medicines for interface with stocks; consistency of CNS obrigatoriedade for requesting doctors and authrizors; improvement of information on health professionals and locations from a national basis of registrations; participation in the implementation of a database environment with multiple servers for the Medex System at SES-SP.

All patrimonial control of the institution, prestações de contas, cashflow and fiscal escrituraação operations are also managed by the Foundation, which accounts aroudn 150 thousand registrations per year, besides administration of documents from arquivos ativos e inativos. Centratlization of such activities is under responsibility of the Controlling Department of FFM.

All materials, equipment and services purchased, besides administration of reforms, among others, are made by the Materials/National Purchases Department team, always driven to deal the best negotiations for the FMUSP/HC System with progressive savings based on prices offered on the market. In 2011 a volume of R$ 266.4 million on purchase/contracts were negotiated in the Department, corresponding to 3.866 purchase processes. The economy generated in 2011 was R$ 10,0 million, representing 3.8%, considering as basis the lowest original value presented by suppliers and price effectivelly negotiated/contracted by FFM. Such data cover acquisiions for FMUSP/HC System, Specific Projects and Units under FFM management in Social Organization: State-ICESP and IRLM; Municipal: West Region – AMAS and UBSs, PS Butantã and PS Lapa.

In 2011 the Projects and Research Management dcontinued its studies on viability, implementation and follow up of contracts/agreements made with public, private, national and international orgãos related to activities proposed by its partners, particularly FMUSP/HC System. Besides that, it made analysis of all non-operational accounts of the Institution. In December 2011 518 Social Assistance, Health Assistance, Academic, Scientific, Research, Scientific and Techonological Knowledge Production, Health Policies, Institutionals and Clinical Studies were active, which brough in direct or indirect benefits to the population. Out of these projects, 148 can be outlined, subvencionados with public and private, national and international resources and 370 clinical studies, sponsored by pharmaceutical industry.

In 2011 the Communication Area of Project and Resaarch Management developed and made available the new Intranet of FFM to employees of direct administration, an interdepartamental communication channel. Its renewed layout offers users facility and agility when searching for information, documents, reports, manuals, forms, access to integrated systems and several resources from all FFM managements. It has kept in permanent updating the FFM site (www.ffm.br) by making uselful information on the institution available to users of FMUSP/HC System and general public. It was also responsible for the site of Restoration and Modernization of FMSUP Project (www.ffm.br/restauro) and creation and edition of FFM Management Report from 2007-2010, FFM Activities Report of 2010 and FFM Relationship Manual. It coordinated creation and distrubtion of bimonthly FFM Jornal and all institutioal material (calendar 2012, business cards, etc.).

The Materials/Import Department administered importation of inputs, equipment, periodical subscriptions, enrollments in courses and congresses for LIMs, all FMUSP/HC System, ICESP and several other specific projects in a total volume of US$ 7,7 millions, equivalent to 290 processes.

The Legal Coordination Department supports civl, administrative, and labour areas preventing office expenses with fees generated by outsourced law office assessoria. Its activities do not focus only on representation issues in contenciosos processes, but also in controlling of retidão in national and international contracts and agreements made by the Institution, besides all documentation and regularidade tributária towards pubic órgãos of several levels. Besides caring for the public utility process and certification of phylantropy in 2011, it also dedicated some efforts in development, fostering and expansion of its activities since creation and administration of hundreds of contracts and agreements to coordination of labor contencioso, civl andtributary, judicial and extrajudicial. It also followed up juridical processes along with órgãos do Judiciary Poder, Public Ministery, Municipal, State and Federal Organs, Tribunais de Contas, Social Conselhos and others and issued several legal reports on findings.

Part 8:

Summary of 2011 Financial Statement

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ORIGIM OF RESOURCES	2011	%	2010	%
TOTAL REVENUES	**961,4**	**100%**	**863,1**	**100%**
Governmental Resources	**774,1**	**80,5%**	**705,0**	**81,7%**
Medical Assistance - SUS	222,3	23,1%	211,9	24,6%
Subventions	551,9	57,4%	493,1	57,1%
Medical Assistance – Health Insurance and Private	**73,5**	**7,6%**	**63,7**	**7,4%**
Donations	**16,4**	**1,7%**	**14,4**	**1,7%**
Private Cooperation – domestic and international	**7,3**	**0,8%**	**3,5**	**0,4%**
Service Provided and/or product sales	**40,6**	**4,2%**	**39,7**	**4,6%**
Other revenues	**49,5**	**5,1%**	**36,8**	**4,3%**

