



The Official Newsletter of the Eureka Medical Laboratories Inc.
263 Thomas Street, North Cummingsburg, Georgetown, Guyana

Eureka

EUREKA LAB TO LAUNCH PCR TESTING

By: Tiffany Roberts

In March 2019, EML will launch a technology using Polymerase Chain Reaction (PCR) to detect Chlamydia, Gonorrhoea and Cervical Cancer.

Sexually Transmitted Infections (STIs) hunt in packs, just like wolves. Now testing is simplified so that laboratories can co-detect Chlamydia, gonorrhoea and human papillomavirus (HPV) on swabs or urine.

Technology

Eureka Medical Laboratory, Guyana's leading provider of diagnostic information services, is pleased to offer

Urine may also be used as an alternate sample, howev-

.PCR Technology which has made tremendous technological impact on the scientific community and has revolutionized the study of life. This technology brings improved sensitivity, the ability to use noninvasive sample type and room temperature storage for collected samples, therefore, simplifying testing for clinicians and patients.

This new test can detect both Gonorrhoea and Chlamydia from a single specimen or it can be done separately. The assay is run on the **Uno Dx instrument (molbio diagnostics)**. Additionally PCR will be used to detect the Human Papil-



Clinical Consultant Khalil Lucky (extreme R) demonstrating DNA extraction to EML's senior clinical laboratory scientists.

lomavirus (HPV) and *Mycobacterium tuberculosis*.

Polymerase Chain Reaction is now best practice for Gonorrhoea and Chlamydia testing, and replaces culture for routine diagnosis.

Specimen collection for Chlamydia and Gonorrhoea:

Collection sites should be determined by gender and infection risk based on a sexual history for the previous 3 months).

Females: A cervical swab if a pelvic examination is being carried out or a self-collected low vaginal

er it is not recommended as a sole screening sample due to its low sensitivity.

Males: The first 10-20mL of voided urine decanted into a sterile urine container (delay passing urine for 1-2 hours before collection).

Culture is not excluded

PCR cannot provide antibiotic susceptibilities as no isolate is grown. Antibiotic resistance in *Neisseria* species is an issue due to its ability to acquire mutations that decrease antibiotic susceptibility and may



The process of DNA amplification.

HR Manager is appointed as Chief Operations Officer



.R. Gonzales, MSc, MM

COO-HR Manager

Mr. Ren Gonzales, Australian Institute of Business, EML's HR Manager was appointed by the Board of Directors as the Chief Operations Officer (COO) of the company.

Gonzales holds a Master's Degree in Psychology and a Master's Degree in Management. He teaches MBA in the University of Bedfordshire with School of Nations as the Centre Likewise, he taught MBA at the

Australian Institute of Business. The COO role is a key member of the senior management team, reporting only to the Chief Executive Officer (CEO). His main role is to maintain a control of diverse business operations in support to the CEO and to oversee the organization's ongoing operations and procedures.

The goal of the COO position is to secure the functionality of business to drive ex-

tensive and sustainable growth.

Gonzales will still hold his office as HR Manager. He has brought in some innovative programs that look into the well being of EML employees.

Further, Gonzales is the head psychologist of the EML Psychodiagnostic and Family Therapy Centre. He is also the President of the Guyana Psychological Association.

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cause treatment failure. Therefore Eureka Medical Laboratory will continue to provide culture and antibiotic susceptibility testing in some circumstances.

Cervical cancer screening Technology is sensitive DNA method for HPV detection. The HPV test is a qualitative test that identifies high risk genes such as HPV16 and HPV18. HPV DNA is very sensitive and when used in conjunction with Pap Smears becomes the most effective cervical cancer screening method.

Intended use:

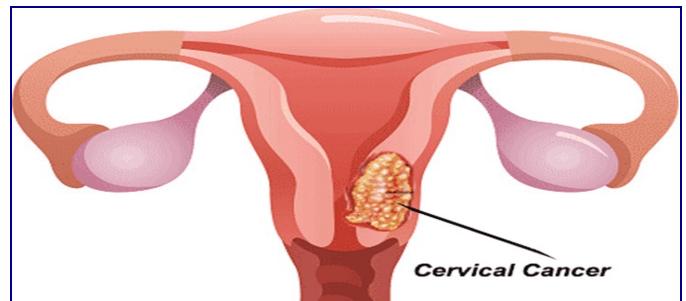
First-line primary screening test to identify women at increased risk for the development cancer or presence of high-grade disease.

