GENERAL

RESEARCH

POLICY

AT

UNIVERSIDAD DE LA SABANA

Universidad de
La Sabana

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CONSIDERATIONS

1. In order to take Universidad de La Sabana to a solid position, both in the National System of Science and Technology (Sistema Nacional de Ciencia y Tecnología) and in the higher education system, in the country and in the international scientific context, it is necessary to have clear policies; such policies shall be framed in the principles contained in the Institutional Educational Project of the University, which shall guide and lead directors, faculty, and administrative staff, in their effort to promote, implement and manage scientific research.

2. Therefore, it is appropriate to issue a policy document for research, in line with the recommendations by peer reviewers of the National Council of Accreditation (CNA in Spanish) - in order to formalize what has already been implemented at university by President-Research Direction as to encourage, promote and improve quality to the research process as well as to knowledge generation and transfer.

3. University members require greater involvement of Professors/researchers in national and international contexts of science and technology through research projects and scientific publications that address issues and questions in the frontier of knowledge and to be endorsed by the highest authorities for such purposes.

4. Policies for research aim at taking, in the medium term (4-6 years), the University to meet the indicators of scientific and technological production that are required to position itself as a University recognized by its achievements in research and high quality research master’s and doctoral programs comparable to top universities.

I. DEFINITIONS

The University welcomes the following definitions to guide the development and promotion of research at University:

1. Scientific Research: It is a process of seeking and generating knowledge in all fields of knowledge and at all levels of reality, by the use of methods of each discipline (1). Scientific research involves a complex intellectual activity and rigorous and systematic study, theoretical, experimental or mixed. With research, University members have access (find and build) to new knowledge, perfecting already existing knowledge or the creation or adaptation of new technologies. Also, research work seeks to: develop thinking in different areas of knowledge or disciplines, resolve questions or problems, and create opportunities and innovations. This definition of scientific research includes both human exact, physical and natural sciences and social and human sciences. The Frascati Manual (2) narrows the definition of research by classifying it in three types as follows:

"Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge about the basics of phenomena and observable facts, without considering its use or particular application.

Applied research also consists of completing original works in order to acquire new knowledge; however, it is mainly directed towards a specific practical objective.

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1. Procedimientos Generales in Relación con la Investigación en la Universidad de La Sabana. 2002.

2. OCD (Organización para la Cooperación y Desarrollo Económicos). 2002. Manual de Frascati. Propuesta de Norma Práctica para Encuestas de Investigación y Desarrollo Experimental. FECYT (Fundación Española Ciencia y Tecnología) (Ed.). 282 pp.

Experimental development is systematic work, drawing the obtained existing knowledge from research and / or practical experience, and it is aimed at the production of new materials, products or devices: the implementation of new processes, systems and services, or substantial improvement of existing ones. R + D covers both formal R + D performed in the R + D departments as well as R + D done casually or occasionally in other departments. ”

2. Group of Scientific and Technological Research: " This is a group of people coming together to do research on a given topic, formulating one or several problematic situations of interest, who devise and develops a mid or long term strategic plan in order generate knowledge on the subject in question. A group exists as long as it brings tangible and verifiable results, product of projects and other research activities conveniently expressed in an action plan (projects) duly executed. (3)”

3. Center of scientific and technological research: Institutional environment where research groups operate and which can stand alone or be attached to a Faculty or Institute. A Centre has a formal organization and may have a degree of administrative and financial autonomy. Its goal and main activity are scientific or technological research as well as to perform other activities related to science and technology, such as training and skills development of human capital, technology transfer, diffusion and spreading scientific and management, monitoring and evaluation processes of science and technology . (4)

4. Scientific and Technological Research Project: Logically structured set of activities whose purpose is to generate new basic or applied knowledge,

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3 Documento Colciencias, Observatorio Colombiano de Ciencia y Tecnología y Grupo Académico Ciencia, Tecnología y Sociedad. 2002: VI Convocatoria a Grupos de Investigación Científica y Tecnológica – Año 2002.

