

# Connections

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## Summer of 17043

by Dr. Michael Noble

In a previous CMPT Connections, I had mentioned the soon-to-be new accreditation standard for Proficiency Testing programs, ISO 17043.

This month the document moved one step closer, reaching the status of a Final Draft International Standard which is the last step before the document is accepted as an international standard fully published by the International Organization for Standardization. This final step usually takes about 6 to 8 months to complete.

The working group responsible for the creation of this document met 2 weeks ago in Milwaukee at

the headquarters of the American Society for Quality. (see Picture). This is likely to be a standard which CMPT will implement, not because we have to, but because it is a good and best practice document, with which we can comply. ISO 17043 will be a strong complement for our ongoing certification to ISO 9001:2008 (an international recognition that we have successfully maintained since 2002), because it will address more of the technical aspects of proficiency testing.

So why do we spend our time meeting and achieving international standards of quality? In Canada, there is no requirement for us to do any of this. I suspect that the number of laboratories that participate with us because

we meet these standards is probably very small. From a strictly money and business perspective, this is a lost leader. We constantly seek excellence, and when we fall short of our standards, we define our opportunities for improvement. Laboratories and accreditation bodies have learned over time that programs that meet their best practice requirements do their job better. CMPT provides a best practices program, with best practices materials, and does a best practices assessment. Whether CMPT is mandatory or voluntary in the provinces, there should be confidence in knowing that our program meets international requirements for quality and competence.

## Letter from the (New) Editor

With this issue, I begin my job as Editor of CMPT Connections 'On-line'. As an enthusiast of Clinical Microbiology, I am excited at the opportunity to join this publication and the CMPT team and to put my efforts to work towards our common goal of quality improvement of the Clinical Microbiology laboratory.

My goal for this Newsletter is to create a dynamic space where we cover news, helpful tips, stories of projects, educational material and opinions on Quality Management of the Microbiology laboratory.

I look forward to covering stories from all disciplines and to creating a space for discussion and communication where your opinions, insight and concerns are heard.

This Newsletter is for you, we welcome your story suggestions, your insight and opinions.

I would also like to take this opportunity to highlight the great job Robin has done with Connections in the past. Thank you for leading the way that made it possible to have a Newsletter that has been educating and providing news to its subscribers for 13 years!

I am very excited to be part of CMPT and look forward to sharing lots of interesting stories with you.

Veronica Restelli, Editor



The working group responsible for the creation of the document ISO 17043 in Milwaukee at the headquarters of the American Society for Quality.

*For those wanting to know more about ISO 17043, please go to [www.POLQM.ca](http://www.POLQM.ca) and check out the Quality Presentation "International Standards for Proficiency Testing Providers"*

# THE CMPT - CHINA CONNECTION

## Dr Xueni Guan (CDC Beijing) visits CMPT

On May 11, 2009, CMPT received the visit of Dr Xueni (Jenny) Guan, Laboratory Program Coordinator for the China-US Collaborative Program on emerging and re-emerging Infectious Diseases.

I sat down with her to find out more about the purpose of her visit. She explained that after the SARS outbreak in early 2003, China realized the importance of Quality Control (QC) for surveillance, monitor and control of emerging infectious diseases.

Research is not enough; in order to enhance preparedness and rapid response to these threats, effective public health, laboratory and clinical practices need to be implemented.

The CDC's office in Beijing acts as a bridge between the US and China government in this issue. Dr. Guan was hired by the CDC to set up a Quality Control program. One of her responsibilities is to identify the needs and communicate them to the CDC, which then provides the means to address them. It was through the US CDC that Dr Guan contacted Dr Noble, chair of CMPT.

**QC is a day to day issue.**

DR. XUENI GUAN

One of the projects Dr Guan is currently involved in is the Laboratory Quality Management and Biosafety Program. Funded by the DLS (Division of Laboratory System) the project is now focusing on how to establish the training to implement quality control in public health laboratories.

Dr Guan explained how Quality Control currently works in China: laboratories in the most developed provinces follow ISO 17025 (general requirements for the competence of testing and calibration

laboratories) and the Chinese National Standard for Laboratory Quality Management is based on ISO 17025 modified to adapt to China's particular situation.