INVESTMENT OF RESOURCES	2011	%	2010	%
TOTAL EXPENSES	**872,6**	**100%**	**825,8**	**100%**
Personnel	**458,7**	**52,6%**	**385,0**	**46,6%**
Operational Expenses	**353,3**	**40,5%**	**305,1**	**36,9%**
Acquisition of Goods	**60,6**	**6,9%**	**135,7**	**16,4%**

Abbreviations in this Report

AAAFMUSP – Association of Former Students of Medicine School of USP
ABADHS – Alzira Denise Hertzog da Silva Beneficient Association
COREME – Medical Residence Comission of FMUSP
CSE Butantã – Samuel B. Pessoa School Health Center
Direx-LIMs – Executive Board of Medical Investigation Laboratories of HCFMUSP
DRS – Health Regional Department
EE-USP – Nursing School of USP
ELSA – Adult Health Longitudinal Study
EMBRAPA – Brazilian Company of Agriculture Research
FAPESP – Foundation of Support to Research in Sao Paulo State
FAT – Technology Support Foundation
FFM – Medicine School Foundation
FMSV – Maria Cecília Souto Vidigal Foundation
FMUSP – Medicine School of Sao Paulo University
FUMCAD – Municipal Funds of Children and Teenagers´ Rights
Fundação CASA – Fundação Teenagers Socio-Educational Support Center Foundation
GREA – Interdisciplinary Group of Studies on Alcohol and Drugs - IPq of HCFMUSP
HAC – Auxiliary Hospital of Cotoxó – HCFMUSP
HAS – Auxiliary Hospital of Suzano - HCFMUSP
HCFMUSP – Hospital das Clínicas of Medicine – University of São Paulo
HU-USP – University Hospital of University of São Paulo
ICB-USP – Biomedical Sciences Institute of University of São Paulo
ICESP – "Octavio Frias de Oliveira" Institute of Cancer – São Paulo State
ICGEB – International Centre for Genetic Engineering and Biotechnology
ICHC – Central Institute of HCFMUSP
ICr – Children Institute of HCFMUSP
IMREA – Physical Medicine and Rehabilition Institute of HCFMUSP
InCor – Institute of Heart - HCFMUSP
IOT – Institute of Othopedics and Traumatology - HCFMUSP
IPq – Institute of Psychiatrist – HCFMUSP
IRLM – Lucy Montoro Institute of Rehabilitation
ITACI – Institute of Child Cancer Treatment of Institute of Children - HCFMUSP
LIM 05 – Atmospheric Pollution and Experimental Laboratory of HCFMUSP
LIM 09 – Pneumology Laboratory of HCFMUSP
LIM 14 – Investigation in Hepatic Pathology Laboratory of HCFMUSP
LIM 15 – Neurology Investigation Laboratory of HCFMUSP
LIM 31 – Genetics and Cell Hemathology Laboratory of HCFMUSP
LIM 38 – Epidemiology and Immunobiology Laboratory of HCFMUSP
LIM 56 – Investigation in Demarthology and Immunodeficiencies Laboratory of HCFMUSP
LIM 60 – Clinical Immunology and Alergy Laboratory of HCFMUSP
Medex – Excepcional (unusual) Medicines
MPT – Public Ministry of Labor
NAPesq – Nucleus of Research Support of HCFMUSP
NIH – National Institute of Health
NUFOR-IPq – Forense Psychiatrist and LEGAL Psychology Program of the Institute of Psychiatrist of HCFMUSP
NEPAIDS-USP – Nucleus of Studies for AIDS Prevention of University of São Paulo
OMS – Global Health Organization
OPAS – Health Pan American Organization
OPM – Ortheses, Prostheses and Means of Locomotion
PAMB – Clinic Building of HCFMUSP
PN-DST-Aids – National Program of DST-Aids of Ministry of Health

RENAGENO – National Network of Genotiping Laboratories – Ministry of Health
SCOL – On-line Consultation System (available on FFM site – www.ffm.br)
SEDPD-SP – State Secretariat of Disabled People´s Rights of São Paulo
Senad – National Secretariat of Policies on Drugs – Ministry of Justice
SEE-SP – Secretariat of Education – São Paulo State
SES-SP – Secretariat of Health – Sao Paulo State
SME-SP – Municipal Secretariat of Education – São Paulo City
SMS-SP – Municipal Secretariat of Health – São Paulo City
SMADS-SP – Municipal Secretariat of Assistance and Social Development – São Paulo City
SUS – Health Unique System
UBSs – Health Basic Units
UNICA – Union of Sugarcane Agroindustry of São Paulo State
UNODC – United Nations Office Against Drugs and Crime
UERJ – University of Rio de Janeiro State
USP – University of São Paulo

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