

# South Florida Hospital News<sup>™</sup> and HEALTHCARE REPORT

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## Laboratory Informatics

Currently, the healthcare services have been impacted and transformed by the implementation of the biomedical informatics resources which have enhanced and expedited the delivery of healthcare services and clinical treatments to the population. The clinical laboratory has not only been the exception. Nowadays, the integration of biomedical resources has also become an important element in the success of the clinical laboratory workflow.

As a medical technologist, it is very interesting to see how the laboratory has been transforming with the addition of biomedical tools which have helped it to become more efficient. The clinical laboratory is a very important process/step in the healthcare framework. Without it, the physicians cannot provide an accurate diagnosis or an effective treatment. The fact that the utilization of biomedical resources has been renovating the laboratory field, it also makes the participation of the Medical technologists significant within this effective workflow.

The human resource is needed in order to verify that the data integration of the different software connected to the lab instrument is properly employed.

The laboratory results that are obtained are efficiently communicated to the other healthcare professionals which in turn produces a positive outcome that improves the delivery of clinical treatment. This is why I decided to pursue a career in this field, because I realized that the bioinformatics does not only strengthen the laboratory framework and workflow but it also enables us to produce more effective results. A few years ago, I joined the MSBI program at NSU, from which I graduated almost a year ago.

This program has been one of the best decisions in my life, because not only did I confirm my assumptions of how technology was changing the healthcare world but also because it allowed me to open new doors and learn new tools that have enhanced my professional growth. This program allows health care professionals to understand and learn how informatics is being integrated into our world of science, symptoms, results and treatment.

Through this program I have acquired knowledge in different



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areas such as information technology project management, computer security, data communications, system analysis, design methods, database systems, and decision support; among others. All of them are essential for enriching my professional experience. It has also opened new opportunities in creating a successful career path in the healthcare informatics field.

Today, I work as a skilled clinical analyst for the clinical laboratory. In this position, I provide a subject of matter knowledge on implementations, troubleshooting, and use of clinical information systems that improves the daily laboratory workflow and reduces the turnaround time of posted results to other hospital's departments.

The healthcare informatics field is growing and developing new prospects for health care professionals. This is happening due to the internet's revolution that has enable the integration of these biomedical tools to the healthcare field and also because the government and other healthcare compliant agencies are embracing it; in order to assure the intercommunication and secure transmission of the patient health information.

Consequently, the health informatics specialist will continue to be in high demand as healthcare facilities begin to implement more bioinformatics tools to be more competitive than others. Also, facilities will be working toward completing initiatives such as meaningful use in order to be in compliance with regulations and needs which emerge from this securely integrated health system.

Despite all of these new tools, we continue to face new challenges in treatment and services. Therefore, the healthcare professionals must find a way to acquire more knowledge about this new field. Educational programs such as the Masters of Science in Biomedical Informatics at NSU will provide the knowledge and expertise that they will need to confront these new challenges and at the same time provide them with new job opportunities without leaving behind their medical experience and field.

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