UBACYT SCIENTIFIC PROGRAMS

2010-2012 | 2011-2014

RESEARCH **SCHOLARSHIPS**

UNIVERSIDAD DE BUENOS AIRES
SECRETARÍA DE CIENCIA Y TÉCNICA

UBACYT Scientific Programs 2010-2012

UBACYT Scientific Programs 2011-2014

Encouragement Scholarship, Master's Scholarship, Doctorate's Scholarship and Doctorate's Completion Scholarship

Science and Technology policies at University of Buenos Aires (Universidad de Buenos Aires – UBA) guarantee the promotion of scientific and technological research, as well as the consolidation and broadening of a highly qualified critical mass of researchers. This reflects the commitment made in 1986, year in which the *Subsidies Program for Scientific & Technological Research* (Programa de Subsidios a la Investigación Científico-Tecnológica) and the *Training Program for Human Resources in Scientific & Technological Research* (Programa de Formación de Recursos Humanos en Investigación Científico-Tecnológica) were created.

These programs, conceived during a promising time in history set by democratic values, still prove to be effective tools more than a quarter of a century later. Their goal is to increase not only scientific production but also the highly qualified and critical mass of human resources at the University. Successive changes to their implementation show a search for balance between the sustain of basic research and the strengthening of applied research, also between the research originated in areas of interest of the researcher and the one that responds to specific demands of society.

The aforementioned constitutes the basis of the commitment made by the University, which also includes a challenge set to the different managements responsible for the strategy layouts and plans of action, challenge that implies the overcoming of distortions and resource adequacy.

As a result of the continued relevance of these goals, the University of Buenos Aires (UBA) has now a major research structure that is a key component at a time that calls for unavoidable requirements from science and technological innovation.

Department of Science & Technology
Secretaría de Ciencia y Técnica – UBA
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Scientific & Technological research and training for human resources 2009-2011: continuity, updating and opening of new spaces

The development and continuity of scientific and technological activities at the University are guaranteed through constant procedures of reviewing and adjusting of policies that aim to raise academic performance and qualification of researchers, as well as the appreciation for scientific production and its disclosure to society.

During a three-year-period, from 2009 to 2011, these procedures originated several strategic lines that turned into operative modifications, the updating of regulations, and the opening of new frameworks for research. Nevertheless, they still maintained the structure adopted back in 1986 through their traditional tools of promotion: *UBACYT Scientific Programs* and *Research Scholarships* for university students and graduates.

In regards to Scientific Programs, a change in the periodicity of calls — now of annual frequency — and the addition of new types of projects have resulted in an increase of the number of current projects and the number of researchers involved.

The emphasis on interdisciplinary production of socially relevant scientific knowledge has encouraged exchange between research groups, coverage of areas of vacant or incipient development, technology transfer and university participation in the design, implementation and monitoring of public policies.

The inclusion of projects that address clinical research show, on the one hand, a commitment to the creation of a direct channel that meets the requests for assistance in matters of human and animal health and, on the other hand, a commitment to integrate researchers working at university hospitals.

In terms of organization, the initiatives implemented aim to endow with transparency all administrative procedures related to promotion policies of Science and Technology activities. Such

is the case of the Subsidies and Stipends Office, an incorporation to the Department of Science and Technology that enables the latter to manage not only the final payment of research scholarships but also to monitor the accountability of subsidies granted to UBACYT projects. Along the same lines, the adoption of an Integrated Management and Assessment System (SIGEVA-UBA) makes possible the computerization of submission, admission and assessment processes of applications for subsidies and scholarships in real time over the internet.

The Coordinated National System of Doctoral Scholarships was created under an agreement signed by the University of Buenos Aires (UBA), the National Scientific and Technical Research Council (Consejo Nacional de Investigaciones Científicas y Técnicas – CONICET) and the Ministry of Science, Technology and Productive Innovation (Ministerio de Ciencia, Tecnología e Innovación Productiva - MINCyT). This system intends to transfer the advanced doctoral UBA scholarships to CONICET's scholarship system, which runs on MINCyT funds, thus helping to concentrate the University's resources on the Encouragement Scholarship. This scholarship is believed to be the most effective for the incorporation of new researchers.

The approval of a new Regulation on Research Scholarships and a new Regimen for Research Subsidies represents the culmination of a long process of revision and update of the founding regulation that supports scientific and technological activity at the University.

The report presented below accounts for the processes that took place in the framework of the *2010-2012 UBACYT Scientific Program* and the *2011-2014 UBACYT Scientific Program*. It also accounts for Research Scholarships with starting dates in 2010 and 2011 that can be articulated with either UBACYT Scientific Program. Said report portrays an analysis of the calls, an assessment of the applications for subsidies and scholarships, and their results.

As in other occasions, the decisions regarding the scope and characteristics of the promotion system are the product of an intense exchange between the Department of Science and Technology and Research Departments of the various academic units of the University of Buenos Aires (UBA).

2010-2012 UBACYT Scientific Program

UBA Superior Board Resolution № 6712/2009 approves the call for the accreditation and funding of two types of research projects: Projects of Scientific Research or Technological Innovation and

Interdisciplinary Projects that address the issues of Climate Change, Sustainable Sources of Energy and Social Marginalization. Both types of projects have a biennial and triennial frequency.

Projects of Scientific Research or *Technological Innovation* can be divided into three categories:

- *Trained Groups' Projects*: triennial, consisting of two or more trained researchers (besides the Director) and led by a researcher with experience in project management, with relevant merits in the scientific field or a three year (or more) experience directing or co-directing research projects accredited by UBA, CONICET, the National Agency for the Promotion of Science & Technology (Agencia Nacional de Promoción Científica y Tecnológica – ANPCyT) and/or other renowned national or foreign universities.
- *Under Training Groups' Projects*: biennial, under the direction of researchers, no age restriction, who are new to the conduction of research projects or who have directed or co-directed research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities for a period of less than five years.
- *Young Researchers' Projects*: biennial, directed by researchers under thirty-six years old at the time of submission, who hold a Master's or Doctorate's degree.

Interdisciplinary Projects are developed through the creation of theoretical framework that can integrate different perspectives and methodologies in order to produce empiric evidence, analysis and interpretation of the results. They address issues related to Climate Change, Sustainable Sources of Energy and Social Marginalization, and can be divided into two categories:

- *Trained Groups' Interdisciplinary Projects*: triennial, consisting of two or more trained researchers (besides the Director), lead by a Director and at least one Co-director who belong to a minimum of two academic units of the University. Both the Director and the Co-directors must be researchers with experience in the direction and co-direction of projects, with relevant merits in the scientific field or a three year (or more) experience directing or co-directing research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities.
- *Interdisciplinary Under Trained Groups' Projects*: biennial, under the direction of a Director and at least one Co-director who belong to a minimum of two academic units of the University. Both the Director

and the Co-directors must be researchers who, no age restriction, are new to the conduction of research projects or who have directed or co-directed research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities for a period of less than five years.

As a result of the call made by the 2010-2012 UBACYT Scientific Program, 857 applications were submitted for Projects of Scientific Research or Technological Innovation and 25 for *Interdisciplinary Projects*.

2011-2014 UBACYT Scientific Program

UBA's Superior Board Resolution № 674/2010 approves the call for the accreditation and funding of two types of research projects: Projects of Scientific Research or Technological Innovation and Interdisciplinary Projects that address topics on Interdisciplinary Programs at the University. Both types of projects have a biennial and triennial frequency. Two months later, UBA's Superior Board Resolution № 1005/2010 approves the call for the accreditation and funding of Clinical Research Projects of biennial and triennial frequency as part of the 2011-2014 UBACYT Scientific Program.

Projects of Scientific Research or *Technological Innovation* aim to produce new knowledge and applications within basic or applied sciences or within the field of technological innovation. These projects can be divided into three categories:

- *Trained Groups' Projects*: triennial, consisting of integrated groups with: one trained researcher (the Director) and at least two UBA graduate students with dissertator status; two trained researchers, including the Director, Co-director or members; three trained researchers or more, including the Director, Co-director or members. They are led by a researcher with experience in project management, with relevant merits in the scientific field or a four year (or more) experience directing or co-directing research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities.
- *Under Training Groups' Projects*: biennial, consisting of integrated groups with: two trained researchers, including the Director, Co-director or members; three or more researchers under training, including the Director, Co-director or members. They are led by a researcher, no age restriction, who

is new to the conduction of research projects or who has directed or co-directed research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities for a period of less than four years.

