



DIAGNOSTICS

Strengths

1 - Existence of effectively installed research networks, directed to priority themes, in constant interaction with institutions in Brazil and abroad.

UERJ's main objective is to seek forms of protagonism in other countries not exclusively financed by the Brazilian agencies and not characterized by the privilege of a center. We invest in the development of partnerships that, considered the power relations associated with these processes, are symmetrical. We seek effective visibility in other countries, not just peripherally. We have achieved this in central countries (exchanges usually conceived as South-North), such as Germany, Canada, USA and France, which can be identified in our publications (see curricula Lattes and Sucupira Platform). We have also invested in strengthening South-South relations, seeking to assume a leading role in Latin America, coordinating projects as well as training highly qualified human resources at master's and doctoral levels, and publishing articles, books and chapters of qualified books in Brazil and abroad. We invest in international exchanges, believing that if many of the actions are financed by Brazil today, in the future we must guarantee the expansion of international counterparts. This has already been done through the bilateral announcements of Capes, CNPq, Finep and Faperj, which regularly finance UERJ projects. We understand that these exchanges are always carried out in multilateral research networks. Thus, our focus is not a country, but the rigorous development of a research project, which, for this, requires constant exchange with leading sectors in the area in question. These research networks involve the production of knowledge and technology in the priority themes listed in this proposal, all of them with social impact in Brazil, abroad and, in some cases, directed to the specificities of Rio de Janeiro.

2 - International cooperation research projects supported by development agencies and led by PQ CNPq, CNE Faperj and UERJ Procientistas / Faperj fellows, as well as the existence of internal programs to support the internationalization of juniors

Unlike other universities that have a long history in research and Graduate studies, UERJ started these activities with prominence in the last twenty-five years. These activities were partly boosted, growing with quality at a speed rarely registered in the university system, in function of the Program of Incentive to Scientific, Technical and Artistic Production - PROCIENCIA, destined to valorize the scientific, technical and artistic production of UERJ professors. Today we have 488 procientistas (scholarship holders) supported by Faperj productivity grants (we detail this program below) and 295 CNPq research scholarships. The excellence of this work is also expressed in the fact that 43% of UERJ's research productivity fellows (PQ CNPq scholarships) are Level 1 researchers. We also count on Faperj's support for the benchmarking programs for highly qualified projects for senior researchers (Scientist of Our State - CNE) and junior researchers (Young Scientist of Our State - JCNE). UERJ now has 95 CNE grants and 77 JCNE grants. At the same time, UERJ invests in the Procad - Professor Training Program, coordinated by the SR2, which allows professors to have a license to improve his/her



formation in Brazil and abroad. UERJ also has a policy of releasing professors to participate in international events, as well as has secured funding for these activities over the last 10 years. Regarding the promotion of the arrival of foreign researchers, UERJ created in 2014 the International Visiting Professor Program for highly qualified foreign researchers to stay in UERJ for 1 to 12 months. This program culminated in the launch of the French Chairs Program (Cátedras Francesas), which aims to receive renowned French researchers for a period of 60 to 365 days, with a scholarship from UERJ and tickets by the French Embassy in Brazil. This trajectory has also contributed to the rapid and consistent growth in the qualification of GP, with increases in the last years of GP levels 7 and 6.

3 - Existence of institutional policy, through the Prociencia Program and research databases, to accompany researchers with high academic performance

UERJ has been developing an institutional research policy for 20 years, led by the Graduate Studies and Research Office (SR2), which involves the organization of institutional databases for teaching, research and extension based on metrics and performance indicators. We have worked with both the Sucupira Platform data, seeking interoperability with our database, as we already have with the CNPq Lattes Platform. Thus, for academic management in general, we interconnect data from the Prociencia Database (record of the scientific production proven by the upload of documents), data from the Scientific Initiation program with the PGG data. With the advent of Capes PrInt, we are already organizing a database of research projects, in which both the national and international financing of projects will be recorded, aiming at their monitoring and evaluation.

4 – Senior and junior researchers with international training and performance

As can be identified by the curricula Lattes, the records in the Sucupira Platform, the ORCID, the Research Gate and SR2-UERJ databases (Prociencia Program, Scientific Production Database - BPC, tracking system for Scientific Undergraduate Projects coordinators), there is a strong international insertion of UERJ professors, identified by: doctorate, postdoctoral studies, senior or short-term training with internationally renowned research groups; participation in editorial boards of international journals; in organizing committees of international or world events; participation in the board of directors of international scientific associations; acting as visiting professor of short or long duration in prominent foreign universities; publications in books and chapters of books in outstanding works and in renowned publishers; publications in leading international journals.

5 - High degree of international cooperation and high impact of academic productivity, as highlighted by international rankings

This high degree of international cooperation is also the basis for the rapid and consistent growth in the qualification of Graduate Programs (GP), with the increase in GP level 7 and 6 in the last years due to high professor and student scientific productivity. These indicators have led us to a prominent position in the national and international rankings. In the University Ranking of Folha (RUF) of 2017, UERJ appears in the 14th general position and in 9th place in Internationalization. UERJ appears in the position between 801 and 1,000 in the Times Higher Education 2018 ranking. In the QS World



University Ranking of 2018, UERJ also appears in position 801-1,000 worldwide and in 49^o in Latin America. A report titled *Research in Brazil* was recently made available to the Coordination for the Improvement of Higher Education Personnel (Capes), which analyzed the performance of Brazilian research works published between 2011 and 2016, using bibliometric resources. The data were obtained from InCites, a platform based on the documents (articles, papers in conferences and workshops, books, patents, sites etc) indexed in the multidisciplinary *Web of Science* database - edited by Thomson Reuters *Clarivate Analytics*). The report identifies highlights in the country's research and presents a ranking, classifying the main Brazilian universities and observing issues such as the production of scientific articles and the generation of knowledge, the impact that these articles have on the world scientific community, that is, the number of citations by their peers, the percentage of articles ranked in the range of 1% to 10% of the most cited articles in the world, in addition to international cooperation and partnership between companies and universities. In the document, UERJ occupies the tenth place in scientific production in the ranking of the national universities. In terms of citations of articles, percentage of scientific articles in the top 1% and in the top 10% of the most cited articles in the world, as well as the international collaboration rate, UERJ ranks first. These articles originate in many areas of knowledge, but many of them relate to the *Large Hadron Collider* experiments conducted in collaboration with the European Organization for Nuclear Research (CERN) in Switzerland, Zika virus research and testing of immunotherapy against cancer, as well as in the area of Human and Social Sciences.

Weaknesses

1 - Need to increase the instruments to support foreign invited professors

Through the GP, under the leadership of SR2 UERJ and DCI, efforts are being made to strengthen local support for the reception of professors and researchers, as well as for foreign students, especially by facilitating the circulation of information necessary for their stay in UERJ and to reduce bureaucracy, whenever possible, the issuance of certificates and declarations for processing to the competent bodies. However, some of the greatest difficulties for the reception and monitoring of these professors, researchers and students are not due to University actions. We understand that the Ministry of Education and the Ministry of Foreign Affairs must establish agreements that guarantee greater agility and welcome to all those who come to Brazil for study and work assignments in universities, particularly with funding from research promotion agencies. Often the procedures for visa of foreigners in Brazil are not fast enough to guarantee the fulfillment of the deadlines of the agencies. Currently, the new Migration Law of May 24, 2017 (Law no. 13445/2017) is still being adapted. Normative Resolution No 20 of December 12, 2017, which aims to discipline the granting of temporary visa and residence permit for research, teaching or academic extension to a scientist, researcher, and professor and to the foreign professional who intends to come to the country, with term of stay of more than ninety days, has just been modified. As a result, the new procedures are still being defined. Likewise, the DCI provided for the creation of a register of UERJ properties to facilitate access to foreign lodging. Although these



properties are not sufficient to account for the demand of GP, they are especially important to facilitate the permanence of those professors who do not receive a scholarship compatible with the values of hotel rates in the city of Rio de Janeiro.

2 - Need to increase the instruments to support foreign students

In this regard, we do not only enable student mobility. We really act for the interaction of our students with those of other countries. Our actions for the Graduate students are articulated to the actions for the undergraduate students: often the future students of the Graduate Programs are ex-Undergraduate students of the institution. In this respect, UERJ has performed a set of actions. UERJ's website has information in English, French and Spanish. All of our Level 7 and 6 GP, our International Cooperation Department (DCI) and many of the other GP have websites in English and sometimes when research relationships lead to the need for other languages, in French and Spanish. UERJ's DCI and the Graduate Studies and Research Office (SR2) have actions aimed at: a) local support for the reception of foreign students through the Amigo Program (UERJ undergraduates students who provide advice to foreign students at the University, facilitating their academic routines and urban mobility); b) university restaurant, libraries and creation of real estate register to facilitate the stay; c) summer courses for foreigners with the participation of UERJ students; d) offer of Portuguese for Foreigners Course (divided into four levels and taught by UERJ's Institute of Letters, 2 to 3 times a week); e) offer of courses in a foreign language; f) support for PEC-G and PEC-PG students, increasing vacancies; g) incentive to co-sponsored international theses, now numbering 70; h) dissemination of Faperj's Reverse PhD (visitor PhD student in Brazil) with international researchers participating in research networks with UERJ; h) dissemination of the PNPd Capes calls to international researchers that participate in research networks with UERJ, since the arrival of a foreign research to carry out Post-doctoral participation in Brazil assists in the creation of links between foreign undergraduate and graduate students in UERJ; i) dissemination of opportunities in other UERJ campuses, as a result of a policy of internalization begun 25 years ago: Ilha Grande, Nova Friburgo, Petrópolis, Rezende, Teresópolis, cities where the cost of living is lower than Rio de Janeiro. Strengthening of research networks, because it is mainly through the contacts and partnerships between UERJ researchers and from abroad that relationships are established that make our institution attractive for foreign students.

INSTITUTIONAL PROJECT

Describe the institution's vocation

Our institutional vocation is the formation of highly qualified human resources, through Graduate Programs at the PhD and Master's level, undergraduate and specialization courses, nucleating other institutions in Brazil and even abroad. We work with a centrality in the research, understanding that all innovation, social activities and cultural activities at UERJ must be related directly or indirectly to the research. We seek to increase our already expressive international insertion.



Describe other relevant information about the level of internationalization of your institution

As can be identified by the records of our GP in the Sucupira Platform, UERJ has institutional partnerships with research groups in Brazil and abroad, generating international insertion attested by: qualified articles published in co-authoring or individually in renowned foreign journals and in Brazil, with international emphasis; complete books and book chapters in collections published abroad in leading international publishers; participation in prominent international events with presentation of papers, participation in scientific and organizing commissions; participation in editorial boards of highly qualified foreign journals; significant citation indexes. UERJ has also received foreign Graduate students for short-term training in Brazil, with fellowships from the European Union, OEA (PAEC Program of the Coimbra Group of Brazilian Universities), PEC-PG. These indicators have led us to a prominent position in the national and international rankings. In the 2017 University Ranking of the Folha (RUF), which uses as a criterion international citations received by academic works and the proportion of publications in international co-authoring in the total of academic articles published by the Institution, UERJ appears in the 14th general position and in 9th place in Internationalization. UERJ is ranked in the 801-1000 Times Higher Education 2018 ranking, which takes into account the number of foreign employees and students, besides tracking the amount of research with international collaborators. In the QS World University Ranking of 2018, UERJ also appears in the 801-1000 position worldwide and in 49th in Latin America. QS uses, among other indicators, the number of “international students” and “international professors”, assessing the University's ability to attract students and professors from other countries. In the report *Research in Brazil*, which analyzed the performance of the Brazilian research works published between 2011 and 2016, UERJ occupies the tenth place in scientific production in the ranking of national universities. In terms of citations of articles, percentage of scientific articles in the top 1% and in the top 10% of the most cited articles in the world, as well as the international collaboration rate, UERJ ranks first.

General Objective of the Internationalization Institutional Project

UERJ's main goal is to seek forms of protagonism in other countries not exclusively supported by the Brazilian agencies and also not characterized by the privilege of a center. We invest in the development of partnerships that, considered the power relations associated with these processes, are symmetrical. We seek effective visibility in other countries, not just peripherally. We have achieved this in central countries (exchanges usually conceived as South-North), such as Germany, Canada, USA and France, which can be identified in our publications (see curricula Lattes and Sucupira Platform). We have also invested in strengthening South-South relations, seeking to assume a leading role in Latin America, coordinating projects as well as training highly qualified human resources at master's and PhD levels and publishing relevant articles, books and book chapters in Brazil and abroad. We invest in international exchanges, believing that if many of the actions are financed by Brazil today, in the future we must guarantee the expansion of international counterparts. This has already been done through the bilateral Programs of Capes, CNPq, Finep and Faperj, which regularly support UERJ's projects. We



understand that these exchanges are always carried out in multilateral research networks. Thus, our focus is not a country, but the rigorous development of a research project, which, for this, requires constant exchange with leading sectors in the area in question. We also seek to consider what is common in science and the specificities of different areas of knowledge. In common, there is a focus on the visibility of our research abroad, with impact in journals and publishers of excellence, both through publication (which has already been achieved in several areas) and its performance in editorial policies (in which we can go further). Considering the specificities of the different areas of knowledge, we do not invest exclusively in co-authoring with researchers from abroad. The logic of knowledge production that leads to highly desirable co-authorship in Physics articles, for example, is not accompanied internationally by Education, Philosophy or Letters, areas in which individual author production is highlighted. Rather, we have invested in the qualified academic production carried out in research networks, thus making it possible to increase the citation of UERJ researchers' articles, a goal in which we have succeeded, as the international rankings mentioned above attest. We understand, however, that increasing citations of our researchers' work is important, because it is accompanied by a social and cultural impact able of generating, through many unforeseen but not less important ways, economic impact and improvement of the population's life. One of the most effective results that attests the seriousness and pertinence of the options made by UERJ is the recent impact result of our production, presented by CNPq (Incities, November 2016), which registers UERJ with a high index of international collaborations and as the third institution in the country with the greatest relative impact in relation to what is done today in the world in S & T (see table in the annex - Summary of this project). This is only possible because UERJ's internationalization policy has already been carried out for many years, without separating international from the national funding, as well as aiming to develop it based on the production of knowledge and technology. Thus, for UERJ, investing in internationalization is only one aspect of an investment policy of Science and Technology, result of a long and hard work. Throughout its 68 years of existence, UERJ has established itself as one of the main universities in the country. Its importance in the Brazilian academic field can be attested by the quality of its higher education, by the value and impact of its scientific production, by the hundreds of research projects in development, by the promotion of culture and by the numerous services provided to the population. Particularly with respect to Graduate Program (*stricto sensu*), after the results of the 2017 four-year evaluation, UERJ has 65 GP, of which 8 at the level of excellence (levels 6 and 7); 17 GP at level 5; 28 GP at level 4 and 12 at level 3, many of them still starting their first class. Of these, 43 are at the doctoral level. The set of GP brings together 5,127 students. This result reflects the continuous investment by both the University and the funding agencies, especially Capes, CNPq, Faperj and Finep. UERJ is an institution that has great prominence in the area of Human and Social Sciences (HSC), with priority for its activity in the area of Education, hosting one of the two Graduate Program level 7 of this area in the country, and in the areas of Political Science, Social Work and Interdisciplinary, with level 6 Graduate Program (GP). GP 5 in the areas of Arts, Social Sciences, Communication, Law, Philosophy, Geography, History, Letters and Social Psychology also attest this excellence. This emphasis on CHS is accompanied by highly significant scientific production in other areas, mainly Biodiversity, Biological Sciences and Health



with a level of excellence expressed in level 6 GP, as well as with a high visibility and impact performance in the fields of Computational and Physical Modeling. Seeking to build an interdisciplinary profile, the partnerships among UERJ's GP are stimulated in articulated research and student mobility. This interdisciplinary profile was built based on a model of academic management that allows to contemplate all areas of knowledge, recognizing their differences and negotiating their specificities. As a result of this institutional vocation, UERJ's Capes PrInt Project was elaborated in order to present 7 core themes for internationalization, all of them based on knowledge production and effectively installed research, organized in research networks, and under the leadership of Graduate Programs level 7 and 6. Unlike other universities that have a long history of research and graduate studies, UERJ has started these activities with prominence in the last 25 years. These activities were partly improved, growing with quality at a speed rarely registered in the university system, in function of the Program of Incentive to Scientific, Technical and Artistic Production – PROCIENCIA, aimed to valorize the scientific, technical and artistic production of UERJ professors. Today we have 488 procientistas supported by Faperj productivity grants (we detail this program below) and 295 CNPq Scientific Productivity scholarships. The excellence of this work is also expressed in the fact that 43% of these UERJ's research productivity fellows are Level 1 researchers. We also count on Faperj's support for the benchmarking programs for highly qualified projects for senior researchers (Scientist of Our State - CNE) and junior researchers (Young Scientist of Our State - JCNE). UERJ now has 95 CNE grants and 77 JCNE grants. It is worth mentioning in more detail that a report titled *Research in Brazil* was made available to the Coordination for the Improvement of Higher Education Personnel (CAPES), in which the performance of Brazilian research works published between 2011 and 2016 was analyzed using bibliometric resources. The data were obtained from InCites, a platform based on the documents (articles, works of events, books, patents, sites and chemical structures, compounds and reactions) indexed in the multidisciplinary Web of Science database – (edited by Clarivate Analytics by Thomson Reuters). The report identifies highlights in the country's research and presents a ranking of the main Brazilian universities and observing issues such as the production of scientific articles and the generation of knowledge, the impact that these articles have on the world scientific community, that is, the number of citations by their peers, the percentage of articles ranked in the range of 1% to 10% of the most cited articles in the world, in addition to international cooperation, and between companies and universities. In the document, UERJ occupies the 10th place in scientific production in the ranking of national universities. In terms of citations of articles, percentage of scientific articles in the top 1% and in the top 10% of the most cited articles in the world, as well as the international collaboration rate, UERJ ranks first. These articles originate in many areas of knowledge, but many of them relate to the *Large Hadron Collider* experiments conducted in collaboration with the European Organization for Nuclear Research (CERN) in Switzerland, Zika virus research and testing of immunotherapy against cancer, as well as in the area of Human and Social Sciences.



THEMES

Theme 1

Theme - CULTURE AND SOCIAL THEORY: FOCUSING LAW, WORK AND SUBJECTIVITY

Partner countries- Luxembourg; Switzerland; Argentina; Canada; Germany; U.S; France; Netherlands; Denmark; Spain; Italy; Mexico; Belgium; United Kingdom

Justification

The recognition of UERJ as one of the institutions with strong leadership in the area of human and social sciences is in part due to one of its Graduate Programs (GP) level 6 in two evaluation periods (triennial 2010-2012 and quadrennial 2013-2016): GP of Social Work. This GP nucleate the GPs of arts, social sciences, communication, law, philosophy, letters and sociology. They focus on culture theme and its connections with the social theory. They focuses contemporary topics of great impact, such as the formation of subjectivities, the media, the critical of the law and the problem of work. Ample and multifaceted matters as these require interdisciplinary approach and international strengthening, once we simultaneously discuss processes with strong contextual contours and assume universal dynamics. Considering that in current the universals of culture are understood as a particular that assume the representation of the universal, the relations between particular (local, contextual, national, any particular) and universal (the global, non-contextual, international, any universal) in this theme are central. then, the dimensions of affect theory, the episteme-nature relations, discussions on language, sociological theory, history, and theory of law assume central space in the interconnections of the projects presented in this theme.

Goal 1 - Increase the international circulation of the professors involved in PrInt

Description - Participation of professors in short-term activities, conferences and international workshops. Expansion of the insertion of professors in the international community of publishers, scientific associations and journals.

Goal 2 - Provide students with internships abroad

Description - Achievement of a sandwich stage, by students involved in the projects, in institutions that the UERJ professors know and where UERJ has consolidated projects. So, the internship is not only for the PhD student, but for the group in which the PhD student participates.

Goal 3 - Provide international research and teaching experience to the professors involved



Description - Conducting postdoctoral or research internship abroad by the professors involved in the projects and objectives registered in PrInt.

Goal 4 - Increase the international circulation of the students involved

Description - Participation of students in short-term activities that include conferences and workshops.

Goal 5 - Increase the publication abroad

Description - Publication of professors and students in international journals, for what is necessary also enable revision of the text, required by many journals for foreign authors.

Goal 6 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.

Theme 2

Theme - EDUCATION IN THE CONTEMPORARY WORLD

Partner countries- Canada; China; U.S; Finland; South Africa; Chile; France; Spain; Switzerland; Mexico; Australia; Colombia; Russia; Mozambique; Italy; Germany; Argentina; Portugal;

Justification - UERJ has a long and recognized history of action in the formation of teachers, well as a great highlight in the area of Education in the current days, as soon as it has been placed since 2010 one of the few Graduate Programs level 7 in this area: o Proped (Graduate Program of Education). Proped nucleate, therefore, in the scope of Capes print, different research projects in the area of education and Graduate Program social inequalities of the faculty of teacher training (only Master degree, level 4), of the Graduate Program in sociology (IESP) (level 5) and of the Graduate Program of public policy and human formation (GP Public Politics and Human Formation, level 6). The theme of education articulate educational projects of those Graduate Programs. Through such projects they achieve internationalization activities that are expressed in the level of excellence of ProPEd and GP Public Politics and human formation. Nowadays, education is one of the topics of public policy in the globalized world. Such policies tend to be reduced to an instrumental and immediate scope, linked to teaching and achieving evaluation goals, and which reduces educational complexity and, therefore, get little advancement in the training of subjectivities tuned with the social demands of the contemporary world. The assumption that such formation of subjectivities could be prescribed and depriving the obligation of negotiating senses with others also not contributed to the intended purposes of freedom and social justice. Therefore, for the development of this theme, the Graduate Programs invest in an educational project for cultural production and for intersubjective formation. These projects, therefore, focus on different educational themes that seek to distance and even question the instrumental and prescriptive approaches, introducing research on: everyday life and education, curriculum policies,



childhood, memory, intercultural education, foreign language teaching, teaching training and social stratification of education in the field of a developed theoretical-strategic study capable of producing long-term practical repercussions. We have chosen consolidated projects with research groups in countries that are part of priorities by the Capes print. These projects are coordinated by senior researchers of long trajectory in the area.

Goal 1 - Provide research experience and international teaching to the professors involved.

Description - Conducting postdoctoral or research internship abroad by the professors involved in the projects registered in PrInt.

Goal 2 - Increase the international circulation of the professors involved in PrInt

Description - Participation of professors in short-term activities, conferences and international workshops. Expansion of the insertion of professors in the international community of publishers, scientific associations and journals.

Goal 3 - Provide students with internships abroad

Description - Achievement of a sandwich stage, by students involved in the projects, in institutions that the UERJ professors know and where UERJ has consolidated projects. So, the internship is not only for the PhD student, but for the group in which the PhD student participates.

Goal 4 - Increase the international circulation of the students involved

Description - Participation of students in short-term activities that include conferences and workshops.

Goal 5 - Increase the publication abroad

Description - Publication of professors and students in international journals, for what is necessary also enable revision of the text, required by many journals for foreign authors.

Goal 6 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.



Theme 3

Theme - HEALTH: CONTROL OF DISEASES AND ACTIONS FOR LIFE QUALITY

Partner countries- Germany; U.S; Argentina; United Kingdom ; Canada; Colombia; Sweden; France; Ireland; Spain; Sweden; Netherlands; Japan; Australia

Justification - Health promotion, protection and recovery depend on the complex interaction of multiple factors that operate both at the individual and the collective levels. with regard to Brazil, the historical social inequality is also evident in the diverse disease patterns in the Brazilian population, which still suffers from a high incidence of certain communicable diseases, such as tuberculosis, but is plagued various chronic-degenerative diseases as well, linked to unhealthy ways of living, which are largely socially determined. the subprojects under this heading include studies that chart specific aspects of biological processes underlying specific diseases and / or its causal agents, seeking possible points of intervention for their prevention or treatment, as well as the analysis of the production of knowledge at the population level aiming to ground initiatives both in research and public policies that contribute to improving the quality of life and the general health of the Brazilian population, having the sustainable development goals as a reference. for the subprojects closer to the micro dimension of understanding disease mechanisms we have the application of cutting edge laboratory techniques, already in development with international partners, that will be boosted and expanded in their implementation and production of results applicable to health practices in multiple dimensions (oral health, prenatal care, detection and treatment of Chagas disease, among others). in the macro dimension the notion of sustainability is emphasized, both in the actions to take place with regard to professional training and the design of public policies, as well as contributing to the improvement of sanitary status of populations as a prerequisite for the desired sustainable development. The projects arise from mature Graduate Programs, with an interdisciplinary perspective, including the health and life sciences and the social sciences. All the participating programs, led by the GP of public (collective) health (Capes level 6), have a strong history of contributing to the development of health research and care in our country.

