



SÃO PAULO RESEARCH FOUNDATION

2015

ANNUAL ACTIVITY
REPORT





SÃO PAULO RESEARCH
FOUNDATION

2015

ANNUAL ACTIVITY
REPORT

executive version

YEAR OF 2015

SÃO PAULO STATE GOVERNOR

Geraldo Alckmin

SECRETARY OF ECONOMIC DEVELOPMENT, SCIENCE AND TECHNOLOGY

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YEAR OF 2016

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INTRODUCTION

The São Paulo State Constitution of 1947 established in Article 123 that support for scientific research would be provided by the state through a foundation organized along the lines established by law. This occurred in 1962, when Governor Carvalho Pinto created FAPESP. The State Constitution of 1989 increased the percentage (from the original 0.5% to 1.0%) of tax revenue committed to the Foundation and included among its attributions support for technological development. FAPESP has been carrying out its funding mission by means of a rigorous project selection system in the internationally recognized process known as peer review.

In 2015, FAPESP disbursed 642.5 million in \$ purchasing power parity (PPP) in support of scientific and technological research in the state of São Paulo. Of this total, 52% was spent to Application-driven Research, 40% to Research to Advancement of Knowledge and 8% to Support for Research Infrastructure (Figure 1). Activities devoted to applications are dominant; this includes an especially intensive portfolio in Health, Agriculture, and Engineering.

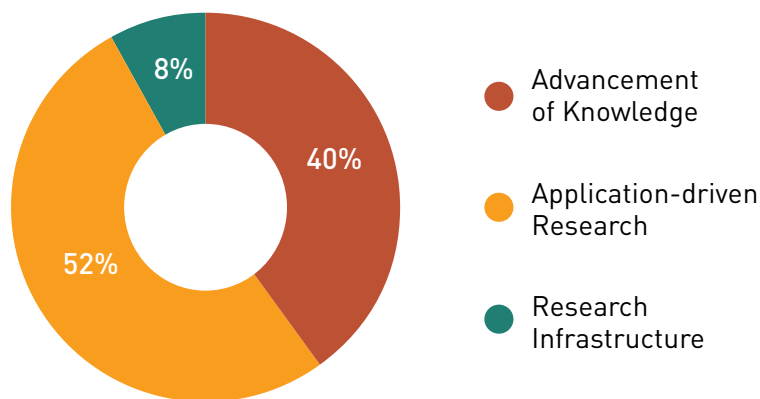


Figure 1. Categories of FAPESP Disbursement for Grants and Fellowships by Objectives of Application

As an example, in 2015, FAPESP announced the creation of three Centers for Collaborative Applied Research, involving large partnerships among universities or research institutes and businesses, each with a 10-year contract to develop advanced research activities:

INTRODUCTION

- a) **Center for Collaborative Applied Research on Green Chemicals:** This is a partnership between GlaxoSmithKline (GSK), one of the largest pharmaceutical companies in the world, FAPESP, and the Federal University of São Carlos, created for the purpose of discovering and developing ideas for sustainable production of pharmaceutical inputs.
- b) **Center for Collaborative Applied Research to Discover Molecules of Pharmaceutical Interest:** This is a partnership between GlaxoSmithKline (GSK), FAPESP and the Instituto Butantan to develop research to discover molecules that can be used in new medications.
- c) **Center for Collaborative Applied Research on Natural Gas:** This is a partnership between British Gas, FAPESP, and the University of São Paulo Polytechnic School created to develop research on the uses and applications of natural gas, seeking to intensify its presence on the São Paulo and Brazil energy grid, thus contributing to a reduction in greenhouse gases.

FAPESP has a portfolio of programs that allow it to meet the demand for support of projects that originate in the state's universities and research institutes, including federal institutions headquartered in São Paulo and small technology-based companies.

This demand is met by grants and fellowships classified into four groups (Figure 2):

- a) Regular Fellowships Program for Research in-country and abroad.
- b) Regular Research Grants Program
- c) Research for Technological Innovation Programs
- d) Special Programs

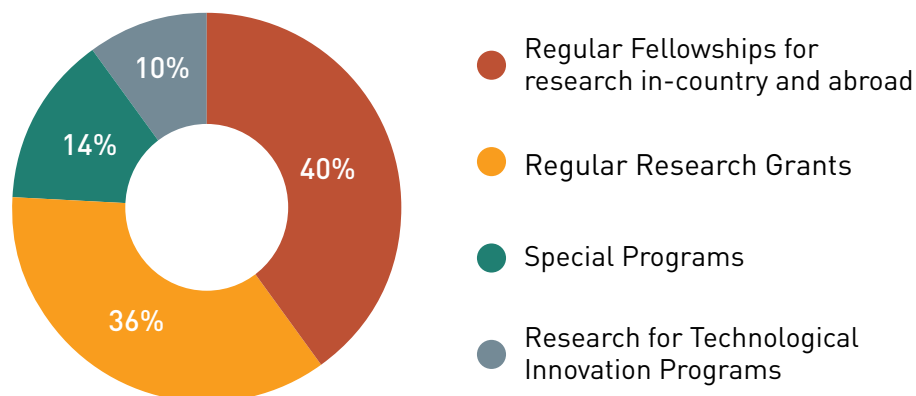



Figure 2. FAPESP 2015 Expenditures for the Four Programs



In 2015, there were 7,239 regular research grants (those that can be requested by researchers at any time) in all modalities: 62.7% (4,537) for research projects. A large majority of these grants supports individuals for short periods (one or two years) and requires relatively low funding amounts.

FAPESP's traditional programs, which are fellowships and research grants (Figure 2), have usually grown along with the Foundation's funding capacity, determined by the growth in state revenue, which is the source of resources transferred to FAPESP.

To support highly daring scientific or technology research projects, FAPESP offers the following funding programs:

- a) **Thematic Projects:** These last up to six years and typically involve teams with several members. There were 482 thematic projects in effect in 2015, of which 61 were linked to Bioenergy research (BIOEN), Global Climate Change, Biodiversity (BIOTA), and applied science based on large databases (e-Science). Thematic projects include the São Paulo Excellence Chairs (SPEC), funding that allows prestigious scientists from other countries to lead research in São Paulo. In 2015, 82 new Thematic Projects were contracted.
- b) **Research, Innovation and Dissemination Centers:** These last up to 11 years and bring together large research teams. Each of the 17 Research, Innovation and Dissemination Centers (RIDCs) has the mission to create an internationally competitive research center and extract applicable results in technological and/or public policy innovation, as well as to disseminate knowledge to society at large.
- c) **Young Investigators at Emerging Centers:** These last up to four years. The Young Investigators program creates work opportunities for high-potential young researchers, individually or in groups, preferably at emerging research centers, strengthening the state research system and prioritizing the creation of new research groups that work on new modern themes of international significance. In 2015, there were 326 Young Investigators projects in effect, and 54 new projects were contracted.
- d) **Centers for Collaborative Applied Research:** These last up to 10 years. These centers develop daring partnerships between companies, universities, and research institutes in São Paulo to address scientific and technological research of great economic and social impact. At the end of 2015, there were four centers in operation, the three highlighted above, as well as the Professor Urbano Ernest Stumpt Engineering Research Center, a partnership between Peugeot-Citroën, FAPESP and UNICAMP.

INTRODUCTION

Moreover, there are programs devoted to specific important subjects, such as those dedicated to climate change research, biodiversity and bioenergy, among others, whose results advance knowledge on the corresponding subject and can also contribute to meeting the technology challenges of associated companies or can support the management and formulation of public policy.

Finally, there are programs to support research infrastructure, without which the development of the projects themselves would not be possible.

Research for technological innovation programs include support to small businesses and large collaborative projects with national and international industries. Support for technological innovation research has also remained stable, at approximately 10% of expenditures (Figure 3).

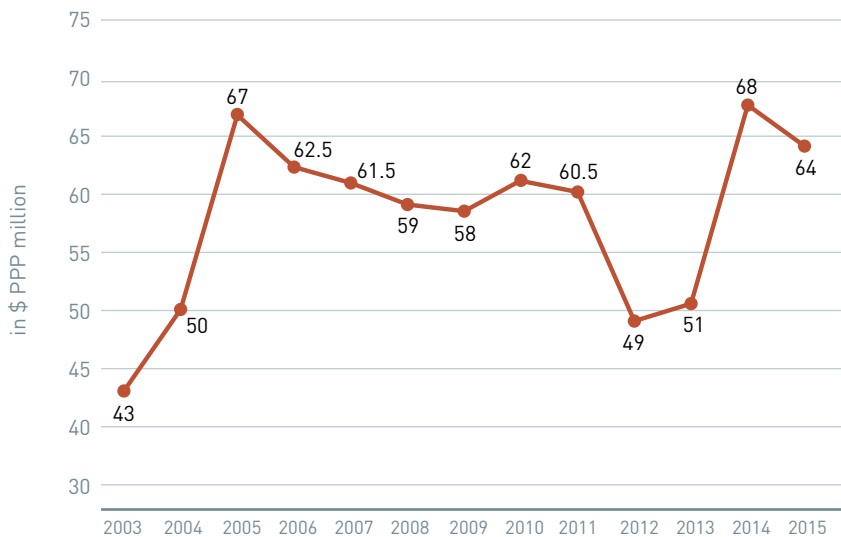


Figure 3. Expenditures for Technological Innovation Research from 2003 to 2015 with Values in \$ PPP million 2016, according to the 2015 IPC FIPE

In the Technological Innovation Research category, emphasis goes to the significant increase in support for the Innovative Research in Small Companies Program (PIPE) and the implementation of Centers for Applied Collaborative Research, involving elaborate collaborations among companies, universities and research institutes.

Figure 4 shows the growth in grants and fellowships in the PIPE since 2011. In 2015, 236 grants and fellowships were approved in this category.

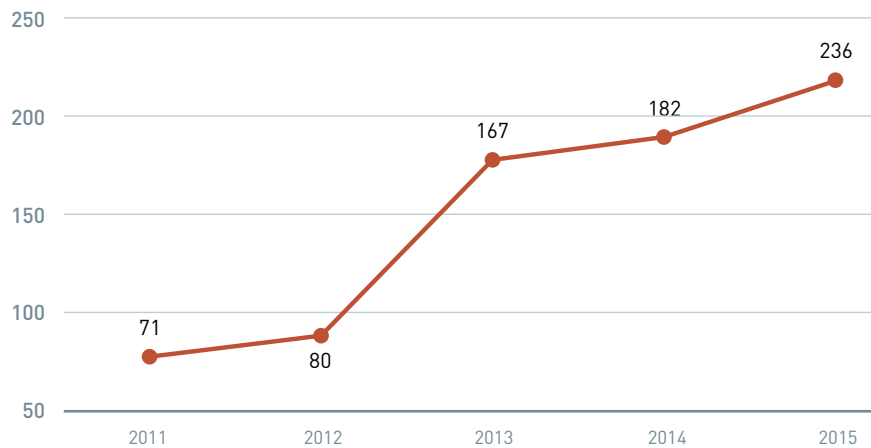


Figure 4. Annual Number of Grants and Fellowships in the Innovative Research in Small Companies Program (PIPE)

Also of note is the expansion of the Research Partnership for Technological Innovation (PITE), which provides support for research projects co-financed with companies who have a vested interest in the results. Since the program's creation, 363 projects have been funded. In 2015, there were 65 projects in progress at state universities, with resources committed at the level of \$ PPP 41.6 million. Disbursement for this program in 2015 was 64% higher than in 2014. Outstanding among these are projects undertaken in cooperation with national and international companies, such as GlaxoSmithKline, AstraZeneca, Boticário, Natura, Embraer, British Gas, and Peugeot-Citroën, among others.

Grants to support international collaborative initiatives also grew significantly (Figure 5).

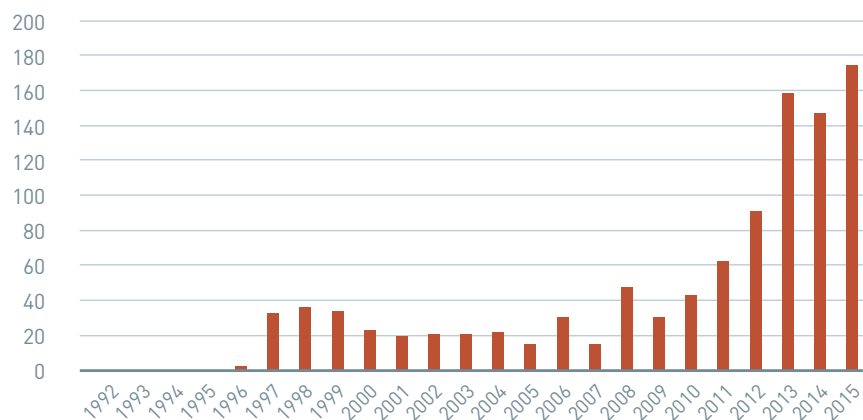


Figure 5. Number of Grants for Agreements for International Collaborative Research

INTRODUCTION

Also noteworthy is the evolution of expenditures in regular thematic projects, which are 87.3% of the year's total; these expenditures have increased significantly (*Figure 6*).