To assess the presence or absence of hr HPV types

To assess the presence or absence of hrHPV genotypes 16 and 18.

Specimen collection for HPV:

Cervical cells collected by the cervix brush.



Tumor in the cervix.

Quality Assurance

In aid of strengthening the integrity of the results we issue to customers, the EML's quality department extended its "blind testing" known as Proficiency Testing offered by One World Accuracy to the microbiology department. This is for the detection of *Gonorrhoeae*, *Streptococcus A* and *Mycobacterium* infections, resulting in us achieving 100% accurate detection from our competent staff.

EML lights trees; awards employees during Christmas

It was that time of the year when recognition, joy and happiness spread across all the corners of Eureka!

During its annual Christmas Tree Lighting Ceremony, gifts and tokens as symbols of appreciation were shared to all our staff and members of the community especially those less fortunate and the elderly.

As a part of our yearly tradition, EML staff, friends, family and some

of our stakeholders were among those in attendance as they anxiously awaited the countdown for the tree lighting that highlighted Eureka's Yuletide celebration.

It was also the time when we reflected on all our achievements throughout the year which would not have been possible

By: Gabriel Hussain

without the contribution of our great team at Eureka.

As such awards and gift vouchers were given to our staff for their outstanding contributions for the year. Our awardees include *Dominick Russel and Aarti Ramsaroop* for best Medical Technologists, *Wonica*

Rogers best Medical Technician; *Candeena Potter* -best Administrative Staff, *Bonny Parris* -best Lab Aide; *Dexter Plowell*-best Security personnel and Cheryl Callender as best *Branch Manager*. Employees were also recognized for zero tardiness along with a special thanks to *Cheryl Callender* and *Renita Vandenburg* who achieved the milestone of 10 years working with Eureka.



Here Is What You Need To Know About Bence – Jones Protein

By: Arti Ramsaroop

The Bence Jones protein was described by the English physician [Henry Bence Jones](#) in 1847 and published in 1848.

A **Bence-Jones protein** is a monoclonal [globulin protein](#) or [immunoglobulin light chain](#) found in the [urine](#), with a molecular weight of 22-24 [kDa](#). Detection of Bence Jones protein may be suggestive of [multiple myeloma](#) (a cancer that forms in a type of white blood cell called a plasma cell. Plasma cells help you fight infections by making antibodies that recognize and attack germs. Multiple myeloma causes cancer cells to accumulate in the bone marrow, where they crowd out healthy blood cells) or [Waldenström's macroglobulinemia](#) (a rare type of cancer that begins in white blood cells. The cancer cells make large amounts of an abnormal protein called a macroglobulin). The proteins are found in urine as a result of

decreased kidney filtration capabilities due to [renal failure](#).

A person may be sent for a Bence - Jones protein urine test if their doctor suspects they might have multiple myeloma. The symptoms may include: bone pain or fracturing, particularly in the back, hips, or skull, confusion and/or dizziness, weakness and swelling in the legs, multiple infections. A doctor will also look for other indicators of multiple myeloma, including: high levels of calcium in the blood, low levels of red or white blood cells in the blood or low levels of platelets in the blood. The diagnosis an individual receives after a Bence – Jones protein test st will determine their outlook.

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Linden Branch Is Up to the Challenge

By: Dominick Russell

Eureka Medical Laboratories Inc. Linden Branch was established on the 3rd of December, 2009. As we approach our 10-year anniversary in December 2019 the staff at the branch and Management of Eureka are proud to have well sustained quality Laboratory in Guyana's Mining town.

Over the years what started as a collection site has evolved into a Licensed Health Facility under the Health Facilities Act of Guyana 2009. Linden Branch is a well equipped Laboratory with the capability to offer tests in Microbiology, Hematology and Biochemistry to name a few. Medical imaging services such to include Ultrasound are also part of the laboratory's testing scope.

The branch is headed by senior Medical Technologist **Tammy Elliot** and she is assisted by Medical Laboratory Technician **Ms Dion Stacia**. These two young ladies are competent and dedicated to the growth and development of EML.

Every year EML's CEO and team, work hard to improve the services offered at this branch, whether it is the installation of a new machine or the upgrading of its Laboratory Information System. In its 10th year it is no different. It is our goal to introduce Electrocardiogram service (Heart Test), so patients of Linden and neighboring communities will be able to get a heart test conveniently done. Quality and reliability have always been our goal when serving our clients and we are proud to be serving this Mining community for almost a decade whilst continuously improving our services .



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