

**TITLE:** MICROBIOLOGY PRACTICES: THE CONSTRUCTION OF A LINK BETWEEN UNIVERSITY AND SCHOOL

**AUTHORS:** SILVA-JUNIOR, L.C.F.<sup>1</sup>; NUNES, B.E.B.R.<sup>1</sup>; QUEIROZ-JÚNIOR, W.G.Q.<sup>1</sup>; FEITOSA, R.A.<sup>1</sup>; ALBUQUERQUE, A.R.<sup>1</sup>; SOUZA, F.M.<sup>1</sup>; OLIVEIRA, E.F.<sup>1</sup>; CUNHA, E.J.O.<sup>1</sup>; QUEIROZ, A.C.<sup>1</sup>; DUARTE, A.W.F.<sup>1</sup>

**INSTITUTION:** 1. UNIVERSIDADE FEDERAL DE ALAGOAS, *CAMPUS* ARAPIRACA, AL (AVENIDA MANOEL SEVERINO BARBOSA – CEP 57309-005, ARAPIRACA – AL, BRAZIL)

**ABSTRACT:**

Microbiology is an area that is not always well understood by most students. Part of this is due to the fact that it is a science related to microscopic organisms that cannot be seen without proper equipment, which eventually creates, in some students, the idea of an abstract science and with no influence in everyday life. However, many of the students who have some knowledge about microbiology end up, due to a common sense, associating this area with "exclusively pathogenic organisms" and with no benefit to human life. Based on this premise, this work was carried out based on the actions of the extension project "The Microbial World in the School Environment" of the Federal University of Alagoas (UFAL) - Campus Arapiraca in partnership with the Senador Rui Palmeira State High School, located in the city of Arapiraca - AL, and with the objective of promoting theoretical and practical actions of microbiology with secondary school students. Undergraduate students from the medical and biological sciences courses at UFAL prepared theoretical and practical actions on microbiology topics for 78 students of the third year of high school during 2018 and 2019. At first, an adapted questionnaire was carried out to evaluate students' prior knowledge, covering basic microbiology topics such as "What are microorganisms and where are they?" to more specific questions such as "What is the difference between a bacterium and a fungus?". The questionnaire data were tabulated and the following actions were created from the results obtained. Interactive biweekly exhibitions on what micro-organisms are, where they are and why they are important and microbiological practices on the detection and isolation of microorganisms in the school environment were created. Topics such as "extremophile organisms and the origin of life", as well as "microorganisms and biotechnology", were addressed through active methodologies such as Team Based Learning (TBL) and videos developed by the project team itself. Currently, the project "The Microbial World" is still active, with actions planned until the end of 2019, with topics such as food microbiology, arboviruses, sexually transmitted infections, rational use of antibiotics, human microbioma, among others. The results are being positive and the interest in microbiology and related areas becomes increasingly evident in the third years of Senador Rui Palmeira State High School.

**Keywords:** High school, Experimental activities, Active learning

**Development Agency:** Pró-reitora de Extensão da Universidade Federal de Alagoas