4 Definición adaptada de Colciencias, 2000: Documento Conceptual sobre Grupos y Centros de Investigación.

enrich or question existing knowledge to propose answers to questions or problematic situations that have not been solved before, or which have be dealt with in an insufficient or unsatisfactory manner, or in another context. A project of technological innovation seeks to generate or adapt, dominate or use new technology in a region, productive sector or specific application, whose main innovation may cause uncertainty, which has not been solved provided the knowledge available '. Each project must be made tangible in a document containing the necessary elements in order to assess its quality, originality, relevance and efficiency; that is, abstract, research question, rationale, state of the art, theoretical framework, general and specific objectives, methodology, expected results and performance indicators (publications, patents, registrations, technology products, among others), timetable, budget, bibliography, ethical considerations (when applicable) and researchers' profiles.

At Universidad de La Sabana, a project "in progress" is one that has been approved by the relevant bodies (School Commission, School Research Sub-commission or equivalent, Research Direction, General Affairs Commission) and that is really developing, as well as "recorded" at the Research Direction Office of the University. Similarly, a research project must provide progress reports and end on the timetable provided for this purpose, which are evident in written documents delivered to an instance which is doing a follow-up and evaluation of the same.

5. Research Plan: Complementary set of projects and activities planned for the medium or long term in order to reach a common goal that aims at solving one or more problematic situations or to create opportunities in a field of knowledge or social or economic sector. A "plan" differs from a "project" by the magnitude of the achievement of its objectives, execution time and the results, as well as by the fact that it shall be constituted by more than one project, and it shall be executed by several research groups; additionally,

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8 Definición adaptada de Colciencias. 2003: Presentación Estrategias SNCyT

a research plan can be developed in several stages, at the end of which, the ultimate goal proposed shall be achieved. In a research plan, the end result should be more than the sum of its components (projects) and proper integration of results is required to reach its ultimate goal. A research plan must channel the strengths of the research groups at work; these groups should, in addition, be able manage several funding sources, both domestic and international. Finally, a research plan also facilitates the definition and implementation of policies in the field or sector subject of the Plan.

6. Research Strand: axis, driver problem, or thematic area of emphasis of the research activities of a group or unit, aiming at achieving a higher purpose or long-term and far-reaching objective. A strand assumes the existence of projects to which they are associated. A strand of research must be justified by its relevance, relevance and impact, current or potential, in the solution of problems or creating opportunities through the generation of new knowledge and technologies. The results of their development have an impact at local, regional, national or global levels. Other scientific and technological activities converge around a strand of research, such as courses, master's and doctoral programs, academic exchanges, among others. The development of a research strand involves systematic work on a specific theme and requires constant dedication, comparison of results and the submission of these to criticism from academic peers; the degree of consolidation of a research depends on the number of projects successfully completed and the results and products obtained from them, as well as those which are running and have an advanced level of development. Depending on the case, we can say that it has an established strand, built in consolidation, construction or gestation (intention or statement of purpose to begin the process of building the strand). A research strand may require multidisciplinary, interinstitutional and intergroup work, both nationally and internationally.

7. Formative Research: It is a search process of inquiry of thinking, research teaching practice, with the explicit intention of promoting the development and formation of habits, strengths and interest in research, in students of different levels of higher education (6). In accordance with the National Accreditation Council (7), all activities that are made to familiarize the research learner with the research process and to train a university student as a future researcher, are formative research activities.