– *Young Researchers' Projects*: biennial, directed by researchers under thirty-six years old at the time of submission, with a teaching position and workplace at UBA, who have not managed projects previously and hold a Masters or Doctorate's degree.

Interdisciplinary Projects are developed through the creation of theoretical framework that can integrate different perspectives and methodologies in order to produce empiric evidence, analysis and interpretation of the results. They address topics on Interdisciplinary Programs and can be divided into two categories:

– *Trained Groups' Interdisciplinary Projects*: triennial, consisting of two or more trained researchers (besides the Director), led by a Director and at least one Co-director who belong to a minimum of two academic units of the University. Both the Director and the Co-directors must be researchers with experience in the direction and co-direction of projects, with relevant merits in the scientific field or a four year experience directing or co-directing research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities.
– *Interdisciplinary Under Trained Groups' Projects*: biennial, under the direction of a Director and at least one Co-director who belong to a minimum of two academic units of the University. Both the Director and the Co-directors must be researchers, no age restriction, who are new to the conduction of research projects or who have directed or co-directed research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities for a period of less than four years.

Clinical Research Projects aim to produce new knowledge and applications within the human and animal field of clinical research, designed to study causes and to assess diagnosis and treatment of diseases. These projects can be divided into two categories:

– *Trained Groups' Projects*: triennial, consisting of two or more trained researchers or renowned professionals in the selected topic, including the Director. The Director, the Co-directors and the

trained researchers must have experience directing or co-directing research projects with relevant merits in the scientific field or a four year experience directing or co-directing research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities.

– *Under Training Groups' Projects*: biennial, consisting of two or more researchers under training or renowned professionals in the selected topic, including the Director. The Director, the Co-directors and the researchers under training, no age restriction, must be new to the conduction of projects or have directed or co-directed research projects accredited by UBA, CONICET, ANPCyT and/or other renowned national or foreign universities for a period of less than four years.

As a result of the call made by the 2011-2014 UBACYT Scientific Program, 1222 applications were submitted for Projects of Scientific Research or Technological Innovation, 14 for Interdisciplinary Projects, and 39 for Clinical Research Projects.

Research Scholarships for university students and graduates

Since the creation of the *Training Program for Human Resources in Scientific & Technological Research* in 1986, that begins with student's scholarships, the incorporation of graduates and postgraduates in order to encourage and facilitate the expansion of a highly qualified critical mass has progressed. Currently, four categories of scholarships are available:

– *Encouragement Scholarships* are designed to initiate students of the University of Buenos Aires (UBA) in all fields of knowledge regarding scientific and technological research. These scholarships have a one year's duration, with the possibility of a six month extension. They are granted to advanced students with 50 to 90 per cent of their career completed and with four hours available per day.
– *Master's Scholarships* are designed to encourage the development of research activities related to the preparation of the Master's Thesis within the academic offer of the University of Buenos Aires (UBA). These are granted to graduates from this University or other National Universities and have a two year's duration, with the possibility of a year extension with a full time commitment. The thesis must be submitted within four years of the scholarship's starting date.

- *Doctorate's Scholarships* are designed to encourage the development of research activities related to the preparation of the Doctoral Thesis within all disciplinary areas. These are granted to graduates from this University or other National Universities and have a three-years duration of full time commitment. The thesis must be submitted within six years of the scholarship's starting date.
- *Doctorate's Completion Scholarships* aim to complete doctoral studies, with particular focus on the preparation and completion of the Doctorate's Thesis. These are granted to graduates from this University or other National Universities, who continue research-oriented Master's studies or who have made verifiable developments in the Doctorate. Doctorate's Completion Scholarships have two year's duration of full time commitment. The thesis must be submitted within three years of the scholarship's starting date.

2009 Call

UBA's Superior Board Resolution № 7164/2009 approves the call to apply for the assigning of Master's and Doctorate's Scholarships to graduates, including Doctorate's Completion Scholarships. The scholarship holder and the Director of the scholarship must participate in a research project funded by the University of Buenos Aires (UBA), ANPCyT, CIC or CONICET. Scholarships begin in May 2010.

UBA's Superior Board Resolution № 7165/2009 approves the call to apply for the assigning of Encouragement Scholarships to undergraduate students at the University of Buenos Aires (UBA). The scholarship holder and the Director of the scholarship must participate in a research project accredited by the University. A minimum of thirty per cent of the scholarships will be granted to applicants whose director is a researcher under training or belongs to the young researcher's category. Scholarships begin in May 2010.

Once concluded the evaluation process for this call, 347 scholarships starting in 2010 were granted, 56 per cent of which belonged to the Encouragement category.

2010 Call

UBA's Superior Board Resolution № 1007/2010 approves the call to apply for the assigning of Encouragement Scholarships to undergraduate students at the University of Buenos Aires (UBA), and Master's and Doctorate's Scholarships, including Doctorate's Completion Scholarships. Entry requirements for scholarship holders and directors in accredited or funded projects are the same as in the previous call. Each research project can only admit one candidate for the scholarship to any category, except for Interdisciplinary Projects, which can admit two candidates from different academic units. Scholarships begin in July 2011.

Once concluded the evaluation process for this call, 298 scholarships starting in 2011 were granted, 51 per cent of which belonged to the Encouragement category.

Evaluation System

Applications for research projects of the Scientific Programs and scholarship applications are submitted for the consideration of eight Technical Advisory Commissions (CTA's), which contain thirty four disciplinary areas, disaggregated in one hundred and seven branches or specialties.

The CTA's, conducted by researchers, teachers and renowned technologists, are advisory bodies of the Superior Board of the University and its mission is to evaluate scientific and technological activities. An Interdisciplinary Advisory Commission assigned by the Superior Board at the proposal of the Department of Science & Technology takes part in the evaluation of Interdisciplinary Projects.

Research Projects Evaluation

The evaluation process consists of two levels: a background evaluation of the directors and group members by the CTA's and a work plan evaluation of the projects by peer reviewers from outside the University. This process is carried out online through the Integrated Management and Assessment System (SIGEVA), software that centralizes all management steps, from subsidy and scholarship requests to their granting. The SIGEVA includes a database of external specialists which is constantly being updated to ensure transparency throughout the process.

For the evaluation of research projects from the 2010-2012 and 2011-2014 UBACYT Scientific Programs, the general items considered and highest weighted scores according to project category were set as follows:

Category of the Proyect	Director's background	Work plan	Group's background	Budget
Trained	50	30	15	5
Under Training	50	30	15	5
Young Researchers	50	45	-	5

Experts from different institutes and offices of the CONICET, along with many national and foreign universities, participated in the external evaluation of the research projects' work plans. The total number of specialists involved rose to 1818.

The following table indicates the participation of external peers according to the institution to which they belong. It should be noted that National Universities of La Plata, Cordoba and Rosario, alongside CONICET's executive units, contributed with 50% of the reviewers.

2010-1012 UBACYT Scientific Program and 2011-2014 UBACYT Scientific Program. Participation of external specialists by institution

University/Agency	Evaluators	%
CONICET (executive units)	579	31.85
National University of La Plata	127	6.99
National University of Córdoba	112	6.16
National University of Rosario	96	5.28
Others	82	4.51
Foreign universities	75	4.13
National University of Mar del Plata	68	3.74
National University of Río Cuarto	46	2.53
UNICEN	45	2.48
CNEA	40	2.20
National University of Litoral	40	2.20
Private Universities	40	2.20
INTA	36	1.98
National University of Sur	35	1.93
National University of Tucumán	35	1.93
National University of Cuyo	33	1.82
National University of Quilmes	31	1.71
National University of Nordeste	26	1.43
National Bodies and Agencies	24	1.32
National University of San Martín	20	1.10
National University of San Luis	19	1.05
National University of General Sarmiento	19	1.05
National University of Comahue	17	0.94
National Research Centers	17	0.94

University/Agency	Evaluators	%
National University of Misiones	16	0.88
National University of San Juan	13	0.72
International Agencies	12	0.66
Fundations	13	0.72
Science Academies	11	0.61
National University of Patagonia San Juan Bosco	9	0.50
National University of Entre Ríos	8	0.44
National University of La Pampa	8	0.44
Hospitals	8	0.44
National University of Jujuy	7	0.39
FLACSO	7	0.39
National University of Lomas de Zamora	6	0.33
National University of Luján	6	0.33
UTN	6	0.33
National University of Salta	5	0.28
National University of Patagonia Austral	5	0.28
National University of Catamarca	3	0.17
National University of La Matanza	3	0.17
National University of Santiago del Estero	3	0.17
National University of La Rioja	2	0.11
National University of Tres de Febrero	2	0.11
National University of Formosa	1	0.06
National University of Lanús	1	0.06
National University of Villa María	1	0.06
Total	1818	100.00

The table that follows indicates the participation of foreign universities by country and number of reviewers. Brazil and Spain are strongly represented, they account for 50% of the reviewers, whereas in South America, Uruguay and Chile stand out.

