



## Editorial

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Research, articulated with University Training and Extension, constitute the main framework of action for the University in its mission, to train and transform the individual, the environment and society. Hence, UNAN-Managua allocates resources and guides efforts aimed at promoting and strengthening its investigative processes, in response to the search for solutions to contextual problems.

The Torreón Universitario Magazine is pleased to offer this edition consisting of 7 articles, all of them related to the “Fund for Research Projects” of UNAN-Managua, better known by its initials as “FPI”. This program is directed by the Vice-Rector's Office for Research, Postgraduate and University Extension, and its main purpose is to promote research work in the different Faculties, Institutes, Centers and Research Laboratories of the University.

The first article exposes the genesis and evolution of this emblematic program of the University, which constitutes one of the largest internal financing efforts for research projects for both undergraduate and postgraduate studies, promoting graduation by monograph modality, encouraging the faculty research work and supporting research projects related to the University's own master's and doctoral programs. The main achievements of the Fund are highlighted, as well as the lessons learned in the development of its four calls.

The second and third articles show the results of research carried out around the usefulness of soursop (*Annona muricata* L.) for the control of species whose effects have been major problems at the country and region level, in the area of health and agriculture, respectively: *Aedes aegypti* L. and the corn worm. The fourth article reports the results of the evaluation of DNA extraction methodologies from recalcitrant plants, specifically in varieties of cocoa (*Theobroma cacao*) and coffee (*Coffea arabica*). The fifth article deals with the assessment of the efficiency of removal of arsenic in water by using activated carbon from Sabanero jicaro (*Crescentia alata*) and its combination with iron oxides. The sixth article deals with the evaluation of Food and Nutrition Sovereignty and Security (SSAN) of families in rural communities in the municipality of La Concepción, department of Masaya. The seventh and last article of this edition is part of an Environmental Audit of Solid Waste management, in the City of Granada.

The contribution of the Biotechnology Laboratory, the Center for Research in Aquatic Resources of Nicaragua (CIRA / UNAN-Managua), the Faculty of Sciences and Engineering and the Research Direction are highlighted in this edition. Through this scientific production, the commitment of UNAN-Managua to the National Plan for Human Development and the work aimed at achieving different Sustainable Development Goals (SDGs) are evident.