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Moving Together: Lessons learned from moving the Big Red One Lab

CPT Christopher J. Zimmerman
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I would like to preface this by saying this is all impressions from my first assignment as a 71E Laboratory Officer and my first experience as a certified Medical Technologist. I arrived at Irwin Army Community Hospital (IACH) on 1 Oct and we moved into our new hospital on 17 Oct. Though we moved less than a mile away we were required to be completely capable up to 0559 at the old hospital and be fully operational at 0600 at the new hospital on the morning of 17OCT16. The work to accomplish this started well before I arrived with the arrival of new equipment in August and the validation of all analyzers and support equipment that continued up until the week prior to the move. We moved in a staggered fashion across three days with our final move occurring after the new hospital had officially opened to bring over all remaining material needed to support patient care up until the patients were transferred to their new hospital rooms.

Despite all the preparation, our lab still anticipated several difficulties that we would have to face. First, we knew we would need 24 hour blood support at two locations with a typical shift staff of only two people for at least one day. Our Transfusion Service Manager devised a plan with an emergency supply at both locations and a transport plan between the two and we found volunteers to work in shifts in case a driver was needed to transport blood between locations. Next was CHCS communication with our new equipment in the hospital. Since our IT department had to support the old location as well as the new one, the new CHCS connection was not prioritized until day one in the new hospital. To mitigate the risk this placed upon the lab in, our manager had sections practice down time procedures weekly leading up to the move. After the move, they were able to connect roughly 80% of our equipment. However the last 20% took over a month to get fully operational and required the CHCS expertise at SAMC. Manual data transfer caused delays in turnaround time for several tests and our section supervisor added an extra surveillance step after certification for all manually entered results because they were so concerned with transcription error.

We communicated the delays with a lab bulletin to the hospital as well as verbally contacting the clinics /wards that were most impacted. Finally we knew a fresh space would require revision of our work processes that we could not anticipate until we were in it. To mitigate this, the leadership made time for personnel to familiarize themselves with the environment. However, these exercises didn't focus on our processes and instead



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SOCIETY SCOPE is published three times per year by the Society of Armed Forces Medical Laboratory Scientists (SAFMLS). Send SCOPE correspondence to scope@safmls.org. Address changes and annual dues (\$20) for SAFMLS membership can be paid via http://www.safmls.org/secretarys_page.html

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Editor's Corner

Here ye Here ye! This is the call for submission of articles to the Society Scope! Capt Hase and I know that there are incredibly talented laboratorians in the military medical field and we want to hear from you. The Society Scope is a great way to show off the talent of you and your staff as well as raise important laboratory issues within our community. Your peers, consultants and leaders all read the Scope...because they too are members of SAFMLS! SAFMLS is continuing to grow, especially now that we have partnered with CLMA, and this provides a wider audience within the laboratory community. Publishing an article is an excellent way to stand apart from your peers and spotlight the accomplishments and leadership involvement in the laboratory.

The articles we seek do not have to be research in nature. If you look through our previous publications at www.safmls.org (Look for Society Scope on the left-hand of the www.safmls.org webpage), you will see we have articles about regulatory compliance, career corner, clinical applications and leadership development, for example. You can send us an overview of your experience from deployment or a spotlight of an event from your current hospital. We love those pictures!

There is no length format. If you have published your article in another publication, we can reprint as long as you request permission from the original publication. Don't forget that any article you submit for publication must be approved by your unit/base public affairs office. It is a fairly simple process with far reaching impact. Showcasing the hard work and accomplishments both at your home base and downrange is a great way to keep the SAFMLS organization growing and expanding.

So put those writing skills to test! We need to know what is taking place with you and at your unit.

Lt Col Paul Eden, USAF
 Capt Rochelle Hase, USAF

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NEW DEADLINES for SAFMLS Society Scope:

Winter	Vol X Number 1	Deadline: 1 Dec
Summer	Vol X Number 2	Deadline: 1 Apr
Fall	Vol X Number 3	Deadline: 1 Aug

President's Message

**COL Eva (Kris) Calero, US Army
Laboratory Manager
Clinical Laboratory Sciences Consultant
Walter Reed National Military Medical Center**

Dear SAFMLS members,

This particular Scope edition, I have the rose for a Consultant's Corner and President's Corner, both at the same time. I took over as Clinical Laboratory Sciences Consultant for the Army on 1 November 2016.

No, I promise, this corner is not about how I never thought I would ever be Consultant (but it is true, I still think it was yesterday when I received my commission and sat through so many briefings by prior Consultants knowing they were "giants" in the field of laboratory medicine, and I do not come close to that).