In China, clinical laboratories in hospitals and clinics have a proficiency testing program. The public health laboratories are in need of implementing QC programs; they have quality managers but not an external QC program.

I asked Dr Guan about the difference between clinical laboratories and public health laboratories.

Dr Guan acknowledged that the role of the public health laboratories needs to be defined. The objective of a public health laboratory is more focused on surveillance, early detection of emerging outbreaks, and monitoring of more critical diseases such as tuberculosis and AIDS.

Currently a good interaction does not exist between the clinical laboratories and the public health laboratories; this is a situation that needs to change in the future.

I asked about her impression after visiting CMPT.

"Right now, a brand new building is being built for the public health laboratories and whenever I bring up the subject of the importance of QC, I usually receive the comment that they will start when they move to the new facilities, I had a hard time convincing them that the QC is a day to day issue, there is no need to have fancy equipment or facilities", she mentioned, "after visiting the facilities and laboratories at the CMPT my argument is stronger because I can go back and let them know that with no such thing as fancy equipments and facilities, a program like CMPT can work perfectly well" Dr. Guan concluded.

## Chinese CDC members train at CMPT

MAY 25 - JUNE 5, 2009

Lei Wang, Yongyun Zhou, Jiandong Li and Meiyang Yan from the Chinese Centre for Disease Control in Beijing, spent two weeks training at the CMPT to learn about proficiency testing and what they need to do to implement a similar program in China. During their visit, they were trained in laboratory safety, material processing and preparation, data analysis, quality control, administration and quality management. They also visited the Vancouver General Hospital (VGH) Microbiology laboratory and British Columbia Centre for Disease Control (BCCDC) facilities.

They explained that in China some programs such as influenza, polio and measles are already implemented. The the World Health Organization (WHO) provides China public health laboratories with Proficiency Testing (PT) samples; however, other programs need to be developed, such a National Surveillance program for Hantavirus hemorrhagic fever and proficiency testing (PT) programs for clinical bacteriology, mycology and parasitology.

When asked about the challenges they face upon their return, their main concerns were to establish reference laboratories, the preparation of PT samples and the recruitment and creation of committees of experts to evaluate results and recommend improvements.

One of their immediate objectives is to establish sentinel laboratory sites by August or September 2009 in order to start a trial PT program.

I asked them what they take from their CMPT visit. They indicated they were excited about learning the QC management system, material preparation and how everything is being done following strict rules of QC. They now have a better idea on how to improve the QC system and implement a program similar to CMPT.

Most important, they have established a relationship with CMPT that they know will continue and the collaboration will ensure they have the support they need to carry on with their goals.



From left to right: Jiandong Li, Meiyang Yan, Dr Blake Gilks, Dr. Michael Noble, Youngyun Zhou and Lei Wang.

# TALES FROM TANZANIA

*In March – April of this year, Yasmin Dhalla spent five weeks at the Mbeya Referral Hospital in Tanzania. Her job was to help the technical staff set up the BACTEC 9050 and the guidelines for blood culture processing and interpretation.*

**Q:** How did you hear about the position and what made you decide to go?

**A:** I found out about it through Sandy, my supervisor in Microbiology at Squamish, who saw the ad in the CMPT newsletter. I am actually born in Tanzania and since I was in-between jobs, I thought it was a great opportunity to go, my family and my supervisors at VGH were very supportive, so it worked out really well.

**Q:** What was your role going into this venture?

**A:** My efforts were supported by PEPFAR (US Presidents Emergency Plan for AIDS relief) Tanzania, at the Walter Reed Program/Tanzania of the MHRP (US Military HIV Research Program). CLSI also provides assistance there and that's how the connection with Dr Noble happened.

Originally I thought that it was just setting up protocols for the BACTEC, but it was more than that, they also needed assistance in the identification of microorganisms and antibiotic susceptibility. I didn't know what to expect and it wasn't until I got there that I realized what I really needed to do.

**...people are extremely warm.... they have great respect for what you are able to provide them...**

I had worked with the BACTEC 9050 before, so I updated their guidelines to work for their hospital. Then I tackled basic identification of

bacteria and susceptibility testing.