Goal 1 - Increase the international circulation of the participant professors

Description - Participation of professors in short-term activities, with participation in conferences and international workshops. Increasing the participation of professors in the international community as periodical reviewers, chairs of scientific associations, scientific periodical editorial boards.

Goal 2 - Provide students with internships abroad



Description – Enrollment in PhD sandwiches of students participating in the projects, in institutions with which UERJ professors have consolidated partnerships, making the internships fruitful not just for the students, but for group in which he participates as a whole.

Goal 3 - Provide international research and teaching experience to the participating professors

Description – Enrollment in postdoctoral or research fellowships abroad of the professors involved in the projects as per the PrInt goals.

Goal 4 - Expand publishing abroad

Description - Publication of professors' and students' articles in international journals, which requires text revisions, demanded by many journals for foreign authors.

Goal 5 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.

Goal 6 - Increase the international circulation of the participating students

Description - Participation of students in short-term activities that include conferences and workshops.

Theme 4

Theme - POLITICAL THEORY, HISTORY AND POWER NETWORKS

Partner countries- Colombia; France; Italy; Mozambique; Portugal; New Zealand; Spain; Argentina; Chile; Africa southern; U.S; Mexico; United Kingdom; Germany; Canada;

Justification – Another Graduate Program (GP) that contributed significantly to the highlight of UERJ in the area of human and social sciences is the GP of political science, located at IESP (ancient IUPERJ). This is a consolidated GP in this area with international networks well established and highlighted in international publication. For the development of this theme, the GP of history are associated (GP level 5 of long tradition in the area) and the GP social history (GP level 4 and improving). The crossings between history and politics are highlighted in this theme, developing issues of strong social impact: immigration, emigration and migration, in history and currently, to the problem of politics, democracy and power, and to memory and identity issues. Nowadays, it is growing the understanding in human and social science that social processes are political. Their power dynamics cannot be reduced to technical and instrumental decisions. So, theoretical development in political theory is fundamental to attempt to account many of the current social challenges. Such challenges, for the time, are more easily faced if the international discussion is done, breaking with disciplinary barriers and cultural borders north-south.



Goal 1 - Provide international research and teaching experience to the participating professors

Description – Enrollment in postdoctoral or research fellowships abroad of the professors involved in the projects as per the PrInt goals.

Goal 2 - Increase the international circulation of the participant professors

Description - Participation of professors in short-term activities, with participation in conferences and international workshops. Increasing the participation of professors in the international community as periodical reviewers, chairs of scientific associations, scientific periodical editorial boards.

Goal 3 - Provide students with internships abroad

Description – Enrollment in PhD sandwiches of students participating in the projects, in institutions with which UERJ professors have consolidated partnerships, making the internships fruitful not just for the students, but for group in which he participates as a whole.

Goal 4 - Expand publishing abroad

Description - Publication of professors' and students' articles in international journals, which requires text revisions, demanded by many journals for foreign authors.

Goal 5 - Increase the international circulation of the participating students

Description - Participation of students in short-term activities that include conferences and workshops.

Goal 6 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.

Theme 5

Theme - EXACT SCIENCES AND ENGINEERING: THEORY, EXPERIMENTATION, MODELING COMPUTATIONAL AND APPLICATIONS

Partner countries- Mexico; U.S; Argentina; Chile; United Kingdom; Vietnam; Russia; Germany; China; Italy; Canada; Belgium; Ireland; Cuba; Denmark; Spain; France; Portugal

Justification - This topic congregates correlated projects in computation and in theory and experimental physics. Interdisciplinarity is one of the most remarkable characteristics of the physics nowadays, relating directly with various areas of science, such as engineering, biology and medicine, as well as the area of computing. It is also through an interdisciplinary dialog that the high energies physics (HEP) revolutioned the understanding of the laws of the universe. On the other hand, the huge r&d program in the development of instruments needed in the experiments produced a direct impact in the society in the last decade, from consumer technology to communication, producing a true revolution in



the development of innovative techniques in diagnosis and medical treatments, especially in the oncology. Theoretical physics has passed by a revolution recently, proposing models to explain from interaction between subatomic particles to behavior of cosmological objects. Many of these models are tested in experiments, which results discards or helps to improve them. In spite of the current state of the understanding of nature's laws, many questions are still to be answered, such as the comprehension of the universe expansion mechanisms, attributed to dark energy or discrepancy in the measurements of the galaxies movement in relation to the estimation of its mass (the dark matter). Currently, the experiments of the large hadron collider (Lhc - cern / Switzerland) among others, tries to solve the mystery. The volume of data produced by these experiments is so big that it is impossible to analyze them with traditional methods, then new computer techniques, as artificial intelligence and high performance processing are applied. experiments so complex need to be proposed based previous studies, involving simulations and computing modeling, which technics may be applied in other areas, as the behavior of subatomical particles passing through matter, with direct impact in the development of new materials, in the diagnosis by means of radiation, in energy transportation and particle scattering in the matter, that could have an impact on the development of new technologies also in the area of nuclear reactors and in the study of physic processes with great potential in the development of more efficient technologies which can be of great importance for the environment as well.

Goal 1 - Provide international research and teaching experience to the professors involved

Description - Conducting postdoctoral or research internship abroad by the professors involved in the projects registered in PrInt.

Goal 2 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.

Goal 3 - Increase the international circulation of the professors involved in PrInt

Description - Participation of professors in short-term activities, with participation in conferences and international workshops. Expansion of the insertion of professors in the international community of publishers, scientific associations and journals.

Goal 4 - Increase the international circulation of the students involved

Description - Participation of students in short-term activities that include conferences and workshops.

Goal 5 - Increase the publication abroad

Description - Publication of professors and students in international journals, for what is necessary also enable revision of the text, required by many journals for foreign authors.



Goal 6 - Provide students with internships abroad

Description - Achievement of a sandwich stage, by students involved in the projects, in institutions that the UERJ professors know and where UERJ has consolidated projects. So, the internship is not only for the PhD student, but for the group in which the PhD student participates.

Theme 6

Theme - PUBLIC POLICIES AND SOCIAL THEORY.

Partner countries- France; Mozambique; Russia; Mexico; United States; Spain; United Kingdom; Portugal; Colombia;

Justification - the Graduate Program of Public Policy and Human Formation, level 6 in two evaluation periods (2010-2012 and 2013-2016), nucleate the theme of public policies in its obligation relative to social theory. This theme also organizes the projects of the GP of Social Sciences, the GP of Geography, the GP of Social Psychology and the GP of Sociology. Therefore, the relations among these GPs are strengthened to address interdisciplinary issues concerning current thematics, such as gender violence, innovation and urban inequalities in relation to education, housing or occupation of public space. Such themes require international dialogue. Not for any subsequent local application of solutions engaged in other contexts for similar problems. But for the understanding that, if the solutions to meet these questions will be mutual, the local constitution of a solution leads to the knowledge of the much that is made in other social contexts.

Goal 1 - Provide research experience and international teaching to the professors involved.

Description - Conducting postdoctoral or research internship abroad by the professors involved in the projects registered in PrInt.

Goal 2 - Conduct consortium research on the subject in focus.

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.

Goal 3 - Increase the publication abroad

Description - Publication of professors and students in international journals, for what is necessary also enable revision of the text, required by many journals for foreign authors.

Goal 4 - Increase the international circulation of the professors involved in PrInt

Description - Participation of professors in short-term activities, with participation in conferences and international workshops. Expansion of the insertion of professors in the international community of publishers, scientific associations and journals.



Goal 5 - Increase the international circulation of the students involved

Description - Participation of students in short-term activities that include conferences and international workshops

Goal 6 - Provide students with internships abroad

Description - Achievement of a sandwich stage, by students involved in the projects, in institutions that the UERJ professors know and where UERJ has consolidated projects. So, the internship is not only for the PhD student, but for the group in which the PhD student participates.

Theme 7

Theme - ENVIRONMENT: FORMATION, ENVIRONMENTAL IMPACT ANALYSIS AND NEW TECHNOLOGIES IN SEARCH OF SUSTAINABILITY AND SOCIAL AND ENVIRONMENTAL ISSUES

Partner countries- Denmark; Norway; Netherlands; Sweden; Chile; France; U.S; Finland; Italy; Belgium; Spain; Portugal; Canada; Russia;

Justification - Responding to the environmental issues today requires considering a social and environmental agenda. Knowledge and personnel training in this context requires a multi and interdisciplinary approach. The environment, biodiversity, sustainable development and natural resources are issues which run through all the areas of knowledge today. Environmental issues, unlike others, often seeks non specialized answers. Acting with a critical and reflexive perspective, it is possible to train personnel to engage in public policy making, seeking innovative solutions and contributing to the expansion of the borders of science and technology. Our Graduate Programs, through their interdisciplinary 5, seek to advance and / or establish an international collaboration directed to steer the production and socialization of scientific knowledge by approaching knowledge-grounded thematic areas and pursuing actions coherent with the latter. projects with this interdisciplinary vision include the chemical engineering, ecology and evolution, public policies and human training, environment, oceanography and vegetable biology Graduate Programs, proposing to investigate: (1) the impact of climate change through oceanographic modeling in order to understand its past record and thus foreseeing current changes and their consequences; (2) proposals for optimizing, characterizing and modeling processes related to biorrefining; (3) environmental contamination from urban-industrial activities monitoring / modeling technologies,, water / effluents purifying / treatment technologies, with development and application of new materials and the mitigation of contaminated areas with new materials recovery technologies aiming at a circular economy; the effects of global change in cyanobacteria blooming, its toxicity and interactions with cyanobacteria-zooplâncton, to prevent blooming and suggest effective management strategies to reduce the likelihood of such events; (4) rivers and fisheries ecology, with an emphasis on fish and macroinvertebrate ecology , and their role in nutrient cycling, trophic networks, structure and functioning of ecosystems; aspects of life history and evolution of biological strategies of the species, as well as studies of the issues regarding reproduction,



migration, behavior and adaptation to environmental variation and changes; (5) the conservation and in vitro production of plants has strong medical, agricultural and economic interests.

Goal 1 - Expand publishing abroad

Description - Publication of professors' and students' articles in international journals, which requires text revisions, demanded by many journals for foreign authors.

Goal 2 - Provide students with internships abroad

Description – Enrollment in PhD sandwiches of students participating in the projects, in institutions with which UERJ professors have consolidated partnerships, making the internships fruitful not just for the students, but for group in which he participates as a whole.

Goal 3 - Provide international research and teaching experience to the participating professors

Description – Enrollment in postdoctoral or research fellowships abroad of the professors involved in the projects as per the PrInt goals.

Goal 4 - Increase the international circulation of the participating students

Description - Participation of students in short-term activities that include conferences and workshops.

Goal 5 - Increase the international circulation of the participant professors

Description - Participation of professors in short-term activities, with participation in conferences and international workshops. Increasing the participation of professors in the international community as periodical reviewers, chairs of scientific associations, scientific periodical editorial boards.

Goal 6 - Conduct consortium research on the subject in focus

Description - Through the creation of research networks with researchers from different countries, specific projects will be developed within the thematic scope of PrInt.



GRADUATE PROGRAMS LINKED TO THIS PROPOSAL

Theme 1 - CULTURE AND SOCIAL THEORY: FOCUSING LAW, WORK AND SUBJECTIVITY

Graduate Program 1 – PHILOSOPHY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in philosophy of uerj has as main objective to offer to the student a professional teaching formation and for conducting research in the area of modern and contemporary philosophy. This formation aims to deepen the knowledge and develop the philosophical skills to carry out high-level research on the relevant to the thematic areas circumscribed by its lines of research. Add to these objectives the concern to enable students to development of autonomous and innovative jobs capable of designing new lights on the subjects investigated. Another fundamental objective is to enable the researcher to the continuation and improvement of their research, in order to maintain and raise the level of production and academic contribution of the Graduate Program beyond the limits of the teaching activity. Lines of research: line 1: theory of knowledge and philosophy of sciences; and technology, and its articulation with the field of ethics, politics and aesthetics. Line 2: ethics and political philosophy. in recent years, the program has achieved an internationalization level and participated in projects such as Daad / Capes, with the department of philosophie of technische universität berlin, which possible effectiveness of an exchange between professors and disciples of the two universities; Capes-cofecub poetry practices and theories in ancient Greece: de Parmenides to Aristoteles with center Léon robin in université de Paris iv; universität Koblenz / landau. Various professors of the program published authored books and chapters in international publishers (as garnier, Georg olms Verlag, springer, college publications, editorial comares, editorial fund), as well as articles in international journals (like studia leibnitiana, Hegel jahrbuch, Portuguese magazine of philosophy, journal of astronomical history and heritage, physics in perspective). The link with this theme will be developed particularly by the discussion of issues of subjectivity and culture, which are increasingly addressed at the same time in view of philosophical questions.

Graduate Program 2 – LAW

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Law has formed over the years an expressive group of PhD who have been playing a leading role in Graduate Programs in Law and in Research Groups. With alumni working in virtually every States of the Federation and abroad, by receiving students with training in other areas, the profile of this GP is multidisciplinary, also contributing to the qualification in several other areas. The faculty is composed of a multidisciplinary team with in several other areas of knowledge, which provides a critical and interdisciplinary nature of the student body. It operates in two main lines of research: Thought Juridical and Social Relations and Citizenship, State and Globalization. Intellectual production is diversified and interdisciplinary, because of partnership with other GPs in the



areas of history, economics, social sciences, sociology. So, the Law students also studies in other Graduate Programs at the University. At the same time, the GP of Law receives students from other courses and abroad. Given this approach, the contribution of this GP to the theme is correlating culture, work and subjectivity. GP of Law has a high level of internationalization. A large part of its professors has publications and international experience. In the year 2017, six international professors taught courses at this GP.

Graduate Program 3 – COMMUNICATION

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Communication of the Rio de Janeiro State University (GPCom / UERJ) was evaluated with level 5, consolidating itself as one of the most important GPComs in recent years, with highly productive teaching and recognized in their fields of research. The activities of GPCom UERJ began in 2002, based on two themes of special interest to the faculty: city and communication and information technologies. Over the course of 15 years of operation, the academically matured, adjusted and updated its lines of research, started and increased the internationalization process and gained wide recognition in the area. The evaluation scores (triennial and quadrennial) gradually increased, reflecting the coordinators, professors and researchers to follow the area and, at the same time, maintain its unique characteristics, investing in the diversity of currents of thought, methodologies, epistemologies and looks on communication. For the discussion of the topic under consideration, GPCOM will contribute with its wide experience in the discussions of technology and culture.

Graduate Program 4 – SOCIOLOGY

Capes evaluation (2017 evaluation grade) - 5

Justification – The GP in Sociology has established itself as a program of excellence in the sociologies of work and education, as well as all its ramifications, playing a central role in the issues of improving the education system, and understand the interrelationships among the various dimensions that influence the paths of students in this system. The internationalization of this GP is increasing, as well as the bibliographical productivity of its professors and students. The experience of studies on the social theory, at the crossroads with culture, are fundamental to the theme at hand.

Graduate Program 5 – ART

Capes evaluation (2017 evaluation grade) - 5

Justification – As well as the program proposal, bibliographic productions, research lines and projects in the Sucupira platform attest, this GP has long history related to this theme. The discussion of the Arts today is not exclusively focused on the theory of artistic production, or artistic products specifically. The History of Art has been increasingly researched in its interface with culture and the production of subjectivity. More and more we have border fields, in which discussions about philosophy,



communication, and social theory not only permeate the field of Arts, are permeated by discussions about Arts.

Graduate Program 6 – SOCIAL WORK

Capes evaluation (2017 evaluation grade) - 6

Justification – The Graduate Program in Social Work (GPSS / UERJ) leads the realization of the research on this topic, being one of the GPs of excellence of UERJ, both in the triennium as in the last four years. The central objective of the GPSS is to high-level researchers, in Social Work and related areas, qualified for teaching and for the production and dissemination of knowledge on the issues related to work, social policies and Social Work in Latin America, with an emphasis on Brazil and qualified intervention in social policy. Since its creation in the last year of century (1999), the Program chose as areas of concentration significant themes and relevant to the historical context: work and social policy. The high level of production faculty, including bibliographic and technical productions, the GPSS has an already consolidated national and regional insertion, which is expressed in the evolution of its selection process, the demand for participation of external students in disciplines and research and extension groups, and in the intensification of postdoctoral research in the last years. Even with an expressive number of Graduate Programs in Rio de Janeiro, the GPSS has maintained its levels of demand, aspect that reveals its consolidation. In the year 2017, it continued having greater visibility with Latin America students and Portuguese-speaking African countries. At The Social Work area, this GP assumes a greater theoretical role in UERJ, it leads research on this topic and enables research to benefit of a wide range of disciplinary studies in culture and work, the focus of this GP.

Graduate Program 7 – SOCIAL SCIENCES

Capes evaluation (2017 evaluation grade) - 5

Justification – The theoretical and research proposals of the lines developed in the GP SOCIAL SCIENCE, which has strong an interdisciplinary and comprehensive cut, strengthens the proposed theme. The GP has nine interconnected research lines: art, image and culture; city, power and resistance; culture, subjectivity and emotions; family, gender and generations; intellectual, education and policy; religions, sociabilities and forms of cultural expression; violence, citizenship and public policies; state, policy and representation; social theory. The internationalization of this GP is also increasing, with international activities.

Graduate Program 8 – LETTERS

Capes evaluation (2017 evaluation grade) - 5

Justification – It is quite expressive the degree of internationalization of the Graduate Program of Letters. This degree can be objectively verified by consulting the Sucupira Platform. In addition to the numerous indicators of internationalization - publications in languages other than Portuguese, by receiving students, and the arrival of visiting professors – there are following exchanges with institutions located outside the country: - University of Cologne, University of Jena, Charles de Gaulle University



(Lille 3), University of Leiden, Università Degli Studi di Roma La Sapienza, University of Winnipeg, Junta of Galicia, University of Coruña, University of the Republic (Uruguay), Stanford University, University of Coimbra, Autonomous University of Barcelona, Sorbonne University Nouvelle (Paris III), University of Madeira, etc., etc. These partnerships aimed at exchanging of professors and students, coauthor publications, academic meetings, co-tutelas, agreements for linguistic, literary and cultural transfers, intended for the investigation of phenomena GP-letters consolidated as a leading university in the field of training of German professors. This is allied to the growing attention given to the Portuguese as a foreign language in the program.

Theme 2 EDUCATION IN THE CONTEMPORARY WORLD

Graduate Program 1 – EDUCATION

Capes evaluation (2017 evaluation grade) - 7

Justification – ProPEd / UERJ has a strong international insertion in the field of Education, with lines of research involving the themes chosen for PrInt. This insertion is the product of an aggressive planning, dating from the early 2000s, which also included the creation of the Doctorate of the Program. It should be noted that this process was part of an institutional planning for UERJ's growth in research and in graduate studies. In the case of ProPEd, one of its goals was to reach the excellence in the period 2004-2006, which happened three years earlier. It was fundamental for this result the expressive support of development agencies, as a result of the increase the demand of the Program, as well as institutional projects. In terms of internationalization, it has been characterized by forms of protagonism in other countries that are not exclusively financed by the Brazilian agencies, nor that they are characterized by a privilege of certain center. ProPEd has achieved this in key countries like USA, Canada and France, as can be identified in the professors' publications. It also invests in Latin America, both coordinating projects and publishing research articles. There are international exchanges, as highlighted in the exchanges section of the Sucupira Platform, conceiving that if many of the actions are financed by our country, in the future we have to guarantee the expansion of the counterpart's countries. In terms of bibliographical production, we emphasize that in the last 5 years, 29 professors (out of a total of 32) had articles published in journals A (defined as with international level), making a total of 92 articles. Part of these journals was published abroad. Similar profile is found in books published by professors, many published by major international publishers (already qualified in the higher strata). Although the production quota international level is high, the effort of the Program has been to seek, more and more, it occurs in vehicles respected by the international academic community. In addition to the exchange and bibliographical production of the Program, international insertion is also visible in technical activities registered in the corresponding module in the Sucupira Platform.



Graduate Program 2 – EDUCATION FORMATION PROCESSES AND SOCIAL DIFFERENCES

Capex evaluation (2017 evaluation grade) - 4

Justification – This Program has a history of research on educational policies and inequalities social policies. Its association with ProPEd / UERJ aims to encourage research into curriculum policies, to increase its internationalization, aiming at concept 5 in the evaluation Capex, as well as to allow articulation among the researches of this Program with the ProPEd / UERJ surveys. The GP also forwarded to Capex its Doctoral proposal in the APCN 2018.

Graduate Program 3 – PUBLIC POLICIES AND HUMAN FORMATION

Capex evaluation (2017 evaluation grade) - 6

Justification – the Graduate Program in Public Policies and Human Formation connects the transversality of the production of knowledge to the realization of adequate conditions theoretical development, to the development of new human formation practices in graduate level and professional intervention in public policies. Researchers with long experience in Graduate Programs and investigation have built the basis of our program, which today boasts of composing its teaching staff with the incorporation of new researchers who are solidly a new academic generation. From an epistemological point of view, interdisciplinarity offers itself as an indispensable to the complexity of social reality and, in the context of a culture scientific and academic context, affected by the fragmentation of the knowledge correlate. the GP Public Policies and Human Formation has two lines of research, which are seen and understood in practice academic-pedagogical aspects of the program as necessarily integrated, so as not to lose sight of important dimensions of what ultimately constitutes the great thematic axis guiding the program: Public Policies and Human Formation, in its interdisciplinary perspective. In its investigations, one of the interfaces is with education, counting on researchers in the area of education in its faculty, some of them coming from ProPEd. Exchanges and agreements in Brazil and abroad: Latin America, Africa, Europe, Asia and North America.

Graduate Program 4 – LETTERS

Capex evaluation (2017 evaluation grade) - 5

Justification – The GP of Letters has a history of research on educational policies and social inequalities, in aspects that have an interface with literature and linguistics. Its association with ProPEd / UERJ and the other participating GPs aims to encourage research into educational policies and learning foreign languages and interculturality. As well as increasing the internationalization of its faculty and students, aiming to broaden the articulation between the researches of this Program and the researches of the other GPs that work on the proposed Theme.

Graduate Program 5 – SOCIOLOGY

Capex evaluation (2017 evaluation grade) - 5



Justification – The GP in Sociology has become a program of excellence in social theory and some of its projects have a strong interrelationship with the subject of work and education sociologies, as well as all its ramifications. This focus is to improve the educational system, and to understand the interrelationships among the various dimensions that influence the paths of students in this system

Theme 3 - HEALTH: CONTROL OF DISEASES AND ACTIONS FOR LIFE QUALITY

Graduate Program 1 – FOOD, NUTRITION AND HEALTH

Capes evaluation (2017 evaluation grade) - 4

Justification – The current internationalization stage of the Graduate Program in Food, Nutrition and Health is characterized by a remarkable expansion of collaborations with foreign countries in various modalities. In the last five years, collaborative international research networks were established, we received visiting researchers from institutions abroad participating in teaching and student orientation, classes open to the public, with an intense exchange of students and professors, increased foreign researcher co-authorship, a student graced with an award in an international event, among other actions. The GP-ANS has professors coordinating institutional agreements and conducting research in collaboration with foreign institutions for internship in the Program. Part of the partnerships established with researchers of Institutions abroad can be verified through collaborative intellectual production with these researchers, expressed in articles in more than 70 foreign journals and chapters of books by international publishers. Particularly with regard to health, the field of Food and Nutrition has a history of investigations in the area of Collective (Public) Health.

Graduate Program 2 – MICROBIOLOGY

Capes evaluation (2017 evaluation grade) - 4

Justification – According to the project linked to the Graduate Program in Microbiology and its insertion into the proposed theme, the bibliographic productions, lines of research and the projects of this GP in the Sucupira Platform attest to the long trajectory of the researchers of the Program linked to this topic.

Graduate Program 3 – BIOCENCIAS

Capes evaluation (2017 evaluation grade) - 6

Justification – The Graduate Program in Biosciences (GPB) has been contributing to the establishment and development at UERJ of new technical platforms for the study of obesity, cancer, cardiovascular and inflammatory pharmacology, histology and infectious and parasitic diseases, with a focus on the study of the processes and mechanisms encompassed by cellular biology, among other important topics. The GPB has stimulated the implementation of cutting-edge techniques in several areas of cellular biology in order to integration of the various research groups. This project will allow the transfer of knowledge and mobility between Brazil and foreign universities. GPB is one of the pioneers in projects of cooperation with foreign institutions, among which we highlight the CAPES / COFECUB Program, in which it has participated since 1980.



Graduate Program 4 – DENTISTRY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Dentistry maintains extensive collaboration with promoting student and teacher mobility, and developing articulated projects. Currently the areas of concentration are: Dentistry, Endodontics, Pediatric Dentistry, Orthodontics, Periodontics and Dental Prosthesis. The GP develops scientific investigations and reflections on the advancement in specific techniques and work in the area of oral health. The program has articulated projects with several research institutes, nationally and internationally, mainly through exchanges with universities in Sweden, the United States, Japan, among others.