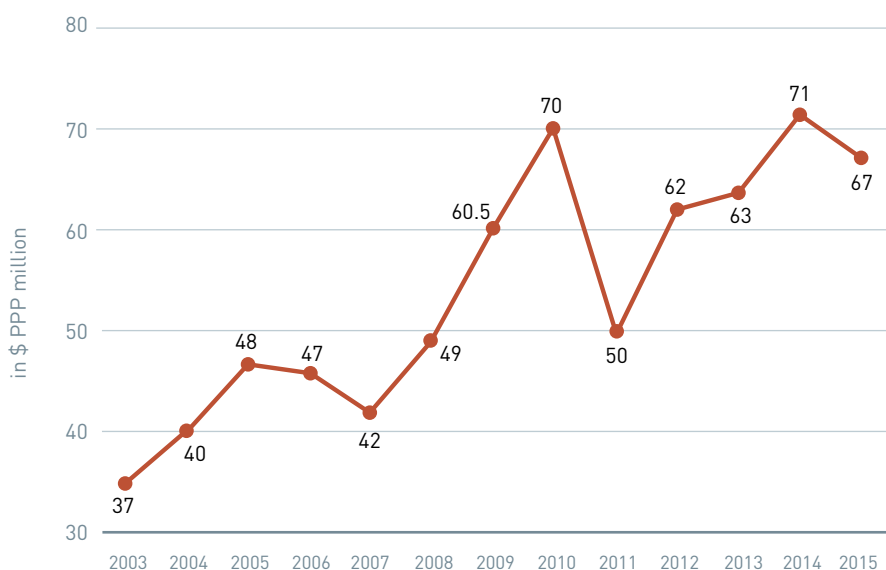


Figure 6. Expenditures on Regular Thematic Projects in \$ PPP million in 2015, according to the 2015 IPC FIPE

INTERNATIONALLY COMPETITIVE RESEARCH IN SÃO PAULO

FAPESP is also responsible for periodic assessments of the overall state of research in São Paulo and Brazil (Article 3, paragraph VI of Law 5918 of 10/18/1960)

To fulfill this requirement, preparation was made to issue soon a report on the state of the art for several scientific and technological research activities in the state to identify areas that need special attention. A preliminary overview follows and analyzes the subject areas in which FAPESP has supported projects in the modalities that show the most scientific daring and international competitiveness, which are the Thematic Projects, grants to Young Investigators, and the RIDCs.

In the Life Sciences block of Chart 1, one can see that São Paulo has expertise in nearly all fields of knowledge; only Speech Therapy has no supported projects in the categories described above.

CHART 1. Coverage of research fields by Thematic Projects, Young Investigators, and RIDCs supported as of 2015 in the Overall Field of Life Sciences

Overall Field of Knowledge Life Sciences	Field of Knowledge	Thematic Project Grants	Young Investigators Grants	RIDCs Grants
AGRARIAN SCIENCES	Agronomy	62	32	0
	Food Science and Technology	15	22	1
	Agricultural Engineering	3	6	0
	Veterinary Medicine	26	46	0
	Forest Resources and Forest Eng.	4	7	0
	Fishery Resources and Finishing Eng.	3	9	0
	Animal Husbandry	26	18	0
BIOLOGICAL SCIENCES	Biophysics	18	18	1
	General Biology	7	1	0
	Biochemistry	132	108	2
	Botany	23	18	0
	Ecology	41	42	0
	Pharmacology	39	34	1
	Physiology	66	58	0
	Genetics	54	64	1
	Immunology	50	30	0
	Microbiology	27	29	0
	Morphology	12	24	0
	Parasitology	19	14	0
Zoology	32	53	0	
HEALTH SCIENCES	Physical Education	1	5	0
	Nursing	8	0	0
	Pharmacy	11	10	0
	Physical and Occupation Therapy	2	10	0
	Speech Therapy	0	0	0
	Medicine	166	95	3
	Nutrition	5	2	0
	Odontology	9	20	0
	Public Health	19	10	0

INTRODUCTION

In the Natural Sciences and Engineering, only the field of Mining Engineering has not had a project proposal approved. By its nature, this field adjusts itself to collaborative projects with universities, research institutes, and small companies, and actually there have been several projects in the PITE and PIPE programs, as well as Regular Research Grants, which are of a shorter duration (two years).

CHART 2. Coverage of research areas by Thematic Projects, Young Investigators and RIDCs supported up to 2015 in the Grand Area of Natural Sciences and Engineering

Overall Field of Knowledge Natural Sciences and Engineering	Field of Knowledge	Thematic Project Grants	Young Investigators Grants	RIDCs Grants
NATURAL SCIENCES	Astronomy	31	27	0
	Computer Science	16	34	0
	Physics	199	125	1
	Geosciences	56	30	0
	Mathematics	55	17	1
	Oceanography	8	6	0
	Probability and Statistics	12	1	1
	Chemistry	120	116	1
ENGINEERING	Aerospace Engineering	4	8	0
	Biomedical Engineering	9	12	0
	Civil Engineering	15	12	0
	Material Engineering and Metallurgy	41	70	2
	Mining Engineering	0	0	0
	Production Engineering	9	4	0
	Transportation Engineering	1	2	0
	Electrical Engineering	35	26	0
	Mechanical Engineering	13	17	0
	Naval and Oceanic Engineering	5	4	0
	Nuclear Engineering	5	0	0
	Chemical Engineering	17	26	0
	Sanitary Engineering	9	12	0

In the Applied Human and Social Sciences block, Linguistics, Letters and the Arts repeat the pattern observed in former years, displaying good coverage of São Paulo research in all fields of knowledge, except for Home Economics, Social Services, and Industrial Design.

CHART 3. Coverage of Research Areas by Thematic Programs, Young Investigators and RIDCs Supported as of 2015 in the Overall Field of Human and Social Sciences

Overall Field of Knowledge Human and Social Sciences	Field of Knowledge	Thematic Project Grants	Young Investigators Grants	RIDCs Grants
HUMAN SCIENCES	Anthropology	13	15	0
	Archaeology	7	2	0
	Political Science	30	4	2
	Education	8	6	0
	Philosophy	22	1	0
	Geography	5	2	0
	History	15	10	0
	Psychology	19	18	0
	Sociology	18	14	0
	Theology	1	0	0
APPLIED SOCIAL SCIENCES	Administration	6	1	0
	Architecture e Urbanism	9	5	0
	Information Science	0	1	0
	Communications	5	1	0
	Demography	4	1	0
	Industrial Design	0	0	0
	Law	1	0	0
	Economics	20	4	0
	Home Economics	0	0	0
	Museology	0	1	0
	Urban and Regional Planning	1	2	0
	Social Services	0	0	0
Tourism	0	1	0	
LINGUISTICS, LETTERS AND THE ARTS	Arts	8	10	0
	Letters	9	3	0
	Linguistics	14	10	0

GRANTS BY UNITS

Chart 4 compares FAPESP resources granted to researchers at state universities, state research institutes, and federal universities headquartered in the state:

CHART 4. Comparison of institutions most often applying to FAPESP, grouped according to type of institution and showing percentage of researchers / professors requesting FAPESP funding

Entities	Number of Researchers (A)	Number of Applicants (B)	(B)/(A)	Number of Applications	Number of Grants	Success Rate
State Research Institutes	1,698	567	33%	1,155	444	38%
USP	6,090	3,866	63%	9,460	3,874	41%
UNICAMP	1,795	1,034	58%	2,992	1,300	43%
UNESP	3,807	2,090	55%	6,039	2,185	38%
Federal Universities	3,238	1,314	41%	3,010	1,149	38%

The data from Chart 4 show a greater interest by universities in the state of São Paulo in applying for FAPESP funding than that observed for the three federal universities or the state research institutes. Additionally, the last column shows the success rate, defined as the ratio of proposals approved versus proposals analyzed; this rate is very similar for the various types of entities.

One aspect that is receiving growing attention is the state research institutes, which number 19 and employ nearly 1,700 scientists. These research institutes, considering the number of researchers working at them, produce fewer funding applications.

The reasons for this are under study, but preliminary assessments indicate that some of these institutes are experiencing institutional difficulties such as low admission rates for new researchers. This is why FAPESP is studying, among other proposals, increasing funding for the Young Investigators program to stimulate new research activities at these institutes, which have played an important role in the state's development, especially in science and agriculture. It would thus also be desirable to partner with researchers at the institutes and universities in projects of social and economic interest to the state.

THE ARTIST

Former FAPESP presidents Carlos Vogt and Celso Lafer established the tradition that the Foundation's annual reports are illustrated with reproductions of works by a São Paulo artist to underline the importance it has historically given the arts and humanities, which are indispensable components of human development.

Maintaining this tradition, this year's choice was Paulo Pasta, a still young but already recognized painter, born in Ariranha in 1959 and trained in plastic arts at the School of Communications and Arts of the University of São Paulo.

His academic activities and connections were reinforced in 1998 when he became a professor of painting at the Armando Álvares Penteado Foundation, and his commitment to research was revealed in 2012 with the launching of the book *Education for Painting*, a collection of his texts published by WMF Martins Fontes.

Intense luminosity is one of the marks of Paulo Pasta's painting, and the choice to use his work to illustrate this report reflects the spirit that has guided this institution throughout its 54 years and will continue to guide it in the future.

José Goldemberg
President of FAPESP

Eduardo Moacyr Krieger
Vice President of FAPESP

São Paulo, July, 2016.

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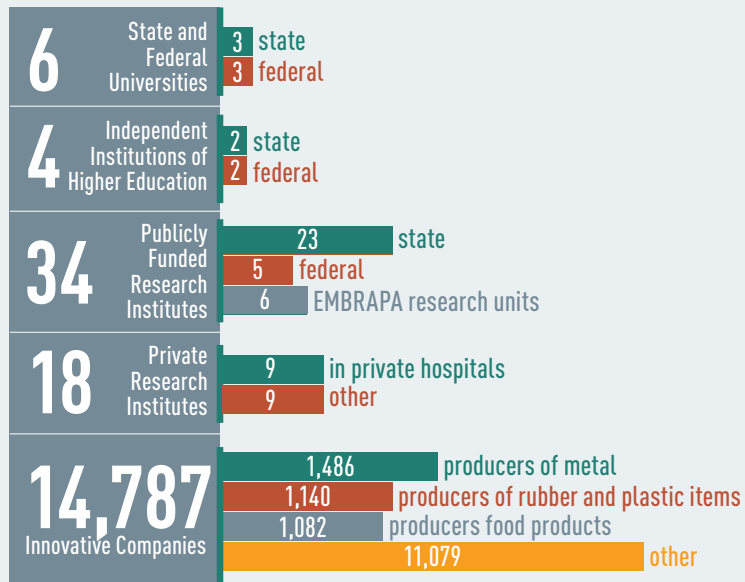
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2015 SÃO PAULO

**SCIENCE &
TECHNOLOGY
SYSTEM**

2015 SÃO PAULO SCIENCE AND TECHNOLOGY SYSTEM

There are
62 entities
 in São Paulo whose mission
 is research, in addition to
14,787 companies⁽¹⁾
 focused on developing
 innovation.



74,000 RESEARCHERS IN THE STATE⁽²⁾



1,714 PATENTS⁽³⁾
 for inventions were filed with the INPI
 (National Institute of Industrial Property)
 by researchers in the state



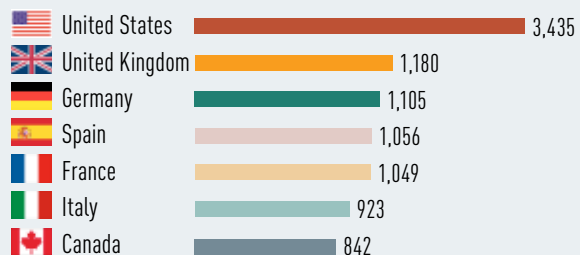
6,777 DOCTORATES
and 11,168 MASTERS⁽⁴⁾
 degrees were granted in 2015



21,783 SCIENTIFIC WORKS WERE PUBLISHED
 in journals listed on the Web of Science (Thomson-Reuters) by researchers in São Paulo

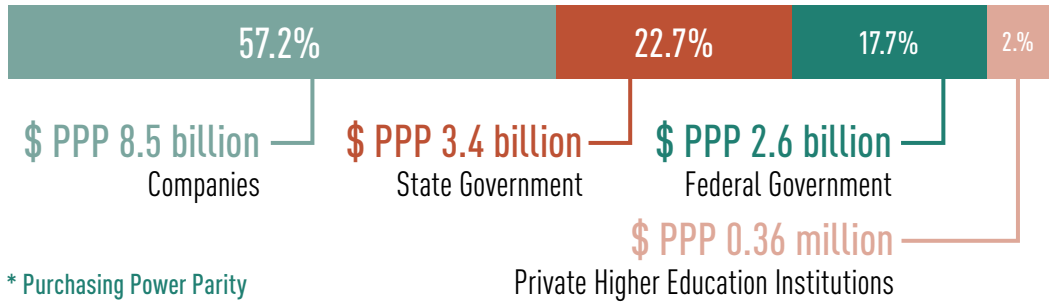


7,894 scientific works were published in co-authorship with researchers from other countries