I worked with what they had...set up zone sizes for them, controlled the media, and gave them guidelines on how to use ATCC organisms for Quality Control (QC).

**I learned that we can do with less... a lot less; we take a lot for granted.**

I was very lucky VGH supported me in this venture... I had taken some reference material with me, and had access to the electronic protocols from VGH, (with the permission of Dr. Roscoe), that way I was able to use and adapt them for Mbeya's needs.

Yasmin mentioned that the work was difficult since many basic supplies were not available during her visit, and they had to manage with what was available.

**Q:** Is this because of lack of resources or something else?

**A:** Distance is one of the biggest issues, the lab is situated 12 hours by road from the coast, and since the airport is not functional yet, supplies have to be transported by bus/car after they arrive at the coast (Dar es Salaam). Most of the supplies come from South Africa or from Europe.

**Q:** What's next?

**A:** With the basic guidelines that I gave them in the short five weeks that I was there, the Microbiology lab is on its way to providing better results. My recommendation was to

spend more time on the initiatives that we had already addressed. As of now, PEPFAR has a new Laboratory Program Advisor, Dr. Beryl West, who will be monitoring the lab activities

**Q:** Are you willing to go back?

**A:** If the opportunity came up and if I could afford to give of my time, I definitely wouldn't hesitate...you see I am a little attached to the project...It is sort of like planting a seed for a flower and seeing how it blooms.

**Q:** How was it outside the laboratory?

**A:** Mbeya is a small town in the Southern Highlands of Tanzania, so the weather is very much like here (Vancouver) and the summers are not super hot.

I stayed at the Walter Reed Project house, and during my stay, there were two young American women with me, also volunteering their time, so I wasn't lonely. I also met a couple of people from my community that I connected with, so I was occupied for the 5 weeks...I didn't miss home that much.

**Q:** What did you learn from this experience?

**A:** I learned that we can do with less...a lot less; we take a lot for granted.

The people are extremely warm...they have great respect for what you are able to provide them; they are so hungry for information that whatever we can give them is like a bonus. And I learned to have faith in my own ability to impart the knowledge I have. It was a very positive experience for me.



Mbeya's Reference Hospital - lab staff.



Mbeya's Reference Hospital - entrance.



Yasmin shows the difference between lactose and non-lactose fermenters

# FEATURE ARTICLE

## Female Genital Tract: What Diagnostic Testing is Appropriate?

Authors: Michelle J. Alfa, Ph.D., FCCM, Deirdre L. Church MD PhD FRCPC Dial ABMM, Kanchana Manickam Ph.D., FCCM, ABMM, Philippe Lagacé-Wiens MD FRCPC

### 1. Introduction:

BV and *Candida* infections are by far the most common infections diagnosed in menarchal women.

In order to set out clinically relevant policies for the work-up of female genital specimens in the laboratory, it is important to understand that the resident microbial population of the vagina changes with alterations in the hormonal milieu<sup>1,2</sup> and or the use of medications that alter the normal flora of the vagina such as broad spectrum antibiotics.

**At birth** the mucosal surface of the vagina is stratified squamous epithelium (as is the cervix) that is under the influence of maternal estrogen and as a result, the pH is low. Lactobacilli are the predominant flora of the neonate's vagina and colonization by maternal organisms is established during delivery<sup>1</sup>. By 6 weeks of age, the vaginal epithelium thins and the pH rises due to the decline in neonatal maternal hormone levels<sup>2</sup>. Vaginal flora may now include gram-positive cocci such as *Staphylococcus epidermidis* and diphtheroids, but anaerobic organisms such as *Bacteroides*, *Peptococcus* and *Peptostreptococcus* spp. predominate. *Gardnerella vaginalis* and yeasts may also be isolated in approximately 10% of infants and young girls. **Unless estrogen is administered during menopause, the vaginal flora reverts back to this premenarchal state.**

**At menarche**, estrogen levels rise and a larger number and a greater variety of organisms colonize the vagina. The cervix transitions from stratified squamous epithelium to columnar epithelial cells. Lactobacilli are the predominant flora in the vagina of most women, but *Corynebacterium* spp. and *S. epidermidis* are also usually present<sup>1,2</sup>. Anaerobes are still found, but they are present in decreased numbers compared to the premenarchal female. *C. albicans* and other yeasts to a lesser extent are recovered in 30% of women. The composition of the normal flora of the vagina also fluctuates during the menstrual cycle, particularly the amount of lactobacilli present<sup>3</sup>. With the decrease of bacterial species found in the vagina towards the onset of menses, yeast may overgrow to cause vulvovaginitis towards the end of the menstrual cycle.