8. Young Researcher Program: It is a strategy that promotes the grouping of graduate students, current students and young professionals or young Faculty to carry out research activities that go beyond the formal academic process and to promote research culture. Activities at the Young Researcher Program materialize in concrete projects (research, development of state of the art, comprehensive literature review for publication of articles). These programs may arise in the context

of research initiatives arising from the needs and interests of their members and which are specified in projects led by researchers (tutors) of greater experience. The Young Researcher Program also functions when there are students who participate as research assistants in formal research groups. This means that students, or young people integrating such programs, can support lead researchers and co-researchers in the development of their projects; these students can also formulate their own projects under the general strands of research academic units. The time a student, graduate or young professor remains, allows for the program to transcend semesters and last up to the graduation period or until one or more projects have been successfully completed; the concept of "young researcher program" presented here can transcend formative research when it involves

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6 Procedimientos Generales en Relación con la Investigación en la Universidad de La Sabana. 2002.

7 Consejo Nacional de Acreditación. 1998. La Evaluación Externa e el Contexto de la Acreditación en Colombia.

the student, graduate student, or young professor, in formal, or "strict" research processes, in other words, the process that generates new knowledge.

II. OBJECTIVES

Research at Universidad de La Sabana pursues the following objectives:

1. Seek, discover, communicate and preserve the truth in all fields of knowledge.

2. Contribute to understand and resolve the multiple problems and new demands of modern society.

3. Generate knowledge that helps support the recognition, respect and unconditional defense of human life, to promote family as the bedrock of society and understand and make contributions to the peaceful coexistence among men.

4. Contribute to the development of thinking in the different fields of knowledge and disciplines related to their academic programs.

5. Create opportunities or innovations applicable to communities, businesses and, in general, to entities or organizations of public or private sector, from different fields of knowledge studied at University.

6. Enhance the teaching and curriculum of the University.

7. Encourage the development of master's and doctoral programs with emphasis on research; these programs should be supported on activity and research projects whose quality has been recognized nationally.

III. POLICIES

In order to address the actions and strategies to promote, support, strengthen and consolidate the basic functions of research, the University shall established and develop policies on the following aspects:

1. Promotion of scientific and technological research and research training.
2. Evaluation, publishing and transfer of research and its results.
3. Organization, administration and financing of the research system.
4. Definition of performance indicators of the University research system.

1. Promotion of Scientific and Technological Research and Formative Research

Universidad de La Sabana ratifies its commitment to boost both basic research directed to deepen and enrich the theoretical developments of the disciplines, such as applied research aimed at interpreting reality and seeking solutions to the problems and needs of society and the country (8). To this end, the following policies are defined:

1.1 On Research Work of Faculty

a. Faculty with advanced degrees (master's and doctoral programs) must demonstrate activity and research results and, likewise, contribute to the training of young researchers; this means faculty must get young researchers involved in research projects and other activities related to science and technology.

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8 Procedimientos Generales en Relación con la Investigación en la Universidad de La Sabana. 2002.

b. Professor/researchers must develop their annual work agenda with a balance between research, teaching, academic counseling and extension programs, giving required priority to some of these activities according to their abilities and projection.

c. For the right job and the utmost dedication of Faculty to research, they can be partially relieved from teaching activities. This should be based on justified requirements in research projects approved and recorded at the Research Direction of University.

d. Research achievements of Faculty should be made tangible in scientific and technological products, such as publications in indexed journals, books or book chapters resulting from research, patents, registrations, rules, technological packages, software development, and industrial secrets, among others (all products of science and technology should be validated in their existence and quality, either by peer researchers or direct recipients of the product).

e. The University supports Faculty training by allocating, through an annual call for proposals, budget by the Special Endowment Fund, to doctoral level studies and research masters. All this, in order to take 30% of Faculty to doctorate level and 30% with master's level, in the next five years, as determined by the Development Plan 2005-2015.

1.2. On Research Strands and Groups

a. Strands and University research groups must be framed in the areas of knowledge that are cultivated in different academic units, and they must be founded on a Christian conception of man and the world and contribute to the fulfillment of the following purposes expressed in the Institutional Educational Project related to research (9)

"... contribute to the solution of theoretical, practical, technical and aesthetic problems that arise in the lives of men and peoples…

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9 Proyecto Educativo Institucional de la Universidad de La Sabana.