Country	Evaluators	%
Brazil	23	30.67
Spain	15	20.00
Uruguay	14	18.67
USA	9	12.00
Chile	8	10.67
France	4	5.33
Italy	1	1.33
Mexico	1	1.33
TOTAL	75	100.00

Projects approved through the evaluation process are accredited by the University of Buenos Aires (UBA). The accreditation and funding of projects is carried out by order of scientific and academic merit. For the evaluation of Interdisciplinary Projects, another step has been added in which external reviewers analyze interdisciplinary contribution, methodological adequacy and transferability of results to non academic sectors.

Overall, 892 research projects were reviewed under the 2010-2012 UBACYT Scientific Program and 1237 under the 2011-2014 UBACYT Scientific Program. Their distribution regarding other variables is analyzed in different sections of this report.

Research Scholarships Evaluation

Applications for all four categories of scholarships are submitted for evaluation using the following criteria and highest scores according to category of scholarship, background and work plan:

Category of Scholarship	Applicant's background	Work plan	Director of the scholarship's background
Encouragement	45	25	30
Master's, Doctorate's and Doctorate's Completion	30	40	30

Calls for 2010 and 2011 research scholarships resulted in the review of 1222 applications: 660 for Encouragement Scholarships and 562 for other categories.

Analysis of results

The primary results of the calls and evaluation process for research projects and scholarships are analyzed in the following pages.

1. Research Projects

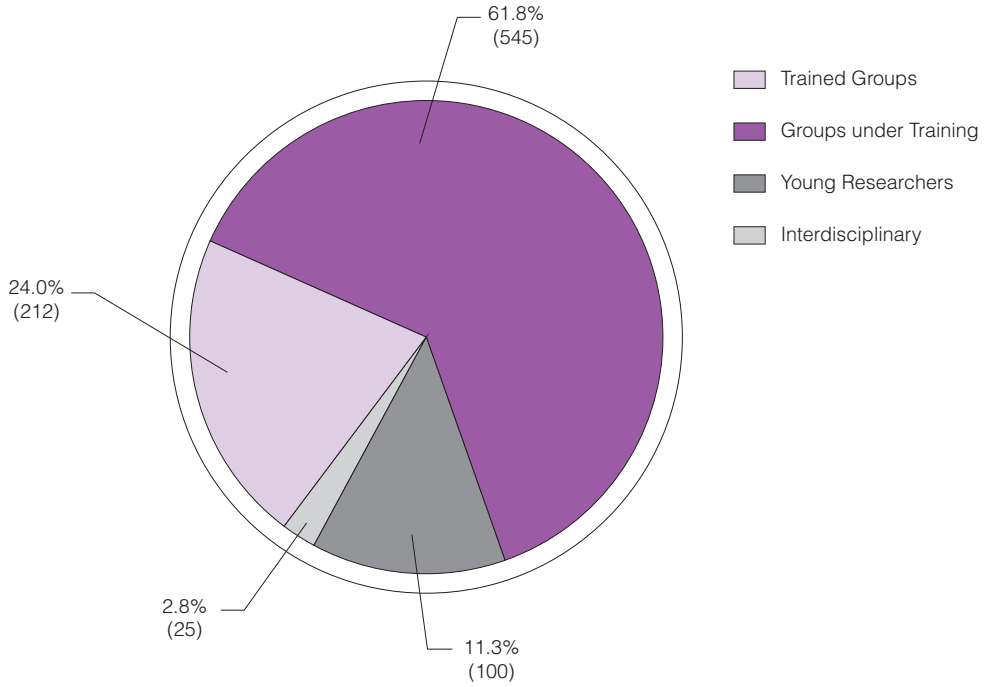
The distinctive features of each UBACYT Scientific Program are displayed through the variables involved in the process of evaluation, accreditation and funding of projects.

1.1. 2010-2012 UBACYT Scientific Program

The call for the ***2010-2012 UBACYT Scientific Program*** throws different results from previews calls due to the large amount of projects presented under the ***Under Training Groups*** category (62%). Such a high number is usually perceived under the ***Trained Groups*** category, comprised of research groups with a broad background in the science and technology fields. The reason for this difference in the results lays in the fact that projects from this category from the 2008-2010 UBACYT Scientific Program were still current at the time of the call.

As regards the previous call, a small increase in the submissions for the ***Young Researchers*** category was registered. ***Interdisciplinary Projects*** (which include the categories of *Trained* and *Under Training Groups*) participated for the first time with almost 3% of projects submitted.

Number of projects submitted for the 2010-2012 UBACYT Scientific Program



1.1.2. Distribution of Research Projects before and after the evaluation process

Once the evaluation process is over, the final configuration of the ***2010-2012 UBACYT Scientific Program*** is defined. 70% of all submitted projects were accredited, including those receiving a Support stipend (14,6%), a method adopted since the call of 2004 to sustain the accredited projects that did not obtain any funding.

Distribution of projects from the 2010-2012
Call by Types and Categories

56% of submitted projects received funding. The previous chart shows a similar funding distribution within each category.

1.1.3. Distribution of Research Project by Categories and Academic Units

As shown in the following table, other characteristics arise when considering the distribution of projects by Academic Units.

2010-2012 UBACYT Scientific Program. Distribution of Research Projects by Categories and Academic Units

Academic Unit	Scientific Research Projects									Interdisci-plinary*		Total		
	Trained			Under Training			Young							
	P.	F.	S.	P.	F.	S.	P.	F.	S.	P.	F.	P.	F.	S.
Agronomy	18	10	5	31	20	3	3	3	0	1	0	53	33	8
Architecture	8	2	1	24	9	2	1	1	0	4	2	37	14	3
Economic Sciences	5	1	2	16	8	2	2	2	0	1	1	24	12	4
Exact and Natural Sciences	48	27	11	107	56	15	38	22	3	2	2	195	107	29
Social Sciences	19	13	3	76	49	6	9	6	1	4	3	108	71	10
Veterinary Sciences	8	3	0	14	4	3	3	2	0	1	1	26	10	3
Law	5	5	0	5	6	1	5	1	1	5	2	20	14	2
Pharmacy and Biochemistry	12	7	2	58	38	4	18	8	5	0	0	88	53	11
Philosophy and Letters	33	21	8	73	44	19	6	4	1	0	0	112	69	28
Engineering	16	9	4	16	10	2	4	2	0	2	1	38	22	6
Medicine	13	6	1	53	32	5	8	5	2	1	0	75	43	8
Dentistry	4	2	1	13	5	2	2	2	0	0	0	19	9	3
Psychology	17	7	5	42	18	6	1	1	0	1	0	61	26	11
Common Basic Cycle	6	2	1	16	5	2	0	0	0	3	0	25	7	3
Rectory	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Total	212	115	44	545	304	72	100	59	13	25	12	882	490	129

* Interdisciplinary Projects are considered according to the Academic Unit of the project's Director.

P: Submitted; F: Funded; S: Support stipend

Almost half of the submissions (47%) came from the *Faculties of Exact and Natural Sciences*, *Philosophy and Letters*, and *Social Sciences*, reaching more than 100 project submissions per category. The same percentages were registered for those Academic Units in the case of the ***Trained Groups*** and ***Under Training*** categories. Regarding the ***Young Researchers*** category, 56% of projects submitted came from the *Faculties of Exact and Natural Sciences*, and *Pharmacy and Biochemistry*. ***Interdisciplinary Projects*** received submissions (52%) from the *Faculties of Architecture, Design and Urbanism, Social Sciences* and *Law*.