### 2. Genital Tract Infections

Infections may affect the vagina (vaginitis and bacterial vaginosis) or the cervix (cervicitis is most commonly caused by *Chlamydia trachomatis* or *Neisseria gonorrhoeae*). The most common viral infectious agents that cause genital tract infections in women include; Herpes Simplex virus (HSV), Human Papilloma virus (HPV) and Human Immunodeficiency virus (HIV). This review will not address these viral pathogens.

#### 2.1 Vaginitis

Vaginitis is one of the most common infections seen in primary care. The vast majority of vaginal infections are caused by either proliferation of organisms such as *Candida albicans* as part of the normal commensal flora, or the acquisition of specific genital pathogens. Vaginitis is associated with an inflammatory response and PMNs contribute to the abnormal vaginal discharge that develops.

##### 2.1.1. Candidiasis

Vaginal candidiasis can be clinically diagnosed when patients typically have vulvovaginal pruritis and/or superficial burning and increased amounts of thick or curd-like white, non-foul smelling discharge. Laboratory confirmation of the presence of moderate to heavy amounts of yeast can be provided by the direct microscopic examination of vaginal secretions either using a wet mount preparation or either a Gram stain or a Calcofluor white stained smear. Provided the technologist examines the entire slide, direct examination reliably confirms the presence of yeast overgrowth in the vagina<sup>7</sup>. Cultures may be necessary to reliably detect smaller amounts of yeast in vaginal specimens, but should be done at the request of the physician in women who have recurrent infections, and/or

in women who are symptomatic and have no other obvious cause of vaginitis. *C. albicans* is the species most commonly found in the vagina, although other yeast species can cause vaginitis.

**The two major causes of vaginitis are: *Candida albicans*, and *Trichomonas vaginalis*.**

##### 2.1.2. *Trichomonas vaginalis*

*T. vaginalis* is transmitted by sexual contact, and many women will be asymptomatic with this infection. The most common symptom reported by patients is an increased vaginal discharge. Since *T. vaginalis* is a much less common cause of vaginitis, the laboratory may elect to perform diagnostic tests only on request of the physician. Currently the most sensitive diagnostic test for this pathogen is the *Trichomonas* antigen test<sup>14,15</sup>. This test is not detrimentally affected by transit times as it does not require the organism to be viable.

Although samples received by the laboratory within 2-4 hours of collection, can have direct examination of a wet mount preparation of vaginal secretions – this method lacks the sensitivity of culture or antigen detection. Delays in the transportation of specimens may hinder the laboratory's ability to detect trichomonads using culture and culture is very labour intensive requiring repeated microscopic reads.

##### 2.2. Bacterial vaginosis (BV)

BV is suspected in women with vaginal discomfort and a malodorous discharge, and is clinically diagnosed based on the finding of 3 or more of the following criteria:

- thin homogenous discharge;
- vaginal fluid, pH of >4.5 (litmus test);
- positive "Whiff" test = amine odour with addition of 10% KOH to vaginal secretions
- presence of clue cells (epithelial cells covered with bacteria such that the cell border is obscured) on wet mount preparation of vaginal secretions<sup>4,5</sup>.

Unlike vaginitis in BV there is seldom an inflammatory response and often PMNs will not be detected on microscopy.

The laboratory can provide confirmation of BV by examination of a Gram smear of vaginal secretions (Table 2). Nugent et al. <sup>6</sup> have established a specific microscopic grading system for the diagnosis of BV based upon the presence of tiny gram variable coccobacilli/gram negative rods with vacuoles suggestive of *Gardnerella* /*Bacteroides*, curved anaerobic rods suggestive of *Mobiluncus* spp. as well as a corresponding decrease in the normal amounts of lactobacilli present<sup>6</sup>. Cultures are not helpful in the diagnosis, because they do not distinguish between bacterial species of the normal vaginal flora and infection.

