

# MORE THAN THREE CENTURIES PROMOTING RESEARCH IN COLOMBIA

Within the framework of the 365th anniversary of the founding of the University, *Advances in Science* takes us on a tour of what this institution of higher education has done in the field of research, where the Rosario laid the initial foundations for the consolidation of the scientific knowledge which it currently offers the country.

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**T**he history of education shows that the research which is associated with teaching is a recent feature of the Western model of the University.

It was the Humboldt University of Berlin, founded by the great savant it is named after in 1810, which linked these two activities, which, for centuries following the Middle Ages, were separate: Universities were only devoted to teaching, that is, the transmission of knowledge, while research took place in other ambits, like monasteries or academies of science.

The model which Alexander von Humboldt implanted in Europe was later adopted in the United States, to start with at Johns Hopkins University, founded in 1876, the first devoted to research in that country, and whose example was followed by the eight private universities in the northeast which form what is known as the Ivy League, all of which were founded in the 18<sup>th</sup> century, except for Harvard (1636) and Cornell (1865).

In Colombia, the Universidad Nacional (National University), founded in 1867 and whose first rector was Manuel Ancízar, who was also a rector of the Rosario, was organized in accordance with the Napoleonic model, that is, as a

## MORE THAN THREE CENTURIES PRODUCING NEW KNOWLEDGE

The activity of research in Latin American universities is relatively recent; however, the Universidad del Rosario has been working on the production of new knowledge for more than three centuries, a period during which it has overcome the adversities of the political and social situation of the country.

**In 1999, it decided to transform itself and become “a teaching university which undertakes research.”**

Today, it is recognized for its achievements and its contributions to science and society.

Collections: Historical Archive of the Universidad del Rosario

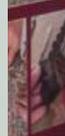
vación de trabajo

la educación regular con recursos de estado que les permita mejorar el nivel de

información para de su obra en medida que la que presentaban en su principal



en la Capilla de de su hijo B. las su ejecución.





←  
Luis Enrique Nieto.

### 1653 - 1654

Inauguration of the Colegio Mayor de Nuestra Señora del Rosario at a ceremony presided over by its founder, Friar Cristóbal de Torres, who, by a Royal Decree (Cédula Real) issued by King Philip IV of Spain, was authorized to create a private and autonomous institution to teach university-level courses to students who were later influential in and enlightened the Republic. **The first subjects which were approved to be taught at the University were theology, philosophy, medicine and civil and canon law.**



### 1653 - 1783

José Vicente Román Cancino, the first teacher of medicine, was responsible for the graduation of two doctors in the Nuevo Reino de Granada (the Vice-Royalty which roughly corresponded to present-day Colombia). **In 1761, José Celestino Mutis joined the Colegio Mayor de Nuestra Señora del Rosario and inaugurated the course on mathematics.** In 1783, Mutis began the research undertaken by the Royal Botanical Expedition (Expedición Botánica), accompanied by several members of the University.



Project of digitalizing the drawings of the Real Expedición Botánica del Nuevo Reino de Granada (1783 – 1816), directed by José Celestino Mutis: [www.rjb.csic.es/icones/mutis](http://www.rjb.csic.es/icones/mutis). Real Jardín Botánico - CSIC

## 1801- 1864

For the first time (1802), the courses on medicine included an agreement between the Rosario and the San Juan de Dios Hospital, whereby the teaching of clinical practices was done with the patients of the Hospital. Mutis led the Botanical Expedition until his death in 1808 and had a strong influence on the academic and scientific life of the Nuevo Reino de Granada. During this period, the intellectual life of the country flourished and important newspapers were published and widely read.



## 1890-1906

In 1905 the first issue of an academic journal entitled the *Revista del Colegio Mayor de Nuestra Señora del Rosario* appeared, the first publication of that kind in Colombia: It is still published. In the following year (1906), the Faculty of Jurisprudence was reopened.



teaching institution which only entered into the field of research in the 1930's.

Hence, the Universidad Colonial, of which the Rosario was part, did not devote itself to research and, for that reason, its teaching program was limited to the three traditional subjects of Arts, Theology and Jurisprudence, since it was not possible to teach Medicine in an organized way, an aspiration of Friar Cristóbal de Torres, founder of the Universidad del Rosario, until the beginning of the 19<sup>th</sup> century.

Those subjects were taught in Latin, in line with the neo-Scholastic tradition of St. Thomas Aquinas and in accordance with the guidelines of the Council of Trent. Aquinas was the author recommended by Cristóbal de Torres, who regarded his philosophy as the foundation of the study of Arts.

This intellectual ambit went through a radical change when the physician José Celestino Mutis arrived in Santafé and, on Mach 13, 1762, set off an ideological and scientific revolution in Nueva Granada with his lectures on Mathematics at the La Bordadita Chapel of the institution, which marked the first time in Spanish America that there was knowledge of the work of Isaac Newton. Mutis likewise made the system of Copernicus known (who

had challenged Ptolemy and the scholastic tradition) and lectured on the principles of Modern Science and the Experimental Method.