My angle with this corner is about pushing yourself and putting yourself out there, as you never know where that will take you. Likely, that journey will reap more benefits than heartaches and I strongly believe unknowingly, it opened many doors to the path that brought me to where I am. No, I as a norm have no time for more additional duties. The fact I have to do both the corner as President, SAFMLS and Army Consultant, was not necessarily by choice, but when asked, I have never turned away from challenges.

Please allow me a moment to digress to make my point: I had the fortune of attending my first SAFMLS annual meeting in Spokane, WA in 1997. That opened up my eyes and my mind to another world out there. Attending a meeting with vendors, educational sessions, colleagues from all services, was mind-blowing. I came back rich with experiences, ideas, and to some degree, strategic vision for our field. One of the things I remember was that my peers were the ones presenting the sessions, publishing the posters, manning the booths. You get it. It is the number one thing we do when we serve is: where do I volunteer, if this is by us, for us, I want to help. Sign me up. For that matter, the services are competitive in nature, and I wanted to do my Army part, to be right up there with the "sea of blue" (both Navy and Air Force) doing this. As much as I was afraid to speak in public, LTC Mike Walter and I submitted a two-hour workshop abstract, and presented for the first time in 1999. And we made it, and it was great, and it went great. With a lot of preparation and rehearsal, our talk on how to manage outlying laboratories, was very well received. It was not about us, it was about sharing, educating, helping each other out. After that, I presented workshops, short topics, posters at every SAFMLS annual meeting with the exception of when I deployed or was an Assignment Officer/ Detailer. I also put my name in the hat concurrently for Army Member at Large, eventually being voted as Vice President in 2012 and then President in 2016. Bottom line, where there is passion, you will always find a way to make ends meet, so push yourself. I am one that when there is an opportunity to volunteer, I tend to, otherwise I know I will never be asked again. In closing, I really think that by putting myself out there, without necessarily knowing it, I was making myself visible for higher opportunities.

I say all this because as this edition is being published, we are still doing the calls for President, Vice President, Member at Large, as well as articles for our publication. I could not find a better way to get involved and making that passion that you have for laboratory medicine and federal facilities known by putting your name in the hat or submitting an article. You just simply never know where that will take you; who will hear you presenting, that then sits on a promotion board and has seen you first hand doing something above and beyond. Please never pass up on these opportunities to showcase yourself for the right reasons.

Changing subjects, our next Scope will be dedicated to the 5Ws of KnowledgeLab 2017. However, here is some preliminary information:

KnowledgeLab 17 CLMA annual venue is taking place Sunday March 26 to Wednesday 29, 2017 at the Gaylord Opryland Resort & Convention Center, Nashville, TN. On Sunday the 26th we are in the phase of

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planning service breakouts, while CLMA holds their leadership sessions. On Wednesday the 29th, Knowledge-Lab ends at 1200; SAFMLS and the different services will likely have breakouts 1200 to ~1630 as in previous years. How you get orders to attend is service specific. There are no SAFMLS central funds. **IF YOU THINK YOU ARE GOING, JUST WAITING ON ORDERS, REGISTER NOW:**

You must register now (you can pay later when you get your orders) <http://www.clma.org/e/in/eid=129>

If you do not have a log-in, you may not be current with your bundled membership (\$50). If you are not, you will not get the discounted registration. If you need to renew your membership, please contact Maj Aaron Lambert, USAF. aaron.w.lambert4.mil@mail.mil

Please also do not wait to register until you get orders. We need to know who is going NOW! To register now, but “pay later”, click on the Return to Registration (you can pay later, this will save your info). You’ll be returned to the Registration page.

Also **IF YOU THINK YOU ARE GOING, JUST WAITING ON ORDERS, MAKE YOUR HOTEL RESERVATIONS NOW:** Call the hotel reservation center directly at 615-889-1000, room reservations/ group sales (press 4). Reserve a room for the \$161 gov rate. There are ONLY 150 rooms at per diem rate (\$161). We suggest you share a room. There are other hotels within walking distance at or below per diem rate. Uniform will likely be as in previous years: If you are traveling on government orders, this is your place of duty so plan on wearing your class B (vs utility) uniform.

As federal government laboratorians, leadership, adapting, and overcoming, are our hallmarks. Please continue a tradition of excellence and selfless service. I hope to see you there. I hope you showcase your passion for serving, and for our field.