**BV and *Candida* infections are by far the most common infections diagnosed in menarchal women. There is NO value in submitting a vaginal swab in the absence of abnormal discharge [i.e. do NOT submit vaginal swabs when women are having routine pre-natal screening, PAP testing or routine physical examination].**

### 3. Cervicitis

The two bacterial pathogens that are most commonly associated with cervicitis are *Neisseria gonorrhoeae* and *Chlamydia trachomatis*. **There IS value in submitting a cervical swab to screen for *C. trachomatis* in asymptomatic sexually active women.**

#### 3.1. *Neisseria gonorrhoeae* and *Chlamydia trachomatis*

The premenarchal girl (<12 years of age) is susceptible to vaginal infections due to sexually transmitted pathogens such as *N. gonorrhoeae* and *C.*

*trachomatis* because of the characteristics of the vaginal epithelium<sup>9</sup>. It is therefore important that cultures for *N. gonorrhoeae* be done in pediatric patients. **However, in postmenarchal girls and women, vaginal specimens should not routinely be cultured for *N. gonorrhoeae* or tested for *C. trachomatis* infection since the primary site of infection by these organisms in adult women is the cervix and there is, therefore, a high false-negativity rate of testing vaginal specimens in postmenarchal patients<sup>8</sup>.** The preferred sample for optimal laboratory diagnosis of these sexually transmitted infections in postmenarchal girls and women is cervical swabs, and the laboratory should educate physicians that cervical samples must be submitted in order to reliably diagnose cervicitis due to these important pathogens. Currently Nucleic Acid amplification Tests (NAATs) are the optimal diagnostic tool for detection of *C. trachomatis* and *N. gonorrhoeae* (one cervical swab can be used for detection of both pathogens). The superior sensitivity of the NAAT test is because it is not detrimentally affected if organisms die during transit (unlike culture methods).

Many sexually active women who are infected with *C. trachomatis* are asymptomatic. Therefore, screening of sexually active women using NAAT testing of a cervical swab is recommended.

#### 4. Other significant organisms in the Female Genital Tract:

##### 4.1. Group B Streptococci

Group B streptococci (GBS) colonization should only be looked for in pregnant women. It causes early onset sepsis in newborns. Pre-natal screening of pregnant women is recommended so that intra-partum antibiotics can be given if the mother is found to be a GBS carrier. The recommended time for screening in the prenatal period is between 36-38 weeks of gestation<sup>16,17</sup>. The physician should collect a SINGLE vaginal-rectal swab for culture<sup>10</sup>. Although vaginal swabs may still be cultured, there is decreased yield if the rectum is also not sampled. All GBS vaginal/rectal cultures should be enriched using Todd-Hewitt broth containing selective antibiotics (Colistin (10 µg/mL) and Nalidixic Acid (15 µg/mL). Only the NAAT test for GBS screening (Cepheid GeneXpert and Cepheid Smart GBS (formerly Strep-IDI)) have received US Food and Drug Administration (FDA) clearance for GBS detection. The test can be used for intra-partum testing on women of unknown GBS status or as a pre-natal screen for GBS.

##### 4.2. Toxic Shock

Cultures for **group A streptococci** and *Staphylococcus aureus* should be

done in patients suspected of having toxic shock syndrome and retrieval of any amount should be reported. In addition, the isolates should be sent to a reference laboratory for detection of TSST-1 production. If associated with purulence of vaginal secretions, predominant amounts of group A streptococci should also be reported since this organism can cause vaginal infections in young girls and more rarely in postmenopausal women.

##### 4.3 Foreign body infections

Foreign body infections of the vagina may also occur in young girls and postmenopausal women, and are typically caused by an increase in the vaginal anaerobic flora<sup>12</sup>. Gram stain of the vaginal secretions in these cases should be done to confirm an increase in the numbers and types of anaerobes present, but anaerobic cultures of vaginal secretions are not useful since the normal vaginal flora cannot be distinguished from infection.