### The strong impact of Mutis

José Celestino Mutis had a strong impact on the isolated and provincial society of Santafé, because, in addition to being a priest, he investigated the fields of mining, botany, public health, astronomy, cosmography, painting, linguistics and even the practical arts, like the distillation of rum. His only complete scientific publication was entitled *El Arcano de la Quina*, a study of Quina (or Chinchona) bark and its medical uses, especially to heal malaria, published in the *Papel Periódico de Santafé* (Newspaper of Santafé), run by the Cuban-born Manuel del Socorro Rodríguez.

There is no doubt that the strong influence of the multifaceted activities of Mutis and his ability to spread the ideas of the Enlightenment left a deep mark on his disciples at the Colegio Mayor of Nuestra Señora del Rosario (now the Universidad del Rosario) and fostered an intellectual movement which split the cultured class of Nueva Granada into two schools, the "Peripatetics" (Scholastics) and the "Innovators", one of the many dichotomies which have divided Colombians.

For all of those reasons, the doubts which a professor at the Rosario wrote down in the margins of a book at the *Biblioteca Antigua* (Old Library) of this institution is still an important reminder of that controversy. The volume is a commentary, by St. Thomas

## 2002-2005

Dual degrees and student exchanges were established. For the first time the University obtained the High Quality Certification of the Colombian Ministry of Education. Research training into Jurisprudence began with the first research incubator on Human Rights. **Today there are more than 80 research incubators in the Rosario.** A new campus of Entrepreneurship and Innovation was opened.



## 2007-2011

The Universidad del Rosario opened its first doctorate program in the Faculty of Economics. It currently has five doctorate programs in: **Biomedical and Biological Sciences, Law, Management Sciences, Political and International Studies, and Economics.** The Rosario, the Orden Hospitalaria San Juan de Dios (Hospital) and the Compensar (health provider organization) opened the biggest hospital network in the country, the Corporación Hospitalaria Juan Ciudad (**Méderi**).



## 1930-1968

In 1939, the first woman graduated from the University, **Carmen de Zuleta y Cebrian**, who was awarded a doctorate in philosophy. New faculties were created and others were revived, among them those of Economics, Business Administration, Rehabilitation and Human Development, and Medicine, the latter under an agreement with the Bogotá Society of Surgery. The University launched the first rehabilitation programs in the country.

## 1990-1999



Students of the Rosario took a leading role in campaigning for the inclusion of a “seventh ballot” (séptima papeleta) in the March, 1990 elections, the aim of which was to win the electorate’s approval of a constitutional reform which resulted in the new 1991 Constitution. The Faculty of Political Science, Government and International Relations was created, agreements were made with foreign universities **and the first steps were taken to create research groups, in accordance with the criteria of Colciencias**, the government agency responsible for science. The Faculty of Jurisprudence created the Public Actions Group, which is celebrating its 20th anniversary this year.

Aquinas, on books about physics and was published in Venice towards the end of the 16<sup>th</sup> century.

The gloss, in a translation from the original Latin by our erudite specialist at our Historical Archive, Mr. Jaime Restrepo Zapata, reads as follows\*\*:

*It cannot be clearly established whether these commentaries should be included, strictly speaking, in the oath which the members of this Colegio de la Virgen del Rosario (College of the Virgin of the Rosario) have sworn, since, today, no philosopher may allow himself to swear to the doctrine of a Maestro: Not only because of the progresses of science, but also because certain writings about nature wear out with the passage of time and lose their validity. In the year of Our Lord, 1779.*

This marginal note indicates a profound conflict of conscience and, according to the translator Restrepo himself, amounts to a paean to the free thought and intellectual independence which cannot be subjected to a loyalty oath.

With this example, to which many others can be added, one understands that while research did not take place during the colonial era, either in the Rosario or Nueva Granada as a whole – a situation which lasted practically until modern times – the seed of a true scientific curiosity had already been sown: The use of methodical doubt, the rejection of dogmas, the tireless search for the natural causes of natural phenomena and, in short, that whole intellectual atmosphere which encourages a profound

search for knowledge and implies, in turn, the reformulation of inherited truths and requires an effort to be objective in order to ascertain the truth.

That willingness to experiment, engage in controversies and freely discuss the subjects under study were the ideals which led one President of the Rosario to inscribe the following motto for the University on marble: “The home of the truth which makes one free”, a principle which now defines the Rosario as a **Teaching university which undertakes research**, by means of its 5 doctoral programs, 48 research groups and 55% of its professors who have a Ph.D.

For the Rosario and Colombia in general, this reality is still far from its optimal level, but, despite the difficult conditions which surround research in the country, it is a response to a sustained effort based on the idea its founder had when he created the institution in order to “Enlighten the Republic.” ■

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\*\*<https://bit.ly/2IPr7Kv>



## 2012-2019

The University has **48 research groups** linked to its faculties and schools: The Faculty of Economics, the Faculty of Natural Sciences and Mathematics, the Faculty of Jurisprudence, the Faculty of Political Science, Government and International Relations, the School of Medicine and Health Sciences, the School of Management and Business, and the School of Human Sciences. **There are six funding schemes for research initiatives by students and professors.** The Rosario has an outstanding position in the **international rankings** of entities like the Scimago Institutions Rankings, the World University Rankings, the Times Higher Education Rankings and the Ranking Web of Universities. In 2014, it obtained its **first patent**, signed an agreement with the Fundación Cardioinfantil, and created the Rosario Institute for the Study of Aging and Longevity. **55% of its professors have doctorates**, it has more than eleven Observatories and 10 research journals.