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Clinical Laboratory Management Association

Welcome to the Clinical Laboratory Management Association (CLMA)! Now that you have renewed your SAFMLS membership, you are now also part of CLMA, the laboratory association dedicated exclusively to leadership growth through forward thinking educational, networking, and advocacy opportunities. Through your dual membership, you will learn first-hand how CLMA educates, advocates, and motivates members to grow both personally and professionally. As a CLMA member, you can depend upon receiving the most up-to-date industry information through valuable resources and benefits including:

- **Relationships and Networking:** With over 40 CLMA chapters distributed across the nation and Canada, you can develop your own professional network, right where you are stationed. Chapters are the heartbeat of CLMA, providing opportunities for continuing education credits, social events, and access to laboratory leaders of all levels of experience. These are the leaders you will need to know if and when you choose to enter the civilian laboratory workforce. Additionally, these are the members that need your help! Many chapters are struggling to find members who wish to step up into chapter leader positions. Your military leadership experience is greatly needed and can be documented as part of your volunteer requirements. Imagine; getting the education you need, fulfilling your military requirements, and having fun while doing it!
- **Professional and Career Development:** In addition to chapter educational events, the CLMA website is full of opportunities for learning. Your SAFMLS membership, allows you CLMA website access with additional education at a modest cost. Interested in free education? Increase your SAFMLS membership to a full CLMA membership and unlock access to web-based education and free webinars. Also found on the CLMA website is the Body of Knowledge for Medical Laboratory Management (BOK), a robust and living document that defines the skills necessary to be successful in the medical laboratory environment. Check your skill levels using the BOK skills assessment tool to identify opportunities for growth. Finally, your membership provides a discounted rate to KnowledgeLab, CLMA's premier annual conference and exhibition. At KnowledgeLab, experience unsurpassed education and training, idea sharing, networking, and access to the latest technological products and services from the vendor community. Become a speaker, present a poster, or participate in CLMA's Increasing Clinical Effectiveness program to showcase your accomplishments and share best practices that shape the course of quality patient care.
- **Publications:** In partnership with Medical Laboratory Management Magazine, CLMA provides opportunities for members to publish research and best practices in a peer-reviewed journal. Get noticed and jump start your career by becoming a published author!
- **Advocacy:** As a CLMA member, you will receive legislative and regulatory updates on the latest actions that affect the laboratory industry. Stay informed and participate in the many Advocacy educational opportunities where your voice matters and your leadership is valued.

Thank you for your membership and I hope to see you at the next chapter event and at KnowledgeLab in Nashville March 26th – 29th 2017.

Kind regards,
Patty Eschliman, MHA, MLS(ASCP)^{cm}DLM^{cm}
President, CLMA



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involved hospital wide procedures. Also, our new space has split the phlebotomy area off from the main lab for the first time in over 60 years. In response, to date, I've written five new SOP's based on new practices with four more drafts in progress and revised over 20 more. Our section supervisors have all had to do as many or more revisions. At one point we had over 30 outstanding work orders between our Facilities and IT departments. Process integration is still ongoing as we continue to discover how we work in our new space.

In addition to continuing to improve our processes, we have also had to navigate some unexpected complications. Turning in legacy equipment has proven very difficult. None of the contracts contained the proper verbiage dictating turn in of equipment. Currently most of our contracts are awaiting modification to allow us to turn in the equipment properly. Network issues were expected but they still managed to surprise us. We required network access off the DOD network for one of our analyzers and thought that it had been set up prior to the move. Unfortunately it was not and it has taken over two months to finally get that access approved. Before I arrived, I expected us to have 90 days before any inspections; however, our CAP window opened two weeks after we completed our move and they arrived 58 days after we opened for business. In addition, the FDA inspected our Transfusion Services just 30 days after we moved. It is a great testament to the work ethic of our staff that we passed both inspections with minimal deficiencies or recommendations. Most of them worked three weeks straight all on a volunteer basis, and it paid off for our lab.

In conclusion, my first experience as a Lab Officer has been an exciting one that has taught me a lot. We've learned that follow-up with Facilities and IT on a daily basis is essential in the early days after the move. Knowing who to contact and how to prioritize problems when mechanical or technical issues arise is highly beneficial to lab survival. Furthermore, based upon our experience we have requested that the lab have a dedicated staff IT person that could have addressed our CHCS issues prior to the move and solely focus on the lab's IT health. We've learned that contracts should include verbiage around the time frame of the move to allow turn-in. The best recommendation we received was to put a window of time as wide as three months to allow for pickup of the equipment, and start work on compliance as early as possible. Be prepared for inspections as quickly as possible and make it part of your movement plan. Finally, give personnel as much time as possible in the new space in order to work out kinks in processes. Fortunately, we have a great team who made our move as seamless as possible.