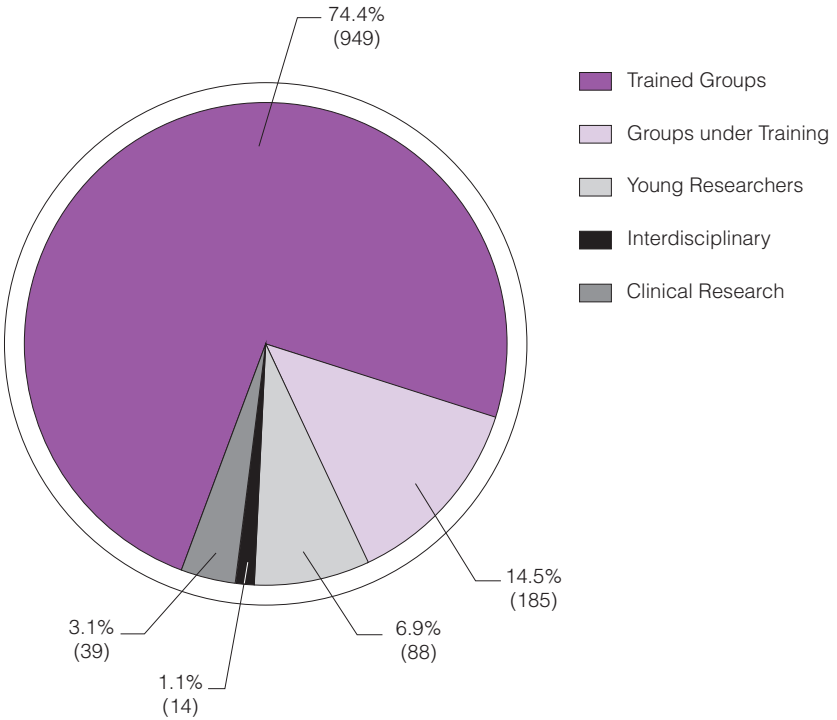
In the case of funded projects, the *Faculties of Natural Sciences, Social Sciences* and *Philosophy and Letters* gather 50% of the total. 44% of projects that receive support stipend come from the *Faculties of Exact and Natural Sciences*, and *Philosophy and Letters*. 25% of Interdisciplinary Projects belong to *Social Sciences*.

1.2. 2011-2014 UBACYT Scientific Program

1.2.1. Research Projects

The call for the ***2011-2014 UBACYT Scientific Program*** provides the usual results, with a high number of submissions for the *Trained Groups* category, where research groups with the broadest background are positioned. ***Clinical Research Projects*** (which include the *Trained* and *Under* ***Training Groups*** categories) take part for the first time in a UBACYT Scientific Program with 3% of the submitted projects.

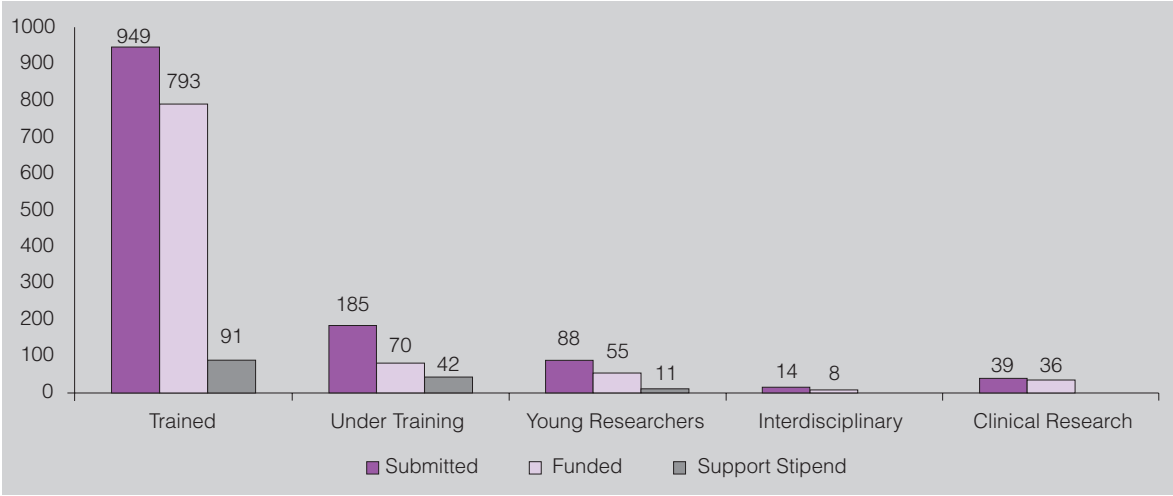
Number of projects submitted for the 2011-2014 UBACYT Scientific Program



1.2.2. Distribution of Research Projects before and after the evaluation process

Once the evaluation process is over, the final configuration of the ***2011-2014 UBACYT Scientific Program*** is defined. Its distribution is shown in the following chart.

Distribution of Projects from the 2011-2014
Call by types and categories



87% of projects submitted for every category were accredited, including those that receive a *Support stipend* (11%). Funding reached the 75% of the projects submitted. As regards *Clinical Research Projects*, 92% of the projects submitted were funded.

1.2.3. Distribution of Research Projects by Categories and Academic Units

When considering the distribution of projects by Academic Units, new characteristics are observed.

2011-2014 UBACYT Scientific Program. Distribution of Research Projects by Categories and Academic Units

Academic Unit	Scientific Research Projects									Interdisci-plinary*		Clinical Research		Total		
	Trained			Under Training			Young									
	P.	F.	S.	P.	F.	S.	P.	F.	S.	P.	F.	P.	F.	P.	F.	S.
Agronomy	78	69	7	11	5	5	4	3	0	3	1	0	0	96	78	12
Architecture	38	30	3	10	4	2	0	0	0	0	0	0	0	48	34	5
Economic Sciences	34	27	4	13	5	0	2	1	1	2	2	0	0	51	35	5
Exact and Natural Sciences	217	180	21	36	13	11	30	19	4	1	1	0	0	284	213	36
Social Sciences	94	80	8	19	7	4	9	5	1	3	1	0	0	125	93	13
Veterinary Sciences	24	22	1	7	2	3	0	0	0	0	0	9	9	40	33	4
Law	17	10	5	6	4	0	3	2	0	2	0	0	0	28	16	5
Pharmacy and Biochemistry	107	96	7	19	6	3	13	7	2	0	0	6	6	145	115	12
Philosophy and Letters	152	135	13	19	8	6	14	10	2	2	2	0	0	187	155	21
Engineering	40	31	7	8	0	5	3	2	0	0	0	0	0	51	33	12
Medicine	71	57	4	13	8	1	9	6	0	0	0	16	14	109	85	5
Dentistry	13	12	1	4	3	0	0	0	0	0	0	5	5	22	20	1
Psychology	53	40	6	11	4	2	1	0	1	0	0	3	2	68	46	9
Common Basic Cycle	11	4	4	9	1	0	0	0	0	0	0	0	0	20	5	4
Rectory	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0
Totals	949	793	91	185	70	42	88	55	11	14	8	39	36	1275	962	144

* Interdisciplinary Projects are considered according to the Academic Unit of the project's Director.

P: Submitted; F: Funded; S: Support stipend

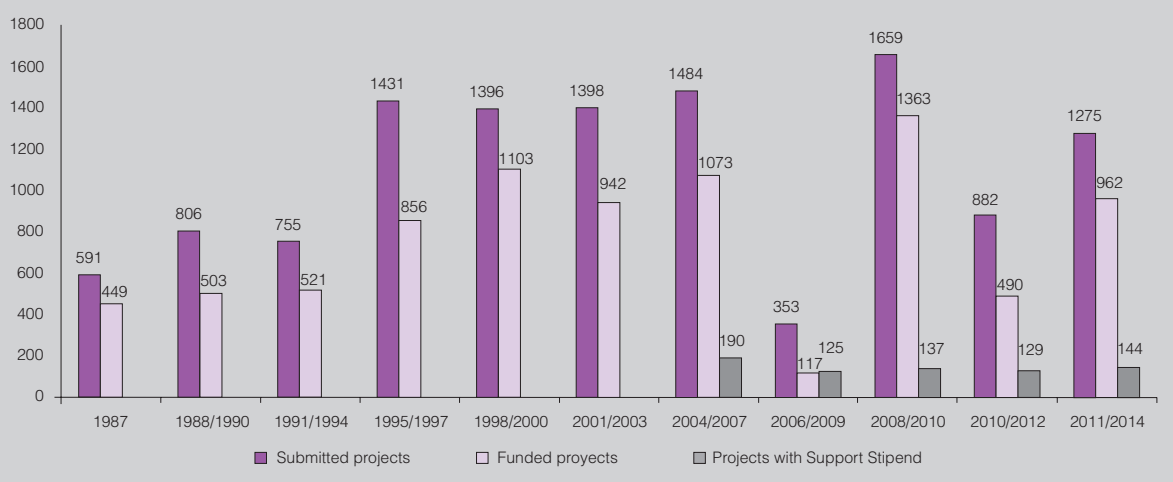
Almost half of the total number of submissions belongs to the *Faculties of Exact and Natural Sciences*, *Philosophy and Letters* and *Pharmacy and Biochemistry*. The same percentage is observed for these Academic Units in the case of the ***Trained and Under Training Groups*** categories. For the ***Young Researchers*** category, those Academic Units gather 65% of submissions. ***Interdisciplinary Projects*** reach 43% of submissions from the *Faculties of Agriculture* and *Social Sciences*. Submissions for ***Clinical Research Projects*** belong to the *Faculties of Veterinary Sciences, Pharmacy and Biochemistry, Dentistry, Psychology* and *Medicine*, with a strong participation of the latter, reaching 41% of submissions for this type of projects.