Graduate Program 5 – NURSING

Capes evaluation (2017 evaluation grade) - 5

Justification – The GP in Nursing in recent years has been developing different activities of international exchange with different countries and centers of excellence in research and training of human resources in the area of nursing, health and humanities and social sciences. Its pertinence in the proposed Theme is important and strategic. The nursing area is a field of production of relevant knowledge in health. The Program has a considerable number of projects developed in partnership with higher education institutions in other countries, as well as projects that bring together different researchers. These exchanges involve a set of research activities, scientific events, mobility of professors and students, the production and dissemination of knowledge and training of high-level human resources in the different countries involved.

Graduate Program 6 – CLINICAL AND EXPERIMENTAL PHYSIOPATHOLOGY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Clinical and Experimental Physiopathology (FISCLINEX) graduates researchers qualified to study the causes and mechanisms of disease through the use of experimental and clinical models. The strategy that has been adopted aims to implement a critical posture regarding the causal mechanisms of disease, their control and prevention. The field of human resources training, including outreach and diffusion activities, represents another aspect of the proposal, whose objective is to transfer research results to society. The Program has a single area of concentration, pathophysiology, which, by definition, integrates disciplines and research lines in the biomedical area. Currently in the Program we have active research lines in areas such as endocrinology, cardiology, pneumology, neurology, infectious diseases, medical genetics, epidemiology, physical education and nutrition. The achievement of the objectives of the Program becomes feasible when there are qualified groups of researchers in the clinical and basic areas. Laboratories, wards and outpatient clinics become data sources for experimental and clinical studies that promote integration and scientific production.



Graduate Program 7 – COLLECTIVE (PUBLIC) HEALTH

Capes evaluation (2017 evaluation grade) - 6

Justification - The Collective Health GP, in addition to having a strong history of contributions to the development of health research and health care in our country, is multidisciplinary and one of the most important centers for the research and training of human resources covering the three branches of Collective Health - Epidemiology, Health Planning and Policies, and Social Sciences and Humanities in Health. Its objective is to develop interdisciplinary and critical reflection on the health / disease process in its multiple dimensions and on health policies in Brazil. It counts on researchers with strong participation in scientific associations, journal editor teams and editorial board of scientific publishers at both the national and International levels. The participation of GP Collective (Public) Health aims to consolidate the partnership and contribute to the other GPs, through the production of knowledge on the presented topics.

Theme 4 POLITICAL THEORY, HISTORY AND POWER NETWORKS

Graduate Program 1 – INTERNATIONAL RELATIONS

Capes evaluation (2017 evaluation grade) - 4

Justification – The GP in International Relations was signed in 2009, when the International Relations was established in the national scenario, as an area. This GP has three lines of research: Politics, Culture and Institutions; Policy Studies External; International Political Economy and Regional Integration. The creation of GPRI was done with professors-researchers from the Departments of History and Social Sciences, and the Faculty of Economics and Education, unifying a staff previously disseminated in different units, but with activities of research and teaching International. GPRI achieved extensive academic and institutional cooperation with other units of the University through the participation of its professors in the laboratories of research and activities promoted by the Program. Currently, GPRI has twelve (12) permanent professors, two professors being linked to the Faculty of Economics and a teacher linked to the History Department, and three (3) professors contributors. Therefore, the interdisciplinarity of the GPRI founding project resulted in formation of a nucleus of production and dissemination of knowledge committed to the deepening of the studies of the area. This program maintains the relevance and originality necessary for the academic impact expected by its creators. To achieve this impact, amid the frank development of a large part of the International Relations Graduate Programs in the region and in Brazil, including those benefited by the Santiago Dantas Project, required redoubled in the design of the GPRI research lines, "Politics, Culture and Institutions", "Studies of Foreign Policy, "International Political Economy and Regional Integration". In accordance with the design of the founding project of the GPRI, the students is accompanied by frequent complementary activities aimed at the promotion of the debate of ideas, as well as the constant exchange between the faculty and student, through research seminars, debates, national and international conferences, publications, co-operation and exchange agreements at the national and international the organization of various scientific events.



Graduate Program 2 – POLITICAL SCIENCE

Capes evaluation (2017 evaluation grade) - 6

Justification – The GP in Political Science is a program of excellence in the field and leads the groups of this theme. The initial inspiration of the Program implied a requalification of the democracy in the public arena, pushing aside the conceptions that saw democracy as a simple political form. It was resized the scientific agenda, with the incorporation of the agenda of the social question in Brazil: race, gender, trade unions, violence, professions, poverty and marginality have passed, then, to integrate the cast of questions researched. The areas of political theory and thought Brazilian politicians have also become strong in GP. To this day, its format preserves that inspiration, informed on the one hand by the institutional theme addressed by the angles of science and of political theory, and, on the other, by the Brazilian social question conceived in the sphere of minorities. Approaches in permanent dialogue with the legacy of social and political thought of the country, whose essay was gradually incorporated into its program of studies and investigation. There are three lines of research: Institutions and Political Behavior; Relations International and Comparative Politics; Political Theory and Brazilian Political Thinking. The scholars of IESP actively participated in the establishment of the Brazilian Association of Political Science (ABCP) in 1987 and its internationally trained professors occupy positions in ABCP and other national and international professional associations (such as ANPOCS, LASA, IPSA and ALACIP). The main publication of IESP, *Data*, is a prominent journal in Brazil and LA. *Data* is one of the few Brazilian indexed social sciences at ISI (Thomson Co.) and was A1. IESP and its 18 research groups are largely funded by national and international agencies (Ford Foundation and UNDP). Your agenda attracts many countries that spend short-term periods. The results of the surveys cover international, regional and national issues, and are also published in other languages in establishments such as *Citizenship Studies*, *European Journal of Social Theory*, *Latin American Politics and Society*, *International Affairs*, *Brazilian Political Science*, *Rev. International Affairs* and *Foreign Policy Analysis*. Annually too we offer short courses in English.

Graduate Program 3 – HISTORY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in History (with researches in Political History) is structured by the following lines of research: Politics and Culture and Politics and Society. This GP is linked to the Laboratory of Power Networks, an academic space where the activities and experiences of the Research Group Ideas, Culture and Politics in the Brazilian Nationality. It is also a member of the Center for Studies on Biography, History, Teaching and Subjectivities (NUBHES), interinstitutional research group. This GP is improving among the level 5 GPs of History in Brazil. The GPH-UERJ Policy and Culture Research Line investigates a vast field related to the concepts of power and political culture. The interdisciplinary content of this project, which crosses the fields of Political History, Arts-Literature and Historiography, with their respective Theories, allow the development of new concepts and methods for the reading of historical experiences, past uses and their implications for the present.



Interdisciplinarity requires the expansion of partnerships and the formation of networks and dissemination of research. This is one of the objectives of the COMMON - History of UERJ, a nucleus of interlaboratory and interinstitutional research, which also postulate the active interaction of the students in the two lines of research: "The history of the discipline in debate "and" Democracy, culture and historical experience". The internationalization of the GP is carried out through partnerships with professors from different countries and collaborators of the study lab Power Networks and Cultural Relations. Efforts to consolidate and increase internationalization channels of GPH materialize in the form of events, bibliographic production, courses and mini-courses, agreements and partnerships with institutions and foreign researchers, largely carried out through the actions promoted by the laboratories and research centers linked to GPH. Among the actions taken by GPH laboratories associated with internationalization are the participation of foreign researchers in courses, visiting professors, projects associated with covenant with the University of Coimbra, with the Lisbon Political Observatory, with the University of Quilmes and the University of Cadiz, exchanges with the University of the Basque Country, many others, and participation in the French Chairs Program.

Graduate Program 4 – SOCIAL HISTORY

Capes evaluation (2017 evaluation grade) - 4

Justification – Graduate Program in Social History is structured from an area of concentration - Social History of the Territory - and three lines of research, Territory, Power and Social Movements; Territory, Identities and Representations; and Historiography and Teaching History. The proposal is based on the understanding of the territory as a space from the local to the global networks, the institutions, to the forms of symbolic construction, representation and appropriation, from the Colony to Republican in Brazil.

Theme 5 - EXACT SCIENCES AND ENGINEERING: THEORY, EXPERIMENTATION, MODELING COMPUTATIONAL AND APPLICATIONS

Graduate Program 1 – COMPUTATIONAL MODELING

Capes evaluation (2017 evaluation grade) - 6

Justification – The Graduate Program in Computational Modeling (GPMC) houses a team of truly multidisciplinary, bringing together professors with diverse backgrounds, mainly in Computer Science, Mathematics, Physics and Engineering, especially in Mechanical, Chemical, Metallurgy and Materials, and Nuclear, with interest and performance in computational modeling, contributing greatly to the interdisciplinary approach of course. The Polytechnic Institute (IPRJ) pioneered several important aspects. In first place, GPMC itself was the first Graduate Program in modelling created in the country. Significant breakthroughs were obtained in these first 20 years of the GPMC, with measurable results both in human resources training and in scientific production of quality, constantly evolving with a more International basis. Having graduated 104 PhDs and 196 MSc by the end of 2017, over time has sought to develop research that encompasses a more interdisciplinary approach, taking advantage of the



heterogeneity of the formation of the teaching staff, understanding that this should be the focus of a course in computational modeling. In GPMC, the research activities and training of human resources are directed towards the lines of research: (i) Applied Mathematics and Scientific Computing; (ii) Porous media, Thermofluidodynamics and Particle Transport; and (iii) Dynamics, Acoustics, Vibrations and Materials. These lines provide an interdisciplinary approach, always encouraged in the program. In order for the computational modeling methodology to be useful in providing responses to the various areas of knowledge, it is essential to aggregate the mathematical modeling, physical experimentation, discrete representation, programming and computational simulation and experimentation. It is understood that the computational modeling, combined with information technologies, has a new paradigm in scientific research, creating a common language based on mathematical models, and in computational platforms in solving current problems. Significant number of foreigners, usually with excellent technical qualifications, have looking for masters and PhD courses, coming from countries like Russia, Cuba, Ukraine, China, Colombia, Cape Verde, Argentina, Ecuador and Peru.

Graduate Program 2 – COMPUTATIONAL SCIENCES

Capes evaluation (2017 evaluation grade) - 4

Justification – The Graduate Program in Computational Sciences is composed of professionals with training in areas of Engineering, Statistics, Mathematics, Computer Science, and Physics, some of which have a background in Medicine and other areas of knowledge. The interdisciplinary character of the professors and researchers training allows and suggests the realization of researches developed in different areas of knowledge, with an emphasis on mathematical-statistical and computational methods used in the study of: Complex Systems, Parallel and Distributed Computing, Computational Neuroscience, Virtual Reality, Software Engineering, Numerical Analysis, Computational Intelligence, Optimization, Computational Geometry, among others. Its researchers have inter-institutional and interdisciplinary cooperation with doctors, nutritionists, biologists, psychologists, psychiatrists and professionals in various fields of engineering. The main goal of this program is the training of researchers for the development and use of computational methods and techniques, statistics and mathematics, aimed at study of natural and artificial processes and phenomena traditionally studied by sciences and engineering, such as physics, chemistry, environmental science, biomedicine, neuroscience, cognitive and social sciences, psychology, information science, mechanical engineering, biophysics and telecommunications and complex systems in general. In Brazil and in the state of Rio de Janeiro, the enormous and recent spread of the use of computational and communication technologies, by different public and private organizations, has demanded professionals capable of integrating knowledge from different domains. Areas such as oil and gas, molecular biology, physiology, geology, sociology, psychology and psychiatry have increasingly demanded the development of mathematical-computational methods that make feasible the study and prediction of nonlinear systems, which may present chaotic behavior, through simulation. Communication media integrate people and require research that enables networks between people and equipment, with optimization of resources. New technologies have been modifying therapeutic practices and permeating areas that, until recently, had



only the support of mechanical equipment. We also highlight that the GPCCOMP is sending this month to Capes its APCN of the Doctorate program.

Graduate Program 3 – PHYSICS

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Physics aims to train staff to carry out research activities, both theoretical and experimental, and for the exercise of the higher magisterium. To achieve this goal, the Program has high level in a regime of exclusive dedication, most of them with Research Scholarship by CNPq. By the end of 2017, the Program totals 156 (one hundred and fifty-six) dissertations and 65 (sixty-five) theses defended. Most of these dissertations and theses has generated articles published in international journals with referees, counting on the direct participation of master's or doctoral students as co-authors. We emphasize that scientific production with the participation of students is increasing every year, as the consolidation of the Program. GPF maintains partnerships in the area of Experimental High Energies Physics with CMS at the LHC-CERN in Geneva, Switzerland.

Theme 6 - PUBLIC POLICIES AND SOCIAL THEORY

Graduate Program 1 – SOCIOLOGY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program in Sociology has established itself as a program of excellence in social area. Some of its projects have a strong link with the theme at hand. Your lines of research are in Social Theory, with discussions that also permeate public policy. Its trajectory with studies on inequality, cities, violence in the interface with public policies are fundamental to this theme.

Graduate Program 2 – SOCIAL SCIENCES

Capes evaluation (2017 evaluation grade) - 5

Justification – The theoretical and research proposals of the lines developed in the GP SOCIAL SCIENCE (GP of Social Sciences), which have strong an interdisciplinary and comprehensive approach, strengthens the proposed theme. The Program is organized in nine interconnected research lines: art, image and culture; city, power and resistance; culture, subjectivity and emotions; family, gender and generations; intellectual, education and policy; religions, sociabilities and forms of cultural expression; violence, citizenship and public policies; state, policy and representation; social theory.

Graduate Program 3 – PUBLIC POLICIES AND HUMAN FORMATION

Capes evaluation (2017 evaluation grade) - 6

Justification – The Graduate Program in Public Policies and Human Education transversality of the production of knowledge to the realization of adequate conditions theoretical development, to the development of new Human Formation practices in Graduate level and professional intervention in public policies. Researchers with long experience in graduate and research have built the basis of our



Program there more than ten years, which today boasts of composing its teaching staff with the incorporation of new researchers who are solidly a new academic generation. From an epistemological point of view, interdisciplinarity offers itself as an indispensable to the complexity of social reality and, in the context of a culture scientific and academic context, affected by the fragmentation of the knowledge correlate. The GP Public Policies and Human Education is composed of a team of permanent professors who guarantee, at a only time, high qualification, experience, national and international projection and, mainly, diversified training in environments and institutions. The GP Public Policies and Human Education has two lines of research, which are seen and understood in the academic-pedagogical practice of Program as necessarily integrated, so as not to lose sight of important dimensions of what, in the last instance, constitutes the great thematic axis guiding the Program: public policies and Human Formation in its interdisciplinary perspective. Exchanges and agreements in Brazil and abroad: Latin America, Africa, Europe, Asia and North America. In 2017, we had 12 international agreements in progress. It should be to point out that exchanges have already taken place with institutions in several other countries, expressing the permanent search for new modalities of interinstitutional exchanges. At international relations remain fertile, through the entry of foreigners into our courses (in 2017 we counted on 11 foreign post-graduate students), exchange of professors from other countries and with the visible interest of our doctoral students for performing internships abroad. In 2017, 3 students went abroad completing their PhD studies at the universities of Coimbra, Lisbon and Porto. Of academic point of view, the Program maintains its concern to build an increasingly integration among their research groups.

Graduate Program 4 – SOCIAL PSYCHOLOGY

Capes evaluation (2017 evaluation grade) - 5

Justification – The Graduate Program of SOCIAL PSYCHOLOGY has a long history of research and social intervention on issues related to human rights, with an impact on public policies. This project brings together professors and work on migration, identity, family, gender, imprisonment, sexual and reproductive rights, crossing with several aspects of the psychological suffering and alternatives of intervention. In three lines of the GP, it is possible to identify professors who, based on their commitment to the social psychology, sought and seek theoretical references that take account of these issues, particularly at a political moment of serious threat to democracy in Brazil and in many countries of Europe and Latin America.



Theme 7 - ENVIRONMENT: FORMATION, ENVIRONMENTAL IMPACT ANALYSIS AND NEW TECHNOLOGIES IN SEARCH OF SUSTAINABILITY AND SOCIAL AND ENVIRONMENTAL ISSUES

Graduate Program 1 – ENVIRONMENT

Capes evaluation (2017 evaluation grade) - 4

Justification – The Graduate Program in Environment of the State University of Rio de Janeiro (GP-Environment) is intended to produce knowledge related to environmental sciences and human training for the pursuit of research, teaching and public policy activities. This is an interdisciplinary doctoral course that has undergone thirteen doctoral admissions processes, counting from its first class with one hundred and fifty-three (153) students and eighty-six (86) dissertations presented up to December 2017. In that year, the course counted on fifty-five (55) active doctoral students and the conclusion and final presentation of five (05) dissertations. The Program expresses its objectives in the integration of the investigative processes carried out in its two lines of research: Social Construction of the Environment and Conservation of the Environment. The Doctorate in Environment at UERJ occupies a strategic place among the teaching and research organizations that develop interdisciplinary processes in Brazil. Of the 23 professors (18 core, 05 contributors), most of them representing the eleven faculties that make up the Program, five are part of the Program Coordination Commission - a general coordinator of the Social Sciences area, and four assistant coordinators, from the fields of knowledge of Oceanography, Education and Engineering, stimulating the creation of strategies that allow the establishment of a thematic project that configures the identity of the Program based on interdisciplinary research. In its constant reach to meet the criteria and suggestions of the Environmental Sciences Committee of CAPES (CACiamb) for the Graduate Programs, during 2017, the GP-Environment Coordination continued the improvement of the Program: - emphasizing the collective production of teachers of the same line and of different lines of research, in order to contribute to the establishment of a new practice in the training / practice of doctors and the ability to move through different areas of knowledge and to dialogue with specialists of different backgrounds in research, teaching and in activities aimed at the social integration of these professionals.

Graduate Program 2 – PUBLIC POLICIES AND HUMAN TRAINING

Capes evaluation (2017 evaluation grade) - 6

Justification – The multidisciplinary of the GP of Public Policies and Human Education is an essential factor for its insertion in the theme. The transversality of the production of knowledge to the accomplishment of adequate conditions for the theoretical deepening, the development of new practices of human formation at the Graduate level and the professional intervention in the public policies. It is not possible today to discuss public policies without the interface with environmental issues, the focus of GP Public Policies and Human Education research groups. Researchers with a long experience in Graduate teaching and research have built the basis of our Program for more than ten years, which today is proud to compose its teaching staff with the incorporation of new researchers who constitute



solidly a new academic generation. From an epistemological point of view, interdisciplinarity is offered as a procedure made indispensable in the face of the complexity of social reality and, in the context of the dominant scientific and academic culture, coherent with its correlate fragmentation of knowledge. The GP Public Policies and Human Education has two lines of research, which are conceived and understood within the academic-pedagogical practice of the Program as necessarily integrated, so as not to lose sight of important dimensions of what is ultimately the main thematic axis of the Program: public policies and human training in its interdisciplinary perspective. Exchanges and agreements in Brazil and abroad: Latin America, Africa, Europe, Asia and North America. In 2017, we had 12 international agreements in progress. It should be noted that exchanges have already taken place with institutions in other countries, expressing the permanent search for new modalities of interinstitutional exchanges. International relations remain fruitful through the entry of foreigners into our courses (in 2017 we have 11 foreign Graduate students), exchanges of teachers with other countries and with the visible interest of our doctoral students to do internships abroad. In 2017, 3 students went abroad to complete their PhD studies at the universities of Coimbra, Lisbon and Porto. From an academic point of view, the Program maintains its concern to build an increasingly integrated performance among the established research groups.

Graduate Program 3 – OCEANOGRAPHY

Capes evaluation (2017 evaluation grade) - 4

Justification – UERJ's Program of Master's and PhD in Oceanography has one area of concentration: Characterization, Diagnosis and Evolution of Marine Environments, with two lines of research: (a) Oceanographic Processes in the Continent-Ocean Interface; (b) Dynamics, Cyclicity and Modeling of Marine Processes. The objective of the GP-OCN is to train professionals to work in the areas of Biological, Physical, Geological and Chemical Oceanography. The training of this professional requires a multidisciplinary approach, and the development of its capacity to integrate knowledge in search of complex, wide-ranging and innovative solutions. In this sense, the curriculum of the GP-OCN is composed of a range of elective courses that deal in depth with specific themes. In addition, the student should periodically present progress in the development of his/her dissertation or thesis in internal seminars. It is expected that, before the end of the first year in the program, the student will be already fully dedicated to the experimental and / or practical work of his dissertation or thesis. The research projects developed in GP-OCN seek to evaluate aspects such as: (i) characterization, conservation and sustainable use of marine resources; (ii) impacts of climate cycles and global change on marine ecosystems; (iii) environmental changes in anthropic activities linked to urban and industrial development (eg, oil and naval); (iv) material flows at the continent-ocean interface; (v) dynamics and circulation of coastal and marine environments; (vi) studies of oceanographic processes at various time scales. The Faculty of Oceanography has a series of interinstitutional agreements, but also participates in programs and projects of scientific, technical and pedagogical cooperation with universities, research centers and national and international entities. Such partnerships have resulted in diverse activities and products, such as: (1) research projects and programs allowing the integration of the student body, joint



publications in national and international journals, exchange of equipment and use of laboratories; (2) exchange of teachers and students allowing academic internships, as well as the preparation and exchange of short courses.

Graduate Program 4 – CHEMICAL ENGINEERING

Capes evaluation (2017 evaluation grade) - 5

Justification – The GP in Chemical Engineering has already graduated almost 200 masters and 16 doctors. Among its research lines, Bioprocesses and Chemical Technology line has a strong interface with environmental issues. The intensification and modernization of the industry, particularly in the area of chemical processes and related sectors, combined with the growing concern with environmental issues, has been demanding an increase in scientific and technological research in the sector. To meet these needs, which are fundamental to the development of our country, it is essential to train human resources capable of facing new technological challenges. Based on this scenario, it concentrates on the training of professionals for the development of scientific and technological activities in the field of chemical engineering. In research activities, we seek to contribute to the Brazilian scientific and technological improvement, allowing graduate students to participate in the process, acting as means of transmission between the research conducted at the university and the national industrial park. The infrastructure of GPEQ research consists of fourteen laboratories, with the adequate equipment. The GPEQ / UERJ presents a growing international participation. Currently, this cooperation is being undertaken through the enactment of networked research projects, doctorates sandwich and co-orientations of doctoral students. It can be noted as examples of concrete results relating to the international cooperation involving professors from the GP of Chemical engineering / UERJ, the following: - Activities of joint research: • One. Rovira i Virgili, Tarragona • Univ. de Pau et des Pays de l'Adour (UPPA), • Univ. Nac. Del Litoral (UNL), • Univ.Nac.de La Plata (UNLP), • Inst. Technical Support (IST), Univ of Lisbon, Co-orientations and PhD sandwich.

Graduate Program 5 – PLANT BIOLOGY

Capes evaluation (2017 evaluation grade) - 4

Justification – The Graduate Program in Plant Biology – area of concentration in Biodiversity Conservation and Utilization, Master and PhD levels, aims to train and improve professionals in the areas of plant biotechnology, morphology, taxonomy and physiology of terrestrial and aquatic plants, phytochemical and pharmacological studies, conservation and production of seedlings, production of metabolites and molecular markers, as well as environmental monitoring studies using plant models. The GPBV professors maintain several intra and interinstitutional collaborations with other research groups and post-Graduate Programs, including UERJ's Graduate Program in Biosciences, the Graduate Program in Plant Biotechnology / UFRJ, the Graduate Program in Biological Sciences - Botany / UFRJ, the National School of Tropical Botany / JBRJ, the Graduate Program in Biosciences and Biotechnology / UENF and the Graduate Program in Forest Resources of ESALQ / USP. All of them have lines of research related to those developed by the GPBV / UERJ, which allows to expand the scope of actions



and the formation of an extremely promising interregional network for teachers and students. GP maintains several collaborations with foreign institutions, such as: Participation through the Algae Ecology and Physiology Laboratory of UERJ, the International Cooperation Project sponsored by CAPES and the Netherlands Organization for International Cooperation in Higher Education (NUFFIC), Netherlands. Cyanobacterial Blooms in a Changing World. The project involves the exchange between several universities in Brazil (UERJ, UFRJ, UFRN, and UFJF) and the Aquatic Ecology & Water Quality Management Group of the University of Wageningen and the Department of Aquatic Ecology of the Netherlands Institute for Ecology (NIOO).

Graduate Program 6 – ENVIRONMENTAL ENGINEERING - DEAMB

Capex evaluation (2017 evaluation grade) - 4

Justification – PhD in Environmental Engineering (DEAMB) of the Department of Sanitary Engineering and The Environment (DESMA) of UERJ is designed with a single area of concentration, Environmental Sanitation: Control of Urban and Industrial Pollution, and 3 research lines: 1. Diagnosis, Monitoring and Environmental Modeling; 2. Technologies of Treatment of Environmental Pollution; 3. Management, Natural Resources and Policy Management For Sustainability. The DEAMB research lines represent different levels of approach to environmental and health problems and challenges and are designed so as to maintain an organic integration between them. Respecting the specificities of the central focus that permeates all of them lies in the innovation, development and improvement of technologies for the control, treatment and mitigation of contamination / environmental pollution. The creation of DEAMB along the lines proposed is based on the premise that the knowledge about processes and the state of degradation of the environment (Line 1), together with the improvement, development and technologies (Line 2) and the understanding of failures of institutional articulation that lead to environmental pollution and the formulation of new models (Line 3) together form a solid framework for the robust training of PhDs in Environmental Engineering and the generation of knowledge and products relevant to the area of knowledge.