\$ PPP* 14.8 BILLION⁽²⁾

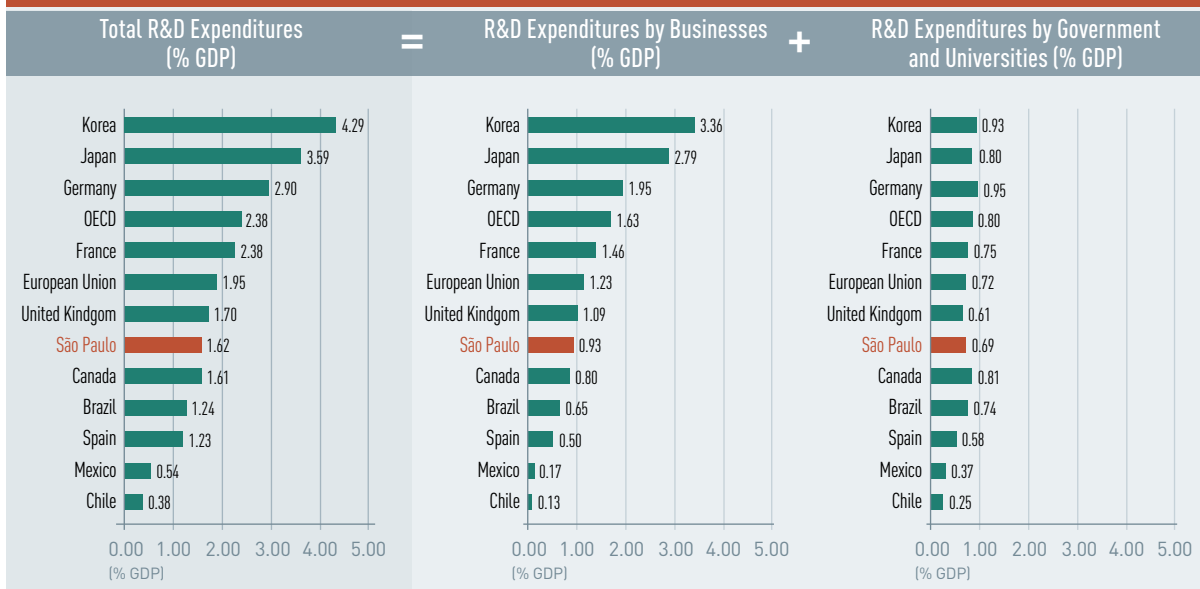
spent in research and development in the state



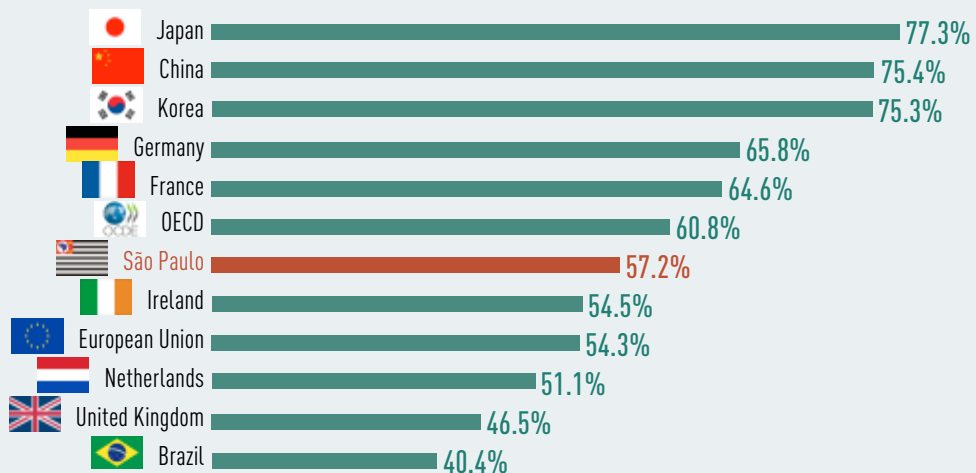
* Purchasing Power Parity

Private Higher Education Institutions

COMPARISON OF R&D EXPENDITURES IN SÃO PAULO STATE⁽⁵⁾

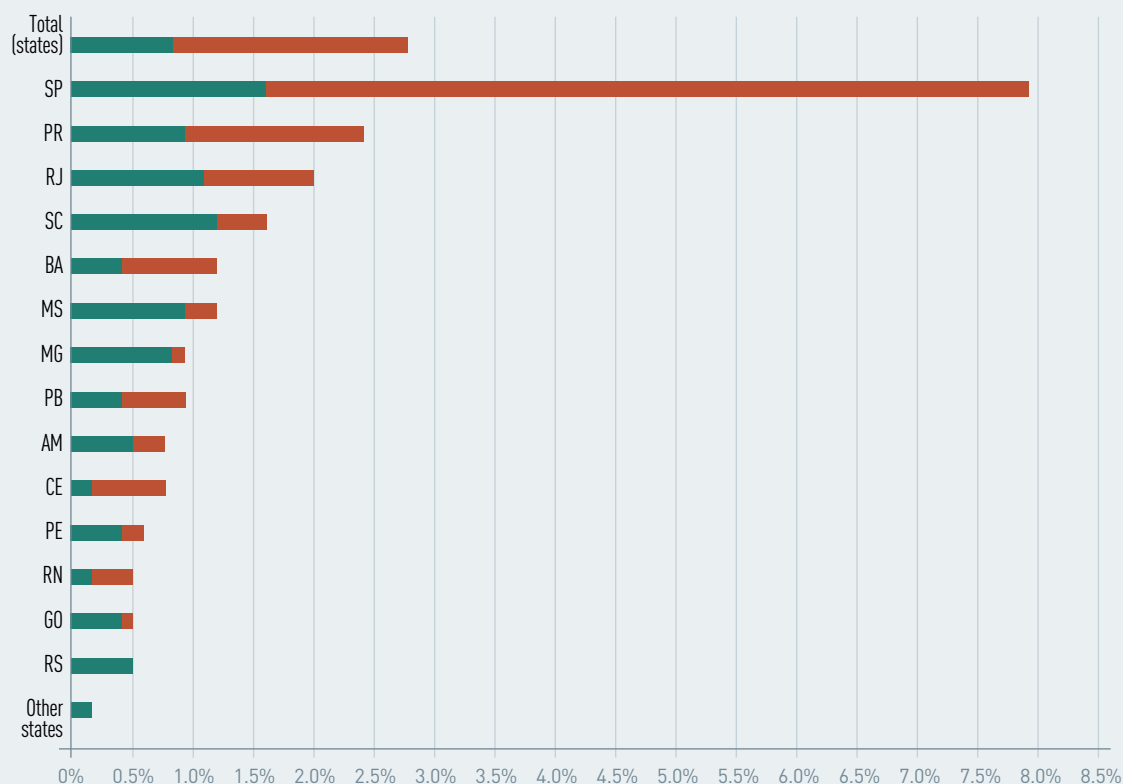


% SHARE OF COMPANIES IN TOTAL R&D EXPENDITURES⁽⁵⁾



2015 SÃO PAULO SCIENCE AND TECHNOLOGY SYSTEM

STATE R&D EXPENDITURES AS A % OF STATE GOVERNMENT TOTAL REVENUES⁽⁶⁾



	Total (states)	SP	PR	RJ	SC	BA	MS	MG	PB	AM	CE	PE	RN	GO	RS	Other states
■ Incurred budget	0.8%	1.6%	0.9%	1.1%	1.2%	0.4%	0.9%	0.8%	0.4%	0.5%	0.2%	0.4%	0.2%	0.4%	0.5%	0.2%
■ Higher education	1.9%	6.3%	1.5%	0.9%	0.4%	0.8%	0.3%	0.1%	0.5%	0.2%	0.5%	0.2%	0.3%	0.1%	0.0%	0.0%
Total	2.7%	7.9%	2.4%	2.0%	1.6%	1.2%	1.2%	0.9%	0.9%	0.7%	0.7%	0.6%	0.5%	0.5%	0.5%	0.2%

- 1 Real net income of the states, which represents the annual income of the state treasury, excluding revenue from credit operations, divestment of assets, voluntary transfers, donations received with the specific aim of meeting capital expenditures, and transfers to municipalities.
 - 2 Incurred budget, which represents R&D expenditures originating in state agency budgets (except institutions of higher education), including research institutes and agencies/foundations for research support.
 - 3 Higher education, which represents R&D expenditures originating from budgets of state institutions of higher education (universities and others).
- NB: States with at least 0.50% of effort in R&D were included; those with a lower level were grouped in Other States.

Data source:

- (1) Survey of Technological Innovation, Brazilian Institute of Geography and Statistics (PINTEC 2011, IBGE)
- (2) Data estimated by the FAPESP indicators coordination
- (3) National Institute of Industrial Property (INPI)
- (4) Coordination and Improvement of Higher Level or Education Personnel (CAPES)
- (5) São Paulo Data: estimated by the FAPESP indicators coordination
International Data: Main Science and Technology Indicators of the OECD
Brazil Data: MCTI (Ministry of Science, Technology and Innovation) – 2013
- (6) Data from 2013, surveyed by the MCTI (Ministry of Science, Technology and Innovation)

2015

FAPESP

HIGHLIGHTS

2015 FAPESP HIGHLIGHTS

Created in 1962, FAPESP is a public foundation funded by São Paulo taxpayers to promote the development of science and technology in the state, by supporting research projects in institutions of higher education and research, official or private, which are selected by a rigorous system of analysis based on the peer-review process.

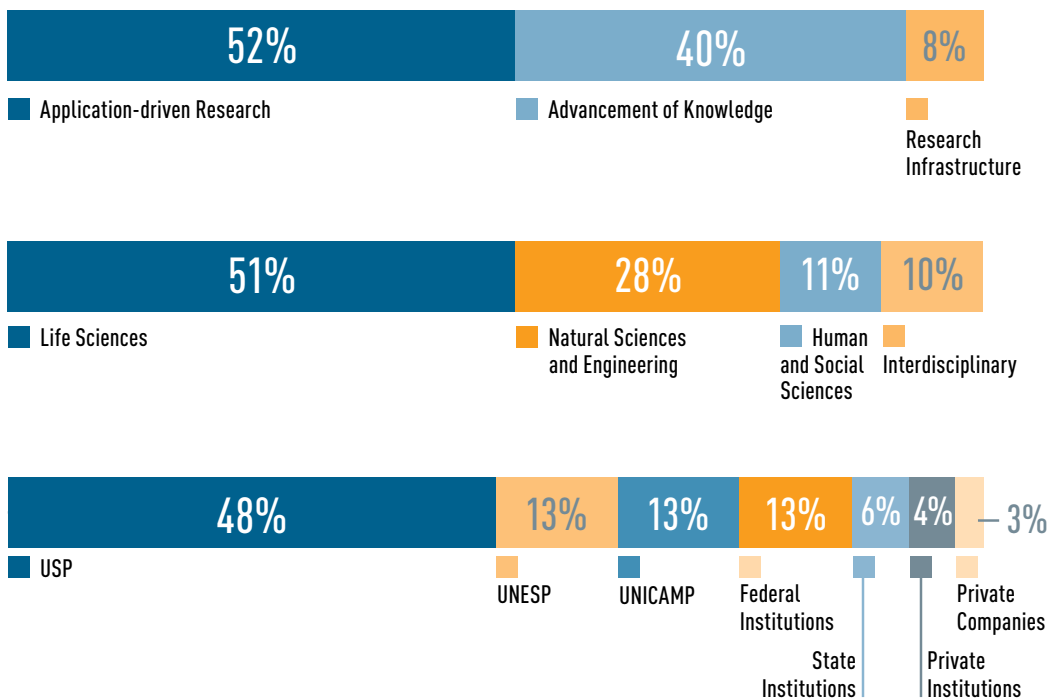
Applications processed for research grants and fellowships
+ 25,000

Average time to process first applications
64 days

10,070
 new projects contracted
5,003
 fellowships in Brazil
1,244
 fellowships abroad
3,823
 research grants

FAPESP DISBURSEMENT FOR RESEARCH PROJECTS

\$ PPP* 642.5 MILLION



*Purchasing Power Parity

COMPETITIVE INTERNATIONAL RESEARCH

FAPESP supports the most daring research in São Paulo through the Centers for Research, Innovation and Dissemination Centers (RIDCs), Thematic Projects, the Young Investigators Program (JP), São Paulo Excellence Chairs (SPEC) and Applied Collaborative Research Centers. Disbursements for these programs in 2015 were **\$ PPP 211.5 million**, including expenses for Multiuser Equipment, and Fellowships and Grants linked to these programs.

17 RIDCs	\$ PPP 35.7 million
482 Thematic Projects	\$ PPP 135.5 million
326 Young Investigator	\$ PPP 36.4 million
8 SPEC	\$ PPP 3.4 million
4 Centers for Collaborative Applied Research	\$ PPP 0.5 million

BUSINESS-UNIVERSITY COLLABORATION

In 2015, FAPESP awarded grants to three new Applied Collaborative Research Centers between business and universities or research institutes for periods of up to 10 years.

Every \$ 1 PPP from FAPESP mobilizes over \$ 1 PPP from the company and \$ PPP 2 from the university or research institute.

ESTIMATED TOTAL*

\$ PPP 101.6 million

* total applied by all partners

CENTERS FOR COLLABORATIVE APPLIED RESEARCH

GSK-FAPESP-UFSCar
Green Chemicals
\$ PPP 16.8 million

GSK-FAPESP-Butantan Discover
Molecules of Pharmaceutical Interest
\$ PPP 30.8 million

British Gas-FAPESP-USP
Natural Gas
\$ PPP 54.0 million

2015 FAPESP HIGHLIGHTS

FOSTERING INTERNATIONAL COOPERATION IN RESEARCH

355 research grants and **1,185** fellowships in the various programs to stimulate international cooperation in research

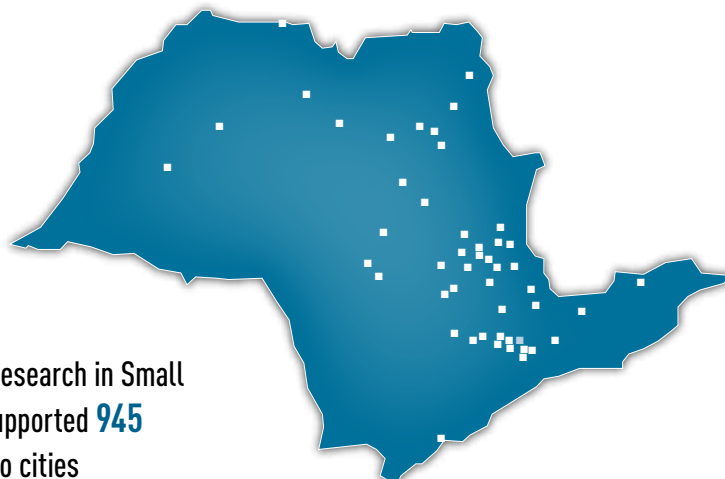
\$ PPP 75.1 million in co-funding of research through agreements with universities and funding agencies

142 cooperation agreements in effect – 26 signed in 2015 – with institutions in 27 countries. FAPESP's resources are coupled with a similar amount from foreign entities; the effective value of support to these collaborations totaled approximately \$ PPP 64.8 million.