…contribute with legitimate solutions to the many and complex problems in society through articulated action of research and teaching…

…consolidate the University academically, so that it is in capacity to meet the requirements of a current open society…

…encourage dynamic strategies to generate and project knowledge in every science; and provide a balance between basic research and applied research."

b. The University also encourages and promotes, as a priority, the development and consolidation of strands and research groups that contribute to the advancement of knowledge, as well as to provide answers to problems in specific subjects for the University which are of special interest and importance such as: the human person, respect for life, family, ethics, and bioethics, among others

c. The University promotes, supports, and strengthens research work done by Professors/researchers who are organized in research groups; these groups should become permanent and valid interlocutors with the academic and scientific national and international community and to the various sectors of society.

d The University acknowledges that in addition to the best research groups which have proven production of new knowledge, there are groups that are growing in the process of building their research skills. Therefore, the University implements strategies to support training courses and seminars, in research methodologies and formulation of projects, advice for the publication of articles in indexed journals, advice on management of statistical results, internships at the headquarters of groups, in A or B categories, internal calls addressed to new projects so as to help the latter groups to improve their performance in the medium term, by producing high quality scientific products, in their scientific communities.

e. The University also acknowledges that provided the nature of its work and in accordance with the dynamics of some fields or areas of knowledge,

some researchers work individually, without creating a group with other researchers. However, even in these cases, dialogue and exchange of ideas with peer-researchers, training of young researchers and production of tangible and certified results their academic peers are considered essential.

1.3 On Incentives for Research

a. The Faculty Ladder Rank of the University explicitly recognizes goals achieved in research by Faculty. This recognition is both tangible in promotions in the ladder and economic bonuses for scientific production.

b. In addition to the recognition of the research done through the Faculty Ladder Rank, the University can establish other incentives or awards to researchers and research groups for achievements in the development and management of research which shall, in turn, benefit the research culture and infrastructure of the University. Incentives or awards can be given in kind (equipment, material is or reagents, travel for academic purposes, in addition to those obtained through research projects) or financial resources, and their purpose is to strengthen the group in aspects, such as infrastructure, scientific networking and interaction with national and international peers, trips to international conferences, international internships, publication of results, external consultancy, among others.

1.4. On Development and Consolidation of Master's and Doctoral Programs

a. The master's and doctoral programs are based on the strengths, abilities and projections of recognized research groups.

b. In terms of curriculum design, structure, organization and administration, master’s or doctoral programs depend on academic units: schools or institutes. Research

groups support the research component of master's and doctoral research projects, which are active and co-financed, either by funding agencies, such as the Special Endowment Fund of the University, and by providing scientific mentoring or directing students' research works.

c, The Research Direction supports the management, assessment and monitoring of research projects and aims at strengthening research infrastructure required by groups to properly develop the research process of master's and doctoral programs. It also promotes the publication of results in the most appropriate medical scientific journals.

d. The University allocates resources to strengthen research groups that can support the development of research and doctoral master's. These resources include provision of laboratories, infrastructure, databases, research time for Faculty and, as required, hiring new Faculty members with a strong research profile.

e. In the Professional Development Plan for Faculty, the University keeps in mind the need of strengthening research groups that support the development of research master's and doctoral programs.

1. 5. On Research Projects

a. For the implementation and formalization of research, the University gives priority to research projects. Research projects should lead to generate new knowledge, applications or technological innovations, verifiable through publications, records, patents, technical, social or environmental standards, technological packages or other indicators of research products, as defined by the Sistema Nacional de Ciencia y Tecnología.

b. Every research project submitted to the Research Direction of the University, to be recorded or is applying for funding, must be fully documented in order for an academic peer or external evaluator to answer questions such as: a) What are the background and rationale leading the researcher to propose a project and why its

implementation shall eventually contribute to new knowledge or development, adaptation or application of technology? b) What is the problematic situation or questions to be solved that the researcher wishes to resolve with a project and what does the candidate researcher know about the issue in the national and global contexts? c) What goals or objectives are pursued with the solution, question or issue? d) How will the problem be approached and how will the researcher achieve the objectives? e) What are the types of results expected? f) What activities, time, and phases should be needed to achieve the objectives?