The distribution of funding usually reflects the distribution of submissions. For instance, 23% of funded projects belong to the *Faculty of Exact and Natural Sciences*, as well as 25% of the ones that receive support stipend.

1.3. UBACYT Scientific Programs through time (1987-2011)

UBACYT Scientific Programs have proven to be efficient tools of promotion for scientific and technological research at the University. An analysis of its evolution shows that in the 1995 call the number of submissions doubled the number of previous years. In recent years, this tool of promotion seems to have ensured the sustainability of the process: successive calls have had similar results and registered an 11% increase from the 2004-2007 to the 2008-2010 UBACYT Scientific Program. The 2006-2009 UBACYT Scientific Program overlapped in time with the previous one, which explains its lower number of applications. Due to a change in the periodicity of the calls (now of annual frequency), the 2010-2012 and 2011-2014 UBACYT Scientific Programs receive a lower number of projects each, while the number of projects per year increases.

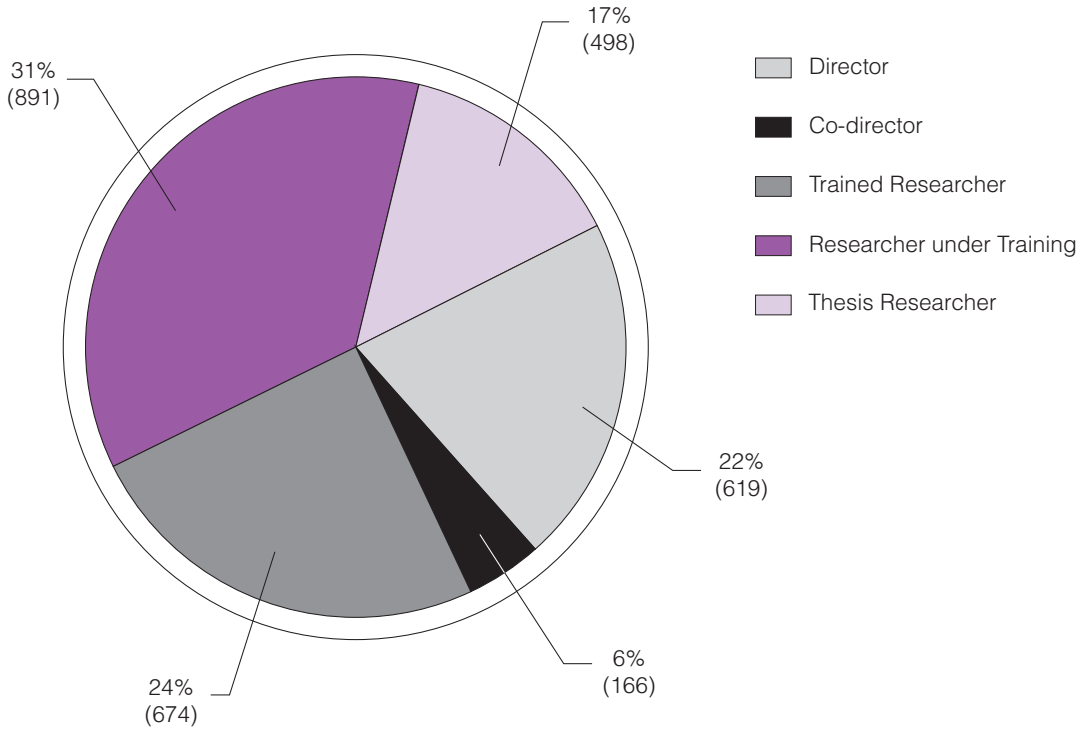
Evolution in the number of submitted and funded projects from the UBACYT Scientific Programs



1.4. 2010-2012 and 2011-2014 UBACYT Scientific Program: research staff

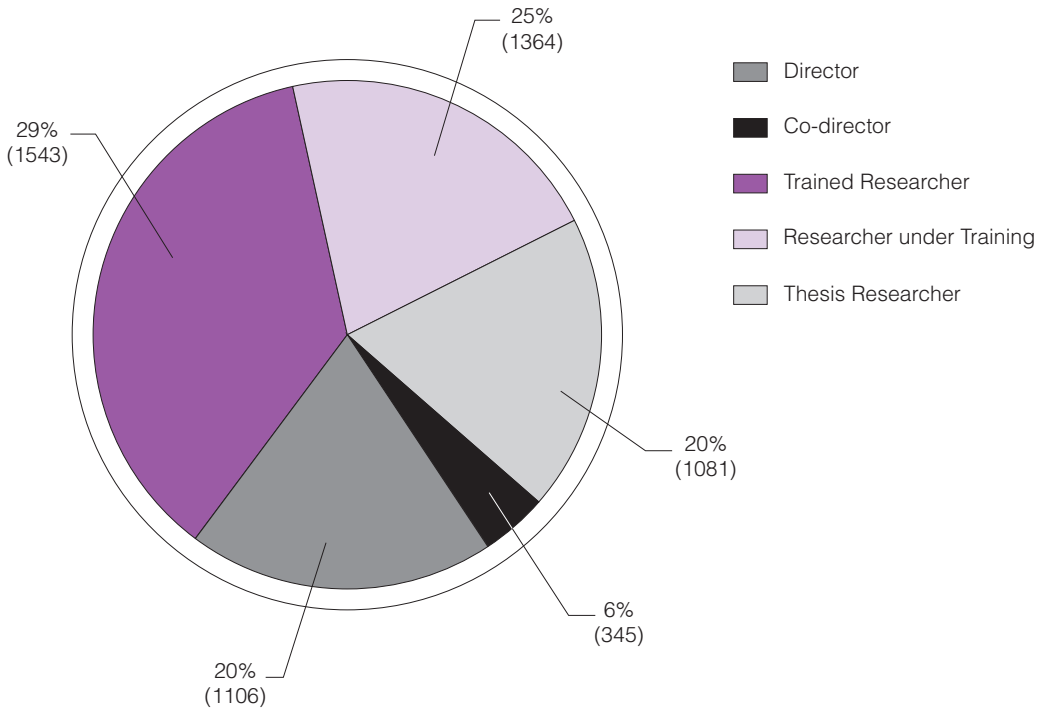
All categories considered, from I to V (*Directors, Co-Directors, Trained Researchers, Thesis Researchers and Researchers under Training*), the staff of researchers from the 2010-2012 and 2011-2014 UBACYT Scientific Programs gathers a total of 8287 members. Their distribution for each UBACYT Scientific Program is shown in the following charts.

Distribution of researchers by position in the 2010-2012 UBACYT Scientific Program



The *Researcher under Training* category is the largest one (31%) from the 2010-2012 UBACYT Scientific Program. The average number amount of researchers per project (4,6) remains close to the one from previous calls (4,4).

Distribution of researchers by position in the 2011-2014 UBACYT Scientific Program



The *Trained Researcher* category is the one with the highest number (29%) from the 2011-2014 UBACYT Scientific Program. The average number of researchers per project (4,8) does not yet reach 5 researchers/project, a common record for Scientific Programs.

1.4.1. Distribution of researchers by Academic Units

The distribution of researchers involved in each Scientific Program allows new analysis.

2010-2012 UBACYT Scientific Program. Distribution of Researchers by Academic Unit

Academic Unit	Number of researchers					
	Director	Co-director	Trained Researcher	Under Training Researcher	Thesis Researcher	Total
Law	14	6	17	24	13	74
Common Basic Cycle	10	5	12	47	4	78
Dentistry	12	4	18	21	11	66
Veterinary Sciences	13	3	21	25	4	66
Economic Sciences	16	9	15	21	10	71
Architecture	19	6	24	64	17	130
Engineering	27	10	46	30	21	134
Medicine	51	6	33	32	18	140
Agronomy	42	9	64	44	23	182
Psychology	37	22	46	176	20	301
Pharmacy and Biochemistry	64	7	47	45	30	193
Social Sciences	81	28	81	143	126	459
Exact and Natural Sciences	136	23	131	46	88	424
Philosophy and Letters	97	28	119	173	113	530
Total	619	166	674	891	498	2848

In the case of the 2010-2012 UBACYT Scientific Program, the previous table shows that the *Faculties of Exact and Natural Sciences, Philosophy and Letters, Social Sciences* and *Psychology* provide 60% of

the total staff of researchers. ***Under Training Researchers*** hold more representation in *Psychology, Philosophy and Letters*, and *Social Sciences*, where they reach 55% of the total of that category. Almost 20% of ***Trained Researchers*** carry out their activities in *Exact and Natural Sciences*, and 25% of ***Thesis Researchers*** in Social Sciences.