Graduate Program 7 – ECOLOGY AND EVOLUTION

Capex evaluation (2017 evaluation grade) - 6

Justification – The performance of the GP in Ecology and Evolution in the proposed theme is backed by its productions, lines of research and projects developed in the area. The GPEE has as one of its priority goals to act as a center of reference and excellence in issues related to biodiversity in Brazilian biomes and, in particular, terrestrial and aquatic ecosystems of the Atlantic Forest of the State of Rio de Janeiro (rivers, streams, lagoon systems, coastal areas, *restingas*, altitudinal fields, among others), with special attention to social and environmental interests. The GPEE's operation is designed in three research lines centering on the search for answers to questions related to the Environment, Ecology and conservation of populations, communities, ecosystems, marine systems and freshwater, and to the study of evolution at various levels. Besides acting in the training of professionals, it aims to generate scientific information that promotes the advancement of Ecology and Evolution and ecological



processes theories and knowledge, encompassing Systematics and Conservation knowledge, which provide inputs for handling, rational use and conservation of ecosystems, especially those existing in the Brazilian Southeast such as the Atlantic Forest, restingas, mangroves, altitudinal fields, lagoons and marine and coastal environments. It also aims to provide subsidies for solving issues and environmental problems (eg regeneration of degraded areas, studies, development strategies and conservation strategies. diversity impacted by exotic organisms or the identification of priority areas for conservation). The GPEE is currently composed by 30 professors among core and contributors. The Program faculty has important partnerships with Researchers of Foreign institutions involved in articulated projects; several foreign professors have taught Discipline at the GPEE in recent years (University of Victoria - Canada; Academy of Science - Czech Republic • Natural Sciences Museum of Madrid / CSIC; University of Nebraska Lincoln - USA; Kansas State University); GPE students who to carry out part of their thesis or dissertation research in laboratories of Institutions abroad (doctorate sandwich).

Activities Linked to the Themes

Theme 1

CULTURE AND SOCIAL THEORY: FOCUSING LAW, WORK AND SUBJECTIVITY

Goal 1 Expand the international circulation of the professors involved

Activity 1 - Work and research missions in the exterior; participation in events; collaboration networks

Start date - 08/2018

End date- 07/2022

Description – Many participating professors are already internationalized, either because they have graduated as doctors or had postdoctoral fellowships abroad, or because they have regular activities with foreign groups in research partnerships. However, they need support to maintain such activities, concentrating on the constitution of solid research networks with a set of research groups instead of dispersed actions. To this end, the incentive should be directed to the activities linked to the presented project. It is worth noting that this cannot be quantitatively measured. The international circulating with impact takes time to consolidate and, even though it might be associated with the indicators described here, there are other qualitative criteria that should be considered (citations, ability to influence, being a recipient of external funding, being able to attract interest). Likewise, it is not possible to define the current situation merely with numbers. We opted to express indicators with percentages. Thus, we start from base 100 and record the increase percentage for the second and fourth years.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, production bibliography and participation in editorials.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 2 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad **Start date** - 08/2018 **End date**- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that in order to achieve this it is important that Capes ceases to require language proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication between researchers, aiming at a certain research object. It would be important that Capes only require the letter from the advisor abroad confirming that the candidate is apt for inter-peer communication. In addition, in an increasingly globalized world, there are cases where the internship takes place in the US with a French researcher, in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and extrapolate the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of PDSE internship abroad.

Current situation – 359

Goal for the 2nd year – 411

Final goal – 582

Goal 3 Provide international research and teaching experience to the professors involved

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ **Start date** - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. But this experience can also be achieved with the participation of



internationally renowned professors in seminars at UERJ, as well as participating in research meetings in the Programs. Such activities carried out in Brazil also allow for the dissemination via video conferencing and / or recording, as long as authorized by the professors involved. By the same token, it is not possible to define a current situation by numbers. We have chosen to express the increment with percentages. Thus, we start from base 100 and record the percentage increment for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Implementing postdoctoral fellowships and visiting foreign professors at UERJ

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 4 Expand the international circulation of the students involved

Activity 1 - Encourage PhD students to participate in events abroad and that all students participate in activities with foreign professors in UERJ

	Start date - 08/2018	End date -
		07/2022

Description – The international circulation of students, especially doctoral students, through participation in overseas events is highly desirable and will be fostered. However, is also achieved, sometimes less costly, with the participation of internationally renowned professors in activities at UERJ. Graduate and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary training. There are no direct quantitative indicators for this purpose, but it can be measured indirectly by the presence of UERJ students at international events and by their greater presence as co-authors in bibliographic productions with international researchers and research groups. It is worth mentioning that the presence of students in events with foreign researchers in UERJ is already elevated.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation



Goal 5 Expand the publication published abroad

Activity 1 - Publish in internationally relevant journals and in prominent publishers abroad

Start date - 08/2018

End date- 07/2022

1. **Description** – UERJ, as already described, already has a great impact abroad from its academic production. There is still room for a quantitative increase of this qualified bibliographic production. We understand that the publication with quality and impact abroad is not an end in itself, but a consequence of the interest in socializing of knowledge and exchanging ideas and data. As this is not only a matter of merely increasing the number of published products, but bolstering their impact, we consider that here we have an association of qualitative and quantitative indicators. We opted to express those in percentages. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of qualified products disseminated internationally, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 6 Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized **Start date** - 08/2018 **End date**- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Theme 2

EDUCATION IN THE CONTEMPORARY WORLD

Goal 1 Provide research experience and international teaching to the professors involved.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ. **Start date** - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. But this experience can also be achieved with the participation of internationally renowned professors in seminars at UERJ, as well as participating in research meetings in the Programs. Such activities carried out in Brazil also allow for the dissemination via video conferencing and / or recording, as long as authorized by the professors involved. By the same token, it is not possible to define a current situation by numbers. We have chosen to express the increment with percentages. Thus, we start from base 100 and record the percentage increment for the second and fourth years

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and visiting foreign professors in the UERJ

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 2 Expand the international circulation of the professors involved

Activity 1 - Work and research missions in the exterior; participation in events; collaboration networks

Start date - 08/2018 **End date**- 07/2022

Description – Many participating professors are already internationalized, either because they have graduated as doctors or had postdoctoral fellowships abroad, or because they have regular activities with foreign groups in research partnerships. However, they need support to maintain such activities,



concentrating on the constitution of solid research networks with a set of research groups instead of dispersed actions. To this end, the incentive should be directed to the activities linked to the presented project. It is worth noting that this cannot be quantitatively measured. The international circulating with impact takes time to consolidate and, even though it might be associated with the indicators described here, there are other qualitative criteria that should be considered (citations, ability to influence, being a recipient of external funding, being able to attract interest). Likewise, it is not possible to define the current situation merely with numbers. We opted to express indicators with percentages. Thus, we start from base 100 and record the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, bibliographic production and participation in publishers and journals.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 3 Provide students with internships abroad

Activity 1 - PhD internships sandwich exterior **Start date** - 08/2018 **End date**- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that in order to achieve this it is important that Capes ceases to require language proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication between researchers, aiming at a certain research object. It would be important that Capes only require the letter from the advisor abroad confirming that the candidate is apt for inter-peer communication. In addition, in an increasingly globalized world, there are cases where the internship takes place in the US with a French researcher, in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and extrapolate the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of internship PDSE abroad

Current situation – 163



Goal for the 2nd year – 296

Final goal – 546

Goal 4 Expand the international circulation of the students involved

Activity 1 - Encourage PhD students to participate in events abroad and that all students participate in activities with foreign professors in UERJ **Start date** - 08/2018 **End date**- 07/2022

Description – The international circulation of students, especially doctoral students, through participation in overseas events is highly desirable and will be fostered. However, is also achieved, sometimes less costly, with the participation of internationally renowned professors in activities at UERJ. Graduate and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary training. There are no direct quantitative indicators for this purpose, but it can be measured indirectly by the presence of UERJ students at international events and by their greater presence as co-authors in bibliographic productions with international researchers and research groups. It is worth mentioning that the presence of students in events with foreign researchers in UERJ is already elevated.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation

Goal 5 Expand the publication published abroad

Activity 1 - Publish in internationally relevant journals and with prominent publishers abroad

Start date - 08/2018 **End date**- 07/2022

Description – UERJ, as already described, already has a great impact abroad from its academic production. There is still room for a quantitative increase of this qualified bibliographic production. We understand that the publication with quality and impact abroad is not an end in itself, but a consequence of the interest in socializing of knowledge and exchanging ideas and data. As this is not only a matter of merely increasing the number of published products, but bolstering their impact, we consider that here we have an association of qualitative and quantitative indicators. We opted to express those in percentages. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative



Indicator - Number of qualified products disseminated internationally, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 6 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized **Start date** - 08/2018 **End date**- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Theme 3

HEALTH: CONTROL OF DISEASES AND ACTIONS FOR LIFE QUALITY

Goal 1. Expand the international circulation of the professors involved

Activity 1 - Work and research missions abroad; participation in events; collaboration networks

Start date - 08/2018 **End date**- 07/2022

Description – Many participating professors are already internationalized, either because they have graduated as doctors or had postdoctoral fellowships abroad, or because they have regular activities with foreign groups in research partnerships. However, they need support to maintain such activities,



concentrating on the constitution of solid research networks with a set of research groups instead of dispersed actions. To this end, the incentive should be directed to the activities linked to the presented project. It is worth noting that this cannot be quantitatively measured. The international circulating with impact takes time to consolidate and, even though it might be associated with the indicators described here, there are other qualitative criteria that should be considered (citations, ability to influence, being a recipient of external funding, being able to attract interest). Likewise, it is not possible to define the current situation merely with numbers. We opted to express indicators with percentages. Thus, we start from base 100 and record the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, production bibliography and participation in editorials.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 2 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad **Start date** - 08/2018 **End date**- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that in order to achieve this it is important that Capes ceases to require language proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication between researchers, aiming at a certain research object. It would be important that Capes only require the letter from the advisor abroad confirming that the candidate is apt for inter-peer communication. In addition, in an increasingly globalized world, there are cases where the internship takes place in the US with a French researcher, in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and extrapolate the goal for the next 4 years.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of PDSE internship abroad

Current situation – 217

Goal for the 2nd year – 254

Final goal – 342

Goal 3 Provide research experience and international teaching to the participating professors.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ
Start date - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. But this experience can also be achieved with the participation of internationally renowned professors in seminars at UERJ, as well as participating in research meetings in the Programs. Such activities carried out in Brazil also allow for the dissemination via video conferencing and / or recording, as long as authorized by the professors involved. By the same token, it is not possible to define a current situation by numbers. We have chosen to express the increment with percentages. Thus, we start from base 100 and record the percentage increment for the second and fourth years

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and visiting foreign professors in the UERJ.

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 4 Expand the publication published abroad

Activity 1 - Publish in internationally relevant journals and with prominent publishers abroad

Start date - 08/2018

End date- 07/2022

Description – UERJ, as already described, already has a great impact abroad from its academic production. There is still room for a quantitative increase of this qualified bibliographic production. We understand that the publication with quality and impact abroad is not an end in itself, but a consequence of the interest in socializing of knowledge and exchanging ideas and data. As this is not only a matter of merely increasing the number of published products, but bolstering their impact, we consider that here



we have an association of qualitative and quantitative indicators. We opted to express those in percentages. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of qualified products disseminated internationally, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 5 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized **Start date** - 08/2018 **End date**- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150



Goal 6 Expand the international circulation of the students involved

Activity 1 - Encourage PhD students to participate in events abroad and that all students participate in activities with foreign professors in UERJ

Start date - 08/2018

End date- 07/2022

Description – The international circulation of students, especially doctoral students, through participation in overseas events is highly desirable and will be fostered. However, is also achieved, sometimes less costly, with the participation of internationally renowned professors in activities at UERJ. Graduate and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary training. There are no direct quantitative indicators for this purpose, but it can be measured indirectly by the presence of UERJ students at international events and by their greater presence as co-authors in bibliographic productions with international researchers and research groups. It is worth mentioning that the presence of students in events with foreign researchers in UERJ is already elevated.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation

Theme 4

POLITICAL THEORY, HISTORY AND POWER NETWORKS

Goal 1 Provide research experience and international teaching to the professors involved.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ

Start date - 08/2018

End date- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. This experience is also increased with the participation of internationally renowned professors teaching courses in UERJ, as well as participating in research meetings in the Graduate Programs. Such activities carried out in Brazil through video conferencing servicing and / or recording for wide dissemination, as long as authorized by the professors involved. Equally it is not possible to define a current situation by numbers. We have chosen to express percentage. Thus, we start from base 100 and record the percentage increase for the second and fourth years.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and international visiting professors in the UERJ.

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 2. Increase the international circulation of the professors involved

Activity 1 - Work and research missions in the exterior; participation in events; collaboration networks

Start date - 08/2018

End date- 07/2022

Description – Professors are already internationalized, either because they have obtained doctorates and postdoctoral abroad, or because they have regular activities with foreign groups, in research partnerships. However, they need encouragement to maintain such activities, focusing not on dispersed actions, but on the constitution of solid research networks with a set of research groups. To this end, the promotion should be directed to the linked to the project presented. It is worth noting that this is not measured quantitative. The international impact movement takes time to consolidate and, even though associated with the indicators described here, there are other qualitative criteria to be considered (citation, influence capacity, to receive external investments, cause interest). Likewise, it is not possible to define a current situation by numbers. We opted to express in percentage. Thus, we start from base 100 and record the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, increase scientific bibliography production and participation in publishers.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 3 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad

Start date - 08/2018

End date- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that for this important to Capes to return with no requirement for proficiency exams. Such exams evaluate details of grammar and spelling in a foreign



language that are not required for the communication among researchers, aiming at a certain research object. It is important that Capes only require the letter from the advisor abroad indicating that confirms that the candidate is enabled for peer communication. In addition, in the increasingly globalized world, there are cases where the internship is held in the US with a French researcher or in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the number total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and we have set the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of internship (PDSE) abroad

Current situation – 130

Goal for the 2nd year – 196

Final goal – 306

Goal 4 Increase the publication abroad

Activity 1 - Publish in international journals and publishers with highlight abroad

Start date - 08/2018

End date- 07/2022

Description – UERJ, as described, already has a great impact of its production abroad. There are still space for a quantitative extension of this qualified bibliographic production. We understand that the publication of quality and impact abroad is not an end in itself, but a consequence of the interest in the socialization of knowledge and exchange of ideas and data. As it is not only a matter of increasing the number of published products, but the impact of these products, we consider that here we have an association of indicators qualitative and quantitative. We opted to express in percentage. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of qualifying international products, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150



Goal 5 Increase the international circulation of the students involved

Activity 1 - Encourage PhD students to participate of events abroad and that all students participate in activities with foreign professors in UERJ

Start date - 08/2018

End date- 07/2022

Description – The international circulation of students, especially PhD students, through participation in overseas events is highly desirable and will be fostered. However, it is also achieved, sometimes less costly, the international renowned professors in UERJ. Graduate students and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary. There are no direct quantitative indicators for this purpose, but indirectly can be measured by the presence of UERJ students at international events and by their greater interlocution in bibliographical production with researchers and international research groups. It is worth mentioning that the presence of students in events with researchers in UERJ.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation

Goal 6 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized

Start date - 08/2018

End date- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a



qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Theme 5

**EXACT SCIENCES AND ENGINEERING: THEORY, EXPERIMENTATION, MODELING
COMPUTATIONAL AND APPLICATIONS**

Goal 1 Provide research experience and international teaching to the professors involved.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ **Start date** - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. This experience is also increased with the participation of internationally renowned professors teaching courses in UERJ, as well as participating in research meetings in the Graduate Programs. Such activities carried out in Brazil through video conferencing servicing and / or recording for wide dissemination, as long as authorized by the professors involved. Equally it is not possible to define a current situation by numbers. We have chosen to express percentage. Thus, we start from base 100 and record the percentage increase for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and international visiting professors in the UERJ.

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 2 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized **Start date** - 08/2018 **End date**- 07/2022



Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 3. Increase the international circulation of the professors involved in PrInt

Activity 1 - Work and research missions in the exterior; participation in events; collaboration networks

Start date - 08/2018

End date- 07/2022

Description – Professors are already internationalized, either because they have obtained doctorates and postdoctoral abroad, or because they have regular activities with foreign groups, in research partnerships. However, they need encouragement to maintain such activities, focusing not on dispersed actions, but on the constitution of solid research networks with a set of research groups. To this end, the promotion should be directed to the linked to the project presented. It is worth noting that this is not measured quantitative. The international impact movement takes time to consolidate and, even though associated with the indicators described here, there are other qualitative criteria to be considered (citation, influence capacity, to receive external investments, cause interest). Likewise, it is not possible to define a current situation by numbers. We opted to express in percentage. Thus, we start from base 100 and record the increase percentage for the second and fourth years.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, increase scientific bibliography production and participation in publishers.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 4 Increase the international circulation of the students involved

Activity 1 - Encourage PhD students to participate of events abroad and that all students participate in activities with foreign professors in UERJ

Start date - 08/2018

End date- 07/2022

Description – The international circulation of students, especially PhD students, through participation in overseas events is highly desirable and will be fostered. However, it is also achieved, sometimes less costly, with the participation of internationally renowned professors in UERJ. Graduate students and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary. There are no direct quantitative indicators for this purpose, but indirectly can be measured by the presence of UERJ students at international events and by their greater interlocution in bibliographical production with researchers and international research groups. It is worth mentioning that the presence of students in events with researchers in UERJ.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation

Goal 5 Increase the publication abroad

Activity 1 - Publish in international journals and publishers with highlight abroad

Start date - 08/2018

End date- 07/2022

Description – UERJ, as described, already has a great impact of its production abroad. There are still space for a quantitative extension of this qualified bibliographic production. We understand that the



publication of quality and impact abroad is not an end in itself, but a consequence of the interest in the socialization of knowledge and exchange of ideas and data. As it is not only a matter of increasing the number of published products, but the impact of these products, we consider that here we have an association of indicators qualitative and quantitative. We opted to express in percentage. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of qualifying international products, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 6 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad

Start date - 08/2018

End date- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that for this important to Capes to return with no requirement for proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication between researchers, aiming at a certain research object. It is important that Capes only require the letter from the advisor abroad indicating that confirms that the candidate is enabled for peer communication. In addition, in the increasingly globalized world, there are cases where the internship is held in the US with a French researcher or in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the number total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and we have set the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of internship PDSE abroad

Current situation – 98

Goal for the 2nd year – 141

Final goal – 239



Theme 6

PUBLIC POLICIES AND SOCIAL THEORY

Goal 1 Provide research experience and international teaching to the professors involved.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ
Start date - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. This experience is also increased with the participation of internationally renowned professors teaching courses in UERJ, as well as participating in research meetings in the Graduate Programs. Such activities carried out in Brazil through video conferencing servicing and / or recording for wide dissemination, as long as authorized by the professors involved. Equally it is not possible to define a current situation by numbers. We have chosen to express percentage. Thus, we start from base 100 and record the percentage increase for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and international visiting professors in the UERJ.

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 2 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized
Start date - 08/2018 **End date**- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 3 Increase the publication abroad

Activity 1 - Publish in international journals and publishers with highlight abroad

Start date - 08/2018 **End date**- 07/2022

Description – UERJ, as described, already has a great impact of its production abroad. There are still space for a quantitative extension of this qualified bibliographic production. We understand that the publication of quality and impact abroad is not an end in itself, but a consequence of the interest in the socialization of knowledge and exchange of ideas and data. As it is not only a matter of increasing the number of published products, but the impact of these products, we consider that here we have an association of indicators qualitative and quantitative. We opted to express in percentage. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of qualifying products transmitted internationally, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 4. Increase the international circulation of the professors involved in PrInt

Activity 1 – **International work** and research missions; participation in events; collaboration networks

Start date - 08/2018 **End date**- 07/2022

Description – Professors are already internationalized, either because they have obtained doctorates and postdoctoral abroad, or because they have regular activities with foreign groups, in research partnerships. However, they need encouragement to maintain such activities, focusing not on dispersed actions, but on the constitution of solid research networks with a set of research groups. To this end, the promotion should be directed to the linked to the project presented. It is worth noting that this is not measured quantitative. The international impact movement takes time to consolidate and, even though



associated with the indicators described here, there are other qualitative criteria to be considered (citation, influence capacity, to receive external investments, cause interest). Likewise, it is not possible to define a current situation by numbers. We opted to express in percentage. Thus, we start from base 100 and record the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, increase scientific bibliography production and participation in publishers.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 5 Increase the international circulation of the students involved

Activity 1 - Encourage PhD students to participate of events abroad and that all students participate in activities with foreign professors in UERJ

Start date - 08/2018

End date- 07/2022

Description – The international circulation of students, especially PhD students, through participation in overseas events is highly desirable and will be fostered. However, it is also achieved, sometimes less costly, with the participation of internationally renowned professors in UERJ. Graduate students and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary. There are no direct quantitative indicators for this purpose, but indirectly can be measured by the presence of UERJ students at international events and by their greater interlocution in bibliographical production with researchers and international research groups. It is worth mentioning that the presence of students in events with researchers in UERJ.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation

Goal 6 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad



Start date - 08/2018

End date- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that, for this, it is important that Capes returns with no requirement for proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication among researchers, aiming at a certain research object. It is important that Capes only require the letter from the advisor abroad indicating that confirms that the candidate is enabled for peer communication. In addition, in the increasingly globalized world, there are cases where the internship is held in the US with a French researcher or in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the number total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and we have set the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of internship PDSE abroad

Current situation – 0

Goal for the 2nd year – 72

Final goal – 234

Theme 7

ENVIRONMENT: FORMATION, ENVIRONMENTAL IMPACT ANALYSIS AND NEW TECHNOLOGIES IN SEARCH OF SUSTAINABILITY AND SOCIAL AND ENVIRONMENTAL ISSUES

Goal 1 Increase the publication abroad

Activity 1 - Publish in international journals and publishers with highlight abroad

Start date - 08/2018

End date- 07/2022

Description – UERJ, as described, already has a great impact of its production abroad. There are still space for a quantitative extension of this qualified bibliographic production. We understand that the publication of quality and impact abroad is not an end in itself, but a consequence of the interest in the socialization of knowledge and exchange of ideas and data. As it is not only a matter of increasing the number of published products, but the impact of these products, we consider that here we have an association of indicators qualitative and quantitative. We opted to express in percentage. So we start from the base 100 and we recorded the increase percentage for the second and fourth years.



Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of international qualifying products, with impact

Current situation – 100

Goal for the 2nd year – 105

Final goal – 150

Goal 2 Provide students with internships abroad

Activity 1 - PhD internships sandwich abroad

Start date - 08/2018

End date- 07/2022

Description – With the consolidation and expansion of the international partnerships of research networks exist, we expect that it will be possible to extend the number of months that the PhD students from UERJ hold internships abroad. We would point out that, for this, it is important that Capes returns with no requirement for proficiency exams. Such exams evaluate details of grammar and spelling in a foreign language that are not required for the communication among researchers, aiming at a certain research object. It is important that Capes only require the letter from the advisor abroad indicating that confirms that the candidate is enabled for peer communication. In addition, in the increasingly globalized world, there are cases where the internship is held in the US with a French researcher or in Spain with an English researcher, making the definition of the communication language increasingly indefinite. In the quantitative data below, we start with the number total number of months of PDSE internship conducted by UERJ doctoral students in 2012, 2014, 2015 and 2017 and we have set the goal for the next 4 years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Number of months of internship PDSE abroad

Current situation – 59

Goal for the 2nd year – 112

Final goal – 264

Goal 3 Provide research experience and international teaching to the professors involved.

Activity 1 - Conducting postdoctoral studies by junior professors; participation of researchers in GPs in UERJ
Start date - 08/2018 **End date**- 07/2022

Description – The implementation of postdoctoral studies abroad, especially for junior professors, is a way of providing this experience. This experience is also increased with the participation of



internationally renowned professors teaching courses in UERJ, as well as participating in research meetings in the Graduate Programs. Such activities carried out in Brazil through video conferencing servicing and / or recording for wide dissemination, as long as authorized by the professors involved. Equally it is not possible to define a current situation by numbers. We have chosen to express percentage. Thus, we start from base 100 and record the percentage increase for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Conducting postdoctoral and international visiting professors in the UERJ.