\$ PPP 43.2 million in scientific exchange programs not associated to agreements

159 new research projects in small business in the state

3 PROJECTS PER WEEK
IN 2015



Until 2015, the Innovative Research in Small Business Program (PIPE) supported **945** companies in **121** São Paulo cities

ATTRACTING YOUNG INVESTIGATORS TO THE STATE

Since 1997, FAPESP has brought
1,398 Young Investigators
to São Paulo Institutions

\$ PPP 36.4 million
were spent on **326** Young
Investigators projects in 2015

In 2015, **54** new Young Investigators were hired to begin their scientific careers in research organizations in the state of São Paulo



PATENTS

FAPESP has **903** patents filed in its interest (holding title or shared benefits).

67 in effect

739 under analysis

97 withdrawn or expired

RESEARCH DATA BASE

FAPESP maintains a Research Data Base on its website that contains over 210,000 items related to all the grants and fellowships financed by the Foundation since 1992

www.bv.fapesp.br

115,301
Fellowships in country

8,713
Fellowships abroad

88,401 Research Grants

FAPESP IN 2015

ABOUT FAPESP

MANAGEMENT

EVALUATION SYSTEM

INCOME

ANALYSIS OF THE YEAR

APPLICATION RESOURCES

COOPERATION IN RESEARCH

ABOUT FAPESP

The São Paulo State Research Support Foundation (FAPESP) is one of the main Brazilian public agencies for research funding. For 54 years, it has supported technological and scientific research in institutions of higher education and research in the state of São Paulo.

With an annual budget corresponding to 1% of the total state tax revenue, as established by the State Constitution, FAPESP supports research, funding investigation, exchanges, and dissemination of the science and technology produced in São Paulo.

Support takes the form of grants for research projects and fellowships in all fields of knowledge.

Grants follow two lines of funding. The first line involves regular funding composed of the various fellowships for training at different levels, in Brazil and abroad, as well as several grant modalities. This line seeks to support researcher-initiated proposals and represents the most traditional form of support for research, conceived from the time of FAPESP's creation in 1962.

The second line of funding offers fellowships and grants under programs oriented to specific and strategic objectives, in fields such as biodiversity, bioenergy, global climate change, eScience, technological innovation in partnership with business, public policy, and others.

Directing FAPESP resources through these two lines seeks to achieve three specific objectives: support for the advancement of knowledge, support for application oriented research, and developing the research infrastructure.

142,000

FELLOWSHIPS GRANTED

FROM 1962 TO 2015

105,000

REGULAR GRANTS MADE

FROM 1962 TO 2015

MANAGEMENT

FAPESP is overseen by a Board of Trustees and managed by an Executive Board. The state constitution guarantees the Foundation's administrative autonomy. The Board of Trustees formulates the overall orientation for the Foundation and makes major decisions on scientific, administrative, and asset policies. It is composed of 12 members each one with a six-year term. Six council members are chosen by the state Governor, and others six are named by him based on three-names selected by the public and private research and higher education institutions in the state of São Paulo. The Foundation's president and vice-president are appointed by the state governor from a three-name list submitted by the Executive Board from among its members.

The Foundation's Executive Board constitutes the executive directorship of FAPESP. It is composed of the chair, scientific director, and administrative director, all with a three-year mandate. The directors are appointed by the Governor based on three-name lists submitted by the Board of Trustees.

EXECUTIVE BOARD IN DECEMBER, 2015		BOARD OF TRUSTEES IN DECEMBER, 2015	
José Arana Varela	2015 – 2016	José Goldemberg	2015 – 2018
EXECUTIVE BOARD PRESIDENT DIRECTOR		PRESIDENT	
Carlos Henrique de Brito Cruz	2014 – 2017	Eduardo Moacyr Krieger	2013 – 2019
SCIENCE DIRECTOR		VICE PRESIDENT	
Joaquim José de Camargo Engler	2014 – 2017	Carmino Antonio de Souza	2015 – 2021
ADMINISTRATIVE DIRECTOR		Fernando Ferreira Costa	2012 – 2018
		João Fernando Gomes de Oliveira	2015 – 2021
		João Grandino Rodas	2012 – 2018
		José de Souza Martins	2013 – 2019
		Maria José Soares Mendes Giannini	2010 – 2016
		Marilza Vieira Cunha Rudge	2013 – 2019
		Pedro Luiz Barreiros Passos	2013 – 2019
		Pedro Wongtschowski	2015 – 2021
		Suely Vilela	2012 – 2018

EVALUATION SYSTEM

Applications for research project grants submitted to FAPESP are selected through systematic peer review. For each field of knowledge, the Scientific Director maintains a committee of recognized experts, called Area Coordinators, with responsibility for coordinating the merit review process.

The steps of this process are summarized below. To learn details of FAPESP's Systematic Analysis, visit the following website: www.fapesp.br/analise.

STAGES OF PROJECT ANALYSIS

<p>1 – Area Coordinators receive applications</p>	<p>Each application received by FAPESP is forwarded to the corresponding Area Panel</p>
<p>2 – Selection of <i>Ad hoc</i> Advisors and Issuance of Expert Opinion Reports</p>	<p>After analyzing and summarizing the project and the presenter's institutional connections, the Area Coordinator identifies specialists with specific competence in the project theme to issue an expert opinion. The choice of outside <i>ad hoc</i> advisors is meant to prevent potential conflicts of interest of any type in project analysis. The <i>ad hoc</i> advisors analyze the proposals and issue expert opinion reports.</p>
<p>3 – Analysis by the Area Panel</p>	<p>The procedures are developed by the Area Coordinators, who in turn analyze the expert opinions and issue a recommendation for decision by the Science Director.</p>
<p>4 – Analysis by the Adjunct Coordinator</p>	<p>The Science Director relies on collaboration from a group of 10 researchers who are recognized leaders in their fields. As adjunct coordinators, they act as quality control for the work of the Area Coordinators. As such, they analyze all the coordinators' recommendations and verify their compatibility with the available expert opinion reports. They can endorse a recommendation, question it, or recommend it for further analysis.</p>
<p>5 – Decision by the Science Director</p>	<p>The Science Director's decision is based on the recommendations of the Adjunct Coordinator and the Area Coordinators and via ratification by the Executive Board.</p>

ANALYSIS AND APPLICATIONS

7,569
AD HOC
ADVISORS

The number of *ad hoc* advisors consulted to analyze a project depends on the field as well as the size of the budget request.

21,338
EXPERT OPINION
REPORTS

98%
OF ADVISORS ISSUE
BETWEEN 1 AND 4
REPORTS

Every request for an expert opinion to an *ad hoc* advisor is accompanied by an express commitment to maintain confidentiality of names. The advisors also commit to maintaining confidentiality regarding the content of their opinion reports, and only FAPESP personnel and advisors are involved in the process of analyzing applications.

FOR THE **19,180** APPLICATIONS RECEIVED IN 2015,
THE AVERAGE TIME OF ANALYSIS WAS **64 DIAS**

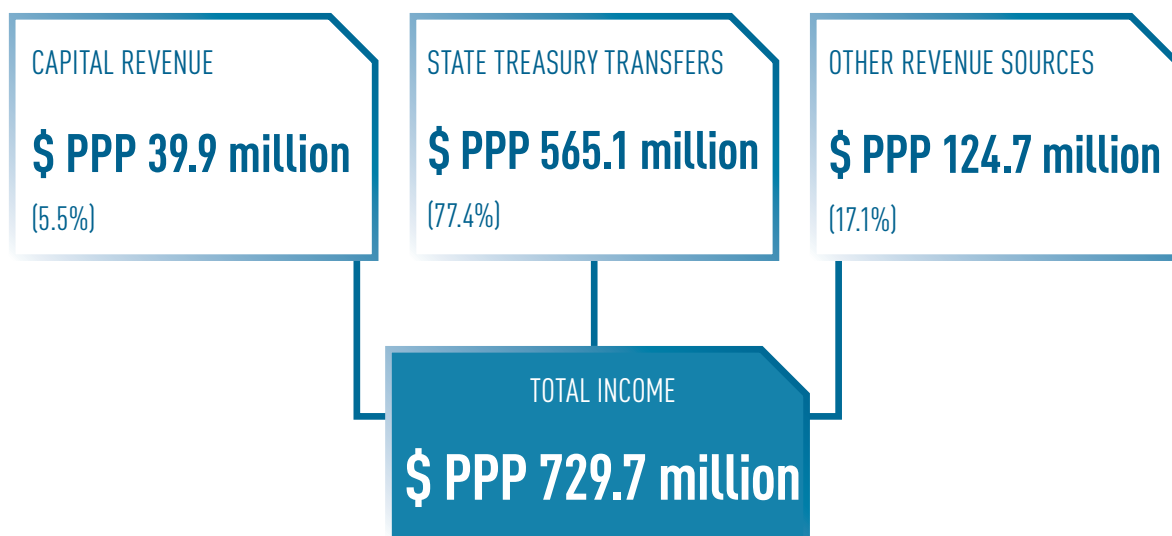
For each of the funding lines, typically, a timeline is defined to complete the analysis process, and in the large majority of cases, FAPESP has made every effort to respect the deadlines. However, the Foundation cannot entirely control the most important stage of the process, namely, analysis by the advisors. Frequently, before issuing a final opinion report, they request more information, and sometimes FAPESP itself takes the initiative to consult more than one advisor in cases where the initial opinion report is not considered sufficient to make a well-founded decision.

Applications with large budget requests are simultaneously sent to at least two *ad hoc* advisors. For this reason, they can take much longer to process than the usual applications to FAPESP in the corresponding modalities.

INCOME

In 2015, FAPESP received a total of \$ PPP 729.7 million. Of this total, 77.4% or \$ PPP 565 million was transferred from the State Treasury, equivalent of 1% of the fiscal revenues collected by the state of São Paulo as determined by the State Constitution. The amount is 4.7% superior in nominal terms to the transfer of 2014, but it represents a negative real growth rate of 6% with respect to 2014 and is 4.7% lower than forecasted in FAPESP’s budget projection for 2015 due to the slowdown of the Brazilian economy.

By statutory disposition, FAPESP must maintain profitable assets to invest in research support in a way that complements the resources received from the State Treasury. Thus, another 5.5% (\$ PPP 39.9 million) of income is made up of capital revenue and 17.1% (\$ PPP 124.7 million) comes from other revenue sources, such as from contracts with other institutions for joint funding of research in which some partners elect to transfer resources for FAPESP to administer expenditures.



ANALYSIS OF THE YEAR

Despite the drop in tax revenues in the state in 2015 and the consequent reduction in the constitutional disbursement allocated to FAPESP, the Foundation maintained expenditure on research 3.1% higher than in 2014 in nominal terms.

The distribution of the amount of \$ PPP 642.5 million can be viewed in different ways considering FAPESP's objectives, the funding lines, the researchers' institutional affiliations, the field of knowledge, and other aspects.

Taking into account FAPESP's objectives, resources were predominantly directed to projects in its economic and social interest with potential for application. A total of 52.3% of the resources were allocated to such studies; while typically developed in academia, such studies often generate innovative solutions for practical problems that affect society. Another fraction – 39.8% – was allocated to research thought to result in the advancement of knowledge, and 7.9% was spent on research infrastructure. The ratio is similar to that of former years, demonstrating FAPESP's coherence and focus on supporting research that simultaneously contributes to the advancement of knowledge and has immediate or future potential for application.

The research supported by FAPESP originates from researchers associated to universities and research institutes – public and private, state and federal, in all the state of São Paulo – or small technology-based companies.

In 2015, as historically has occurred, disbursement was greater for researcher-initiated proposals compared to research solicited through programs or public announcements.

The funding line through which FAPESP meets researcher initiated proposals requests for regular grants and fellowships is permanent, with various modalities of grants and also of scholarships in Brazil and abroad. It represents the traditional form of the Foundation's support and received \$ PPP 488.2 million,

TOTAL DISBURSEMENT

\$ PPP 642.5 million

NEW PROJECTS CONTRACTED: 10,070

ACTIVE PROJECTS: 26,445

5,448 NEW
REGULAR FELLOWSHIPS

FELLOWSHIPS ABROAD
+32.8% in \$ PPP

ANALYSIS OF THE YEAR

or 76% of FAPESP's disbursements.

\$ PPP 257.9 million (40.2%) was spent on regular fellowships and \$ 229.9 million (35.8%) on regular grants. FAPESP received 11,659 applications for regular fellowships and 5,900 requests for regular grants. There were 16,200 fellowships in effect during the year, of which 5,448 were contracted during the period, and 7,239 regular grants, of which 3,429 were contracted during the year.

Fellowships abroad deserve a highlight and received 32.8% more than in 2014, even though a higher number of new contracts (4,204) and those in effect (14,282) were for in-country fellowships.

For special programs, disbursements were 30.3% greater than in 2014, with expressive growth especially in research undertaken within the production sector.

The PIPE program that supports innovation in small companies, recorded the highest number of projects selected since 2011: 159 projects and 77 fellowships associated to them, for a growth rate of 225% over the last five years. The amount disbursed, with the 325 projects in effect, was \$ PPP 16.2 million, which was 27.5% higher than in 2014 and 166% higher than in 2011.