2011-2014 UBACYT Scientific Program. Distribution of Researchers by Academic Unit

Academic Unit	Number of researchers					
	Director	Co-director	Trained Researcher	Under Training Researcher	Thesis Researcher	Total
Rectory	1	2	6	6	–	15
Law	21	12	29	48	21	131
Common Basic Cycle	9	7	15	22	9	62
Dentistry	21	8	41	23	21	114
Veterinary Sciences	37	17	61	104	25	244
Economic Sciences	40	23	63	67	26	219
Architecture	39	21	81	109	32	282
Engineering	45	13	69	46	30	203
Medicine	90	17	95	29	79	310
Agronomy	90	24	149	109	45	417
Psychology	55	19	85	202	79	440
Pharmacy and Biochemistry	128	29	170	90	100	507
Social Sciences	106	24	163	166	164	623

Academic Unit	Number of researchers					
	Director	Co-director	Trained Researcher	Under Training Researcher	Thesis Researcher	Total
Exact and Natural Sciences	248	77	228	115	207	875
Philosophy and Letters	176	52	288	228	243	987
Total	1106	345	1543	1364	1081	5439

Almost half of the staff of researchers (46%) is provided by the *Faculties of Philosophy and Letters, Exact and Natural Sciences,* and *Social Sciences.* The Faculty of Philosophy and Letters is where almost 20% of ***Trained Researchers***, 17% of ***Under Training Researchers*** and 23% of ***Thesis Researchers*** carry out their activities.

1.5 Funding

A proportional and differential distribution of resources was implemented by setting a maximum amount for all the categories and types of projects and a minimum number of projects to fund in each category. As explained in previous sections, Projects of ***Scientific Research*** or ***Technological Innovation*** that have been accredited but did not receive any funding after being reviewed were offered a support stipend.

Funding was differentiated according to the requirements of each research project. Type A projects are those that require inputs and purchase, or repairing of laboratory equipment, or expenses related to fieldwork. The methodology of Type B projects does not demand special expenses, materials or supplies.

1.5.1. 2010-2012 UBACYT Scientific Program

The annual funding plan sets up different maximum amounts according to categories and types of projects. In the case of projects of ***Scientific Research*** and ***Technological Innovation***, the distribution of funding goes as follows: triennial projects by ***Trained Groups***, up to $22,000 for type A and up to $9,000

for type B; biennial projects by ***Groups under Training***, up to $11,000 for type A and up to $5,000 for type B; biennial projects by ***Young Researchers*** up to $6,000 for type A and $3,000 for type B.

In the case of ***Interdisciplinary Projects***: triennial interdisciplinary projects by ***Trained Groups***, up to $50,000 for type A and up to $22,000 for type B; biennial interdisciplinary projects by ***Groups under Training***, up to $25,000 for type A and $11,000 for type B.

1.5.2. 2011-2014 UBACYT Scientific Program

For this call, a scale of integration methods (according to the number of trained researchers and researchers under training in each group) was added to the differentiation of maximum amounts according to categories and types of ***Scientific Research*** and ***Technological Innovation Projects*** by ***Trained*** and ***Under Training Groups***. Thus, for triennial projects by *Established Groups*, modalities I, II and III indicate the presence of one, two, three or more trained researchers, respectively. For biennial projects by *Groups under Training*, modalities I and II indicate the presence of two, three or more researchers under training, respectively.

The annual funding plan determined the following amounts for triennial projects by ***Trained Groups type A***: Group I, up to $10,000; Group II, up to $22,000, and Group III, up to $34,000. For triennial projects by ***Trained Groups type B***: Group I, up to $5,000; Group II, up to $11,000, and Group III, up to $17,000. In the case of biennial projects by ***Groups under Training type A***: Group I, up to $11,000, and Group II, up to $17,000. For biennial projects by ***Groups under Training type B***: Group I, up to $5,500, and Group II, up to $7,500.

For biennial projects by *Young Researchers* the annual funding limit is: up to $8,000 for type A, and up to $4,000 for type B.

Accredited projects that did not obtain any funding receive a support stipend of $2,000 per year.

The annual funding limit for ***Interdisciplinary Projects*** was also determined: interdisciplinary triennial projects by ***Trained Groups type A***, up to $50,000; and type B, up to $25,000. For interdisciplinary biennial projects by ***Under Training Groups type A***, up to $25,000, and up to $12,500 ***for type B***. In the case of ***Clinical Research Projects***, the maximum amounts of annual funding are distributed as follows: triennial projects of *Clinical Research* by ***Trained Groups type A***, up to $25,000; and ***type B***, up to $12,000. For biennial projects of *Clinical Research* by ***Under Training Groups type A***, up to $14,000; and ***type B***, up to $7,000.

1.5.3. 2010-2012 UBACYT Scientific Program: distribution of expected annual investment

The following chart shows the total distribution of the funding amounts from the ***2010-2012 Scientific Program***. It groups all projects and clasifies them in three categories regardless the type of project. The total amount of $6,899,321 goes to the funding of 490 projects, 38% of which goes to ***Trained Groups***, 53% goes to ***Under Training Groups*** and 6% to ***Young Researchers***. The Support Stipend accounts for the remaining 3%.

The relation between the number of funded projects and the distribution of expected annual investment is properly verified. If analyzed by Academic Units, this distribution shows matching percentages between submitted projects and allocation of subsidies. In this case, *Natural and Exact Sciences*, *Social Sciences* and *Philosophy and Letters* account for almost half of the projects and almost half of the expected annual investment.

To sum up, whether carried out considering categories of projects or academic units, the distribution of funding responds equitably to the offer made by the research groups involved in this UBACYT Scientific Program.

Academic Unit	Investment (in ARS)						Total funded projects	Total projects with Support Stipend
	Trained Groups	Under Training Groups	Young Researchers	Total Support Stipend	Total amount funded*	%		
Agronomy	249.837	281.450	19.200	12.360	562.847	8.16	33	8
Architecture	131.840	109.052	7.680	5.760	254.332	3.69	14	3
Economic Sciences	28.790	84.480	15.360	7.680	136.310	1.98	12	4
Exact and Natural Sciences	673.834	722.087	153.523	55.680	1.605.124	23.26	107	29
Social Sciences	345.947	494.398	35.950	19.200	895.495	12.98	71	10

Academic Unit	Investment (in ARS)						Total funded projects	Total projects with Support Stipend
	Trained Groups	Under Training Groups	Young Researchers	Total Support Stipend	Total amount funded*	%		
Veterinary Sciences	81.260	70.400	15.360	5.760	172.780	2.50	10	3
Law	100.224	59.476	3.840	3.840	167.380	2.43	14	2
Pharmacy and Biochemistry	170.931	534.299	61.440	21.120	787.790	11.42	53	11
Philosophy and Letters	274.567	422.267	26.880	53.760	777.474	11.27	69	28
Engineering	177.314	136.030	15.360	11.520	340.224	4.93	22	6
Medicine	158.070	431.483	38.400	15.360	643.313	9.32	43	8
Dentistry	52.736	56.498	15.360	5.760	130.354	1.89	9	3
Psychology	149.626	186.134	7.680	20.574	364.014	5.28	26	11
Common Basic Cycle	19.972	36.152	0	5.760	61.884	0.90	7	3
Rectory	0	0	0	0	0	0.00	0	0
Totals	$ 2.614.948	$ 3.624.206	$ 416.033	$ 244.134	$ 6.899.321	100%	490	129

1.5.4. 2011-2014 UBACYT Scientific Program: distribution of expected annual investment

The following chart shows the total distribution of the funding amounts from the ***2011-2014 UBACYT Scientific Program***. It groups all projects and clasifies them in three categories regardless the type of project. The total amount of $ 20,983,879 goes to the funding of 962 projects, 92% of which goes to

Trained Groups, 5% goes to ***Under Training Groups*** and 2% to ***Young Researchers***. The Support Stipend accounts for the remaining 1%.