Current situation – 100

Goal for the 2nd year – 115

Final goal – 150

Goal 4 Increase the international circulation of the students involved

Activity 1 - Encourage PhD students to participate of events abroad and that all students participate in activities with foreign professors in UERJ

Start date - 08/2018 **End date**- 07/2022

Description – The international circulation of students, especially doctoral students, through participation in overseas events is highly desirable and will be fostered. However, is also achieved, sometimes less costly, with the participation of internationally renowned professors in activities at UERJ. Graduate and, eventually, undergraduate students will be encouraged to participate in activities with foreign professors, whether they are held in their GP or not, allowing interdisciplinary training. There are no direct quantitative indicators for this purpose, but it can be measured indirectly by the presence of UERJ students at international events and by their greater presence as co-authors in bibliographic productions with international researchers and research groups. It is worth mentioning that the presence of students in events with foreign researchers in UERJ is already elevated.

Activity 1 - Indicator 1

Type – Qualitative

Indicator - Articulation of UERJ with international themes

Current situation – High circulation

Goal for the 2nd year – High circulation

Final goal – Very high circulation



Goal 5. Increase the international circulation of the professors involved in PrInt

Activity 1 – International work and research missions; participation in events; collaboration networks

Start date - 08/2018

End date- 07/2022

Description – Professors are already internationalized, either because they have obtained doctorates and postdoctoral abroad, or because they have regular activities with foreign groups, in research partnerships. However, they need encouragement to maintain such activities, focusing not on dispersed actions, but on the constitution of solid research networks with a set of research groups. To this end, the promotion should be directed to the linked to the project presented. It is worth noting that this is not measured quantitative. The international impact movement takes time to consolidate and, even though associated with the indicators described here, there are other qualitative criteria to be considered (citation, influence capacity, to receive external investments, cause interest). Likewise, it is not possible to define a current situation by numbers. We opted to express in percentage. Thus, we start from base 100 and record the increase percentage for the second and fourth years.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Presence in events abroad, projects in partnership, increase scientific bibliography production and participation in publishers.

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

Goal 6 Conduct consortium research on the subject in focus

Conduct consortium research on the subject in focus

Activity 1 - Continue research in the proposed themes, and expand the research networks that are organized

Start date - 08/2018

End date- 07/2022

Description – As described, UERJ develops an internationalization project based on networks of research and cooperation, involving professors and students from different institutions in different countries, focused on the development of the topic at hand. Our goal, then, is to further develop such networks. This is not achieved with mere strategies, but with consistent and articulated research work. Again, there is no quantitative indicator, although the widening of such networks leads us to increment the indicators of all the other listed objectives. However, quantitative indicators alone are not sufficient for this. We could calculate the number of agreements made and projects in partnership, but the simple quantitative extension of such activities does not guarantee impact. For the already described actions, we commit ourselves to a careful evaluation of the results of these agreements and partnerships and a



qualitative assessment of their impact, which is differentiated according to the areas of knowledge. In percentage terms, we estimate a 10% increase in the first year and 50% by the end of the fourth year.

Activity 1 - Indicator 1

Type – Quantitative

Indicator - Higher impact of UERJ's research internationally

Current situation – 100

Goal for the 2nd year – 110

Final goal – 150

STRATEGIES

1. **Strategy for the consolidation of existing international partnerships, as well as the construction of new partnerships and cooperation projects to increase the relationship between the Brazilian institution and research groups abroad.**

The expansion of partnerships is achieved by capillarity, as the groups participate in consistent research networks. These are not partnerships for specific projects, but networks between researchers in which there are various projects, articulating actions of senior researchers, junior and doctoral students in Brazil and abroad. It is through these networks that new networks are formed, in a constant unfolding of the actions begun at a certain point. UERJ prioritizes not the choice of countries, but the choice of HEIs that have groups of excellence in the priority themes. We understand that in order to expand this movement we need: (A) Funding for nucleation in Brazil of activities with Latin American partners. This allows us a differentiated insertion in the international scenario, as representatives of Latin America, as we are protagonists in the majority of the areas in this region of the globe. (B) Funding of activities carried out by scientific or research and graduate teaching associations aiming at the relationship with international research Associations. These partnerships allow participation in research networks and the presentation at international meetings in panels of greater visibility. (C) Financing for short-term visits of leading researchers from abroad. In general, for this, pro-labore stipends are necessary with compatible values with the international market. (D) Financing of international travel of Brazilian professors for short and medium term activities. (E) Conducting text production workshops geared towards publishing in foreign journals with international editors who would participate in national research meetings (as in international meetings) (F) More effective agency action to fund (cultural) translation of texts. In the Human and Social Sciences in particular, but sometimes in other areas as well, foreign language argumentation requires a strong command of the language and cultural nuances, so that the work of translation professionals is desired. For neocolonial reasons, it is common to receive a request for revision of the use of the language by a professional (even when it has already been done). This means that it is necessary to provide



resources for professional to revision and attesting to the quality of the Brazilian researchers writing. (G) For about 10% of published papers, with greater potential for citation, it would be important to finance open access publishing, which usually require hefty processing fees.

2. **Strategy to attract foreign students to Brazil.**

In this regard, not only do we enable student mobility, but we also act for the real interaction of our students with students from other countries. Our actions for PG are articulated with the actions for undergraduates: often the future students of PG are alumni of the institution. In this respect, UERJ has performed a set of actions. The University's internet homepage has information in English, French and Spanish. All of our Level 7 and 6 GPs, our International Cooperation Directorate (DCI) and many of the other GPs have pages in English and sometimes, when research partnerships lead to the need for other languages, in French and Spanish. The UERJ's Directorate of International Relations (DCI) and the Graduate Studies and Research Office (SR2) (SR2) have actions aimed at: a) local support for the reception of foreign students through the Amigo Program (UERJ undergraduates who provide advice to foreign students at the University, facilitating their academic routines and urban mobility); b) university restaurant, libraries and creation of a real estate register to facilitate the stay; c) summer courses for foreigners with the participation of UERJ students; d) offer of Portuguese for Foreigners Course (divided into four levels and taught by the UERJ Institute of Letters, 2 to 3 times a week); e) offer of courses in a foreign language; f) support for students in the framework of the PEC-G and PEC-PG, increasing openings in various courses; g) incentive to internationally co-sponsored dissertations, now numbering 70; h) Dissemination of Faperj's Reverse Doctorate calls with international researchers participating in research networks with UERJ; h) dissemination of the PNPd Capes calls to international researchers that participate in research networks with UERJ, since the arrival of a foreign research to carry out DP in Brazil assists in the creation of links between foreign undergraduate and graduate students in UERJ; i) dissemination of opportunities in other UERJ campuses, as a result of a policy of internalization begun 25 years ago: Ilha Grande, Nova Friburgo, Petrópolis, Rezende, Teresópolis, cities where the cost of living is lower than RJ. j) Strengthening of research networks, since it is mainly through the contacts and partnerships between UERJ researchers and researchers from abroad that relationships are established that make our institution attractive for foreign students.

3. **Strategy to attract faculty and researchers with international experience.**

As a result of the international experience of UERJ professors, we have an expressive participation of international researchers (see Sucupira Platform). The most outstanding participated in the Higher Education Schools program from CAPES. Our strategies to increase this number of guests have been developed with funds from agencies and UERJ itself. We believe that, in addition to the conditions for staying in the city, UERJ is attractive to foreign researchers because they are effectively inserted into our research networks. Through our mutual interests, the exchange of ideas, research results and the possibility of disseminating their work to a broad readership, we



guarantee an international interest. The stimulus to the formation of these networks begins with the participation of the teachers in activities abroad. Since 1980, with the implementation of the Special Professor Training Program (Procad), UERJ has been investing in the training of its teachers in HEIs abroad. In the first 15 years, an average of 30 professors / year obtained doctorates abroad. Starting in the 2000s, the investment was in postdoctoral studies in foreign institutions. Between 2007 and 2017, more than 430 teachers performed postdoctoral studies, ranging from 6 to 24 months, mostly in Europe (305) and the United States / Canada (97). UERJ also has a policy of releasing teachers to participate in events and short-term work missions abroad, and has secured funding for these activities over the past 10 years. With special reference to fostering the arrival of foreign researchers, UERJ created in 2014 the International Visiting Professor Program for highly qualified foreign researchers to stay in UERJ for 1 to 12 months. This program culminated in the launch of the French Chairs Program, which aims to receive renowned French researchers for a period of 60 to 365 days, with a scholarship from UERJ and travel expenses provided by the French Embassy. It is not possible for all students to enjoy a sandwich internship abroad, such courses are a unique opportunity for students to make contact with the academic forms in force in other countries. Likewise, the GPs financed the visits of foreign teachers through Proap, Proex, Faperj or CNPq grants. With the scholarships provided in Capes PrInt, we will be able to extend the reception of foreign visiting researchers.

4. Strategy to prepare the scholarship holders for the period abroad as well as for their return, especially in order to increase the knowledge appropriation by the institution.

We do not consider that one or more specific strategies are required. We understand that the main guarantee of preparation of the professor / student for the period abroad, as well as for their return, is their insertion in the research network. In order for the student and / or the professor, especially the junior ones, to be well received for research fellowship abroad, capable of guaranteeing the possibility of study and effective insertion in the production of knowledge, it is necessary that the professor and the research group who will receive this student / professor abroad already participates in the network, with its members having an interest in maintaining the partnership. SR2 / UERJ strongly discourages that work and / or study missions abroad are carried out at universities with which there is no prior articulation, common research interests or stronger links, or data exchange, organization of joint publications and / or prior contact in events in Brazil and / or abroad. For this, the leadership of a senior researcher who articulates the actions and introduces the new teachers and students in the research network is fundamental. In addition it is necessary that the members of the research network - and, among them, the advisor and respective supervised students - remain in close contact during the internship abroad. SR2 / UERJ therefore directs that the group's research meetings take place with at least a virtual presence of group members, whether they are professors or students, who are abroad (via Skype or videoconference or even a constant exchange of information via online groups) .A more organized presentation of results of the



work and study missions when the members of the research network in question return to the country is also encouraged. As it is in UERJ's interest that such activities are not limited to the University, we have used the WEB TV UERJ to disseminate the online courses or digital media recordings for wide dissemination. With this, both the adaptation abroad and the appropriation of local knowledge are guaranteed.

5. Describe innovative strategies that will be used by the institution that were not mentioned above.

We will initially use this space to highlight the innovative political strategies that have been and continue to be used by UERJ in the last twenty-five years. Strengthening the institutional policy of financing and raising funds for research and graduate activities, we also point out two programs that, by their scope and results, allow us to ensure the assertiveness and commitment of UERJ to this issue: the Incentive Program for Scientific and Technological Production (Prociência) and the Support Program for Research and Graduate Teaching (PAPD). The Scientific, Technical and Artistic Production Incentive Program (PROCIÊNCIA) is intended to value the scientific, technical and artistic production of the University's teachers who opt for the exclusive dedication regime, in accordance with State Law 6328 of October 2nd, 2012, by conceding a special grant to encourage scientific, technical and artistic production, as defined in terms of Deliberation 25/2013 and in accordance with art. 16 of State Law 5,343 of December 8th, 2008. This Program was conceived as a promotion action aimed at achieving three basic objectives: settling researchers, incentivizing scientific, technical and artistic production and stimulating the interaction between the various research groups. It is an innovative program among Brazilian universities, since it institutionalizes a periodic evaluation, which takes place every three years, through a competitive selection mechanism. The admission and permanence in the Program are based on the judgment of internal and external selection and monitoring committees, which use evaluation criteria compatible with those adopted by the development agencies. The scholarship is paid through a UERJ / Faperj technical cooperation agreement.

Today, Prociência has 488 scholarship holders throughout the institution. The Support Program for Research and Graduate Teaching, in turn, is geared towards national or foreign teachers or researchers, with a doctoral degree or equivalent, in order to support the development of Graduate Programs, the implementation of special programs in graduate teaching and research, to contribute to the improvement of Graduate Programs' teaching, research and outreach and technical-scientific training, as well as to enable the scientific and technological exchange of the University of the State of Rio de Janeiro - UERJ with other educational institutions in the scope of graduate teaching and research. These actions as a whole have ensured the infrastructure for graduate teaching and research development at the University. Additionally, there is the organization of the internationalization policy, as already described, by the articulation of international activities in the same research network. By mapping the consolidated research networks and training in the institution, it is possible to better



manage the internationalization policy, identify where the resources should be applied and guarantee better conditions for the groups of excellence. In order to expand these actions that are already carried out by UERJ, SR2 has encouraged the use of online platforms to make available in other languages the GPs' study guides with the texts and materials proposed for the study of the graduate students. As far as possible, we will also invest in recording and making available online for downloading foreign language lessons of crucial subjects in each GP. With each GP involved in Capes PrInt (mandatory) and each GP not involved in Capes PrInt (optional), it is also the objective of SR2 / UERJ to organize a workshop to exchange internationalization experiences, as well as to evaluate what is being done, drawing goals for the next few years. This workshop will also develop a policy of strengthening the use of social networks between students and teachers of the same GP, so as not only to strengthen academic ties, but also to exchange ideas and create support networks that favor personal relations of trust between the with teachers and technical-administrative staff. Another strategy that has already been implemented by SR2 and which we consider fundamental for the organization of a good internationalization policy is the organization of research databases. We have worked with the Sucupira Platform data, seeking interoperability with our databases, as we already have with the Lattes Platform of the CNPq. Thus, for academic management in general, we have linked data from the Prociência program and the Scientific Initiation program with the data of the Sucupira Platform. With the advent of Capes PrInt, we are already organizing a database of research projects, in which both the national and international financing of the projects will be registered, aiming at their monitoring and evaluation.

POLICIES

1. Policy for selection of foreign partners, considering that 70% (at least) of the resources should be earmarked for partnerships with institutions based on countries that Capes maintains effective cooperation (listed in Annex I of the call).

As already described in our general objective, we have clarity about the importance of an internationalization project that values English language communication and the possibility of establishing agreements with countries where the development of research is more advanced than ours, notably South-North. We do, however, consider that we cannot establish subordinate relations, without the due counterpart of attempts to seek international support for our actions abroad. We must also be aware of areas of knowledge in which South-South relations are important, due to the focus of research in question. Thus, the pre-definition of countries has never seemed to us the best strategy for an internationalization policy that wants to achieve effective results of prominent insertion (including participation in editorial policies of journals and citations). Not to mention that this pre-definition assumes freezing for 4 years the relations established today, disregarding changes of focus and new articulations to be formed. Moreover, even countries with a long history in scientific research, such as the United States or Germany, do not have the same quality in all their universities. In this way UERJ's policy has always been to incentivize the formation of research networks with excellence groups on subjects in which we have an expertise,



both aiming at the academic penetration of our researchers in the globalized spaces that today take the lead in scientific research, as well as for the University to take the lead in academic research in the circuit currently considered peripheral in scientific research, notably Latin America. It should be noted that the established leadership of Brazil in Latin America favors that our internationalization actions in the region are already guaranteed by funding from Latin American universities and development agencies. It is therefore in the financing of the internationalization actions with the excellence groups of North American and European Universities that we focus the search for support via Capes PrInt. The way to ensure compliance with this policy is established in the following item, which indicates our policy of internal selection of beneficiaries.

2. Grant policy and internal selection process for specific actions, within the funding lines of the Capes-PrInt program. In the case of cooperation projects with foreign institutions, the proposer should specify the application of funds, the plan of activities, reciprocal funding, academic mobility, technical - scientific production, counterparts in the partner institutions, among others.

In order to guarantee the research network policy described in the previous item, as well as to guarantee the beneficiary selection criteria described in item 3.4.1.9 of the Capes PrInt Call, SR2 / UERJ, in the internal process of selecting projects for Capes PrInt, requested of each GP Coordinator to complete, along with his Collegiate of core professors, two forms. In the first, the GP was required to elaborate a proposal for internationalization, which includes diagnosis, goals, indicators and internationalization strategies. In the second form, researchers, especially seniors, were asked to register the Universities involved in international research networks and to justify the relevance of these institutions to the project in question (see form submitted to GPs, contained in the Executive Summary of the Institutional Plan aligned with Project presented in PrInt). Researchers were also asked to present training projects for new internationalization research networks and a detailed description of what funding was used to sustain these networks in the last 5 years. Each internationalization project, therefore, articulates different projects, with or without specific funding for internationalization. It is these projects that support the formation of multilateral networks, which, as registered here, are formed with the countries listed among those to which Capes aims to allocate 70% of the Capes PrInt funds, while not including in the same network, to a lesser extent, the countries that are listed among those to which Capes aims to allocate 30% of the Capes PrInt funds.

Also in order to ensure compliance with these criteria, SR2-UERJ has opened a Call for the internationalization projects for Capes Print with the following criteria for evaluation of projects by the Management Group: a) Higher PGP score in Capes' four-year evaluation. b) Proposal that has already been finalized or completed in the last three years (2015-2017) by Capes or another development agency, justifying the need to complement resources. c) Larger number of CNPq research fellows, Scientist from Our State Faperj, Young Scientist from Our State and participants in the Prociência program involved in the proposal. D) Higher bibliographical output of the teachers involved. E) Proposal that includes one of the countries included in Capes' priority list.

3. Policy for hiring faculty with recognized scientific performance at an international level.

In UERJ's experience the most successful model to bring to the institution researchers of high international recognition is the CAPES' School for Advanced Studies. But we have also sought actions for long-term hiring of qualified researchers, members of the research networks, in Brazil and abroad, nucleated by UERJ. SR2 UERJ has acted towards facilitating as much as possible the procedures for settling the foreign researcher in UERJ, with adequate conditions to carry out his/her work. To that end, UERJ has noticed the development agencies about the need to solve problems related to the entry of these professors into the country. Capes, for example, has advised researchers from the United States to apply for a VITEM I visa - a visa for those who come to Brazil for research purposes, regulated in the RN 20/2017 of the CNIG. However, in our experience, it is impossible for the foreign researcher to obtain this visa in the USA, since it requires the presentation of an employment contract, which cannot be provided in the case of a scholarship. Thus, many come to Brazil with VITEM V, possible in case of stay for less than 90 days, but this visa leaves them at risk of an irregular situation. This is an important point to consider, especially in the case of American researchers who come to Brazil for longer periods. Therefore, we also believe it is important in future calls for Capes to make it possible to pay one scholarship per course, not per month, as it is currently. It is difficult to get a quality international researcher in the country for a month. The total value of the monthly scholarship of the School of Advanced Studies, for example, would be attractive for condensed courses in shorter periods. For courses of one or two weeks, the proportional values are very low with the current dollar exchange. Likewise, it is necessary that this amount be paid abroad, since it is not allowed by the Brazilian Central Bank the remittance of high values or its conversion to dollars by foreigners. Although these difficulties exist, we have achieved prominence in attracting foreign researchers, through the UERJ Visiting Professor Program. Prociência, on the other hand, is a particular attractive when hiring highly productive researchers who come to UERJ a real space to be valued for their academic production.

4. Policy to increase proficiency in foreign languages for students, Graduate faculty and technical staff that have a direct relationship with the proposed Internationalization Project.

This is a real barrier to the expansion of internationalization, since it is not sufficient to master a foreign language – notably English, a lingua franca in the hegemonic academic world at the moment – at the basic level. There is a need for a domain that provides argumentative communication with international researchers. Such a barrier, in a way, has already been overcome with the professors of GP 7, 6 and 5, but much still has to be done at the level of other GP, students and technical-administrative staff. Aiming to promote actions to overcome the difficulty of academic communication in foreign languages, UERJ has been seeking: a) to train administrative technicians directly involved in internationalization actions; b) develop EMI (English as a Mean of Instruction),



ELT (English Language Teaching) and internationalization strategies; c) train professors to offer classes in English (UERJ International Program of the Institute of Letters of UERJ); d) prepare undergraduate and graduate students for proficiency testing. In 2012, DCI, in partnership with the Institute of Letters, submitted a project for the FAPERJ Call for Proposals 09/2012 Support for the Creation and Implementation of International Assistance in Scientific and Technological Institutions Program based in the State of Rio de Janeiro for the installation of a Laboratory to prepare UERJ students for English proficiency (TOEFL). The Training Laboratory for Examinations of Proficiency belongs to the Institute of Letters of UERJ, has 41 complete computers with stabilizers and headphones and 01 Cache Proxy computer. The teaching material consists of: complete kit provided by ETS (one for each student); software with simulated exams; software for classroom use installed on computers and material prepared by professors. This material was fully financed with funding from FAPERJ.

5. Policy for recognition of academic and scientific activities performed by faculty and students abroad.

UERJ has been working in the last fifteen years to defend curricular flexibility without giving up academic quality and rigor. So much so that it adopted without restrictions the conception of flexible curricular structure that constitutes the basis of recognition of diplomas via Carolina Bori Platform (process created by the Ministry of Education). We agree that the exchange of undergraduate students and the mobility of masters and doctoral candidates require the acceptance of different forms of training, credit registration and graduation internationally practiced. Thus, we work to promote the mutual recognition of undergraduate and graduate credits abroad. The recognition of credits in the undergraduate course starts with a request from the student in the secretariat of his/her academic unit. The student, in possession of the transcript of notes and syllabus referring to subjects taken outside UERJ, requests the recognition of credits made. The subjects studied, according to the syllabus previously approved by the academic unit of UERJ, are submitted to the Departmental Council of the Unit for the assessment of the equivalence of credits, and it is up to the body to recognize its equivalence. The credit equivalence record is recorded in the student's academic record under the heading "exempt". When there is no correspondence with the discipline offered in the student's curriculum in the school history, registration is done as a complementary activity. In UERJ, the monitoring of the standardization of credits and academic and scientific activities carried out by graduate students abroad is the responsibility of the Colleges of GP and the Department of Education Development for Graduates (DEPG) of SR2, provided they are approved by the High Councils. In this sense, SR2 encourages all GP to include in their deliberations the criteria for accepting credits made in other GP, whether in Brazil or abroad. It is also stimulated the prediction of the criteria for the acceptance of research and exchange activities in the form of Non-disciplinary Programmed Activities, in order to allow credits to be assigned for activities carried out



in other GP, under the supervision of a partner advisor, provided that they are duly evaluated by the mentor of the Graduate in Brazil.

6. Policy for hosting and support of foreign faculty, researchers and students.

Through the GP, under the leadership of SR2 / UERJ and DCI, efforts are being made to strengthen local support for the reception of professors and researchers, as well as for foreign students, especially by facilitating the circulation of information necessary for their stay in UERJ and to reduce bureaucracy, as far as possible, the issuance of certificates and declarations for processing to the competent bodies. However, some of the greatest difficulties for the reception and monitoring of these professors, researchers and students are not due to University actions. We understand that the Ministry of Education and the Ministry of Foreign Affairs must establish agreements that guarantee greater agility and welcome to all those who come to Brazil for study and work assignments in universities, particularly with funding from research promotion agencies. Often the procedures for visa of foreigners in Brazil are not fast enough to guarantee the fulfillment of the deadlines of the agencies. Currently, the new Migration Law of May 24, 2017 (Law no. 13445/2017) is still being adapted. Normative Resolution No 20 of December 12, 2017, which aims to discipline the granting of temporary visa and residence permit for research, teaching or academic extension to a scientist, researcher, professor and to the foreign professional who intends to come to the country, with term of stay of more than ninety days, has just been modified. As a result, the new procedures are still being defined. As far as UERJ is concerned, we seek to invest in our infrastructure, especially in the university restaurant and libraries, with the most agility coming from abroad for short or long term mission in the institution. Likewise, DCI created of a register of UERJ properties to facilitate access to foreign lodging. Although these properties are not sufficient to account for the demand of GP, they are especially important to facilitate the permanence of those professors who do not receive a scholarship compatible with the values of hotel rates in the city of Rio de Janeiro. We emphasize that the activities carried out at our other campuses, outside of Rio de Janeiro, do not face this difficulty, because of the lower cost of living.

7. Policy for the appropriation of knowledge and experience acquired abroad by the beneficiaries of the actions of the Institutional Internationalization Project.

UERJ's policy of appropriation of knowledge and experience acquired abroad is based on the articulation of research projects in Brazil and abroad in the development of its institutional capillarity. Internationalization in UERJ is based on research networks, associated with the articulation between GP and the establishment of visible and institutionally evaluated relations in UERJ or by development agencies. With this format, the appropriation of knowledge and experience is guaranteed by the articulation of research with internationalization. If each researcher, professor or doctoral student who carries out activity abroad has close links with a research group at the



University, his/her activities abroad are followed by the group in Brazil. Reports are exchanged and bibliographic productions are planned together. Aiming at the Capes PrInt Notice, SR2 UERJ strongly encouraged that each project was organized around certain focus groups and research groups in networked universities. With this, it can be guaranteed that a researcher performs activity abroad in an university that has articulation and resonance with the activities carried out by his doctoral student or the one in his/her research group, whether these internships are carried out in the same institution abroad or in different institutions. In order to consolidate this design, SR2 UERJ intends to guarantee the widest visibility of PrInt's actions among all UERJ's GP through a specific web page, so that there is greater synergy of the actions carried out and possibility of jointly confronting the difficulties related to internships abroad. Thus, even doctoral students of GP from different areas can exchange information and establish personal and professional ties when they take internships at the same University or in the same country abroad. As already described, we also make use of WEB TV UERJ for this purpose, divulging courses and lectures of national and foreign researchers.