The PITE program for funding university-industry research collaboratives had 65 ongoing projects during the year from 21 companies that received \$ PPP 5.7 million; investments were 64% higher than in 2014.

Four Applied Collaborative Research Centers were created, three of them in 2015, through an initiative that involves a long-term commitment from FAPESP, as well as from companies such as a BG Brasil, GlaxoSmithKline (GSK) and Peugeot Citroën do Brasil, in addition to universities, USP, Unicamp, and UFSCar and the Instituto Butantan. The estimated total

RESOURCES FOR TECHNOLOGICAL INNOVATION

UNIVERSITY-BUSINESS RESEARCH

+64%

21 COMPANIES = 65 PROJECTS

INNOVATIVE RESEARCH IN SMALL BUSINESS

+27.5%

271 COMPANIES IN 50 CITIES = 445 PROJECTS

10 YEARS OF PUBLIC POLICY RESEARCH FOR THE SUS (NATIONAL HEALTHCARE SYSTEM)

+88%

disbursement with all partners over a 10-year period is approximately \$ PPP 101.6 million. These centers, together with the Thematic Projects, the Young Investigators program, the RIDCs, and the SPEC, include the most daring and competitive research on the international level. Expenses for these programs, including all fellowships, grants, and multiuser equipment connected to them, totaled \$ PPP 211.5 million in 2015.

Of the 26,445 projects being conducted in 2015, 40.6% were hosted at USP, which received the greatest amount of funds (\$ PPP 311.5 million), while UNESP and Unicamp were practically tied for amounts received in 2015, each with nearly \$ PPP 84.3 million.

FAPESP also establishes relationships with research and higher education institutions, funding agencies, and national and international companies to stimulate collaborative research and the expansion of international projections for research produced in São Paulo state. In 2015, 183 cooperation agreements were in effect: 148 international (including funding agencies, universities and companies from other countries) and 35 national (with other research support foundations, federal and state governmental agencies, companies, and others).

Considering all fields of knowledge, some fields traditionally receive more resources than others. For example, Health received 27.9% of total disbursement, Biology received 14.9%, Human and Social Sciences received 10.3%, Engineering received 8.6%, and Agronomy and Veterinary Medicine received 7.8%. However, there was one break from tradition: for the first time, interdisciplinary research received the third highest disbursement, with 10.4% of total expenditures over the year.

RESOURCES FOR SPECIAL PROGRAMS

YOUNG INVESTIGATORS
+24.1%

EXPERIENCED RENOWNED RESEARCHERS
+180.2%

SUPPORT FOR RESEARCH INFRASTRUCTURE
+10.9%

APPLICATION OF RESOURCES

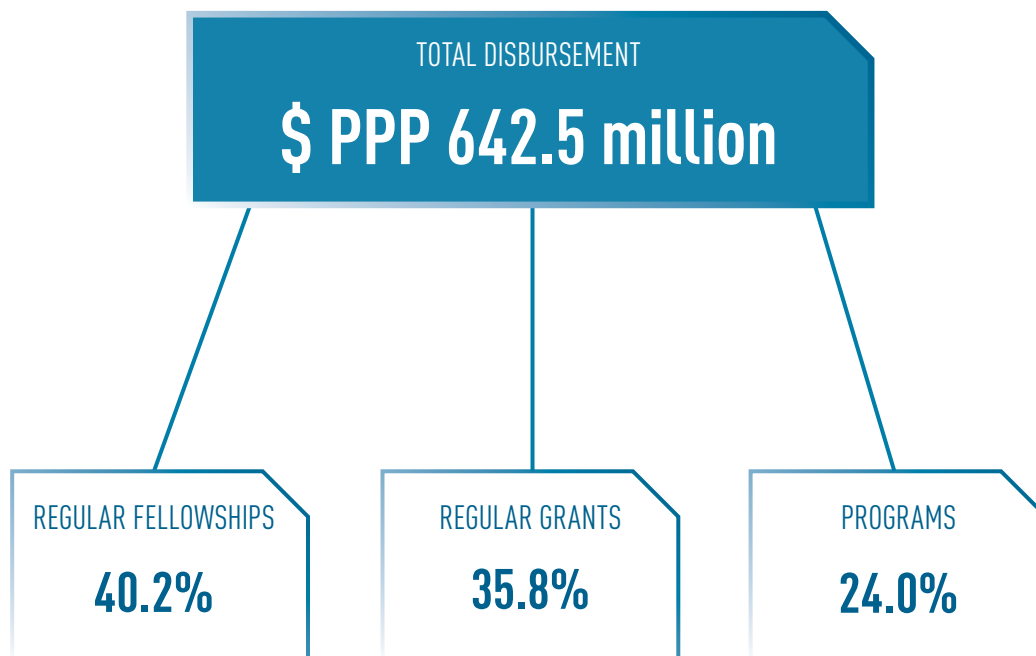
BY LINE OF FUNDING

The distribution of resources by funding line in 2015 showed that the major portion was destined to meeting researcher-launched study requests from researchers and fellows.

The Regular Program received \$ PPP 448.2 million, which corresponds to 76% of the total disbursed by FAPESP during the year. Of this, 40.2% was spent on regular fellowships in the country and abroad and 35.8% on regular grants.

The remaining 24% was spent on active fellowships and grants in the sphere of the various Research Programs.

With respect to last year, total disbursement for regular grants was 1% lower in nominal terms, while disbursement for Programs registered a nominal growth of 30.3%. Expenses for regular grants were marginally higher by 0.3%



DISBURSEMENT FOR REGULAR FELLOWSHIPS

In 2015, there were 16,200 regular fellowships active, including 5,448 contracted during the year. This included 14,282 fellowship projects that were on-going in Brazil in addition to 1,918 fellowships abroad. \$ PPP 258.2 million was spent on these projects, which was 40.2% of the total disbursed by FAPESP during the year.

At 78.2% of this amount, in Brazil fellowships received \$ PPP 210.7 million. Two modalities took the largest share (81%) of this disbursement: post-doctoral fellowships, with R\$157.4 million, and doctoral fellowships, with \$ PPP 78.9 million.

Fellowship modalities abroad together received \$ PPP 56.5 million. Despite representing only 21.9% of all disbursements for regular grants, the resources destined to modalities abroad registered a nominal increase of 32.9% with respect to 2014, while regular in Brazil grants received 7.6% less.

The largest portion of resources was directed to the Fellowships for Research Internships Abroad (BEPE), which received \$ PPP 43.8 million, but it was the Fellowships for Research Abroad (BPE) that registered the highest growth in disbursement, with a growth rate of 52.1%.

This year, FAPESP received 11,659 fellowship applications, which was 1.5% less than last year.

DISBURSEMENT FOR REGULAR FELLOWSHIPS

\$ PPP 258.2 million
40.2% of total disbursement

16,200 ACTIVE FELLOWSHIPS
5,448 NEW FELLOWSHIPS GRANTED

IC: Scientific and/or Technological Initiation
MS: Master's
DR: Doctorate
DD: Direct Doctorate
PD: Postdoctorate
BEPE: Research Internships Abroad
BPE: Research Abroad

Disbursement			Active Fellowships	New Fellowships granted
FELLOWSHIPS – Brazil				
	78.1%	\$ PPP 210.7 million	14,282	4,204
PD	42.2%	\$ PPP 85.1 million	2,704	684
DR	39.1%	\$ PPP 78.9 million	4,463	644
MS	9.2%	\$ PPP 18.6 million	2,563	728
IC	5.3%	\$ PPP 10.6 million	3,977	2,036
DD	4.2%	\$ PPP 8.5 million	575	112
FELLOWSHIPS – Abroad				
	21.9%	\$ PPP 56.5 million	1,918	1,244
BEPE-PD	37.5%	\$ PPP 21.2 million	380	244
BEPE-DR	30.8%	\$ PPP 17.4 million	782	483
BPE	22.4%	\$ PPP 12.7 million	390	254
BEPE-MS	4.9%	\$ PPP 2.8 million	218	151
BEPE-DD	3.3%	\$ PPP 1.8 million	75	47
BEPE-IC	1.2%	\$ PPP 0.6 million	73	65

DISBURSEMENT FOR REGULAR GRANTS

FAPESP’s second highest expense in 2015 – \$ PPP 229.9 million (35.8% of the total) – was for regular grants, the funding line with the second highest number of active projects, at 7,239 (27.4% of the total). FAPESP received 5,900 applications for regular grants in all modalities.

Regular grants for research projects was the modality with the highest number of active projects (4,958 or 68%) and which received the largest volume of resources (\$ PPP 209.4 million or 91%). Included in this amount are disbursements for Thematic Projects – a specialty of regular grants to research projects – which received \$ PPP 66.8 million and had 421 projects in progress, 76 of them contracted during the year.

Grants for Organization of Scientific Meetings was the modality receiving the second highest amount of resources (\$ PPP 9.6 million) and was fourth in the number of active projects (536).

Grants for Participation in Scientific Meetings Abroad was the modality with the second highest number of active projects (698) and the third highest in amount of resources (\$ PPP 4.4 million, approximately 2% of the total).

In 2015, there were 626 active grants for publications, including 369 submitted during the year. \$ PPP 1.5 million was spent on this modality.

DISBURSEMENT FOR REGULAR GRANTS

\$ PPP 229.9 million

35.8% of total disbursement

7,239 ACTIVE REGULAR GRANTS

3,429 NEW REGULAR GRANTS GRANTED

Disbursement	Active projects	New Projects Granted
REGULAR PROJECT GRANTS		
91% \$ PPP 209.4 million	4,958	1,419
Regular Research Grants		
62% \$ PPP 142.5 million	4,537	1,343
Research Grants - Thematic Projects		
29% \$ PPP 66.8 million	421	76
ORGANIZATION OF SCIENTIFIC OR TECHNOLOGICAL MEETINGS		
4.2% \$ PPP 9.6 million	536	539
PARTICIPATION IN SCIENTIFIC OR TECHNOLOGICAL MEETINGS ABROAD		
1.9% \$ PPP 4.4 million	698	716
VISITING RESEARCHER PROGRAM FROM ABROAD		
1.8% \$ PPP 4.1 million	264	235
SCIENTIFIC PUBLICATIONS		
0.6% \$ PPP 1.5 million	626	369
VISITING RESEARCHER PROGRAM FROM BRAZIL		
0.4% \$ PPP 0.8 million	22	12
PARTICIPATION IN SCIENTIFIC OR TECHNOLOGICAL MEETINGS IN BRAZIL		
0.1% \$ PPP 0.3 million	135	139

DISBURSEMENT FOR RESEARCH PROGRAMS

Research programs to support strategic projects in areas with specific demands are divided into Special Programs and Research for Technological Innovation Programs.

SPECIAL PROGRAMS

- Young Investigators Awards
- Special Projects
- São Paulo Excellence Chairs (SPEC)
- FAPESP Research Program on eSCIENCE
- Training Human Resources for Research (Technical Capacity-Building)
- Public Education
- Scientific Journalism (Mídia Ciência/Science Media)
- Programs for Research Infrastructure
 - Research Infrastructure
 - FAP-Livros Book Program
 - ANSP Network
 - Multiuser Equipment (EMU)
 - Program Technical Reserves Institutional Research Infrastructure
 - Technical Reserves for ANSP Network
 - Technical Reserves for Program Coordination
 - Scientific Electronic Library Online (SciELO)

RESEARCH FOR TECHNOLOGICAL INNOVATION PROGRAMS

- Innovative Research in Small Business (PIPE)
- Research Partnership for Technological Innovation (PITE)
- Program for Support of Intellectual Property (PAPI/NUPLITEC)
- Research, Innovation and Dissemination Centers (RIDC)
- BIOTA-FAPESP Program
- FAPESP Bioenergy Research Program (BIOEN)
- FAPESP Research Program on Global Climate Change (RPGCC)
- Public Policy Research
- Public Policies Research for the National Health Care System (PP-SUS)
- Inter-institutional Cooperation in Brain Research (CINAPCE)

DISBURSEMENT FOR RESEARCH PROGRAMS

For administrative purposes, FAPESP classifies programs devoted to training and capacity building as human resources and programs to support, such as Special Programs, as research infrastructure. The programs whose results have clear potential for application are classified as Technological Innovations.

In 2015, \$ PPP 154.4 million was disbursed for the two research programs. The greatest quantity of resources was committed to 420 active projects under the Young Investigators program, which received \$ PPP 26.1 million, 24.2% more than in 2014. Next was the 17 RIDCs, which received a total of \$ PPP 25.7 million.

In the business research area, the PIPE program received \$ PPP 16.2 million, which was 27.5% higher than in 2014, while the PITE program received \$ PPP 5.7 million, which was 64% higher than in 2014. During the year, there were 445 PIPE and 65 PITE projects on-going.

Also of note was the sum disbursed for the Programs for Research Infrastructure Support, which received a total of \$ PPP 46.8 million, of which 52% was allocated to the Technical Reserves for Institutional Research Infrastructure and 26% was allocated to the ANSP Network. The modalities that make up this line of funding had a total of 358 projects in progress, of which 153 were contracted in 2015.

