

HOW THE ACADEMIC COMMUNITY UNDERSTAND THE MOLECULAR BIOLOGY: APPLICATIONS AND ETHICAL ASPECTS, LEGALLY AND SOCIALLY.

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INTRODUCTION: In the last years, the knowledge about Molecular Biology has been growing exponentially. It is a broad science, working in several branches, for example, transgenic, recombinant proteins, embryonic stem cells' manipulation and molecular diagnosis of diseases. Therefore, it has generated many discussions in various sectors of society about its use and the ethical aspect involved. These discussions and some restrictions are due to disinformation, religion and social prejudice. The aim of this study is to describe the students' understanding concerning the use, applications and ethical aspects of molecular biology and know their opinions about topics related to it.

METHODOLOGY: The work consisted of three steps: (i) questionnaire's formulation, (ii) questionnaire's application and (iii) tabulation of results. Questionnaires were applied to the Nursing, Pharmacy, Medicine and Odontology students from all semesters, individually and selected by random sampling. We interviewed 199 students with questions involving the acceptance of transgenic, the use of stem cells and bacteria's manipulation, in addition to theoretical questions.

RESULTS: Considering 199 students, 80.4% accepted transgenics and 89.95% approved stem cells as therapy. On the other hand, 62.63% were against abortion if there is a genetic disorder diagnosed during pregnancy. The genetic bacteria's manipulation was considered safe for 72.45% and 72.36% were against the use of genetic information as a means of discrimination among workers. About DNA's definition, 39.18% of the students used the composition, structure or structure and also function to define it, and 26.13% defined only by their function. Approximately 50% knew the difference between therapeutic cloning and reproductive cloning and they explained the purpose of genetic counseling for couples.

CONCLUSION: This research allowed to get the opinion, as well as the level of student understanding from the Health area on topics related to Molecular Biology, making possible to delineate the students' profile in this area.