##### 4.4 Pre-pubescent females

Prior to menarche, the cervix in pre-pubescent females consists of undifferentiated squamous epithelial cells similar to the vagina. Therefore it is acceptable to submit a vaginal swab when abnormal discharge is detected. The organisms that should be evaluated from such a sample include; Beta-hemolytic streptococci, yeast, *S. aureus*, *H. influenzae*, and predominant heavy growth of *E. coli* or *Pseudomonas aeruginosa*. *Neisseria gonorrhoeae* should also be evaluated even if there is no indication of sexual abuse – as this genital pathogen can be frequently missed<sup>18</sup>. Although rare, *Salmonella* and *Shigella* spp. may be significant vaginal pathogens in children<sup>13</sup>. A predominant or pure growth of an *Enterobacteriaceae* should therefore be worked-up in a child with purulent vaginal secretions.

##### 4.5 Ureaplasma and Mycoplasma

*Mycoplasma* and *Ureaplasma* may have a role in recurrent miscarriage and infertility, but because they are frequently carried asymptotically in the vagina, the pathogenicity of these organisms remains controversial. Laboratories should not routinely culture samples with Ureaplasma or Mycoplasma requests without discussing with the ordering physician and consultation with a gynecologist is advised.

The laboratory can influence the effective treatment of most patients with vaginitis by providing a rapid direct microscopy result. **By also encouraging physicians to collect genital samples in adult women from the actual site of infection (i.e., cervix NOT vagina) and not culturing and reporting normal vaginal flora, the laboratory can not only enhance the diagnosis of sexually transmitted diseases such as *N. gonorrhoeae*, but also curtail unnecessary antibiotic use.**

Table 1. Sample Submission and Work-up for Female Genital Samples.\*

Clinical Diagnosis	Suspected pathogen(s)	Sample to Submit	Reporting Protocol
Vaginitis [abnormal vaginal discharge]**	<i>Candida albicans</i> <i>Candida</i> species	Vaginal swab in routine transport media.	Gram stain microscopy to assess yeast and PMNs. (No culture needed.) Report PMNs with quantitation and report yeast as present or absent.
	<i>Trichomonas vaginalis</i>	Vaginal swab placed in transport media for Antigen testing OR: A vaginal swab placed in Trichosel tube for culture	<i>Trichomonas vaginalis</i> antigen: is reported as present or absent. Culture: Wet preps performed and <i>T. vaginalis</i> reported if present (interim assessment made on receipt and at 48 hours with a final assessment at 5 – 7 days).
Bacterial vaginosis [abnormal vaginal discharge]	Altered normal vaginal flora.	Vaginal swab in routine transport media.	Gram stain prepared and Nugent score to assess for bacterial vaginosis. (See Table 2 for scoring)
Toxic shock associated with tampon use *	<i>Staphylococcus aureus</i>	Vaginal swab in routine transport media.	Culture and report <i>S. aureus</i> if present in any amount.
Cervicitis [abnormal cervical discharge]	<i>Chlamydia trachomatis</i> <i>Neisseria gonorrhoeae</i>	Cervical swab collected using Nucleic Acid Test (NAAT) kit. Culture for <i>N. gonorrhoeae</i> not recommended as NAAT is optimal due to better sensitivity).If suspected treatment failure do both NAAT and culture.	Molecular amplification testing and report if <i>N. gonorrhoeae</i> or <i>C. trachomatis</i> is detected.

\* If a diagnosis other than vaginitis or bacterial vaginosis is suspected (e.g. Toxic Shock), please ensure that it's indicated on the specimen requisition.

\*\* In pre-pubescent females assess culture for: Beta-hemolytic streptococci, yeast, *S. aureus*, *Salmonella*, *Shigella*, *H. influenzae*, *N. gonorrhoeae*, as well as a predominant or pure growth of *E. coli/Enterobacteriaceae* or *P. aeruginosa*. If none of these pathogens are isolated report as: "No pathogens associated with pre-pubescent vaginal discharge detected."