Academic Unit	Investment (in ARS)						Total funded projects	Total projects with Support Stipend
	Trained Groups	Under Training Groups	Young Researchers	Total Support Stipend	Total amount funded*	%		
Agronomy	2.103.249	63.500	24.000	24.000	2.214.749	10.55	78	12
Architecture	630.800	34.200	0	10.000	675.000	3.22	34	5
Economic Sciences	444.500	31.000	3.200	10.000	488.700	2.33	35	5
Exact and Natural Sciences	4.488.638	155.000	144.000	72.000	4.859.638	23.16	213	36
Social Sciences	1.519.200	59.400	27.500	26.000	1.632.100	7.78	93	13
Veterinary Sciences	810.850	98.000	0	8.000	916.850	4.37	33	4
Law	110.000	25.900	5.250	10.000	151.150	0.72	16	5
Pharmacy and Biochemistry	2.871.275	129.990	55.000	24.000	3.080.265	14.68	115	12
Philosophy and Letters	2.726.040	71.500	60.000	42.000	2.899.540	13.82	155	21

Academic Unit	Investment (in ARS)						Total funded projects	Total projects with Support Stipend
	Trained Groups	Under Training Groups	Young Researchers	Total Support Stipend	Total amount funded*	%		
Engineering	823.300	0	12.000	24.000	859.300	4.10	33	12
Medicine	1.507.334	190.000	47.500	10.000	1.754.834	8.36	85	5
Dentistry	314.100	94.000	0	2.000	410.100	1.95	20	1
Psychology	844.753	45.400	0	20.000	910.153	4.34	46	9
Common Basic Cycle	66.000	7.500	0	8.000	81.500	0.39	5	4
Rectory	50.000	0	0	0	50.000	0.24	1	0
Totals	$ 19.310.039	$ 1.005.390	$ 378.450	$ 290.000	$ 20.983.879	100%	962	144

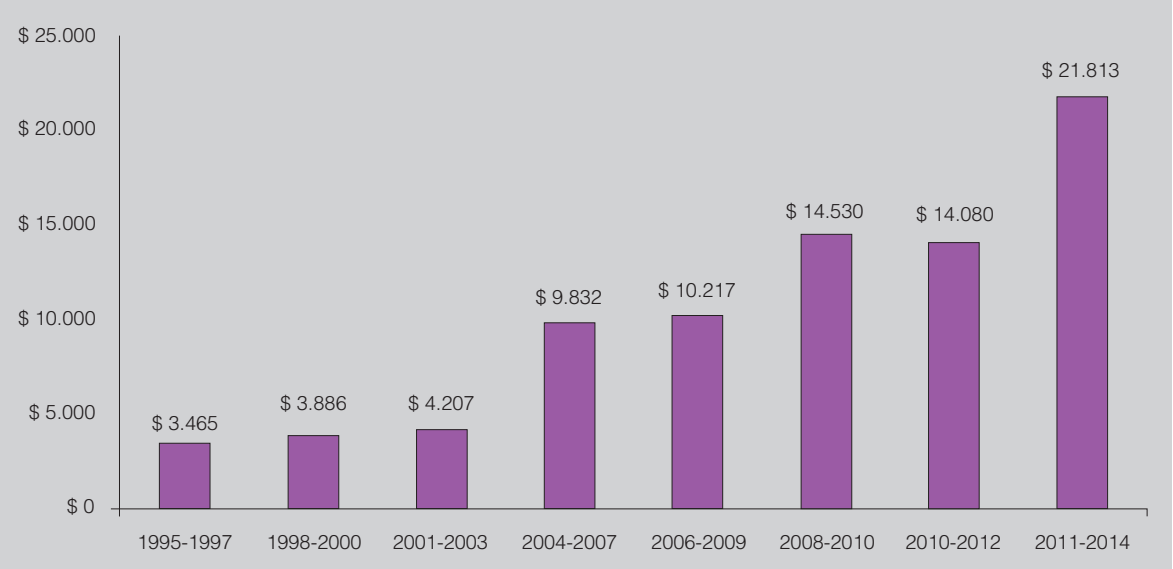
Whether carried out considering categories of projects or academic units, the distribution of funding responds equitably to the offer made by the research groups involved in this UBACYT Scientific Program.

1.5.5. Evolution of average annual funding per project (1995-2011)

The evolution of the funding granted to research projects reflects the budget available and quantitative variability of accreditations. It is noteworthy that the average annual funding per project

does not reflect the weighting made by types of projects and requirements of supplies, equipment or fieldwork that is verified after the 2004-2007 UBACYT Scientific Program (type A and B projects).

Average annual funding per project of the last UBACYT Scientific Programs (ARS)

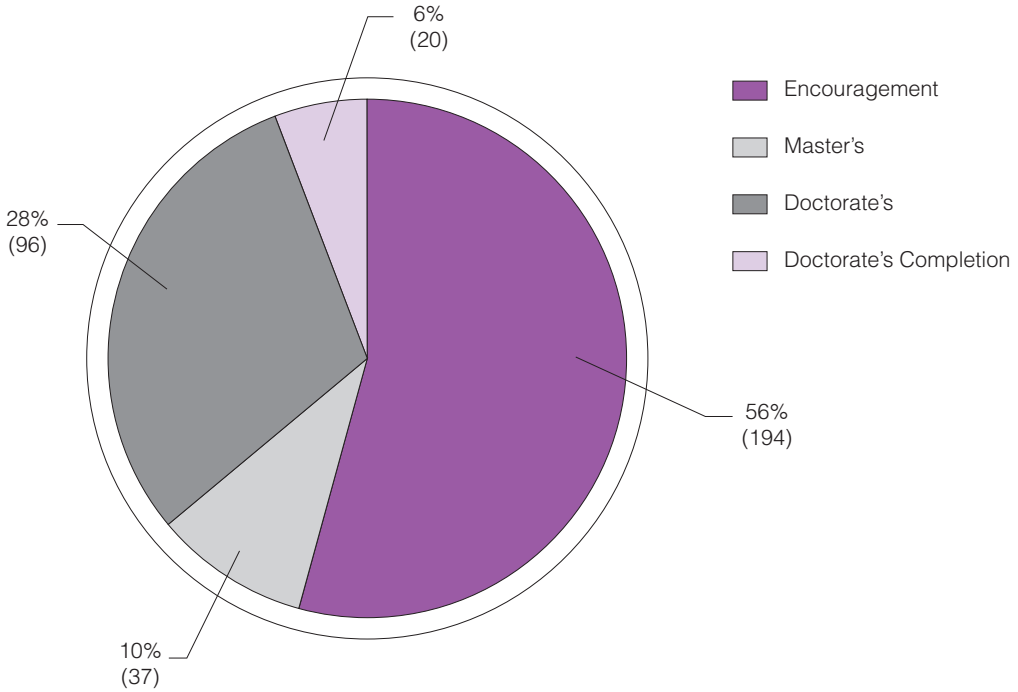


The previous chart shows a sustained increase in the annual funding since 1995. In the 2004-2007 UBACYT Scientific Program, the average funding doubles the average from previous programs. In the 2008-2010 UBACYT Scientific Program, the average annual funding increases between 42% and 48% in comparison with the two previous ones. As noted in preceding pages, the annual periodicity of the calls begins with the 2010-2012 UBACYT Scientific Program, which explains the lower number of applications for project subsidies and the negative difference in the average annual funding per project in comparison with the 2008-2010 UBACYT Scientific Program. Finally, the 2011-2014 shows a 50% increase in the average annual funding in comparison with the two previous ones.