c. Research projects must go under a peer-review process. This can occur in the external funding agency to which co-financing resources are being requested, at the Research Direction or the Faculty Research Sub-commission, when the Special Endowment Fund resources of the University or the Faculty are being requested, either through direct internal calls for research projects, or without.

d. Once the technical quality of a research project is assessed, it should be submitted to the Research Ethics Committee of Universidad de La Sabana (or its delegate subcommittees for this purpose) in order to assess its ethical integrity and compliance with existing rules.

e. Every approved research project must sign an agreement form, through which the University, its researchers, and students involved in it, commit to comply with the provisions in it. Moreover, this agreement makes explicit everything related to intellectual property of a project and the results arising from this, in regard to both moral and property rights. This should be in accordance with the Regulation of Intellectual Property at Universidad de La Sabana.

f. The lead researcher of any approved ongoing project must submit progress reports and a final report (technical and financial) to Research Direction, according to dates on the project timetable.

g. In order to consider commitments on results of each project fulfilled, the University takes into account that authors fully conducted the process of submitting

articles for publication in journals, preferably indexed in the project topic.

1.6 On Formative Research and Articulation between Teaching and Research

a. The University emphasizes a strong and clear relation between research and teaching so that research is the basis for ongoing feedback on curriculum and course contents, as well as for pedagogical practices that promote the student's interest in generating new knowledge.

b. The University encourages and supports the creation and consolidation of the young researcher program and the appointment of students of undergraduate and graduate programs in research projects with Faculty, as a strategy to train young researchers.

c. Formative research is present in the curricula of the University academic programs through strategies, such as: research seminars, research methodologies, formative research projects, participation of students in Faculty research, student participation in forums, conferences and other events, publication of research results, graduation research projects, building of state of the art, among others.

1. 7. On Internationalization of Research

a. The University promotes the internationalization of its research groups, fostering and facilitating access to updated and international sources of information, seeking international resources for research and relations with international peers. This encourages partnerships with other groups and institutions in the search and access to resources by sponsors and international cooperation.

b. Relations with international peers should lead to projects and joint publications or other results of science and technology, certified with high quality.

c. The University facilitates and supports the inclusion and active participation of its research groups in international networks.

d. The University, through research direction offices, international relations and educational institutions relations, supports Faculty in the pursuit and realization of exchanges and internships, framed in research work and participation in scientific and academic events, in order to share and present research results.

e. The University considers, as fundamental strategies for international visibility of research performance of its groups, the following:

• Publication of results in international indexed journals.

• Inclusion of scientific journals of the University in indexing and abstracting services of international reach and coverage.

• Presentation of projects to sponsors and international cooperation agencies.

1.8. On Promotion of a Research Culture

The University promotes a "research culture" that includes, among others, the following:

a. Intellectual curiosity, open-mindedness, creativity, critical reflection, pursuit of new knowledge.

b. Approach to problems and questions that require a process of scientific research for their solution.

c. Reading and updating on the latest scientific developments (National and International level).

d. Monitoring standards recognized by the international scientific community.

e. Criticism and external peer-review (projects and research results).

f. Publication of research results in specialized and indexed high impact journals (preferably internationally published) or books that provide for a process of external peer-review with recognized experience in the subject matter.

g. Resource management for external agencies.

h. Further opening of the academic community of the University to other national and international academic communities, through active participation in the most important scientific events, international networks and exchanges, and collaborative projects with international peers.

i. Compliance with regulations and ethical criteria.

j. Self-assessment and measurement of research results through verifiable indicators.