Table 2 – Scoring Vaginal Gram Stain for Bacterial Vaginosis

Organism (Morphotype)	Number/Oil Immersion Field	Score
<i>Lactobacillus</i> -like (parallel-sided, gram-positive rods)	>30	0
	5–30	1
	1–4	2
	<1	3
	0	4
<i>Mobiluncus</i> -like (curved, gram-negative rods)	>5	2
	<1–4	1
	0	0
<i>Gardnerella</i> / <i>Bacteroides</i> -like (tiny, gram-variable coccobacilli and rounded, pleomorphic, gram-negative rods with vacuoles)	>30	4
	5–30	3
	1–4	2
	<1	1
	0	0

Assess smear for the presence and amount of: *Lactobacilli*, *Gardnerella/Bacteroides* and Curved Gram Negative Rods. Score as indicated above and add the scores together.

BV positive  
(score of 7-10)

BV intermediate  
(score of 4-6)

BV negative  
(score of 0-3)

Report as:  
"Gram stain is consistent with bacterial vaginosis."

Report as:  
"Gram stain shows altered vaginal flora – results are indeterminate for bacterial vaginosis."

Report as:  
"Gram stain is not consistent with bacterial vaginosis."

Patient > 60 years of age: Add comment:

Gram stains of vaginal smears for bacterial vaginosis in individuals who are post menopausal has not been standardized, clinical correlation is therefore suggested in these patients.

[Table adapted from Bailey and Scott; Diagnostic Microbiology <sup>19</sup>]

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# Get Connected

## Follow up

## QUALITY MANAGEMENT AND SUSCEPTIBILITY TESTING WORKSHOP, JUNE 18, 2009

This year the emphasis of the CMPT/POLQM Quality Management Workshop was susceptibility testing in collaboration with the 26th International Congress of Chemotherapy and Infection held in Toronto, June 18-21, 2009.

The workshop included talks addressing susceptibility testing and Quality Management:

*"External Quality Assessment of Laboratory Performance with ESBL Bacteria"* Robin Barteluk.

*"International Advances in Anti-fungal Susceptibility Testing"* Robert P. Rennie.

*"External Quality Assessment of Laboratory Performance with MRSA -Quality Management Program"* Candy Rutherford.

*"Post Market Evaluation of Antimicrobial Susceptibility Testing"* Stephen G. Jenkins.

Robin's presentation introduced the EQA (external quality assessment) concept.

Dr Rennie filled in for Dr Jenkins, who couldn't leave New York's airport due to terrible weather conditions.

Although the attendee numbers were less than expected, the speakers fielded good questions and received positive feedback.



## Announcements

### UPDATED BACTERIAL VAGINOSIS SCORING TABLE

The tables **"Laboratory examination of vaginal smears and the determination of Nugent Score"** and **"Interpretation of Nugent Score"** on the CMPT website have been updated reflecting the current recommendations. The new approach is to report samples with Nugent scores that are indeterminate as such (not report them "BV" or "not BV" based on the presence or absence of clue cells).

To check the new updated table, please visit CMPT's website and follow this [LINK](#).

References:

Bailey & Scott's Diagnostic Microbiology. Forber BA, Salem DF, Weissfeld AS (Editors) Mosby Elsevier Publishers, 12th edition 2007.

Alfa M.J, Church D.L, Manickam K, Lagacé-Wiens P. Female Genital Tract: What Diagnostic Testing is Appropriate? 2009 Connections, CMPT Newsletter, Vol 13, No 2.

## Upcoming events

### AUGUST

#### 1st Annual Canadian Quality Congress

August 19-21, 2009

University of British Columbia, Vancouver, Canada

With the participation of:

**13th World Congress for Total Quality Management and Laboratory Quality Management Program of the University of British Columbia Department of Pathology**

<http://www.canadianqualitycongress.com/>

### SEPTEMBER

#### 49th Annual ICAAC

September 12 -15, 2009

The Moscone Center

San Francisco, CA

Booth #1526

<http://www.icaac.org/>

### OCTOBER

#### ILAC/IAF 2009

October 10- 20, 2009

International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF).

Accreditation: Global Assurance of Competence

The Westin Bayshore

Vancouver, BC, Canada

<http://www.ilaciaf2009.com/>

## ABOUT CONNECTIONS

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We want to hear from you. Have an idea for an article? Is there a topic you'd like to see covered? Do you have any questions or want to announce an event? Drop us a line. Don't like something we're doing? Let us know.