The path to a great start in research development [1]

Enviado por Alex Mora [2] el 30 junio 2017 - 8:49pm

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Greetings! My name is Alex Mora. I am a sophomore student in Industrial Biotechnology at the University of Puerto Rico-Mayagüez Campus. During this summer, I've had the joy of participating of the Research Experience for Undergraduates in Reconfigurable and Multifunctional Soft Materials program at the University of Puerto Rico-Mayagüez. I am fairly shy person. However, I did not want my shyness to be an obstacle in my career. Therefore, I decided to challenge myself into applying to this research experience for undergraduates, and I'm glad I did. The experience overall has been wonderful, I have made lots of friends and learned many things along the way. As an Industrial Biotechnology major, I found very interesting the programs focus on soft materials. In fact, this REU experience will help me diversify my knowledge in areas that could be potential applications to the Biotechnology Industry. Also, this experience gives me the opportunity to work hand in hand with the development of a research.

My research is focused on the area of Tissue Engineering. More specifically, I am working on how an increase in revolutions per minute and flow affects the alignment of collagen fibers by means of electrospinning. Electrospinning, as defined by kdStientific, is a process that uses high voltage to create an electric field between a droplet of polymer solution at the tip of a needle and a collector plate. Also, I am working with polymeric bilayers and how the amount of these polymeric bilayers in fiber coatings affect cellular behavior. I never thought tissue engineering would be such a dynamic and interesting research topic. Now that I have learned more about Tissue Engineering, I have gained an interest and have taken into consideration studying graduate studies in this field. During this week, we went to Lajas to make some biocompatibility tests of our collagen membranes by electrospinning in rabbits. These membranes will be compared with other membranes with a synthetic biodegradable polymer named poliprolactone (PCL). These implants will be placed in an equal amount of male and female rabbits for period of time of two to four weeks. Once the membranes are removed, we will analyze the degradation of these membranes, as well as their cellular adhesion, and many other tests. In conclusion, I believe this research experience will enrich my undergraduate studies and will help me be an excellent researcher and

student.

Links
[1] https://www.cienciapr.org/es/blogs/soft-matter/path-great-start-research-development?language=es [2] https://www.cienciapr.org/es/user/alexmora?language=es