2. Evaluation, Publishing and Transfer of Research and its Results

21. On Research Reports

a. Lead researchers of research projects sponsored and / or funded by the University shall deliver progress and final reports, both technical and financial, as stipulated on the project timetable and registration form.

b. Final reports must be submitted for peer-review.

c. It is expected that final technical reports are delivered in an article (s) (or draft version) whose acceptance for publication in a journal, preferably indexed, shall be considered as a positive and satisfactory evaluation of project results.

d. For a book, as a project result, preliminary texts shall undergo peer-review by experts on the subject, and according to these concepts the final report of the project should be approved, or not.

2.2. On Publication of Research Results

a. Research process should lead to the generation of results that become visible through "science and technology products”, such as: print or digital media, technical standards, social and environmental results of research, records, patents,

or industrial secret of technological products, and other products of research defined by the Sistema Nacional de Ciencia y Tecnología.

b. In regard to written publications, these should be made in the most appropriate and recognized media, in accordance with national and international media standards, these are: scientific indexed journals, research books or peer-reviewed book chapters, books result of research may be published by the University, where possible in co-edition with publishers specialized in the general topic of the topic that resulted in a book and providing for a process of peer-review.

c. In regard to technology products, they must meet a process of quality validation, registration or patent, or make clear their acceptance by users, to whom it may be addressed.

d. Publications that occur as a result of the research should be made payable to Universidad de La Sabana, and they must publish, as co-authors, the names of the researchers and, if applicable, of students or assistants who participated in the project.

e. If a project is a product which is patentable or marketable, it shall become intellectual property of Universidad de La Sabana and, as provided by the Regulations on Intellectual Property of the University, the economic benefits that may result from it can be distributed between the University and researchers in compliance with previous agreement.

f. An "Annual Conference on Research Development" is established as a space for researchers to present the results of their research projects and / or lectures on scientific topics and their specialty. These events may be attended by researchers from other national or international universities.

g. The University has a research website or page which is regularly updated with information related to activities, projects and research results of University research groups.

2. 3. On Transfer of Research Results to Potential Recipients

a. In accordance with the policies of social projection of the University, and its intention to contribute to understand and solve many new problems and demands of modern society, it fosters transfer of technologies and research results to society. To this end, the University consolidates strategies of transfer and use of research results in public or private business and entities. In addition, the University provides organizational bodies required to find opportunities and joint projects to serve communities in greatest need in our country.

b. Similarly, and aware that for successful transfer of results, it is necessary to ally with potential recipients (private corporations, public entities, economic sectors, etc.) from early stages of research projects. The University seeks to strengthen relations with corporations and organizations in sectors relevant to the research strands of the University.

3. Organization, Administration and Financing of the Research System

3.1. On Organizational Structure

In order to achieve proper functioning of its research system, the University is organized by academic and administrative instances which are informed of the policy described on this document and the guidelines issued from President-Research Direction. Such instances are:

a. Groups of Scientific and Technological Research: basic research units that develop research in social and human sciences as well as in natural sciences.

b. Centers of Scientific and Technological Research: institutional environments in where research groups work. They can be independent or attached to a Faculty or Institute.

The following are bodies for the promotion, coordination, management and funding decisions:

From the Superior Council:

• Commission of General Affairs of the Superior Council: It adopts policies for research and decides on the financing of projects of higher amounts from the University resources.

• Research Ethics Committee: It provides advice and guidance to the scientific community on the subject and assesses the ethical integrity of research projects.

From the President's Office:

• Research Direction: It coordinates aspects related to the promotion, management, financing, reporting and evaluation of research at the University. It proposes policies and creates processes to adequately promote and develop research in the University.

• Research Committee: It advises the Research Director in regard to the promotion, quality, coherence, and relevance of research work of the University, and it decides on the approval of research projects requiring minor external financial agencies or the Special Endowment Fund.