8. Policy for management and operationalization of the Institutional Internationalization Project.

In order to lead the implementation of its internationalization policy, particularly under the auspices of Capes PrInt, UERJ, through a collegiate decision in the SR2 Advisory Board, brought together researchers from different areas of UERJ with international experience, mostly linked to GP 6 and 7 of the institution (details on the international insertion of the members of this Management Group are in the Executive Summary of UERJ's Institutional Plan, attached), as well as its foreign partners with international prominence. These researchers discussed the different ways of planning and implementing the internationalization policy in the different areas and jointly produced a first version of this document which, in turn, guided the debate on internationalization that resulted in the present proposal of PrInt UERJ, under the leadership of the Graduate Studies and Research Office (SR2). This policy, in turn, is fully in line with UERJ's Internationalization Plan for graduation, Graduate and extension, prepared by DCI / UERJ in partnership with the Sub-Chancellors and approved by its Advisory Board, attached to this online form. For the evaluation of the internationalization policy, SR2 UERJ intends each year to hold a broad workshop, as already mentioned, to present the experiences of internationalization of GP by professors and students. Likewise, semi-annual meetings are being planned as the Management Group with the coordinators of the 52 Capes PrInt projects of UERJ and the PGP Coordinators to follow up, evaluate and improve the internationalization policy, in the way as Capes holds the meetings to follow the GP. To support the operationalization of UERJ's Institutional Internationalization Project, SR2 UERJ, in partnership with DCI, composed a Financial and Institutional Operationalization Group of Capes PrInt UERJ, led by SR2 Assistant UERJ Maria Del Carmen Corrales, supported by Juliana and Marcos Paulo Nascimento (DCI). This group will carry out the final accountability of PrInt UERJ, based on what is sent by the Management Group, by the project coordinators and coordinators of GP, to guide



professors and students in the correct forwarding of documents from PrInt to Capes; suggest changes of heading, when applicable. In this process, the Financial and Institutional Operationalization Group of Capes PrInt UERJ will be supported by DAF-UERJ's agreement sector.

9. Policy for monitoring and internal evaluation of the goals of the Institutional Internationalization Project.

Inasmuch as UERJ's Internationalization Project for Capes PrInt, as described above, is part of the activities already carried out by the institution's GP and is the result of the installed research, with previous funding history and developed under the coordination of senior researchers, most of them procientistas, PQ and / or CNE Faperj scholarship holders leading GP of excellence, the process of monitoring and internal evaluation of their goals and execution is already reflected in institutional routines. The reports of the GP in the Sucupira Platform are monitored by DEPG / SR2 / UERJ; the reports of the procientistas are monitored by Depesq / SR2 / UERJ; and the results of international agreements are monitored by DCI / UERJ. All these reports usually include the results and goals achieved in the works developed in national and international research networks. In order to deepen this process and ensure the specific follow-up of the activities of PrInt UERJ, the coordinators of PrInt projects that will be financed under this call will be asked to present to the Management Group every six months concise reports with the implemented scholarships, missions accomplished, expenditure of funding and goals of bibliographic production and exchange of data and results. The meetings planned and mentioned above between the Management Group and the project coordinators also ensure the follow-up of actions and possible course corrections. The promotion of an annual Workshop to present internationalization experiences also facilitates the wide dissemination of actions, especially for those who do not participate in PrInt UERJ. The intention is to effectively publicize PrInt actions with the project participants, aiming at the synergy of actions, as already mentioned.

10. Policy for the conciliation of national development programs supported by Capes to the internationalization effort.

UERJ's option, for several years, due to its internationalization through the funding of research networks already developed by the GP, also focuses on the conciliation of national development programs, whether supported by Capes or by other agencies, with international actions. In addition, the internationalization already carried out by UERJ researchers has also been financed by the grant of researchers 1 of CNPq, by scholarships of Faperj's Our State Scientist and Young Scientist of Our State or even by miscellaneous research projects from different agencies of development. If the focus is not a specific internationalization action, but research and production of knowledge, financing, whether it be national or international, of this research and of this knowledge production will be carried out in an articulated way, broadening its capillarity and its results. Thus, many of the projects listed in PrInt, if not almost all, also have national funding or are linked to other actions carried out within the scope of other GP in Brazil. UERJ has extensive experience of good projects



in bilateral agreements, such as Capes Cofecub, a program we have been participating in since 1980, as well as the training of human resources in Brazil and abroad.

11. Describe here other innovative policies that will be adopted by the institution that were not addressed in the above items.

As a summary of what we have reported up to now, we have taken advantage of this space to highlight the aspects of internationalization that did not seem sufficiently contemplated by the previously requested items. We understand that the internationalization of the Graduate Studies of Brazilian Universities only makes sense if articulated to the production of knowledge, technology and qualified bibliographic production. If science has always had a globalized feature, in the name of the mutual interest of researchers in the exchange of information and results, the recent expansion of global communication processes has only amplified this need – and often the desire – of this international exchange. But if we want to participate in this process in an articulated and leading way, we must prioritize actions that guarantee the visibility of our qualified production in international vehicles, through its action in the international editorial policy. We argue that the qualified publication cannot be increased with strategies. Consistent work of participation in international communities is needed so that participation in the research culture enables production to be communicated to a culturally distinct audience. This is especially relevant in the areas of human sciences where knowledge produced is more strongly context-dependent. Even in the case of theoretical elaboration, post-colonial and post-foundational studies have already demonstrated that theory cannot be understood as independent of context. Abstraction and idealism have been negatively evaluated by researchers in the field of social sciences and humanities and increasingly being incorporated into other areas, especially with the development of interdisciplinarity. UERJ's movement has been to seek a lasting insertion and quality in the international community. In this sense, we have worked with the goal of increasing our GP 7 and 6, as well as our international research networks in all GP, aiming at the same time greater publication, high visibility and the consolidated international insertion of researchers, such as the expansion of training of qualified human resources.

UERJ already has an expressive international prominence, and to maintain this prominence it is understood that it needs:

- (A) Financing of Brazilian professors going abroad in short and medium term activities.
- (B) Conducting text production workshops for foreign journals with international editors who would participate in national research meetings (as in international meetings).
- (C) More effective action by agencies to finance (cultural) translation of texts. In Human and Social Sciences, argumentation in a foreign language requires a strong command of the



language and cultural nuances, so that the use of professionals is desired. It is necessary to provide resources for a professional to review and certify the quality of writing.

(D) Financing of doctoral sandwiches internship abroad and reverse doctorate in Brazil (item not provided in PrInt), guaranteeing the mobility of doctoral students with research articulated to institutional experts.

(E) For about 10% of published papers, with greater potential for citation, open access funding would be important.

As actions to increase research networks, the model chosen by UERJ to organize its internationalization, it is necessary to:

(A) Support research conducted in Brazil (as a node of the network) dealing with the local or multilateral contexts.

(B) Support nucleation, in Brazil, of activities with Latin American partners. This allows us a differentiated insertion in the international scenario, as representatives of Latin America, as we are protagonists in most of the areas in this region of the globe.

(C) Finance activities carried out by scientific or research associations and graduation studies aimed at the relationship with international research associations. These partnerships allow participation in research networks and the presentation of panels at international meetings in those of greater visibility.

(D) Finance international trips for events when articulated with short-term internships and work assignments at Universities in the city of the event that have prominent groups on the theme in focus.

(E) Expansion of institutional policies that facilitate the displacement of researchers abroad, at which point SR2 / UERJ has worked in a remarkable way, simplifying internal procedures for the release of professors.

(F) Finance the visiting, for short-term activities (not really congresses in which participation is, in many cases, reduced to a conference), of leading researchers from abroad. In general, for this, pro-labore is necessary in values compatible with the international market. In this sense, as already mentioned, the importance of Programs such as the Higher Studies School of Capes is highlighted.

INSTITUTIONALS INDICATORS

Number of courses taught in foreign languages in post-graduate studies between 2013 and 2016	50
Number of Graduate Programs stricto sensu cotutela between 2013 and 2016	25
Number of Graduate Programs stricto sensu with double titration between 2013 and 2016	0
Number of Graduate Programs stricto sensu between 2013 and 2016	0
Number of contributions for derivatives and database of international research projects	1020
Number of development programs of the Capes of which the institution benefited between 2013 and 2016	32
Number of international cooperation projects Capes from which the institution benefited between 2013 and 2016	345

Prediction in the curricular structure of Graduate Programs of insertion of materials, subjects and subjects in a foreign language.

Especially the GPs 6 and 7, are already planning to organize disciplines in foreign language, associated with the topics listed in PrInt; GPs 5 are also planning for this. It is worth mentioning that we are referring to the disciplines exclusively in the foreign language. It is usual for GPs to have part of the discipline's activities in another language: whenever a foreign visiting researcher is received at the GP, their activities are included in the regular GP courses. We are also organizing the systematic preparation of teaching materials in other languages to be made available online for the students enrolled in GPs. The socialization of this material in a non-systematic way is already common practice in classes and research groups in GPs and often in the University graduation. We took advantage of this space to justify the numbers presented in terms of contributions of derivative products and cooperation projects. We do not consider that these numbers are a measure of the impact. They are just quantitative records that do not tell too much. UERJ's impact on internationalization is measured by the international rankings, already described, by our high impact bibliographic production and by so many other intangible factors that can only be identified by an overall qualitative assessment. This evaluation is constantly performed at UERJ, through the Program Prociência, in the database of scientific production and by the different processes of institutional evaluation, mainly those related to the teaching career.



EXPECTED BENEFITS

Theme1 - CULTURE AND SOCIAL THEORY: FOCUSING RIGHT, WORK AND SUBJECTIVITY

INTERNATIONAL COOPERATION PROJECTS

Name of the project: Geopoetics and New Epistemes: Art and Culture in Contemporary Art
08/08/2018 **Start date** - 07/31/2022 **End date**

Description

The issue addressed is justified by a global scenario marked by a broad theoretical and public discussion on the colonial legacy, post-colonialism, and the decoloniality of power and knowledge. Research that involves Brazilian professors (UERJ), from Argentina (UBA and National University of San Martín), from Mexico (UNAM) and United States (UC / Berkeley) has as its main focus a transdisciplinary approach and a theoretical engagement that seeks to question the advance of conservative policies and denounce the epistemicide of knowledge that is reflected in the epistemes of southern western universities, which reproduce dominant structures of knowledge founded in Eurocentric historical narratives, which provoked, among other consequences, epistemic racism / sexism. In proposing the writing of geopoetics and new epistemes the project inscribes the relations of art and culture in the contemporaneity, unveiling its aesthetic and political power. GP Arts of UERJ is formed by professors of different lines of research that have common interests regarding the relations between art, culture and politics, mainly on issues such as post-colonial studies and the decoloniality of power, ethnic-racial relationship and the African diaspora, through transdisciplinary approaches that include dialogues with the anthropology, history and the teaching of art. As already mentioned, the project brings together professors from UERJ, from Argentina (UBA National University of San Martín), Mexico (UNAM) and the United States (UC / Berkeley) with the objective of inscribing geopoetic and new epistemes that seek a view on the relations of art and culture in the contemporaneity of a post-colonial perspective, in dialogue with the critique of studies of the decoloniality of power to the epistemicide provoked by the colonial legacy in the westernized universities. The main challenge of the project is to understand the experiences of art in this field of dispute, conflicts and negotiations.

Name of the project: Culture, Subjectivity and Emotions

Start date: 01/08/2018 **End date** 31/07/2022

Description: The creation of anthropology of emotions as an autonomous area of investigation began in Brazil in the 1990s, with the Research Group on Anthropology and Sociology of Emotions (Prof. Mauro Koury) at the UFPB and with the research line "Transformations of Intimacy" (Prof. Claudia Barcellos Rezende and Maria Claudia Coelho) in the Graduate Program in Social Sciences of UERJ. Since then, the area has experienced a strong development with the meetings of scientific associations in Brazil, such as ABA and ANPOCS, and international meetings, such as Meeting of Anthropology of Mercosur, European Association of Social Anthropology, Portuguese Association of Anthropology and the Argentine Association of Anthropology. Among the topics addressed are the relationships between emotions, body and health / disease experiences and the micropolitical work of the emotions in



phenomena of public life, such as violence, policing, social movements, institutions and universes / professional trajectories. Based on this trajectory, this project articulates researchers from the lines "Culture, Subjectivity and Emotions" and "Intellectuals, Policy" of the GP SOCIAL SCIENCE. The interweaving among the lines occurs through the conjugation of the study of the emotions to the study of the trajectories of intellectuals in some research projects, as part of the broader heading "emotions and universes / professional trajectories". The central objective of this project is the formation of an Ibero-American network in Anthropology of Emotions through the fostering of interlocution among researchers from Brazil, Argentina and Portugal. This promotion will take place through the interlacing of four formats: a) participation in events, mini-courses and workshops as part of the visit work plans; b) publications in co-authorship and co-editor of books; (c) the creation of a site dedicated to the dissemination of research and events; d) comparative research projects. This proposal is based on four main themes that should surround the limits and possibilities of construction of the emotions like object of the social sciences. They are: a) emotions, intellectual trajectories and scientific fields; b) body, health, emotion and gender; c) suffering, crises and caution; and d) policing, security and emotions.

Name of the project: Law and Social Sciences (Netsal Sociological Theory)

Start date 01/08/2018

End date 31/07/2022

Description

Theories are always underdetermined by facts and facts are always overdetermined by theory. The project aims to dig up and systematize the philosophical presuppositions of sociology to develop a cosmopolitan and reconstructive social theory. In more general terms, the research project intends to systematically relate the metatheory, social and sociological theory in a unified perspective that it is called "social reconstructive theory." It is inspired by critical realism of Roy Bhaskar, by the critical theory of Jürgen Habermas and by the anti-utilitarian theory of the action of Alain Caillé. It points to a "Habermasian" synthesis (sic). Although it does not intend to elaborate a philosophical system with transcendental deductions from a last foundation (letzbegründung), we are convinced that the transcendental presuppositions of sociology can be systematically mapped (metatheory) (i), that these meta-theoretical presuppositions can be worked out in a general theory of society that offers a framework conceptual framework for the analysis of social action, order and change (social theory) (ii), that this social theory philosophically informed can serve as the basis for a critical theory of modernization and globalization (theory sociological) (iii), and that this sociological theory of the main dimensions and directions of modernization in the global era prepares the ground for qualitative research in local communities (social ethnography) (iv), as well as for practical, transformative and concrete interventions in collaboration with community-based organizations (sociology applied transformative). The present project format is mainly theoretical, but does not in any way exclude possibility of assuming a more empirical and practical direction. International relations are developed with France, Belgium, the USA, the United Kingdom and the Netherlands, through exchanges with the following universities and research groups: MAUSS, YALE, SUSSEX, WARWICK, CCS / YALE, UVH, CRUISIS / UNIVERSITE CATHOLIC DE LOUVAIN, ENS / LYON.



Name of the project: Language, Migration and Work

Start date 01/08/2018

End date 31/07/2022

Description

The intensification of migratory flows in the last two decades has produced relevant and current demands in the world of work, which enable the insertion of researchers in the area of letters / linguistics into multiprofessional teams to analyze concrete work situations, promote intercultural training and impacts on literary and philosophical production. The shared challenge between the State and civil society lies in the elaboration of practices of integration of refugees in the context of work and social life. In this direction, the investigation of issues such as the analysis and formation of work groups, the presence of stereotypes and stigmas in these circuits, the expansion of the processes of formation for work are some of the demands already presented to the group and their reflections in the literature and in the philosophy. Considering that there are few links between labor sciences and migratory studies, the proposed articulation here emphasizes the innovative nature of the researchers who are part of this project working in national and international research networks in the language / work and literature / philosophy and experience in orientation, in the ambit of the GP Letters and Linguistic, in dissertations and theses that deal with these topics. This project aims to reflect on the relationships between the complexity of historical and contemporary migratory flows and the different modalities of insertion of individuals into the world of work and the intellectual universe. For this, the project proposes the theoretical approximation of the work sciences and ergology with the discussions originating in the field of intercultural relations and the analysis of discourse and interactions. The field of analysis and intervention will be based on the joint investigation of voluntary and forced migratory processes and their effects on individuals and integration communities. The results will enable theoretical articulation, training of researchers and production at the international level, as well as social relevance arising from the policies of integration of immigrants and refugees, nowadays and in historical perspective. This debate has already been strongly developed with København University (University of Copenhagen, Denmark) and Università della Svizzera italiana (University of the Italian Switzerland).

Name of the project: Law and Social Sciences

Start date 01/08/2018

End date 31/07/2022

Description

The present project intends to induce in UERJ the formation of pole that aggregates international discussions about problems rights and their relationship with society and politics in different contexts. It arises with the aggregation of this proponent to IESP-UERJ (2015), and the recent foundation of the research group he leads: core research in law and social sciences - decision. The framework of academic production shows that, at the moment, it is possible to affirm the sociology of law as a mature field of research in the Brazilian context. The primary purpose of this project is to highlight this fact, explaining the need for a more precise cut in favor of a political sociology of law - a specific field that has a long history of intellectual consolidation. The completion of this cycle of expansion imposes a series of reflections on: 1) the trajectory of the sociology of law in the context of Brazilian sociology; 2) their broader dialogue with the other social sciences; 3) its relation to international sociology; 4) the



theoretical-methodological advances of the discipline; and 5) their dilemmas and challenges in the face of contemporary problems. O project focuses mainly on the following topics: recruitment, formation, trajectory and performance of legal elites, social and political organization of the judiciary, and the relationship between legal institutions and occupational hierarchies and the daily work of lawyers. The Graduate Program in Sociology (UERJ), Graduate Program in Sociology Law (UERJ), Ecole Doctorale de Sciences Politiques de l'Université de Montpellier 1 (France), Master of Science Juridical-political of Agostinho Neto University (Angola) are the programs articulated in this proposal.

Name of the project: Subjectivity and Nature

Start date 01/08/2018

End date 31/07/2022

Description

The notion of subjectivity is central to Philosophy from modernity, and its critical analysis provides a guiding framework for understanding much of the debate that animates the contemporary philosophical scene. In fact, this scenario is dominated by discussions about the overcoming or transformation of the paradigm of subjectivity, which finds its inaugural figure in the Cartesian cogito. This multifaceted notion, which involves several concepts that ultimately refer to the phenomena of self-consciousness and self-determination, establishes a paradigm of understanding the human subject as the basis of its representations, norms, values and actions that raises the complex question of its relation with nature and has repercussions on the most varied fields of philosophy. To investigate historically and systematically the concepts and problems involved in this paradigm is, therefore, a crucial task to advance in the debate about its overcoming or transformation. The notion of subjectivity, understood as an understanding of the human being as characterized by the cognitive and practical capacity to refer to itself as the subject and cause of its representations, norms, values and actions, occupies a prominent position in philosophical thought. Around this understanding centered on the human capacity for self-consciousness and self-determination articulates a constellation of concepts, theses, and theories that seek to elucidate how an entity thus characterized is inserted in nature, and what are the metaphysical, epistemological, ethical, political, and aesthetic conditions and consequences involved in this paradigm of understanding. The objective of the project is to investigate, through the philosophical methods of historical approach, conceptual analysis and rational reconstruction practiced by the researchers involved, the most significant theoretical positions formulated by philosophical tradition to account for the challenges posed by the adoption of the paradigm of subjectivity. In the development of this project, teaching and student mobility and exchanges with France, Belgium, Canada, USA, Argentina and Germany have been organized through the following universities: Université de Lille, Université Paris Diderot, Université Paris IV, vub Brussels, Université de Quebec à Trois-rivières, Université Paris, i Akademie der Künste, Stevens Institute of Technology, Universität Koblenz-landau, Université Paris VII, University of Berkeley, Universidad de Buenos Aires, Université de Bourgogne, Humboldt Universität, U. Berlin.



Name of the project: Work and Social Issues

Start date 01/08/2018

End date 31/07/2022

Description

The relation between work and the "social question" is central, since it is the constitutive work of the social being and, therefore, the core of the main issues affecting today's society. In this sense, the apprehension and deepening of the theme of work requires the consideration of issues that relate the local and the global, the singular and the general, the conjunctural and the structural, such as: unemployment, poverty, violence, social policies, citizenship, democracy, among others. In relation to Social Work, the social question is its object of study and, in this sense, it becomes essential the understanding of the processes that accentuate the social inequalities and their effects on the forms of reproduction of the working class. Created in 1999, the GP in Social Work of UERJ elects as areas of concentration significant and relevant topics for the country and the state of Rio de Janeiro: work and social policy, relating the latter theme to the forms of facing the expressions of the social question. Today the GPSS has a national and international insertion consolidated. The project "work and social question" consists of analyzing the transformations in the work world, with emphasis on institutional reformulations that impact on the refractions of the social issue and affect institutional social promotion and control policies. This impact has direct repercussions on the work of social workers, due to their efforts to achieve social rights. this proposal seeks to encourage the exchange of knowledge on labor and social issues between European countries (University of Granada and Universidad de the Balearic Islands (UIB), Universidad Autónoma de Barcelona - Spain; Instituto Superior Miguel Torga / Coimbra; Institute of Contemporary History - Lisbon, Center for Recherches et d'études sociologiques et Politiques de Paris (CRESPPA), CNRS - Université Paris 8 Saint-Denis; Center d'Enseignement, Documentation et de Recherches pour les Etudes Féministes, in France) and Latin America (National University of La Plata and National University of Rosario), aiming at deepening reflection and stimulating debate in order to broaden the international academic production in a critical and collective perspective in the social sciences, capable of promoting joint productions in this area concentration. Also with the Pacte-Université Grenoble-alpes - Canada exchange relations are established.

Name of the project: History, Constitution and Critique of Law

Start date 01/08/2018

End date 31/07/2022

Description With research in the History of Brazilian Law, and especially in the History of Brazilian Constitutions, with sociological, philosophical and historical methodologies, the program intends to contribute to a critique of current Law, Justice Institutions and Constitution Interpretations. The project intends to investigate methodologies and solutions from other countries, in order to think about the Brazilian reality - and the research that already exists here - to present creative and critical solutions to the challenges of law and its institutions in Brazil. The strengthening of the internationalization activities already practiced does not take the focus of establishing new internationalization strategies. The GP in Law seeks to fill gaps in terms of development and monitoring of the internationalization actions, seeking to understand the impact on the performance of the strategies adopted. The breaking of



borders, then customarily thought of internally in the legal community, provides the contact with systems from different countries, leading to a global awareness of the axiological load and citizenship of the members of the educational institution. The promotion is fundamental to the Program's engagement in its active policies rooting international actions. The program, based on its needs and particularities, establishes a plan to optimize access to global knowledge. Relations with the USA, France, Germany, Italy, Spain, the Netherlands, Luxembourg, Argentina and Portugal are hereby established through agreements with the following Universities: Universidade nova da Lisboa, academia de Direito internacional de haia, Virginia university, université Toulouse, université Lyon, universidade de Buenos Aires, Universidad Nacional del litoral, université Paris Nanterre (Paris 10), Friedrich-schiller-universität Jena, Max-Planck-Institut für europäische rechtsgeschichte (Frankfurt), Max-Planck Hamburgo, Max-Planck Luxemburgo, University of Connecticut, school of law Harvard, Kennedy school, Universidade de Yale, Northeastern university Boston, universidade de Bordeaux, Universidade de Paris 8, Universidade Maastricht, Consejo Superior de investigaciones científicas, Universität Hamburg, Università degli studi di Firenze, Max-Planck-institut für europäische rechtsgeschichte (Frankfurt).

Name of the project: Communication Technologies, City and Culture of Media

Start date 01/08/2018 - **End date** 31/07/2022

Description The project aims to provide a space for international dialogue, exchange and reflection on the communication phenomenon in the intertwining three guiding dimensions understood as fundamental in the constitution of our Lines of Research, are: a) the construction and diffusion of the mediatic messages; (b) the cultural and material repercussions of communication and information technologies; c) urban space as an important locus of communication and generator of imagery for the sedimentation of contemporary cultures. We propose as subjects of interdisciplinary research themes related to the study of bodies, performances, cities, photography, music, cinema, games, creative industries, communication cartographies, technological materialities, uses of technologies, dissent practices in the city, food cultures, political activism, ephemeral territorialities and contemporary imaginaries.