DISBURSEMENT FOR RESEARCH PROGRAMS

\$ PPP 154.4 million

24% of total disbursement

3,006 ACTIVE PROJECTS
(FELLOWSHIPS AND RESEARCH GRANTS)

1,193 NEW PROJECTS GRANTED

Disbursement for Research Programs		Active projects	New projetos granted
SPECIAL PROGRAMS			
58.4%	\$ PPP 90.1 million	2,167	937
RESEARCH FOR TECHNOLOGICAL INNOVATION PROGRAMS			
41.6%	\$ PPP 64.3 million	839	256

SPECIAL PROGRAMS				
		Disbursement (in \$ PPP million)	Active Projects	New projects granted
RESEARCH INFRASTRUCTURE	52.1%	\$ PPP 46.8 million	358	153
YOUNG INVESTIGATOR AWARDS	29%	\$ PPP 26.1 million	420*	74*
SPECIAL PROJECTS	9.7%	\$ PPP 8.7 million	2	1
TECHNICAL CAPACITY-BUILDING	6.1%	\$ PPP 5.5 million	1,338	692
SPEC	2.8%	\$ PPP 2.6 million	8	1
eSCIENCE	0.2%	\$ PPP 0.18 million	4	3
PUBLIC EDUCATION	0.1%	\$ PPP 0.11 million	26	10
SCIENTIFIC JOURNALISM	0.1%	\$ PPP 0.08 million	11	3

* It includes Fellowships and Research Grants related to the Program: Active projects: 326 Research Grants and 94 Fellowships.
New Projects granted: 54 Research Grants and 20 Fellowships.

RESEARCH FOR TECHNOLOGICAL INNOVATION PROGRAMS				
		Disbursement (in \$ PPP million)	Active Projects	New Projects Granted
RIDC	40%	\$ PPP 25.7 million	17	0
PIPE	25.2%	\$ PPP 16.1 million	445*	236*
PITE	8.8%	\$ PPP 5.7 million	65	10
BIOTA	8.5%	\$ PPP 5.5 million	72	2
CLIMATE CHANGE	6%	\$ PPP 3.9 million	48	0
PP-SUS	5.5%	\$ PPP 3.6 million	77	0
BIOEN	5.4%	\$ PPP 3.5 million	93	1
CINAPCE	0.2%	\$ PPP 0.15 million	1	0
PAPI-NUPLITEC	0.2%	\$ PPP 0.14 million	16	5
PUBLIC POLICY RESEARCH	0.1%	R\$ 0.03 million	3	2
PIPE Phase 3: PAPPE/Finep	0%	0	2	0

* It includes Fellowships and Research Grants related to the Program: Active projects: 325 Research Grants and 120 Fellowships.
New Projects granted: 159 Research Grants and 77 Fellowships.

APPLICATION OF RESOURCES

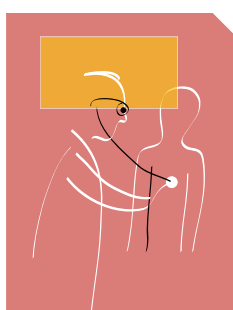
BY FIELD OF KNOWLEDGE

Disbursements by FAPESP in diverse fields of knowledge reflect the degree of dynamism, the research tradition, and the direction of the pathway of scientific research in São Paulo state, as well as its strengths and weaknesses.

Traditionally, some fields of knowledge have received more resources than others. This is the case for Health, which received 27.9% of all FAPESP disbursements in 2015, whereas Biology received 14.9%, Human and Social Sciences received 10.3%, and Engineering and Agronomy and Veterinary Studies received 8.6% and 7.8%, respectively

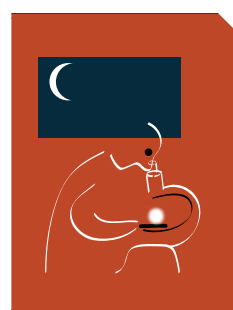
These are areas with a long research tradition in São Paulo state, going back to the first research institutions created at the beginning of the twentieth century. These research areas also each have a large community of researchers who remain active in producing knowledge in their fields.

In 2015, breaking with tradition, interdisciplinary research, represented by the studies undertaken at the 17 Research, Innovation and Dissemination Centers (RIDCs) and institutional infrastructure projects were in third place, receiving 10.4% of the total resources applied by FAPESP to research.



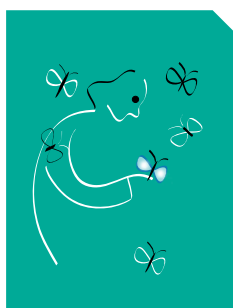
HEALTH

\$ PPP 179 million – 27.9%
2,839 new projects – 28.2%
7,949 active projects in the year



INTERDISCIPLINARY

\$ PPP 95 million – 10.4%
150 new projects – 1.5%
393 active projects in the year



BIOLOGY

\$ PPP 67 million – 14.9%
1,212 new projects – 12%
3,551 active projects in the year



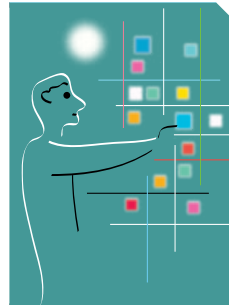
HUMANITIES AND SOCIAL SCIENCES

\$ PPP 66 million – 10.3%
1,918 new projects – 19.1%
4,416 active projects in the year



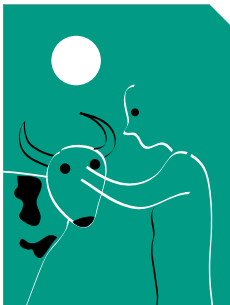
ENGINEERING

\$ PPP 55 million – 8.6%
1,129 new projects – 11.2%
2,741 active projects in the year



COMPUTER SCIENCE AND ENGINEERING

\$ PPP 14 million – 2.2%
254 new projects – 2.5%
614 active projects in the year



AGRONOMY AND VETERINARY SCIENCE

\$ PPP 50 million – 7.8%
889 new projects – 8.8%
2,513 active projects in the year



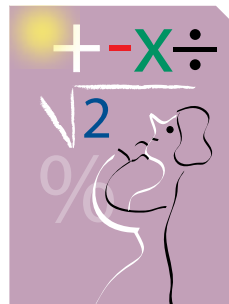
GEOSCIENCES

\$ PPP 13 million – 2.1%
197 new projects – 1.9%
565 active projects in the year



CHEMISTRY

\$ PPP 32 million – 5.1%
453 new projects – 4.5%
1,283 active projects in the year



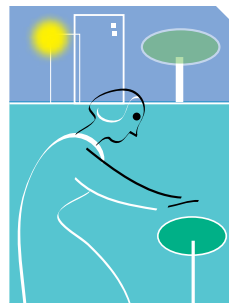
MATHEMATICS AND STATISTICS

\$ PPP 9 million – 1.5%
260 new projects – 2.6%
594 active projects in the year



PHYSICS

\$ PPP 32 million – 5%
339 new projects – 3.4%
936 active projects in the year



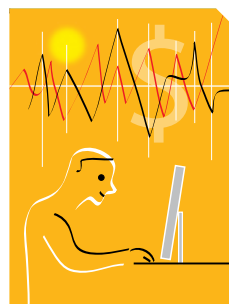
ARCHITECTURE AND URBANISM

\$ PPP 4 million – 0.6%
183 new projects – 1.8%
378 active projects in the year



ASTRONOMY AND SPACE SCIENCE

\$ PPP 20 million – 3.1%
70 new projects – 0.7%
180 active projects in the year



ECONOMICS AND ADMINISTRATION

\$ PPP 4 million – 0.6%
177 new projects – 1.8%
332 active projects in the year

COOPERATION IN RESEARCH

FAPESP uses several mechanisms to integrate Brazilian researchers into international networks that are active at the frontiers of knowledge in diverse fields and to promote cooperation in research to result in greater international visibility and impact for the science produced in São Paulo state.

Scientific Exchange

Grants for Research Internships Abroad (BEPE), for example, provide opportunities for FAPESP fellows in Brazil to intern at outstanding foreign research centers. In 2015, 990 BEPE were contracted, and the five most sought destinations were the United States, France, England, Spain and Canada.

There were also 254 new fellowships for Research Abroad (BPE) provided to individuals with doctorates to conduct research at international institutions.

Another form of support for scientific interchange was 716 grants that were awarded to attend scientific conferences: 49% of these were in Europe, 32.5% in North America (29% in the United States), 10% in Latin America and the Caribbean, 6% in Asia, 1.5% in Oceania and 0.5% in Africa.

Attracting Renowned Scientists to São Paulo

FAPESP has also made efforts to attract foreign researchers or those living abroad to work in the state of São Paulo. One evident result is that, in 2015, 123 foreign fellowships represented 21% of in-country post-doctoral grants, with higher incidences of exact and earth sciences, biology and social sciences.

TECHNICAL SHEET FOR 2015

 www.fapesp.br/acordos

In 2015

- **142** active international cooperation agreements with institutions in 27 countries.
26 signed in 2015
- **137** partners:
87 academic institutions
40 funding agencies
10 multinational institutions
- **25** active national cooperation agreements with 15 institutions.
4 signed in 2015
- Over **2 mil** new Scientific Exchange projects contracted.

AGENCIES AND ACADEMIC INSTITUTIONS

In 2015, FAPESP supported visits to São Paulo by 247 researchers from different countries through its Visiting Researcher Program, including attendees of the São Paulo Schools of Advanced Sciences (ESPCA) for short courses administered by renowned Brazilian and foreign scientists.

In this line, the São Paulo Excellence Chairs (SPEC) that establishes collaborations among São Paulo state institutions and high-level researchers located abroad merits highlight. The researchers maintain their connections to their institutions of origin, but they are obliged to stay in Brazil for 12 weeks per year for at least five years during the project duration, coordinating post-doctoral appointments, doctorates and even scientific initiation students.

International Cooperation Agreements

FAPESP's main instrument for formalizing collaboration among Brazilian and foreign scientists is cooperation agreements that the Foundation established with foreign institutions interested in jointly supporting research in areas of common interest.

In 2015, there were 142 active international agreements, with 26 signed during the year. In total, there were partnerships with 137 institutions in 27 countries, including 87 agreements with institutions of higher education and research, 45 agreements with 40 funding agencies, and 10 agreements with multinational institutions.

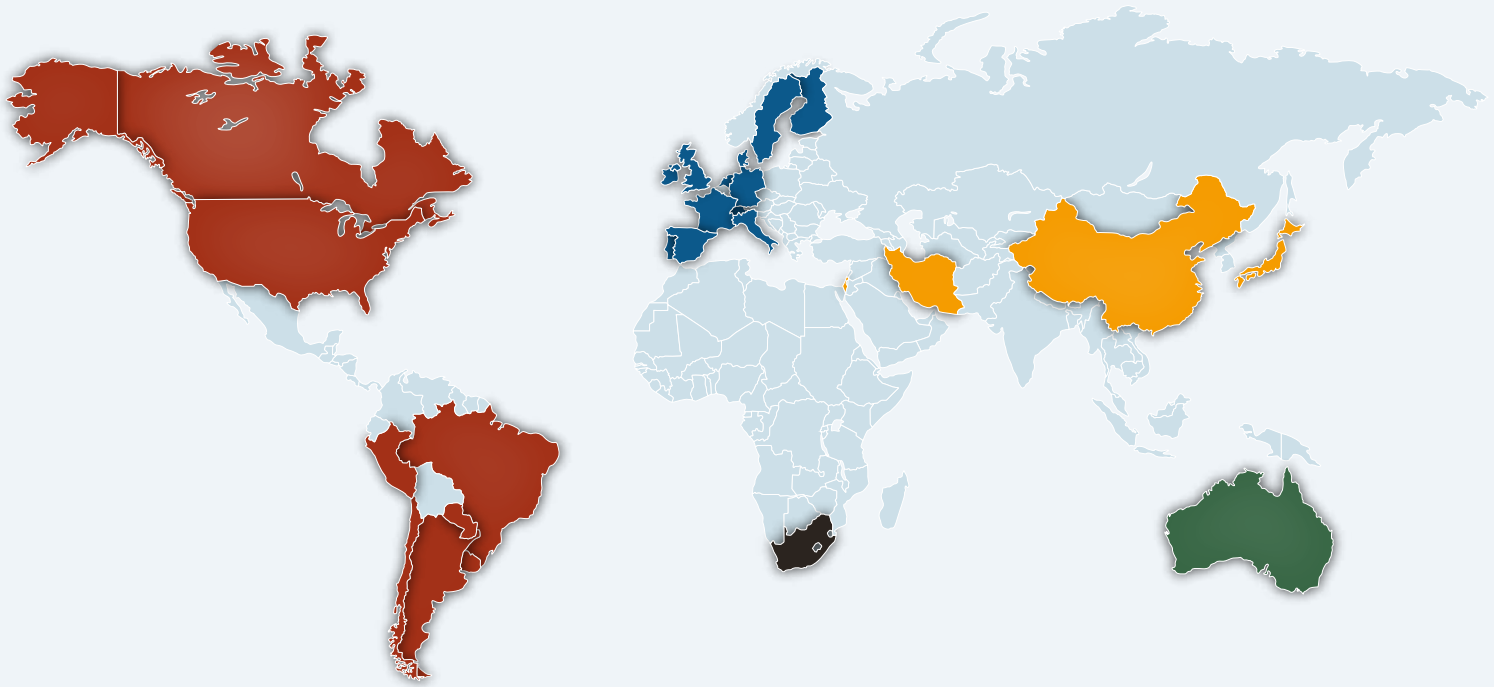
National Cooperation Agreements

There were also 25 active agreements with 15 Brazilian institutions (funding agencies, government agencies and associations), four of which were signed in 2015.

This number does not include the 16 current agreements with national and international companies that are reported on pages 50 and 51.

To view the public announcements for select current research proposals and those from former years, see www.fapesp.br/chamadas.