8 Leadership Tips that will Unquestionably Gain the Respect of Your Team Members and Positively Impact your Life and Your Organization

**1LT JASON L. REEVES
USA, MS
Executive Officer**

Recently I have started to jot down some thought-provoking notes as I watch our next great generation of Military Leaders move into the most innovative time in our country's history. Frequently I am approached by young/junior, enthusiastic Soldiers asking me for advice on how I was able to advance in a Military field that for a number of years may have seemed stagnant. By leveraging some of my own experiences, positive and negative, I have come up with 8 leadership tips to improve and sustain the respect of those you may lead and set you and your organization on a path to success.

1. Family First!

In the Military it is engrained in us that the mission always comes first, and it does. Our mission is to maintain the best family environment we can for those we lead so they can come to work and accomplish the goals of the Military, defend our great nation, without unnecessary distractions! There has never been a mission compromised by letting a team member take care of their Family (within reason). If it is

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important to your team members and/or their families, it should be important to you. A compassionate leader has the utmost respect for his or her team members. They will pay it forward, I promise you.

2. Listen with more than your ears.

Being able to listen to your team members is paramount to the success of any organization. When I say listen to them I mean with more than your ears. Your team members have great ideas and they want to share them with those that encourage and empower them to express them. Watch their body language as they express these ideas. Watch the body language of those around you. This will indicate to you their passion and heartfelt enthusiasm for their ideas. Turn them loose to explore their innovative ideas. The next generation of leaders is undoubtedly the most innovative this country has ever seen and we need to cultivate these ideas. Their suggestions for improving the organization may or may not work, but they will know that you have confidence in them to explore and they will positively impact your organization for years to come.

3. Good leaders don't take the credit.

Let your team relish in the victory of a job well done. They are the reason you all got there, not just you alone. For the most part, they are the executing factors that ensured mission success and deserve to be recognized publicly for it. This will enhance esprit de corps and have a ripple effect throughout the organization. Think of how it would feel to you to watch your leaders continue to be recognized while you did the heavy lifting? It doesn't feel good. We have all been there and this is demoralizing to the good character of any organization. Reward your team members every chance you can. They will be much more likely to keep performing for you if you do.

4. Who is the smartest person in the room?

A few years ago I had a leader say that he was tired of being the smartest person in the room. All of his ideas were the best and if everyone would just listen to him, we would be way better off. I finally had to tell him what we all wanted to tell him is that we were letting him think that he is the smartest person in the room. You don't have to be the smartest person in the room everywhere you go, just don't be the dumbest. Don't lose credibility with your team members by denigrating their importance to the organization. Everyone has a role. Build them up, don't tear them down.

5. It's easier to say "No" but way better to say "Yes" if you can.

Too often we think that if we say "No" then the situation will be over, but it typically isn't. What would happen if we as leaders said "Yes" just a few more times, when we can? You might see some very strong positive reactions from your team members. They will see that you have confidence in them and will likely work more diligently with and for you. Many people are like me... if you tell me "No" I hear "No for now." I will keep trying for it if I believe in it. You should trust your team. Watch what happens when you say "Yes" just a little more often.

6. You don't have to be the best.

This sounds simple, but very true. You don't have to be the best at everything, but try to be the most diverse you can be. Be that go-to person that your team members can come to. Even if you don't know how to do something, try to find someone that can. Take that burden from your team members. Have the resources at your fingertips by networking. They will trust you to give them all of the best information to accomplish the mission and really set your organization up for success.

7. Are you having fun yet?

If you do not have a good time while you are at work, then what is keeping you from having a good time? Don't be afraid to crack a tasteful joke, smile, or share some funny stories with your team members. This builds comradery and shows your more human side to people and makes you approachable and relatable. I am not saying to make your office into a circus or a fun house, but the key is balance. Smile more...its infectious!

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8. Go Home!

This is the one that I struggle with the most, I think. You don't have to be the first one in and the last one to leave every day. If your team members see you at work when they get in and when they are leaving they may begin to feel inadequate or that you don't trust them to take some of the pressure off. You are all a team and have one focus, organizational success. Make the most of every moment you are at work so you can have that most important balance of work and family with Family Being First!

Following some of these simple leadership strategies will have a great impact on the morale and productivity of your team and organization. You will see the positive impacts resonate throughout all areas of your life, enhancing the future of your organization, and making it the High Reliability Organization we are striving for. One Team...One Purpose!

