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A night of vision and voice

The School of Theater and Dance combined its talents for a stunning visual and vocal performance.

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New blood test ups efficiency, lowers cost

By **Victoria Bekiempis**
STAFF WRITER

Two local scientists have developed a new, light-based method of testing blood that proves less expensive and quicker than previous methods.

German LeParc, the chief medical officer at Florida Blood Services, and Luis Garcia-Rubio, a professor of marine science at USF St. Petersburg, said that the test detects pathogens and irregularities by using a spectrometer to measure the beams of light that pass through a blood sample.

"We can do the complete blood analysis for about a penny, and it takes about two minutes," he said. "So we want to make it available not

only to our community, because it will lower the cost of diagnostics, but available to developing countries that don't have the medical infrastructure we enjoy. It can do a great deal of good."

LeParc said that the idea for the process was developed years ago, when Garcia-Rubio explained how light can be used to analyze particles in solutions and found that blood cells behave similarly to particles in solution.

"What we did was early experiments trying to find what the optical fingerprints were for red blood cells and white blood cells and that effort was initially very encouraging, and we continued that effort over time," he said. "We have demonstrated

that we can quantify the amount, the number of cells of each class in blood, as well as finding any other elements in blood that are there that shouldn't be there — things like bacteria and fragments of cells."

According to Garcia-Rubio, the team was interested in both the medical and industrial applications of the technology.

Garcia-Rubio also said that the technology can be used to track the spread of diseases.

In order to develop the technology commercially, the team has formed Claro Laboratories, a biotech startup now located at Florida Blood Services in St. Petersburg.

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ORACLE GRAPHIC/MARLOW GUM

TEST

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Claro Laboratories also employs several recent USF graduates. Jennifer Smith, who recently graduated from USF with a doctorate in marine science, said her work at Claro was challenging because it combined elements of scientific research and business.

Though trained as a marine scientist, Smith said her expe-

rience with statistics allows her to bridge the gap between the biology and modeling aspects of the research so better sense can be made of the data.

García-Rubio said his future hopes for Claro are to help develop a local biotechnology community.

"One of the things we hope to do is bring the high-paying jobs, and the high technology associated with the industry," he said.