COOPERATION IN RESEARCH



AFRICA

- África do Sul**
 - National Research Foundation (NRF)
 - Stellenbosch University
 - University of Cape Town (UCT)
- Cabo Verde**
 - Ministério da Educação Superior, Ciência e Inovação (MESCI)

NORTH AMERICA

- Canada**
 - Agence Universitaire de la Francophonie (AUF)
 - International Science and Technology Partnerships Canada Inc. (ISTPCanada)
 - McGill University
 - Natural Sciences and Engineering Research Council of Canada (NSERC)
 - Queen's University at Kingston
 - Universidades Simon Fraser, Concordia, York e Ryerson
 - University of Ontario Institute of Technology
 - University of Toronto
 - University of Victoria
 - University of Waterloo
- United States**
 - Brown University
 - California Institute for Regenerative Medicine
 - Emory University
 - Gates Foundation
 - Instituto de Pesquisa Scripps
 - Massachusetts Institute of Technology (MIT)
 - John E. Fogarty International Center
 - National Institutes of Health (NIH)
 - National Science Foundation (NSF) e universidades americanas
 - North Carolina State University
 - Ohio State University

- Pew Latin American Fellows Program in the Biomedical Sciences (PEW)
- Programa Dra. Ruth Cardoso (Capes/Fulbright/ Columbia University)
- Smithsonian Institution
- Texas Tech University (TTU)
- University of California Davis
- University of Florida
- University of Illinois
- University of Maryland
- University of Miami
- University of Michigan
- University of North Carolina - Charlotte
- University of Texas, Austin
- US Department of Energy / GOAmazon
- Vanderbilt University
- West Virginia University (WVU)

SOUTH AMERICA

- Argentina**
 - Consejo Nacional de Investigaciones Científicas y Técnicas (Conicet)
 - Ministerio de Ciencia, Tecnología e Innovación Productiva (MINCyT) e USP: Projeto LLAMA
- Brazil**
 - APAE de São Paulo
 - Associação Brasileira da Indústria de Alta Tecnologia de Produtos para a Saúde (Abimed)
 - Centro Alemão de Ciência e Inovação de São Paulo (DWIH)
 - Conselho de Defesa do Patrimônio Histórico, Arqueológico, Artístico e Turístico do Estado (Condephaat)
 - Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)
 - Coord. de Aperfeiçoamento de Nível Superior (Capes)
 - Financiadora de Estudos e Projetos (Finep)
 - Fundação de Amparo à Ciência e Tecnologia

AGENCIES AND ACADEMIC INSTITUTIONS

- de Pernambuco (Facepe)
- Fundação Maria Cecília Souto Vidigal
- Fundação Sistema Estadual de Análise de Dados (Seade)
- Informática de Municípios Associados (IMA)
- Instituto de Estudos de Saúde Suplementar (IESS)
- Instituto Nacional de Pesquisas Espaciais (Inpel)
- Ministério da Ciência, Tecnologia e Inovação: Laboratórios Multiusuários
- Ministério das Comunicações e Ministério da Ciência, Tecnologia e Inovação
- Nossa Caixa Desenvolvimento
- Secretaria de Estado de Energia - Rede ER

- Chile**
- Universidad de Chile (UCH)
 - Universidad de la Frontera

- Paraguay**
- Consejo Nacional de Ciencia y Tecnología (CONACYT)

- Peru**
- Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica (CONCYTEC)

- Uruguay**
- Agencia Nacional de Investigación e Innovación de Uruguay (ANII)
 - Asociación de Universidades Grupo Montevideo

ASIA

- China**
- Peking University (PKU)

- Iran**
- Cognitive Science and Technology Council of Iran (CSTC)

- Israel**
- Matimop
 - Technion - Instituto de Tecnologia de Israel
 - University of Haifa
 - Tel Aviv University
 - Hebrew University of Jerusalém
 - Weizmann Institute of Science

- Japan**
- Japan Science and Technology Agency (JST)
 - Japan Society for the Promotion of Science (JSPS)
 - University of Tokyo
 - Hiroshima University

EUROPE

- Germany**
- Deutsche Forschungsgemeinschaft (DFG)
 - Fraunhofer-Gesellschaft
 - Friedrich-Alexander-Universität Erlangen-Nürnberg
 - Ministério de Estado de Ciências, Pesquisa e das Artes do Estado Livre da Baviera (STMWFK)
 - Ministério Federal da Educação e Pesquisa da Alemanha
 - Serviço Alemão de Intercâmbio Acadêmico (DAAD)
 - University of Münster (WWU)

- Belgium**
- Direction Générale Opérationnelle Economie, Emploi & Recherche du Service Public de Wallonie (DG06)
 - Fonds de la Recherche Scientifique (F.R.S.- FNRS)

- Denmark**
- Innovation Foundation Denmark (ex-DCSR)
 - University of Copenhagen

- Spain**
- Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC)
 - Universidad Complutense de Madrid
 - Universidad de Girona
 - Universidad de Salamanca

- Finland**
- Academy of Finland (AKA)

- France**
- Agence Nationale de la Recherche (ANR)
 - Centre National de la Recherche Scientifique (CNRS)
 - Ecole Normale Supérieure (ENS)
 - Groupe des Écoles Centrales (GEC)
 - Institut National de la Santé et de la

- Recherche Médicale (Inserm)
- ParisTech
- Région Provence-Alpes-Côte d'Azur
- Université de Lyon

- Netherlands**
- BE-BASIC
 - Erasmus Universiteit Rotterdam
 - Netherlands Organization for Scientific Research (NWO)
 - Stichting Dutch Polymer Institute
 - Technische Universiteit Eindhoven (TU/e)

- Ireland**
- Science Foundation Ireland (SFI)

- Italy**
- Consiglio Nazionale delle Ricerche (CNR)
 - Università di Bologna

- Portugal**
- Fundação para a Ciência e a Tecnologia (FCT)

- United Kingdom**
- Bangor University
 - Brunel University London
 - British Council
 - Research Council UK (RCUK)
 - Durham University
 - Economic and Social Research Council (ESRC)
 - Heriot-Watt University
 - Imperial College
 - Institute of Education, University of London
 - Keele University
 - King's College London
 - London School of Economics and Political Science
 - Queen's University of Belfast
 - University of Bath
 - University of Birmingham
 - University of Cambridge
 - University of East Anglia
 - University of Edinburgh
 - University of Glasgow
 - University of Manchester
 - University of Nottingham
 - University of Oxford
 - University of Southampton
 - University of Surrey
 - University of Warwick
 - University of York

- Sweden**
- Halmstad University
 - Lund University
 - Uppsala University

- Switzerland**
- Instituto Federal Suíço de Tecnologia de Zurique (ETH Zürich)

OCEANIA

- Australia**
- Australian National University (ANU)
 - Australian Technology Network of Universities (ATN)
 - University of Melbourne
 - University of New South Wales
 - University of Sydney
 - Victoria University

MULTINATIONAL INSTITUTIONS

- Belmont Forum (IGFA)
- ERA.Net - LAC
- Inter-american Institute for Global Change Research (IIA)
- Inter American Network of Academies of Science (IANAS)
- International Union of Pure and Applied Chemistry (IUPAC)
- M-ERA.NET
- New Partnership for Africa's Development (NEPAD)
- Parceria G3
- Trans-Atlantic Platform for the Social Sciences and Humanities
- União Europeia (Horizon 2020)

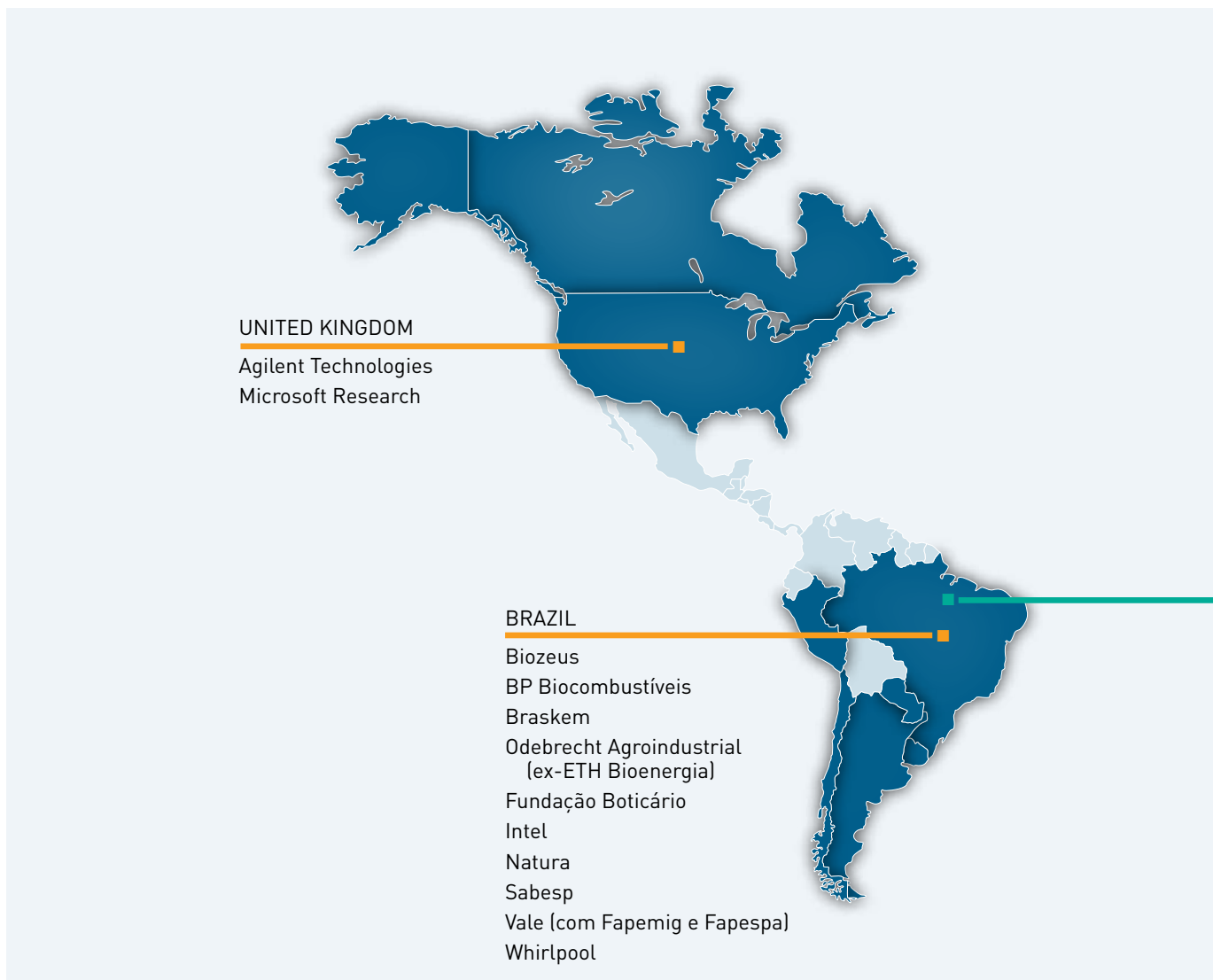
COOPERATION IN RESEARCH

RESEARCH COOPERATION WITH COMPANIES

In the two modalities of the PITE program, FAPESP promoted an interface between the academic and production sectors with a hundred companies.

Under the PITE Agreement modality, FAPESP has established cooperation agreements with 26 companies. In 2015, there were active agreements with 16 companies, including a partnership with AstraZeneca/Medimmune, signed during the year, as indicated on the map by the color orange. Under these accords, there were 57 projects in progress.

In earlier years, FAPESP supported projects through agreements with the companies Biolab, Ci&T Digital Assets, Boeing/Embraer, Dedini, Grupo Fleury,

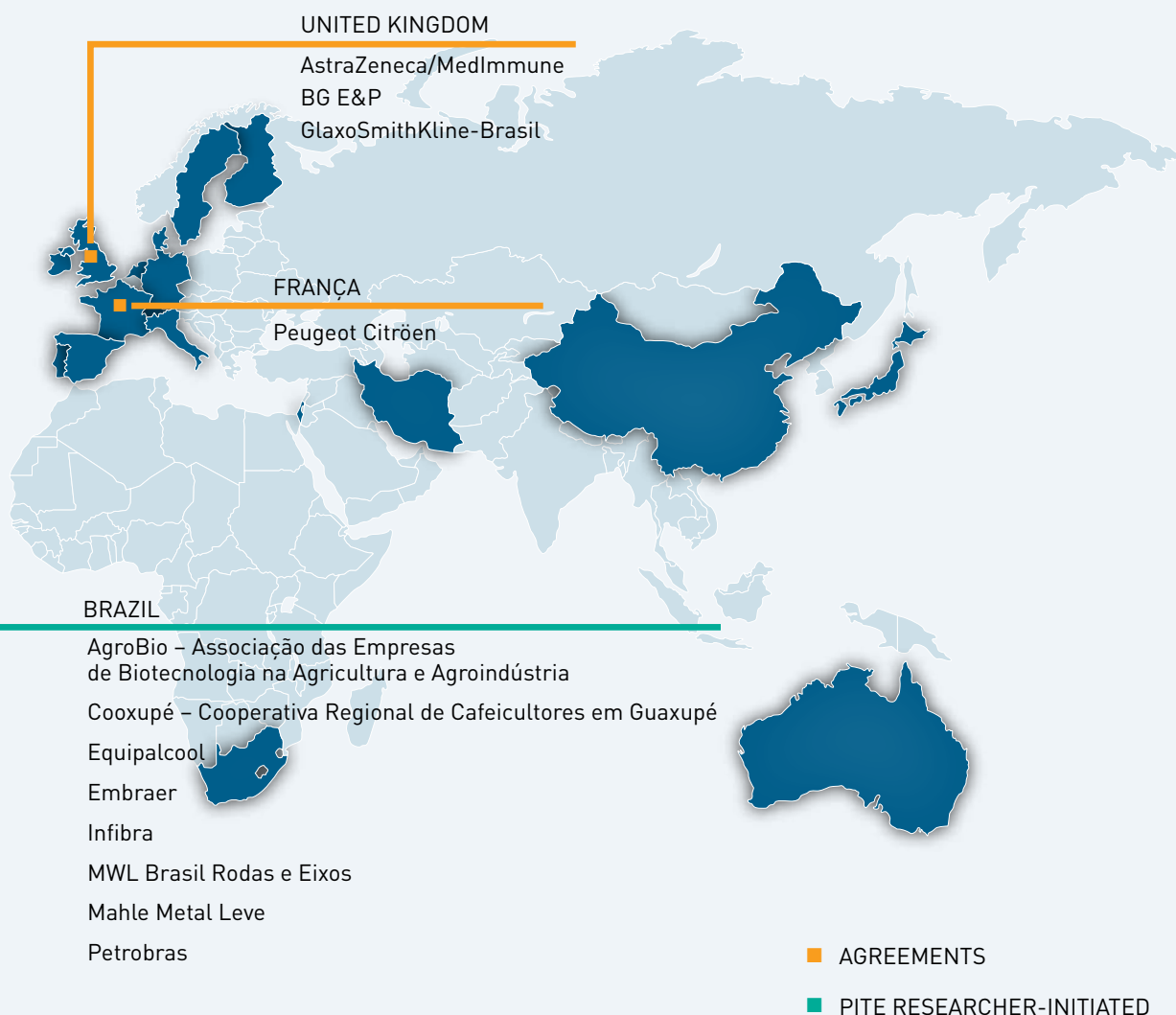


WITH COMPANIES

Grupo Telefónica, Oxiteno, Ouro Fino, Padtec and Imprimatur Capital.