Theme2 - EDUCATION IN THE CONTEMPORARY WORLD

INTERNATIONAL COOPERATION PROJECTS

Name of the project: Everyday, Educational Networks, Cultural Processes and Images

Start date 01/08/2018 - **End date** 31/07/2022

Description: The research groups involved in this project (from ProPEd / UERJ and the GP Formative Processes of FFP) have been working for many years to understand the relationships and the texture of knowledge in multiple educational networks that are formed in human everyday life and in which we all form. These networks are understood as of practical theories and are thus enunciated: the one of the academic formation; daily pedagogical actions; that of government policies; the collective actions of social movements; the creation and "use" of the arts; that of research in education; the production and



'uses' of media; the experience of the cities, the countryside and the roadside. Cultural and educational processes in these networks are common concerns of the group and are developed with diversified uses and creation of images: photographs, videos, movies and countless other audio-visual resources, in on-site and online actions. These projects maintain relations with several groups abroad with: A) Cirnef (Center Interdisciplinaire de Recherche Normand in Éducation et Formation) since 1997; B) University of Porto, in the theme of genres and sexualities; C) Open University of Lisbon, on online education; D) University of Minho, on childhood and multiple cultures; E) University of Buenos Aires; E) University of La Plata; 3) Universidad de La Republica, Uruguay, around issues of youth culture, urban culture and images; D) CINVESTAV - Center for Research and Advanced Studies of the National Polytechnic Institute - Sector Educational research. With these institutions numerous relationships are developed: student and teacher mobilities; co-authored publications; participation in congresses held in different countries.

Name of the project: Writing, Memory and Teaching Proficiency

Start date 01/08/2018

End date 31/07/2022

Description: Nuclear Researchers committed to reflect on the phenomenon of education, from a historical perspective, the studies developed within the research line “Institutions, educational practices and history” turn to objects that cross the recent specialized literature, covering objects associated with the history of different types of institutions and educational practices related to them. The project aims to deepen regular relations with the USA, Mexico, Argentina, Switzerland, Spain, Portugal and Mozambique, involving formation, research and publication in journals and books, around the themes that cross the studies in the field of educational historiography : history and historiography of teaching profession and school, memory, written culture, which unfold in projects articulated to them, such as the education of women in Brazil and Portugal (19th and 20th centuries), and school, written culture and (self) biography, history of written culture, history of reading, self-writing and writing, writing culture and resistance. Among the institutions with which they have maintained a regular interchange on the subjects under study are: University of Illinois (USA) and CINVESTAV / DIE (Mexico), National University of Rosario (Argentina), University of Geneva (Switzerland), Universities Eduardo mondlane and pedagogical university (Mozambique) around the history of teaching and historiography and with the University of Alcalá (Spain) and San Luis de Potosí School (Mexico), around school, written culture and (auto) biography, university of Seville (Spain) around memory and educational heritage, University of Coimbra (Portugal) around female education and University of Lisbon (Portugal) around Republican education and Universidad de la Plata (Argentina), around the history of written culture, history of reading, written by itself.



Name of the project: Curriculum Policies

Start date 01/08/2018 - **End date** 31/07/2022

Description: The theme Curriculum Policies articulates the research line Curriculum: subjects, knowledge and culture of ProPEd, who leads this project. By curriculum policy, one understands the process of meaning that occurs in the field - curricular thought - as well as in public policies in curriculum. In the curricular thought axis, transnational studies of specific subjects in the field are important, as well as researches that seek to understand how the internationalization of the field takes place. With regard to public policies, in an increasingly global world, both interconnections and crossings among nations, as well as differences and fluxes, stand out. The curriculum theme is, today in education, one of the most relevant, as the mechanisms of representation control increase. In this sense, the investigation of curriculum policies acquires internationally the outline of the research of political struggles by the meaning of what is curriculum and by the dispute in the representation of the other. The projects articulated here focus on different issues of these policies, maintaining ongoing exchanges for several years with research groups from the United States (Columbia University, Montclair State University, New York City University), Canada (University of British Columbia, University of Ottawa), Portugal (University of Porto, University of Lisbon), Argentina (University of Buenos Aires, University of La Plata, National University of Rosario), United Kingdom (Essex University), Mexico (National Autonomous University of Mexico, State of Mexico, Universidad Autónoma Metropolitana Cuajimalpa), Colombia (Universidad Francisco José Caldas), South Africa (Stellenbosch University), China (Normal East University), Chile (Pontifical Catholic University of Chile, University of Chile), Mozambique (Strategic Research), Australia (Charles Sturt A University) and Finland (Abo Akademi University).

Name of the project: Philosophy in Childhood of School Life

Start date 01/08/2018 **End date** 31/07/2022

Description

The project extends work among philosophy, education and childhood both from the perspective of philosophical experimentation with young children up to the formation of teachers, from three articulating concepts: emancipation, childhood and experience. The emancipation is considered, starting from J. Rancière, an exception to the logic of the institution, when there is a fundamental equality among the subjects involved, beyond its age, social class, ethnicity, gender. Childhood is a category of subjectivity that allows subjects to think beyond chronology in the sense of Lyotard, as well as the crossings among temporality, transformation and subjectivity with Deleuze and Guattari. It concerns, therefore, the childhood of nursery school teachers. Finally, the philosophy as an experience of thought considers that the school institution can welcome a thinking willing to call into question its presuppositions, committed in the problematization of oneself and the world. With a wide international articulation, this project, which is the nucleus of ProPEd's line of research on Childhood and Youth, has been collaborating for several years with universities in the United States, Argentina, Italy, Portugal, South Africa, Canada and Russia.



Name of the project: Innovation and Technical Networks in Production of Public Policies in the Environment Urban (Education and Biopolitics)

Start date 01/08/2018 - **End date** 31/07/2022

Description

Understanding biopolitics, starting from Michel Foucault, as the set of mechanisms of power destined to control the ways of life of the population, education presents itself as a privileged field of government in the regulation of conduct. The study of education through the bias of biopolitics, in this project, is a way of analyzing the mechanisms of government and the development of a series of knowledges present in the subjective formations, political definitions and daily practices that make up the established educational practice. In particular, we highlight the interest in deepening our ongoing research and guidance in Graduate Programa, which has focused on the study of modes of subjectivation in the fields of childhood and youth, teacher training, school practices, gender relations and sexuality, and ethnic-racial diversity. GP Public Politics and Human Formation's Human Formation line is dedicated to the study and research of public policies instituted and their implications in the processes of subjectification and human socialization and in the expansion of the sphere of social rights, a condition of effective citizenship and democracy. One of the themes of relevance in the research carried out in the program is that of education, which this project proposes to address from its implications in the governance of conducts, that is, a biopolitics that guides the life of the population and structure the policies public in the contemporary world, whether in Brazil or in other countries with political, economic and social characteristics, such as Mexico and Portugal.

Name of the project: Teaching and Learning of Foreign Languages Under an Intercultural Perspective

Start date 01/08/2018 - **End date** 31/07/2022

Description

The GP-Letras of UERJ has a research line dedicated to the area of language teaching. Through the products of existing agreements, such as sandwich-master and bibliographic production, UERJ has established itself as a leading university in the field of teacher training in German. It is added to this fact the growing attention given to the area of Portuguese as a foreign language in the program. The agreements and actions already developed by the members of the present project present a very successful interface between teacher training of German and Portuguese as a foreign language. The number of researches in the area of Language Teaching and Learning is growing in Brazil, as well as the recognition that the process of university internationalization must be achieved through investments in teacher training and in the expansion of learning opportunities. In order to contribute to the area, this project aims to improve the training of Brazilian university professors, masters and doctoral students who, together with researchers from Germany, will develop projects that will contribute in a unique way to the area in Brazil through academic and scientific exchange, mobility and the holding of events and publications together. The German researchers included in this project stand out internationally in their fields and their theoretical and methodological contributions will boost research in Brazil regarding the relationship of teaching of culture and language, teaching methodology, development of printed and digital didactic material and use of new technologies. To this end, the internationalization actions of the



GP-Letters UERJ and the Graduate Program of the INSTITUT FÜR DEUTSCH ALS FREMD-UND ZWEITSPRACHE UND INTERKULTURELLE KOMMUNIKATION - University of Jena, Germany, the Graduate Program in Romanistics and University of Giessen, Germany, the Graduate Program in Germanisation of the Higher Education School of Heidelberg, Germany and the Graduate Program in Foreign Language Didactics, Leuphana-Universität Lüneburg, Germany.

Name of the project: Law and Social Sciences (Stratification of Brazilian Basic Education (Elementary and High School): A Multidimensional Approach)

Start date 01/08/2018

End date 31/07/2022

Description - We propose the study of the causes and consequences of stratification in Brazilian basic education (Elementary and High School), investigating the social, economic and cognitive factors associated with differentiation of school performance in Brazil in terms of proficiency and progression. We investigate how simultaneous processes at the level of the family, school level, including professors and personal characteristics (both socio-demographic and socio-psychological) affect the performance and progression of students in the educational system. Taking into account that primary education plays a central role in the life cycle of people with effects on socioeconomic mobility at later stages of the life cycle, it is intended to identify the factors that compel students in unfavorable socioeconomic contexts to achieve results educational, as well as the social, economic and cognitive consequences of the results. Taking advantage of the contribution of theoretical matrices of the sociology of education, education, social psychology and statistics. The data sources will be: from the School Censuses, from the Evaluation System of Educ. Basic, the National Examination of Student Performance, and the Survey of Discriminatory Actions in the School, all collected by the Inst. Nac. De Est. E Pesq. Educational Anísio Teixeira; data will be collected longitudinally on random samples from elementary public schools in Juiz de Fora; of the Sec. of Education of the Federal District; and Household Sampling Research, Monthly Employment Survey, Population Census, and National Survey of School Health, collected by IBGE. We will combine existing cross-data sources collected by INEP and IBGE with longitudinal data that will allow us to deepen the analysis of causal relationships between different social dimensions related to the school, the family and the individual characteristics of the students themselves and the students' performance throughout the course of the educational system. We will investigate the obstacles to the improvement of indicators of progression and performance in a dynamic, aiming to instruct the formulation of new pol. public aimed at improving the educational system, and to understand the interrelationships between different dimensions that influence the paths of students in this system and the consequences of the quantity and quality of schooling reached by the chances of life of the individuals. Involved international institutions: Univ of Texas at Austin, SCIENCEPO-FR. and STANFORD UNIV.



Name of the project: Inclusion, communication and learning

Start date 01/08/2018

End date 31/07/2022

Description - The objectives of the study are: initial and continuous teacher training in the elaboration of an educational project that contemplates the communication and learning of the students with diverse deficiencies; use of assistive technology and alternative communication; an individualized educational plan that contemplates an individualized transition plan for adult life and / or the world of work, in order to enable the subject with intellectual deficiency to leave school. With the increasing presence in the classrooms of students with intellectual disabilities and others with motor disabilities who are unable to communicate through speech, the proposal of inclusive education faces a great challenge and needs to base its practice on evidence. With the policy of inclusive education, the school should be thought of as a locus of learning for all. It is necessary that the school realize necessary transformations as: the formation of the teacher; the planned and consistent use of Assistive Technology (AT) resources, such as alternative and increased communication and a schooling aimed at leaving the student to adulthood and work. We intend to: train students of pedagogy with knowledge and practical notions of ta and caa; promote and evaluate continuing education involving learning, planning, communication and social interaction; evaluate the effects of assessment techniques and learning and learning protocols; develop, implement and evaluate an individualized transition plan for the adult life and work of young people and adults with intellectual disabilities. It is hoped that with funding we can continue with the network of national and international researchers in search of promising results and closer relationship with: University of Oslo; University of Dublin; Trinity College University of Louisiana at Lafayette; Manchester Metropolitan University; Gothenburg University; School of Rehabilitation Therapy - Queen's university; National Dong Hwa University Hua-shih college of education; University of Helsinki; Catholic University of Applied Sciences Freiburg; University of Barcelona; Radboud University; Purdue University; Kansas University; University of Massachusetts; New York University, articulating countries Norway, Ireland, USA, United Kingdom, Sweden, Canada, Taiwan, Finland, Germany, Spain and Netherlands.

Theme3 HEALTH: CONTROL OF LIVING QUALITY DISEASES AND ACTIONS

INTERNATIONAL COOPERATION PROJECTS

Name of the project: New Tools for an Old Enemy: a Fight against Chagas Disease through Regulation of RNA Transcripts from Trypanosoma Cruzi

Start date 01/08/2018 -

End date 31/07/2022

Description - Trypanosoma cruzi is a protozoan that causes Chagas' disease. This disease is transmitted by insects while feeding on the vertebrate host. It is estimated that 7-8 million people are infected with the parasite, especially in Latin America where the disease is endemic. Due mainly to migration the disease, once exclusive to the American continent, has been spreading throughout the world, resulting in the loss of 750,000 years of productive life and about 1.2 billion dollars annually. After more than 100 years of its discovery, the disease does not have an effective treatment. Therefore, new



therapies remain a priority. Several of the basic aspects of parasite biology are not yet fully understood, such as the near complete absence of promoter sequences in genomic DNA and the use of polycistronic RNA. This project is relevant for the advancement in the knowledge of the gene transcription of the parasite that will determine important targets for its survival. UERJ and the University of Nottingham have won the FAPERJ Birmingham and / or Nottingham - 2014 Bilateral Cooperation Call. We use state-of-the-art sequencing and bioinformatics tools to understand the metabolism of the heme molecule in *Trypanosoma cruzi*. In the current project, we will extend existing collaboration by interfering with target genes for energy metabolism (eg under hypoxia or inhibition of glycolysis) found in the initial design. We will further understand the biology of this organism and train students using multidisciplinary approaches such as bioinformatics, biochemistry and molecular biology. In this way, it will be possible to identify specific and unique genes for this parasite family. Sequencing and bioinformatics will be conducted in the UK using state-of-the-art technology and the in vitro and in vivo experiments will be managed by the network of laboratories in Brazil coordinated by the State University of Rio de Janeiro. Specific objectives are, therefore, to continue developing knowledge on the biology of the agent of Chagas' disease, in particular with regard to the control of gene transcription in *Trypanosoma cruzi*; to identify differentially expressed genes by parasites in the presence of the heme molecule with different interventions in their energy metabolism (eg in hypoxia or presence of a glycolytic pathway inhibitor).

Name of the project: Collective Health and Nutrition: Knowledge Production to Drive the Agenda 2030 - Sustainable Development Goals

Start date 01/08/2018 - **End date** 31/07/2022

Description - The Sustainable Development Goals (SDG) will guide national policies and international cooperation activities over the next 15 years, succeeding and updating the Millennium Development Goals (MDGs). The formulation of the SDG involved a wide consultation process and the crucial concept of indivisibility of the economic, social and environmental dimensions of sustainable development was then accepted. The commitment to global health is framed in goals specific to Goal 3 (Health and Well-being), which potentially open a new chapter in the history of population health: improvement for all, with reduction of inequalities. The areas of Collective Health and Nutrition represent important pillars in the construction of knowledge to boost the 2030 agenda, which is the objective of the project. The GPS-IMS / UERJ is multidisciplinary, encompassing areas of concentration, research and training covering the three branches of Collective Health - Epidemiology, Health Planning and Policies, and Social and Human Sciences in Health. Its objective is to develop interdisciplinary and critical reflection on the health / disease process in its multiple dimensions and on health policies in Brazil. Multiple themes on agenda 2030 have been the subject of study. GP-ANS aims to develop research in the fields of Food, Nutrition and Health in order to overcome the fragmentation that characterizes modern life and science, with approaches that articulate their biological, sociocultural and collective health aspects. The studies converge on themes of the 2030 agenda, such as eradicating hunger, achieving food security and improving nutrition, and promoting sustainable agriculture. The project aims to consolidate the partnership and contribute to the international reach of these GPs, through the



production of knowledge around the ODS theme. Eleven professors and 25 students will be trained, 30 work missions will be carried out, international partnerships and international publications will be expanded and the ODS theme will be incorporated into the curricula of the programs involved. The initiative will have a significant impact on the qualification of GPs and their production, contributing to UERJ's prominence in terms of internationalization. IES involved: UB Aires, U. Wollongong, Alberta U., British Columbia, U. of Montreal, U. del Valle, U. Pompeu Fabra, U. Irai Virgili, U. California, Harvard U., John Hopkins, Berkeley UU Lyon, LSHTM (UK). U. Stockholm, UDELAR (Uruguay).

Name of the project: Molecular Mechanisms Related to Endothelial Dysfunction in Neonatal Sepsis

Start date 01/08/2018

End date 31/07/2022

Description - Sepsis caused by *Streptococcus agalactiae* is the leading cause of neonatal morbidity and mortality, affecting one in every 1000 births. Mortality is estimated to be 25% in preterm infants. Its treatment is expensive, since patients require hospitalization in intensive care units, which often requires an extended period. However, there are few studies on sepsis in Brazil. *Streptococcus agalactiae* is the leading cause of neonatal sepsis that often leads to death or generates complications in the long run. A major limitation in our current understanding of how bacteria interact with endothelial cells is the fact that previous studies have been performed under static conditions. The 3D model created by Dr. Kerrigan (Royal College of Surgeons in Ireland) is unique and capable of creating the vascular biochemical environment containing the layers of endothelium, smooth muscle, collagen and elastin. The proposal is that we can have a basic understanding of the host's response to *S. agalactiae* infection in order to develop a next generation therapy that can overcome current clinical interventions for the treatment of neonatal sepsis. It is important to clarify that 3D modeling techniques of infection under dynamic conditions are not implemented in any laboratory in Brazil. The Graduate program in Biosciences (GPB) has been contributing to the establishment and development at UERJ of new technical platforms for the study of obesity, cancer, cardiovascular and inflammatory pharmacology, histology and infectious and parasitic diseases, focusing on the study of processes and mechanisms encompassed by cellular biology. The GPB has stimulated the implementation of cutting-edge techniques in several areas of cellular biology in order to promote the integration of the various research groups. The pili is a virulence factor of *S. agalactiae* that favors the infectious process and the mechanisms of adhesion and invasion to the host cells. As the endothelium is one of the main targets of sepsis events, this project aims to use a unique three-dimensional model that mimics the vascular system in 3D, which will contribute to the elucidation of mechanisms used by *S. agalactiae* during the induction of sepsis. This project will allow the transfer of knowledge and mobility between Brazil (State University of Rio de Janeiro) and Ireland (Royal College of Surgeons in Ireland).



Name of the project: Workforce and Care Practices in Health and Nursing: The Internationalization of Nursing Knowledge in Primary Health Care through Sustainable Partnerships

Start date 01/08/2018 - **End date** 31/07/2022

Description - It is acknowledged that nursing is, at the international level, an essential professional category for access to primary care, which leads us to suppose that this action can be strategic in the conjunctures of crises that affect social and health policies. There is a lack of international comparative analyzes of the health and nursing workforce, their practices and work organization. Given the speed of implementation of restrictive policies and the multidimensionality of the problem, academic institutions of Spain, France and Sweden point out their interest in developing, with UERJ, studies in comparative perspective and academic-scientific activities that expand ongoing exchanges, strengthening the area of nursing as a field of production of relevant knowledge in health. At the international level, nursing operates on the basis of historical and ethical-political premises that refer to a training base that includes commitment to collectivities, integral care and actions of education, health promotion and prevention, from an inter and transdisciplinary perspective, as well as activism in defense of equitable government policies. The institutions' project have long been dedicated to the study of the potentialities and challenges for health workers in different conjunctures. The institutions involved carry out collaborative activities, with joint academic production, to be broadened and consolidated as a systematic and sustainable practice, strengthening the production of knowledge in health and nursing. The development of a process of partnership and international exchange is proposed, focusing on the analysis of the organization of work in health and nursing and its practices in primary health care. Studies with a comparative perspective will be developed in Brazil, France, Spain and Sweden, as well as other academic-scientific activities. The objectives are to deepen a conceptual and methodological evaluation of professors and students, through bicentric and / or multi-center studies, offer of seminars for graduate students, exchange between visiting researchers, academic-scientific production in terms of co-doctorates, sandwich doctorates, postdoctoral studies, bibliographic production and presentation of papers at scientific events. It includes activities integrated with the lines and research groups of the researchers involved in each Program and country.

Theme 4 - POLITICAL THEORY, HISTORY AND POWER NETWORKS

INTERNATIONAL COOPERATION PROJECTS

Name of the project: Foreign Policy, Regionalism and Cooperation International

Start date 01/08/2018 - **End date** 31/07/2022

Description - The transformations of the international system since the late 1980s have significantly altered the position of the countries in the international system, especially in the case of so-called regional powers. Faced with this changing global order, there are great opportunities, but also serious



international challenges for gestation and consolidation of a development project, combining economic growth, social inclusion, and reduction of inequalities and promotion of democracy. In these macro-issues, the project seeks to expand and consolidate international academic cooperation already established with partners from different universities, forming a research network around three dimensions of Brazil's international insertion and in perspective compared with other regional powers: foreign policy, processes regionalism and international cooperation. The Political Science Program has faculty-researchers working in the field of international relations and foreign policy analysis recognized nationally and internationally as specialists of excellence. Foreign policy ties internal needs and demands to external opportunities and challenges. It is necessary to assess the country's diplomatic capacities for the projection of political and economic interests, the domestic institutions involved, and the coalitions of support and veto in society. Such research demands a comparative focus with other emerging countries that also experience new challenges and leverage in their respective external policies. In the area of regionalism, the challenges are even greater in view of the considerable interests of the countries in the region, their specific weight due to the differential of economic and military capabilities vis-à-vis their neighbors, etc. The comparative dimension is necessary since the regional insertion of the emerging countries is not homogeneous. Finally, international development cooperation, especially in its south-south dimension, is an important tool in the international relations of emerging powers. In order to contemplate the research objectives, it is fundamental to expand our international partnerships. Partnerships with: South Africa, France, USA, Argentina, Mexico, UK and Germany, through the following universities: STELLENBOSCH UNIV, UNIV OF PRETORIA, SCIENCES PO PARIS, SCIENCES PO BORDEAUX, UC - BERKELEY, NAVAL WAR COLLEGE, RUTGERS UNIV , UNIV NACIONAL DE QUILMES, THE COLLEGE OF MEXICO, CAMBRIDGE UNIV, UNIV OF CALIFORNIA AND GIGA.

Theme 5 - EXACT SCIENCES AND ENGINEERING: THEORY, EXPERIMENTATION, MODELING COMPUTATIONAL AND APPLICATIONS

INTERNATIONAL COOPERATION PROJECTS

Name of the project: High Energy Physics in the CMS Collaboration (Compact Muon Solenoid) and Cern Technologies Engineering and Computer Associates

Start date 01/08/2018

End date 31/07/2022

Description - High energy physics (HEP) is an area in which all experiments in operation or planning are built through an international effort of dozens of countries. Given the complexity of the experiments and the spectrum of topics available for study, it also involves several areas of science: in planning, construction and operation of the experiments (physics, engineering, computing, etc.); in spinoff of the technologies developed in the experiments (medicine, etc). It is a known fact that Large Hadron Collider (Lhc) of cern is the largest and most complex scientific instrument ever constructed. The UERJ HEP group has several decades of experience in international collaborations and has been involved with the cern cms experiment for more than 10 years. The partnership established here aims to intensify the



participation of the HEP group in the experiments, but also to seek training and human resources formation at graduation level in new technologies often nonexistent in the market, in the field of electronics, nanotechnology (detectors) and computer science. The volume of data produced (at the exabyte scale) needs to be processed using the most up to date technology in high performance, parallel computing, computational intelligence and machine learning. This project looks to support the activities of the HEP group of the UERJ in cms / cern and increases the activities of the partners GPs, contributing to the intensification of the internationalization actions of them. The collaboration between the GPs mentioned here will allow to deepen the participation of the UERJ in the cms, creating conditions for the engagement in research projects and development in the areas of electronics, detectors, computing and research in physics, exploring the existing synergies between these areas with regard to respect to the HEP area. The development of ultrafast detectors is planned using nanofabrication techniques and associated electronics, innovative methods in machine learning and high-performance computing (through GP-CComp) aiming at more active participation of the group in sub detectors of cms associated to the topics of physics of interest of the group (frontal physics, physics of heavy flavors, supersymmetry and Higgs boson). Such activities will be carried out with countries such as USA, Italy, Portugal, Spain, Germany, through the following institutions: LIP, CIEMAT, Univ de Aachen DESY, Univ Milano - Bicocca, and Polytechnic of Bari.

Name of the project: I-Caloric Effects

Start date 01/08/2018

End date 31/07/2022

Description - The study of i-caloric effects, where i represents an external parameter on which the entropy depends, for example, voltage, magnetic and / or electric field, is of great interest from the technological as well as from the theoretical-academic point of view. From the technological point of view these effects have as their main application an ecological and more efficient alternative to conventional refrigeration. From the theoretical-academic point of view, the i-caloric effects present a great potential for the investigation of fundamental physical properties of the materials. The research group on magnetism of UERJ has made relevant contributions to the theme, in addition to maintaining important international collaborations. With this project we intend to increase these collaborations. This project intends in general to develop models to describe the fundamental physical properties of various materials with i-caloric effects, such as the magnetocaloric, electrocaloric and barocaloric effect, or the combination of these effects in so-called multi-center effects. Our models use the midfield approximation and include the fundamental interactions to describe the properties of interest, eg with respect to magnetic properties our models include interactions like exchange interaction, Zeeman and crystal electric field to describe materials with localized magnetism. This project links the institutions: Ameslab (USA) and University of Denmark.