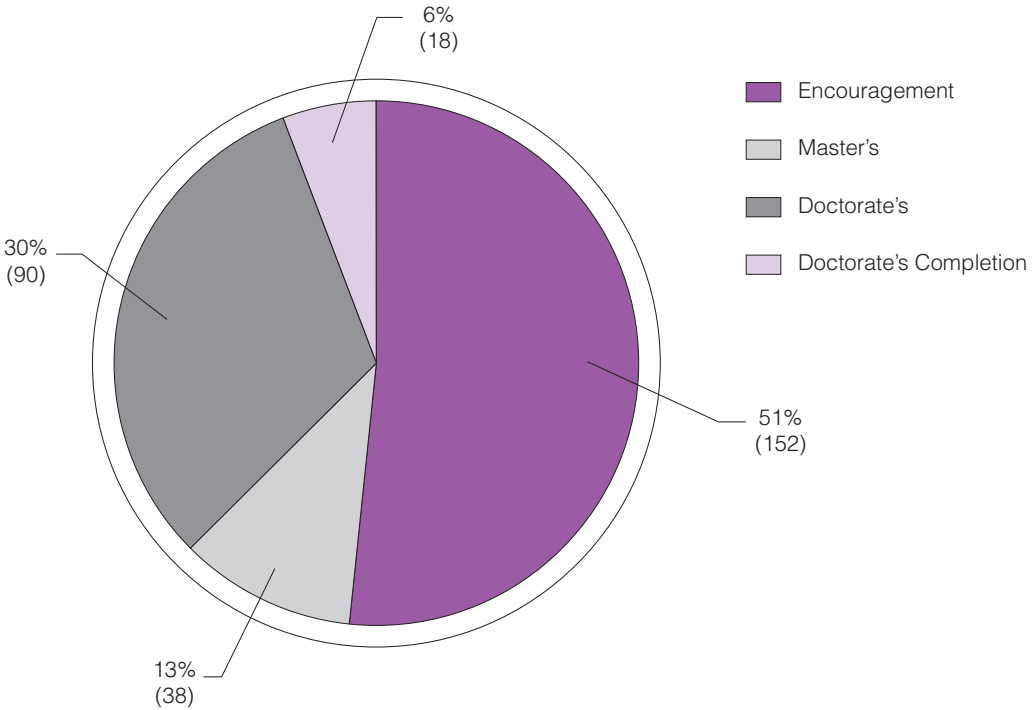
2. Research Scholarships for students and graduates

The *Training Program for Human Resources* of the University aims to the consolidation and maintenance of a highly qualified critical mass of researchers. As a result of the call for scholarships beginning in 2010, 374 research scholarships were granted to students and graduates. For scholarships beginning in 2011, the granting of 298 research scholarships to students and graduates was approved. Their distribution by categories is shown in the following charts, where the Encouragement Scholarships account for more than half of the total of granted scholarships of both calls.

Granting distribution of scholarships by categories. 2010 Cohort



Granting distribution of scholarships by category. 2011 Cohort

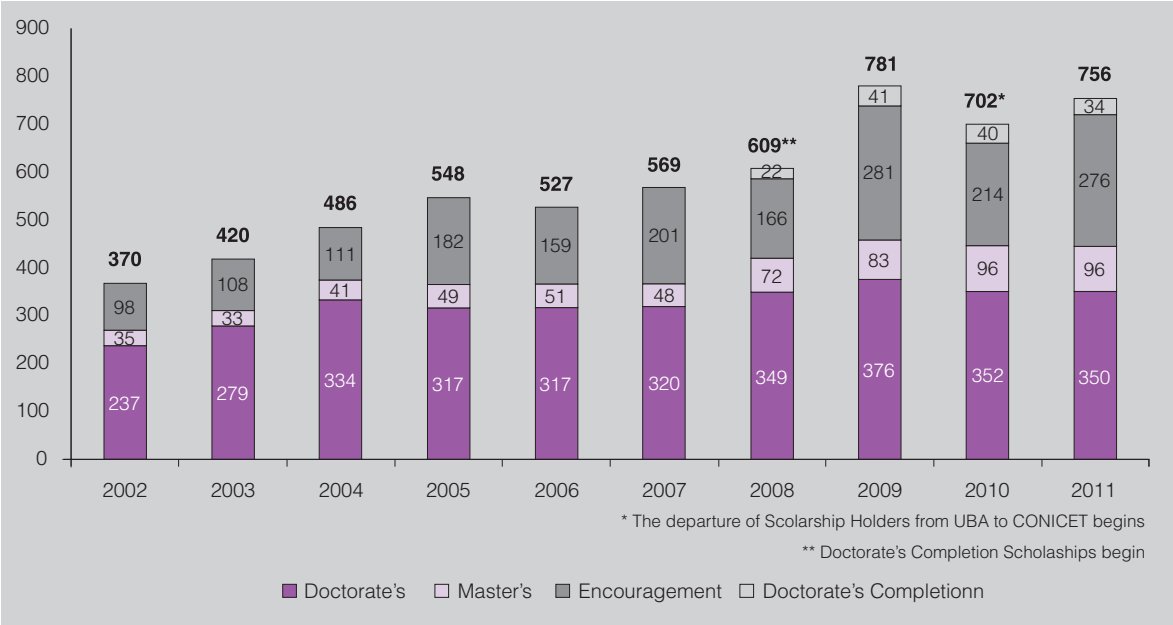


2.1 Evolution of current scholarships (2002-2011)

The duration of the scholarship varies from one to three years, according to the categories. There is also the possibility of an optional extension, implying scholarships in progress come from different cohorts.

During the period 2009-2011, the current scholarships outnumbered those recorded in previous years despite the departure of scholarship holders from UBA to CONICET under the agreement between the two institutions and the Ministry of Science, Technology and Productive Innovation (MINCyT).

Evolution of the total number of current scholarships per year



If we analyze the number of active scholarships per year for the period 2002-2011, the categories that registered sustained increase in time are the ***Encouragement and Master's scholarships***.

2.2. Scholarships: the funding

The following chart shows the evolution scholarships' funding in all categories, thus proving the efforts made by the University through the Training Program for Human Resources.

Total funding (ARS) for scholarships per year

The annual funding assigned to scholarships responds both to academic demands as well as to variations in the budget available. For the selected period, 2002-2011, the annual cumulative increase reached 25%. The highest positive variation is observed between the years 2008-2009 and the lowest, between the years 2009-2010.

As complementary information, a compact disk is included with additional access to each of the projects that have been accredited and funded.

Instructions for the CD

Insert the CD into the drive of your computer and wait a few moments for it to run automatically. Thereafter, you can interact with the contents of the disc. If autorun does not happen for any reason, the following steps are suggested:

1. Go to ''My Computer''.
2. Double left click on the corresponding unit to the CD drive.
3. Double left click on the file ''index.exe''.
4. For the correct functioning of the program, it must be run as administrator. If you have problems with the configuration, right click on ''index.exe'' and click the ''Run as Administrator'' option from the menu.

In the event of a problem in the execution of the disk or any difficulty displaying it, the Adobe Flash Player and Adobe Reader should be updated. In order to do this, you must to access http://get.adobe.com/es/reader/ and http://get.adobe.com/es/flashplayer/, respectively.

Glosary

- *UBACYT Scientific Programs*: Programaciones Científicas UBACYT
- *Research Scholarships*: Becas de Investigación
- *Subsidies Program for Scientific & Technological Research*: Programa de Subsidios a la Investigación Científico-Tecnológica
- *Training Program for Human Resources in Scientific & Technological Research*: Programa de Formación de Recursos Humanos en Investigación Científico-Tecnológica
- *UBA Superior Board*: Consejo Superior de la UBA
- *Department of Science & Technology*: Secretaría de Ciencia y Técnica
- *Common Basic Cicle*: Ciclo Básico Común – CBC
- *Subsidies and Stipends Office*: Departamento de Rendiciones de Subsidios y Estipendios
- *Integrated Management and Assessment System*: Sistema Integrado de Gestión y Evaluación (SIGEVA-UBA)
- *Coordinated National System of Doctoral Scholarships*: Sistema Nacional Coordinado de Becas de Doctorado
- *Projects of Scientific Research or Technological Innovation*: Proyectos de Investigación científica o de Innovación Tecnológica
- *Trained Groups' Projects*: Proyectos de Grupos Consolidados
- *Under Trained Groups' Projects*: Proyectos de Grupos en Formación
- *Young Researchers' Projects*: Proyectos de Investigadores Jóvenes
- *Interdisciplinary Projects*: Proyectos Interdisciplinarios
- *Clinical Research Projects*: Proyectos de Investigación Clínica
- *Encouragement Scholarships*: Becas Estímulo
- *Master's Scholarships*: Becas de Maestría
- *Doctorate's Scholarships*: Becas de Doctorado
- *Doctorate's Completion Scholarships*: Becas de Culminación de Doctorado
- *Support Stipend*: Estipendio de Sostenimiento
- *Technical Advisory Commissions*: Comisiones Técnicas Asesoras
- *National Scientific and Technical Research Council*: Consejo Nacional de Investigaciones Científicas y Técnicas – CONICET
- *Ministry of Science, Technology and Productive Innovation*: Ministerio de Ciencia, Tecnología e Innovación Productiva – MINCYT
- *National Agency for Promotion of Science & Technology*: Agencia Nacional de Promoción Científica y Tecnológica – ANPCYT

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