In the PITE researcher-initiated modality, there were eight active projects in 2015, with a focus on the challenges of eight companies, indicated by green on the map.

Under this modality, in earlier years, FAPESP supported approximately 127 studies, presented by academics and developed together with researchers from 75 companies, such as Aché Laboratórios S/A, Aço Villares, Biobras S/A, Companhia Siderúrgica Nacional (CSN), Cristália Produtos Químicos e Farmacêuticos, Itautec Philco, Nestlé, Rhodia, Suzano Papel e Celulose and Tetra Pack.





Untitled, 1985
Enamel and charcoal on paper
200 x 150 cm



Untitled, 1985
Gouache on paper
80 x 100 cm



Untitled, 1986
Oil on canvas
120 x 140 cm



Untitled, 1987
Oil and wax on canvas
170 x 130 cm



Untitled, 1988
Oil on canvas
130 x 170 cm



Untitled, 1989
Oil and wax on canvas
190 x 220 cm



Madonna, 1987
Oil and wax on canvas
120 x 140 cm
Museu de Arte Moderna
Collection, São Paulo,
Brazil



Untitled, 1987
Oil and wax on canvas
170 x 130 cm



Untitled, 1990
Oil and wax on canvas
180 x 140 cm



Untitled, 1990
Oil and wax on canvas
170 x 130 cm



Untitled, 1991
Oil and wax on canvas
120 x 160 cm



Untitled, 1994
Oil and wax on canvas
24 x 30 cm



Untitled, 1996
Oil and wax on canvas
40 x 60 cm



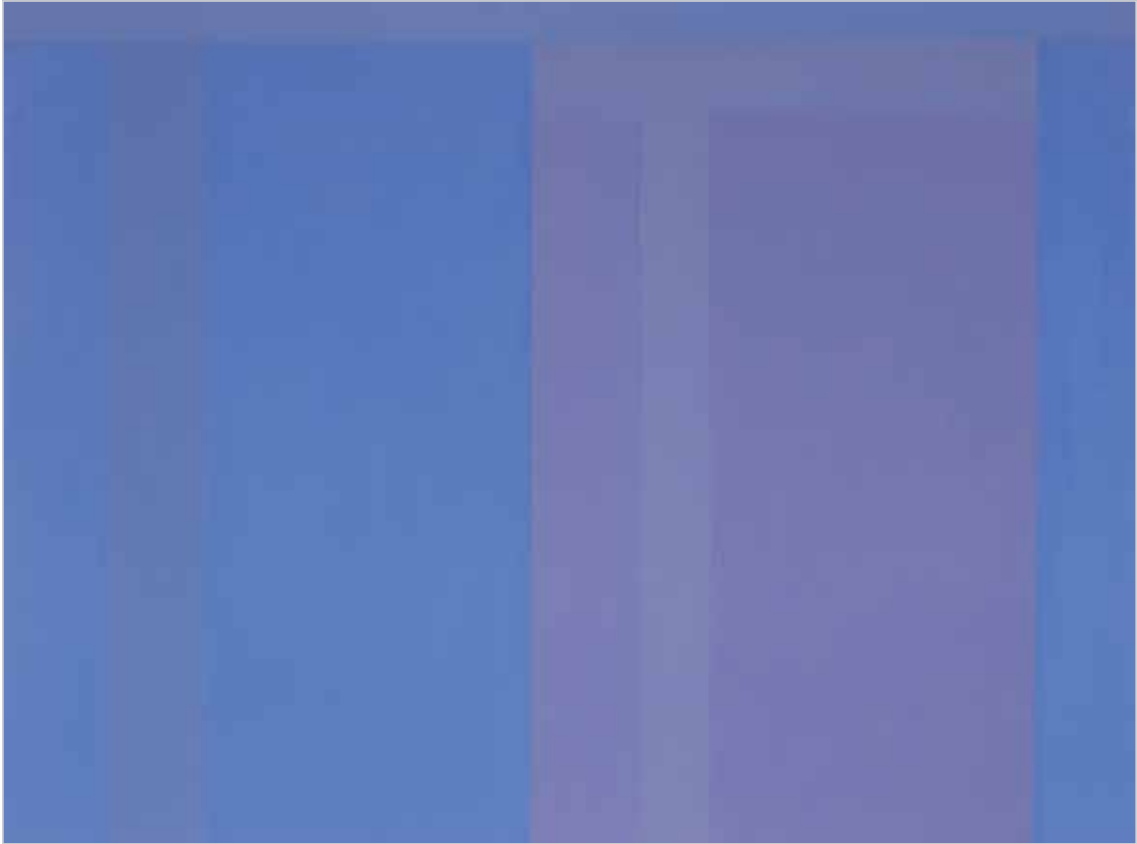
Untitled, 2000
Oil on canvas
20 x 30 cm
João Liberato



San Marco, 2005
Oil on canvas
20 x 30 cm



Untitled, 2005
Oil and wax on canvas
30 x 40 cm



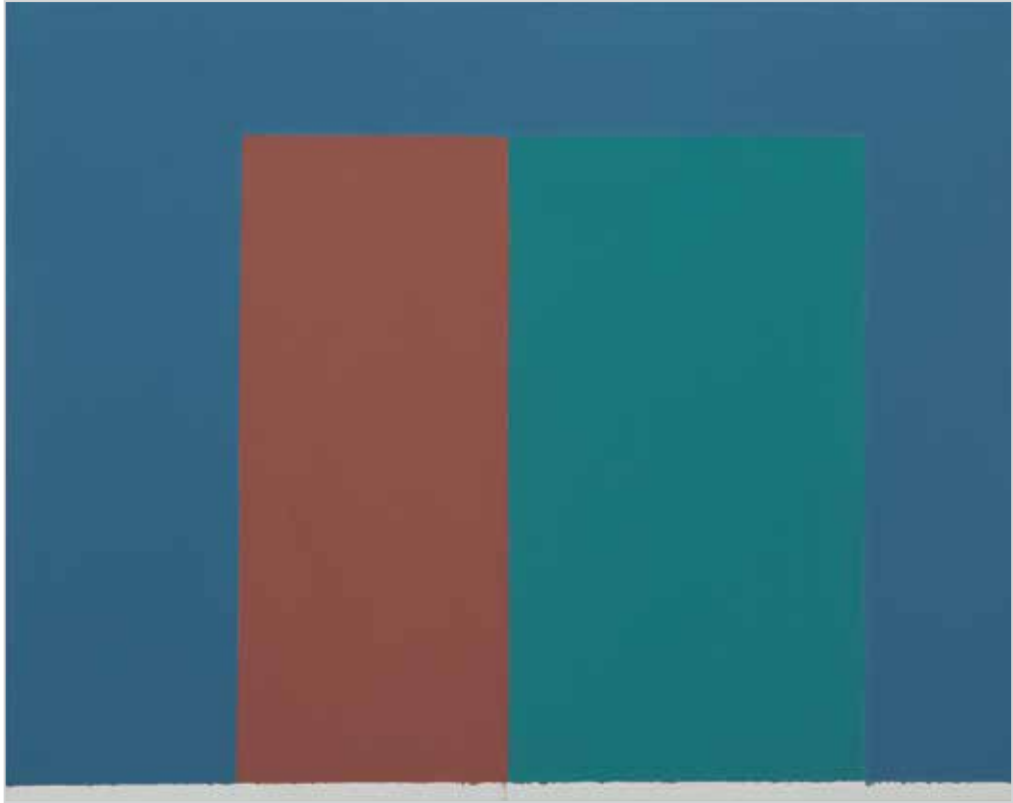
A Noite do Meu Bem, 2006
Oil on canvas
160 x 180 cm



Untitled, 2012
Oil on paper
50 x 65 cm

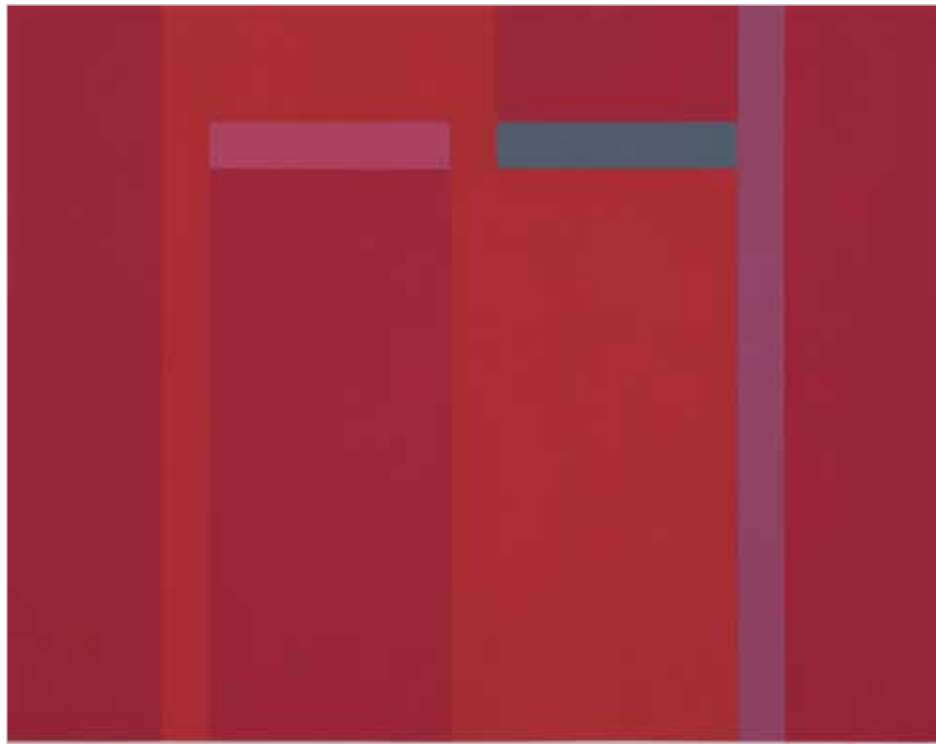
Untitled, 2013
Oil on paper
50 x 65 cm





Untitled, 2015
Oil on canvas
40 x 50 cm

Untitled, 2015
Oil on canvas
240 x 300 cm





Untitled – Landscape Series, 2015
Oil on paper
150 x 203 cm



Untitled – Landscape Series, 2015
Oil on paper
150 x 196 cm

Paulo Ponta

The artist holds a PhD in visual arts from Universidade de São Paulo. He received the Emile Eddé Scholarship for Visual Arts from the Museu de Arte Contemporânea – MAC/USP, in 1988. Highlights among his recent exhibitions include solo shows at Galeria Milan (São Paulo), 2015; SESC Belenzinho (São Paulo), 2014; Fundação Iberê Camargo (Porto Alegre), 2013; Centro Universitário Maria Antônia (São Paulo), 2011; Centro Cultural Banco do Brasil (Rio de Janeiro), 2008; and a solo show at Pinacoteca de São Paulo (São Paulo), in 2006, all in Brazil, other than participating in different editions of the Bienal de São Paulo, the Biennials of Mercosul and Cuenca. As a professor, he taught painting at the Faculdade Santa Marcelina, from 1987 to 1999, drawing at the Universidade Presbiteriana Mackenzie, from 1995 and 2002, and painting at the Universidade de São Paulo, between 2011 and 2012. He also taught at Fundação Armando Álvares Penteado from 1998 to 2012.

His works are part of many collections, such as: Pinacoteca do Estado de São Paulo, Museu de Arte Moderna de São Paulo, Museu de Arte Moderna do Rio de Janeiro, Museu de Arte Contemporânea da Universidade de São Paulo, Museu de Belas Artes do Rio de Janeiro, Colección Patricia Phelps de Cisneros and Kunsthalle Berlin. The artist also won art prizes such as the “Prêmio Viagem - Salão Nacional de Artes Plásticas do Rio de Janeiro” (Rio de Janeiro, RJ), in 1989, and the “Grande Prêmio do Panorama do MAM” (São Paulo, SP), in 1997.



Untitled – Landscape Series, 2014
Oil on paper
50 x 70 cm

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