From Faculties, Institutes and Other Academic Units:

• Research Sub-commission: It promotes processes of research at the University Schools and approves of projects that are submitted to the Research Direction and Research Commission for funding resources of the Special Endowment Fund or external funding agencies. A research coordinator is a Faculty member of each academic unit who is assigned to this task and represents the technical secretary of this sub-commission in order to support other Faculty members and school dean when writing and developing research project proposals of his school.

3.2. On Research Funding

a. The University has financial resources provided by its Special Endowment Fund, aimed specifically at research funding and training of Faculty in doctoral level programs.

b. In order to allocate resources to research, the University conducts internal research group calls for proposals, in response to the University Research Strands. Additionally, the University allocates funds for projects submitted to calls for outside agencies.

c. The University encourages and requires its Professors/researchers to find and manage external funds, before funding agencies for science and technology, both national and international, or entities or corporations, potential recipients of their research results. This seeks to leverage the investment in research by the University in order to strengthen its research groups and increase its scientific and technological capacity.

d. Investment in research that is done through research projects is priority to improve research infrastructure (equipment, supplies, databases, networks and participation in conferences, training, consultants, and students).

e. The University may also decide to directly strengthen, with financial resources from income returns of the Special Endowment Fund (FPE), the infrastructure and human talent of those groups that are of most interest and who also are showing significant progress and achievements in research.

f. Delivery of reports of technical and financial progress is crucial for the approval of disbursements for the various phases of project implementation.

g. The University is committed to agile and efficient administrative processes to facilitate the development of research activities.

4. Definition of Performance Indicators Expected from Implementation of Research Policies

With proper and timely implementation of policies, the University expects to achieve the consolidation of a research system based on:

1. Development and stability of projects, programs, strands, groups, centers and research networks.

2. Faculty Ladder Rank with clear incentives for production activity and research results from Faculty members.

3. Status of Intellectual Property that shall meet the needs of the development of research at the University.

4. Research Ethics Committee that shall be regulated and running.

5. Academic Agenda of Faculty where there shall be a suitable balance between research, teaching, academic counseling, extension programs and administrative tasks.

6. Faculty with doctoral and master's degrees devoted to research and generating verifiable results, with certified quality.

7. Laboratories, equipment, information and technological resources suitable and sufficient to develop research activities.

8. Adequate and sufficient budget to develop research activities, consisting of University resources and resources from external sources, such as national and international funding agencies of science and technology, corporations, corporate associations, among others.

9. Annual internal calls funding for research projects.

10. Approval and co-financing (with funds from FPE) research projects as quality parameters and academic merit of the proponents.

11. A culture of peer-review.

12. Annual events for the publication of research results from Universidad de La Sabana.

13. Master's and doctoral programs with emphasis on research as provided in the Development Plan of the University.

14. Information and monitoring system of research at the University, which is accessible online and can be powered by the relevant bodies (researchers, Research Direction, Division of Budget Monitoring, administrative secretary of faculties and institutes, etc.)

15. Indexed Journals of the University and the leading and most recognized indexing and abstracting services such as Publindex, ISI, ScieLO, Index Medicus, PsycINFO, among others.

16. Plans and research agendas of groups registered in the SCientTI platform.

17. Research groups recognized by Colciencias and classified into categories A and B which have members with doctoral-level education.

18. Research groups that manage national or international funds before external agencies of science and technology (at least one research project formally presented to funding agencies every two years), or before entities or corporations which shall be recipients of research results.

19. Research groups with projects approved and funded by national or international external agencies, or by entities or corporations recipient of research results.

20. Research groups that produce books and articles in indexed journals published by leading publishers.

21. Young researcher program and student/researcher working in the framework of recognized groups and which is granted some funding for the development of its "young projects".

22 Internationalization of research, using indicators, such as projects and joint publications with international peers; exchanges, internships and participation in networks which are tangible scientific products.

23. Consolidation of University-industry and University-public sector entity relations for the generation and transfer of research results, in response to the requirements and needs of these potential recipients of research results.