Name of the project: Strong Interactions: Theoretical Foundations and Applications

Start date 01/08/2018

End date 31/07/2022

Description - All processes in nature are described through four fundamental forces. One of them, the strong interaction, is the theme of this research project and describes the interaction within the atomic nucleus, among the fundamental constituents of all known matter. Quantum chromodynamics is the theory that describes such a force in terms of subatomic particles called quarks and gluons. At the frontier of physics there are several questions related to strong interaction: how was the universe fractions of a second after the big bang? What happens inside ultra-compact stars? And why do we observe tens of particles composed of quarks and gluons, such as the proton and the neutron, but never did we detect these fundamental blocks directly? The theoretical development proposed in this project has exactly the objective of contributing to answer such questions and thus to understand the most fundamental composition of known matter. This project consists of a set of theoretical efforts to understand how strong interactions manifest themselves in different contexts in which the fundamental theory, quantum chromodynamics, presents strong coupling and the standard perturbative approximation is not applicable. One of the objectives is the investigation of what happens to this interaction at low energies, with the study of theoretical models for the description of the confinement of quarks and gluons within the hadrons, such as protons and neutrons. Proposals aiming at an appropriate quantization scheme for non-abelian gauge theories in this low energy regime, with an appropriate treatment of gauge redundancy, are an essential part of this project. Such theories and their applications are central research objects in this project. Another complementary issue that is also addressed is the study of extremes conditions, which could lead to the confinement of quarks and gluons. SUCH PARTNERSHIPS INVOLVE THE COUNTRIES OF CHILE, URUGUAY, FRANCE, VIETNAM, BELGIUM, GERMANY, ITALY, through agreements with the following institutions: HEIDELBERG UNIVERSITAET, CEC-VALDIVIA, UNIVERSIDAD DE LA REPUBLICA, CEA-SACLAY, UNIVERSITÉ PARIS 7, ÉCOLE POLYTECHNIQUE, SORBONNE UNIVERSITÉ, DUY TAN UNIVERSITY, UNIVERSITY OF LEUVEN - KORTRIJK, HEIDELBERG UNIVERSITAET, GOETHE UNIVERSITAET FRANKFURT, HEIDELBERG UNIVERSITAET and INFN Torino.

Name of the project: Computational Modeling for Applications in Engineering and Environment

Start date 01/08/2018

End date 31/07/2022

Description - The formulation and solution of direct and inverse problems constitute a research area with numerous relevant applications in Engineering, Biotechnology and Environment, just to name a few. Brazil stands out in the international scenario in the area of inverse problems, and one of the strongest research group in the country works at the Polytechnic Institute of UERJ, under the coordination of the proponent of this research project of international cooperation. Various formulations and different methods of solution have been proposed by this research group for more than 20 years in partnership with different institutions of the country and from abroad. This project will make possible to consolidate existing partnerships, as well as to broaden them, with concrete results both in terms of publication of research activities, and in the training of human resources at the graduation level. These



activities are directly linked to research lines of the Graduation Program in Computational Modeling entitled: (i) Applied Mathematics and Scientific Computation; and (ii) Thermofluidodynamics. In the last ten years (2007-2017), international cooperation projects started and grew significantly in the field of Inverse Problems using Computational Intelligence, leading to the publication of two books, six chapters, 24 complete articles in scientific journals, and 30 complete papers in scientific events, in addition to the training of human resources in Brazil and abroad. The research project in international cooperation proposed here aims to develop computational modeling, simulation and experimentation, based on Inverse Problems and Computacional Intelligence, aiming applications in Engineering, Biotechnology and Environment. In this project will be developed theoretical / analytical, numerical and experimental activities in three main axes of action: (i) Heat Transfer; (ii) Transportation / Mass Transfer; and (iii) Identification of Damage and Failures in Industrial Systems. This project strengthens a solid partnership built with the Technological University of Havana José Antonio Echeverría from 2007 to 2017, as well as extending its scope with the participation of the University of Granada, Spain. There is thus a trilateral, internacional cooperation project: Brazil, Spain and Cuba, to be held in the period from 2018 to 2022. Connections are also established with the BEIJING COMPUTATIONAL SCIENCE RESEARCH CENTER (CHINA).

Name of the project: Contemporary Challenges in Gravitation and Cosmology

Start date 01/08/2018

End date 31/07/2022

Description - In this project, we are particularly interested in the study and understanding of cutting-edge problems in the area of theoretical physics, especially in the understanding of the physics of the primordial universe, including physics associated with the big bang, of issues related to so-called dark universe components (energy and dark matter) and fundamental problems of general relativity, such as black holes, gravitational waves, gravitational collapse and other possible extensions. This research group, linked to the UERJ's graduation program in physics, has made important contributions in this sense and has a long-standing network of international collaborations. This project will allow not only a narrowing and deepening of these collaborations, but also the elaboration of future agreements, particularly with universities in the United Kingdom, Canada, the United States, Spain, Portugal, Scotland, Argentina and Mexico (such as the UNIVERSITY OF NEWCASTLE, MCGILL UNIVERSITY, UNIVERSITY OF GRANADA, UNIVERSITY OF EDINBURGH, UNIVERSITÉ MONTPELLIER, UNIVERSITY OF PITTSBURGH, UNIVERSITY OF MICHIGAN, GEORGIA TECH, OBSERVATOIRE DE PARIS-MEUDON, UNIVERSITÉ PARIS MARIE CURIE, AND INSTITUTE OF COSMOLOGY AND GRAVITATION). The research group in the areas of cosmology and gravitation of gpf is highly productive in terms of quality publications (mostly quails A), with several orientations at both master's and doctoral level and has a wide network of international collaborations. Its connection to this project is presented in a natural way, given the possibility of making possible the future relations of the program with those researchers and international institutions and the exchange of researchers and students from both institutions involved. This project aims the study of the various aspects related to gravitation and cosmology: inflation and phase transitions in the primordial universe (phase transitions in general



associated with spontaneous symmetry breaks), description of black holes in modified theories of gravitation, emission of gravitational waves by systems described by general relativity (gravitational collapse and interactions between compact objects). We expect to gain a deeper understanding in this area of physics, attracting and broadening the interest of other research groups in this area and the visibility of our publications at both the national and especially the international level.

Name of the project: Computational Modeling in Tomography Experiments Computerized and X-Ray Fluorescence

Start date 01/08/2018

End date 31/07/2022

Description - The study of the application of Monte Carlo codes in experiments of imaging in Computed Tomography and in the determination of elementary compositions with the technique of X-ray Fluorescence has been the subject of several papers published recently and presented at international conferences. We have already been working on this topic with applications in the area of Materials and Archaeometry and we hope to increase these applications with collaborators that we already have partnership. O GP in COMPUTATIONAL MODELING of UERJ has been working in the field of applications of the Monte Carlo method in Computed Tomography as in X-Ray Fluorescence. We have carried out and approved articulated projects with the GP in PHYSICS / UERJ at FINEP and purchased equipment for shared use. We have a microtomograph Skyscan 1174, equipment of XRF (ARTAX200 and 5 AMPTEK spectrometers with several anodes, as well as a Bruker D2 DRX). We have a joint participation in various works and co-orientations. The use of Monte Carlo XPMC, GEANT4 and MCNP codes helps to compare simulation and experimental results and to suggest modifications in these programs for better results. Through close collaboration with University of Sassari, where the XPMC code was developed, we hope to send professors and receive technical staff visits from there, to narrow this collaboration. We also look forward to collaborate closer with the Universities of Rome (Sassari), Italy; St. Petersburg, Russia; Lisbon and Évora, in Portugal, to compare simulated and experimental results in archaeological samples.

Name of the project: Computational Modeling of Non-Classical Transportation of Neutral Particles

Start date 01/08/2018

End date 31/07/2022

Description - Neutral particle transport has many applications in reactor physics and radiative transfer. Research groups in Brazil and in other countries have been working in the deterministic and stochastic computational modeling of the transport of neutrons and photons, both classical transport (systems with uncorrelated scattering centers) and non-classical (correlated scattering centers). The research group on Deterministic Neutronics Computing (NCD) has been offering contributions to classic transport simulations since 1997. This project will be an opportunity for the NCD to also contribute in the non-classical transport area with the graduation program proposed in the NUCLEAR ENGINEERING GRADUATE PROGRAM / THE OHIO STATE UNIVERSITY, with joint publications and PG student training. Since 1997, the NCD group has been working on computational simulations of classical



transport of neutral particles applied to reactor physics and radiation shielding, highlighting significant contributions to the numerical solution of the Boltzmann transport linear equation and the diffusion equation in thick spatial grids; notably the spectronodal class of thick-mesh numerical methods. We are now interested in offering contributions to computational simulations of non-classical transport with wide applications in geophysics and in very high temperature reactors (generation IV). We propose in this project to initiate collaborations with more experienced researchers in the non-classical transport. In the classical linear theory of the transport of neutral particles, the probability of a particle at a given point in space and with known kinetic energy to experience an interaction is independent of the direction of motion and the length of the trajectory, which is the distance traveled by the particle from its previous interaction (birth or scattering). In this situation, the classical Boltzmann linear equation is used to model particle transport problems in which the locations of the scattering centers are not correlated. In this project, we propose to use the Boltzmann's generalized non-classical equation as a model for random systems statistically homogeneous in which the distribution function for the distances between the scattering centers is not exponential. This situation occurs in the description of the transport of photons in atmospheric clouds and transport of neutrons in ball-bed nuclear reactors.

Theme 6 - PUBLIC POLICIES AND SOCIAL THEORY.

INTERNATIONAL COOPERATION PROJECTS

Name of the project: Public Campaign Analysis for Preventing Gender Violence in Brazil 2000-2017

Start date 01/08/2018

End date 31/07/2022

Description - New legislation on gender-based violence has been introduced in many countries, such as the new Feminicide Law, which defines the homicide of women motivated by their gender. Various prevention programs and public awareness campaigns were released. The aim was to convert gender violence from a private issue to a public issue, so that the whole society and large organs assume their responsibility in preventing it. In spite of such movement, the levels of violence continue to grow throughout the world, and little is known about how and to what extent campaigns helped to change attitudes and behaviors in the desired direction. This comparative project seeks to our knowledge of the characteristics of such campaigns to prevent gender-based violence in various countries, in order to reflect on possible improvements in them. The GP SOCIAL SCIENCE has a tradition of applied studies and public policies in several areas, particularly in violence and gender that are located in two lines of research of the Program: A) Violence, Citizenship and Public Policy; B) Family, Gender and Generations. The cultural similarity between violence in Spain, Portugal, Colombia and Brazil led to cooperation between gender violence in our Program. This study is intended to analyze gender-based violence prevention campaigns launched by public and private organizations in Brazil between 2000 and 2017. An analysis of campaign content will be conducted to evaluate the results achieved and optimize the impact of future campaigns. A denotative and connotative analysis will be done to verify different hypotheses about the communicative purposes of the advertisers, the type of prevention



(primary, secondary or tertiary) that the campaigns propose, the audience to whom they are directed and the meaning of the messages. The analysis will date of the campaign and the three structures in which the sample will be divided: A) Public Organizations (Federation, states and counties); B) Political Parties and Trade Unions and C) women's organizations and other NGOs. Campaigns in Spain, Portugal and Colombia, including: MASTER'S PROGRAM IN SOCIAL PSYCHOLOGY – UNIVERSITY COMPLUTENSE DE MADRID; PROGRAM OF PhD IN PSYCHOLOGY - UNIVERSITY OF COIMBRA AND LISBON; PhD IN SOCIAL SCIENCES, CHILDREN AND YOUTH. - UNIVERSITY OF MANIZALES Y CINDE.

Name of the project: Law and Social Sciences (City, Town and Urban Infrastructure: Ethnographies of Everyday Life in Rio de Janeiro and in Mexico City)

Start date 01/08/2018

End date 31/07/2022

Description - This project aims to continue research carried out within the scope of the CASA Group: social studies on housing and city, based in IESP / UERJ since 2015. The present project aims to examine the relations between the production of the city, the daily inequalities and conflicts surrounding the provision of urban infrastructure in the metropolitan regions of Rio de Janeiro and the Mexico City. This project has as main objective the consolidation and deepening of a research agenda ethnographic studies on the production of housing and the provision of infrastructure in Rio de Janeiro and in Mexico City. The intention is to construct an analytical perspective that explores the multiple dimensions of housing from various analysis - from the construction and production of the home space, domesticity structures and feelings of belonging to public housing policies and the provision of urban infrastructure - with the empirical focus of research being the regions metropolitan areas of Rio de Janeiro and Mexico City. To this end, researchers with broad experience in research in both cities (Colegio de México, UNAM, Center for Latin American Studies, University of Chicago, USA, and Columbia University's Center for the Study of Race and Ethnicity) and a history of collaboration more than a decade to carry out joint research that should result in a book or dossier to be published in English and / or Spanish.

Name of the project: Law and Social Sciences (Study of Urban Inequalities and their Transformations in Time, with Focus on Middle Class and Comparing Rio de Janeiro, São Paulo and Paris)

Start date 01/08/2018 -

End date 31/07/2022

Description - To understand dynamics of transformation of the middle classes and their place in the metropolis, it is necessary to place them in the analysis of structural and social changes, and inequalities and their spatial translation. Our approach has been contributing an original way to debate, in defining the middle classes not by their income and consumption, as is the most common case in Brazil, but by its place in the division of labor, starting from the hypothesis that the growth of the middle classes, which is real, results from changes in the economy and diversification of the types of employment and qualifications required. An analysis dimension is the study of social structure and segregation in the three metropolises from the occupations of the active population. The analysis of socioeconomic segregation will be the next step, measuring the evolution of the segregation of its



different components of class. We will analyze the different urban configurations in which these different components of classes their explanatory factors in different contexts, such as residential strategies and education for children. The two GP-SOC teams of IESP-UERJ and OSC (France), recognized centers of excellence in addressing issues of stratification, inequalities and social mobility, are engaged in cooperation projects since 2005. A first stage was carried out as a CNPq-CNRS cooperation program on "Inequalities, segregation and urban policies. Convergences and divergences of major cities in globalization: Paris, Rio de Janeiro and São Paulo, "which took place between 2006 and 2009. In 2014 a CAPES-COFECUB project was approved, still in force. It is the aim of this cooperation is to deepen the common approaches already begun on the comparative study of social structures and spatial, school and class segregation in the three metropolises, and to specify their effects by the more specific analysis of the classes and their practices in these contexts. The project will also pay attention to interactions with ethnoracial dimensions and demographic (in the case of Paris, particularly international migration). In the context of inequalities, it will education, since they contribute to the reproduction, reduction or inequalities in the passage from one generation to another. We will add, in the themes already underway, in-depth studies on the sociability and political action of the middle classes in the three metropolises.

Name of the project: Innovation and Technical Networks in Production of Public Policies in the Environment Urban (Human Formation and Citizenship)

Start date 01/08/2018 - **End date** 31/07/2022

Description - Of naming one of the lines of research of the GP PUBLIC POLITICS AND HUMAN FORMATION, the theme incorporates, transversally, the different objects of study, insertions and practices of professors proposing this project. So our research on education, work, music, memory, territory, culture and race relations, converge to strengthen such perspectives, through the analysis of the public policies and their implications in the processes of subjectivation and human socialization and in the broadening of the social rights. This project aims to create and strengthen international research networks involving 6 localized GPs in the USA, Mozambique, France, Russia and England, involving the following institutions: Afro-Latin American Research Institute Hutchins Center for African and African American Research Harvard University Analyze Group Pluridisciplinaire des Situations de Travail (APST) –Institut d'Ergologie / Université de Provence Aix-Marseille School of Music - Eduardo Mondlane University Laboratoire EMA (Ecole, Mutations, Apprentissages) - Université de Cergy-Pontoise Latin American Studies Program – University of California / Riverside Center of Recherche sur Le Travail et Le Développement (CRTD) - Conservatoire National des Arts et Métiers (CNAM) School of Histories, Languages and Cultures / University of Liverpool Sciences of L'Education - Université de Paris VIII Latin American Studies Program - University of California / Riverside Center National de la Recherche Scientifique – École des Hautes Études en Sciences Sociales Latin-American Institute - Russian Academy of Science Center National de la Recherche Scientifique - École des Hautes Études en Sciences Sociales. Composed of professors, doctoral candidates and program technicians linked to the project, brings together individuals with diverse backgrounds (history, music, education, psychology,



anthropology and geography), interested in investigating the world in an integral, situated and non-linear way from the studies on education, work, memory, territory, culture, music, and race relations.

Name of the project: Innovation and Technical Networks in Production of Public Policies in the Environment Urban

Start date 01/08/2018

End date 31/07/2022

Description - The project is linked to the International Geocritical Group, which brings together 229 Ibero-American researchers and develops regular exchanges since 1996 on the links between technical innovation, public services and urban sprawl in different historical and geographical contexts. Considers that urban public policies are defined in close association with the technical-scientific changes that, impelling changes in economic production and social dynamics, give rise to production of new material and legal bases for urban life, influencing the design of policies and the objective bases for infrastructure, equipment and services of various types. The project draws on the experience of the researchers from the University of Barcelona (Doctorat Geography, Territorial Planning and Environmental Management), Spain, for to increase international cooperation activities to advance comparative studies on of the technical bases related to urban public policies. In a scenario that points each time the "urbanization of society" (Harvey, 2010), knowledge about public policies cannot study on the conditions of its emergence and consolidation in different contexts. In this sense, the GP PUBLIC POLITICS AND HUMAN FORMATION develops, especially in the line of research "State and Public Policies", studies, research, training of researchers and exchanges related to the investigation and analysis of different experiences and conditions of public policies in the environment urban areas, such as those related to the structural bases of economic production (such as technical energy and transport networks) and guarantee of collective life (such as education, health, social work and job training). The challenges of in the current context, marked by accelerated urban modernization in clear contradiction with the intensification of social problems and the dispute over the role of the State, are of central interest to the Program. The project is development of comparative studies on the emergency conditions and the implementation of public policies in the in the Ibero-American context, with an emphasis on the constitution of technical networks for energy, transport and collective equipment related to social policies.

Name of the project: Articulations in human and social sciences: challenges of human rights in Latin America and Europe

Start date 01/08/2018

End date 31/07/2022

Description - In the last decade we have witnessed a resurgence of ultraconservative positions with exclusionary and reactionary ideologies both in Latin America and in Europe, with nationalist, racist, sexist, and authoritarian state inferences similar to the Nazi-fascism of the past. In this scenario, human rights, previously considered a secondary expression, attributed only to a leftist ideological construction, have become an influxion for social movements and the critique of society. The recognition of chauvinism, xenophobia, homophobia and persecution of ethnic minorities has required forms of



defense in all segments of society. Social Psychology is a field of knowledge that, articulated with the other social sciences, can contribute to the reflection and confrontation of this phenomenon. This project brings together various social situations that, because they are in danger, call us to a careful look at updating and reconfiguring our practices. The risks to democratic principles and human rights that are being experienced by both the Latin American and European countries involved in this proposal have devastating and sometimes indelible consequences. Increased migratory processes, psychic suffering from this expatriation, growing mass incarceration, violence at schools with learning losses, pressures on varied family forms, violence against racial, gender, and sexual minorities pose a threat not only to human rights, but to our survival as a society. These are aspects to consider in this research whose main focus is human rights. Our proposal is to act in the various segments described here, creating new possibilities for dealing with and constructing knowledge about an essential theme for the human and social sciences.

Theme 7 - ENVIRONMENT: TRAINING, IMPACT ANALYSIS ENVIRONMENTAL AND NEW TECHNOLOGIES IN SEARCH OF SUSTAINABILITY AND SOCIAL AND ENVIRONMENTAL ISSUES.

INTERNATIONAL COOPERATION PROJECTS

Name of the project: Ecology of Populations, Communities and Water Ecosystems: Understanding and Modeling Tropical Environments

Start date 01/08/2018

End date 31/07/2022

Description - Human activities such as agriculture and urbanization lead to changes in the morphology of rivers, increasing water flow and concentration of nutrients. Under these conditions the survival of the biota depends on its potential for adjustment to the changes. Recently it has been suggested that environmental changes resulting from urban processes impose a rapid change in the phenotypic biota, but not all species can compensate for the speed of changes. Acknowledge which species and how they respond to and adapt to new environments is critical to ecosystem management. In this context, we propose the development of models that explain how the phenotypic plasticity of species and ecosystems changes. The limnological characteristics and the composition of the biota are the essential foundations for understanding and modeling the maintenance and functioning of ecosystems. GP of Ecology and Evolution professors already collaborate with several reference institutions, in international projects supported by development agencies. The research that has been carried out focuses on different aspects of Rivers and Streams Ecology, with emphasis on Fish and Macroinvertebrate Ecology and its role in nutrient cycling, ecosystem structure and functioning, as well as aspects of life history and evolution of biological of local species. There is already an important collection of articles published with the working groups involved and maintaining the partnership. Issues relating to the first set of approaches follow the cutting-edge methodology involving nutrient concentration reading and physical structure of habitats and have the collaboration of University of Victoria - Canada, Cornell University and



University of Nebraska - USA. The studies on the second set of approaches are focused on the understanding of issues related to reproduction, migration, behavior and adaptation to environmental changes and variations and have the collaboration of a researcher from the Museum of Natural Sciences of Madrid - Spain.

COUNTERPART

1. Internationalization of the curriculum - Incorporation of international themes in postgraduate classes.

As all the themes proposed by UERJ for Capes PrInt were organized around activities the effectively carried out by the GPs, international issues are already part of the undergraduate and postgraduate classes. The regular and constant participation of visiting foreign researchers at the University, invited by a GP, but with activities open to other GPs of UERJ, in turn, already guarantees the participation of undergraduate and postgraduate students in international activities. Courses are offered in English, French, German, Spanish and Japanese students to Undergraduate students, preferably, but also for the whole community of students, professors and non-professors of UERJ, under the supervision of the Institute of Languages / UERJ. We also have a Translation Laboratory.

2. Production of publicity material for the University in other languages, including websites of the participating GPs.

All GPs 7 and 6 already have their pages in other languages. The other GPs are already encouraged to do the same. In addition, teaching materials in other languages circulate among postgraduate students and, eventually, also among students of graduation. SR2 is stimulating the expansion of this process, recommending to all GPs the online dissemination of teaching materials in other languages for Brazilians and foreigner students to use.

3. Training and qualification of staff for institutional internationalization.

The International Cooperation Office has staff members with fluency in languages and has organized regular training activities for its officers. The Department of Graduate Education has a bilingual officer to support the technical-administrative activities that require mastery of other languages. The SR-2 has Advisors who are fluent in other languages, such as Spanish, French and English.

4. Counterparts offered by foreign partnership institutions, when applicable.

As already pointed out, UERJ has regular activities with Latin American countries and, for the most part, such activities are funded by the agencies and universities of other countries. It has also been usual for foreign universities with which we have agreements to exempt our students from academic fees. This, however, is much more difficult with certain leading universities in the US and Europe, which requires agreements to be developed directly by MRI and Capes in order to exempt Brazilian students of



academic fees. Efforts are being made to ensure that, in the future, leading institutions fund Brazilian researchers, a broader goal that, in our view, should be part of Capes' internationalization policy. For now, this is achieved by occasional funding for UERJ researchers' activities when our researchers are part of the board of international associations.

5. Other counterparts, when applicable.

The major counterpart offered is the support of Faperj and CNPq at the international level. The University's researchers regularly use their grant funds from CNPq, grants from Faperj, as well as specific internationalization projects of these agencies (Reverse Doctorate, Faperj - Conicet, International Visiting Researcher, French Chairs, etc) to fund internationalization projects. UERJ maintains a Visiting Professor Program, with its own resources, receiving foreign researchers to work on our GPs.

Description: Especially the GPs 6 and 7, are already planning to organize disciplines in foreign language, associated with the topics listed in PrInt; GPs 5 are also planning for this. It is worth mentioning that we are referring to the disciplines exclusively in the foreign language. It is usual for GPs to have part of the discipline's activities in another language: whenever a foreign visiting researcher is received at the GP, their activities are included in the regular GP courses. We are also organizing the systematic preparation of teaching materials in other languages to be made available online for the students enrolled in GPs. The socialization of this material in a non-systematic way is already common practice in classes and research groups in GPs and often in the University graduation. We took advantage of this space to justify the numbers presented in terms of contributions of derivative products and cooperation projects. We do not consider that these numbers are a measure of the impact. They are just quantitative records that do not tell too much. UERJ's impact on internationalization is measured by the international rankings, already described, by our high impact bibliographic production and by so many other intangible factors that can only be identified by an overall qualitative assessment. This evaluation is constantly performed at UERJ, through the Program Prociência, in the database of scientific production and by the different processes of institutional evaluation, mainly those related to the teaching career.