FDA Grants First-ever CLIA-Waiver for a Highly Multiplexed Molecular Diagnostic Assay

A.C. Camacho and David G. Watson

Defense Threat Reduction Agency, Fort Belvoir, VA

The typical complexity of running diagnostic tests greatly limit where they can be conducted and by whom. Regulations under the Clinical Laboratory Improvement Amendments (CLIA) of 1988 require that U.S. laboratories conducting human diagnostic testing receive certification affirming their ability to effectively conduct complex laboratory tests. Receiving CLIA certification helps prevent costly and even fatal misdiagnoses of medical conditions by ensuring that diagnostic tests are conducted within an appropriate facility and test results are interpreted by qualified personnel. Because specialized training is required, physicians, nurses, and military medics are often not qualified to perform these tests. However, certain diagnostic tests can be granted a CLIA-waiver. These CLIA-waived tests are those which the FDA has determined to be sufficiently simple that they can be performed in facilities without CLIA certification and by personnel with minimal training. Gaining a CLIA-waiver is particularly important for the military because it allows diagnostic testing by combat medics and non-laboratory military personnel in settings near the front line.

The Joint Science and Technology Office for Chemical and Biological Defense (JSTO-CBD) of the Defense Threat Reduction Agency and United States Strategic Command Center for Combating Weapons of Mass Destruction has been leading efforts to develop robust point-of-care (POC) diagnostic tests for biological threat agents and emerging infectious diseases that can be fielded in non-laboratory settings, austere environments, and field forward locations where they can best support the Warfighters. JSTO-CBD and BioFire Diagnostics co-funded a research and development effort to develop the first-ever highly multiplex molecular diagnostic test system approved for use outside of certified laboratory environments capable of differentially diagnosing diseases caused by biological threat agents from common public health pathogens. In September 2015, a dual 510K and CLIA-waiver application was submitted to the U.S. Food and Drug Administration (FDA) to waive these regulations for the developed diagnostic test system known as the FilmArray Respiratory Panel EZ (RP EZ). On October 3, 2016, the FDA approved and granted a CLIA-waiver for the RP EZ test system — the first of its kind for this type of diagnostic.

To secure a CLIA-waiver, JSTO-CBD worked with BioFire Diagnostics to modify the FilmArray platform and RP pouch (Figure 1) to ensure that non-laboratory personnel are able to run the test and accurately read the results. Using a simple video tutorial, personnel can be trained in under 20 minutes to use the RP EZ test system. Loading clinical samples into the RP EZ pouch was made easier by substituting metal syringes for plastic droppers and the software for the FilmArray system was simplified to provide the user with clear, easy-to-read test results (the pathogens detected by the RP EZ are shown in Table 1). To demonstrate the simplicity of the RP EZ test system, JSTO-CBD and BioFire Diagnostics implemented a number of clinical studies at various

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non-CLIA certified facilities across the U.S. The results from the studies were submitted to the FDA along with the application for a CLIA-waiver.

The necessity of transporting clinical samples to a CLIA-certified laboratory for testing by qualified professionals creates a serious delay in the time between when a Warfighter falls ill and when they can be definitively diagnosed and treated. Allowing combat medics and non-laboratory military personnel to perform these diagnostic tests will significantly increase Force Health Protection and prevent the spread of emerging infectious diseases. Further, a diagnostic test for common respiratory pathogens is invaluable to differential diagnosis in the case of Warfighters who have potentially been exposed to biological warfare agents. The successful transition of an advanced laboratory diagnostic into a CLIA-waived format for use at the point of care and closer to the front lines will more readily and quickly benefit the Warfighter. FDA approval for a CLIA Waiver test system of this multiplicity is both unprecedented and establishes the foundation for all research and development into point-of-care diagnostics for the Department of Defense. In fact, the Medical Countermeasure Systems-Diagnostics, Joint Program Executive Office for Chemical and Biological Defense, is also working with BioFire Diagnostics to further develop biothreat testing capabilities for use across all branches of the Armed Forces.



Figure 1. The FilmArray and the Respiratory Panel pouch with a laptop for analyzing results. (Images from the BioFire FilmArray EZ Configuration Operators Manual).

Table 1. A list of the pathogens detected by the FilmArray RP EZ.

- Adenovirus
- Coronavirus
- Human metapneumovirus
- Human rhinovirus/enterovirus
- Parainfluenza Virus
- Influenza A
- Influenza A H1
- Influenza A H1 – 2009
- Influenza A H3
- Influenza B
- Respiratory Syncytial Virus
- *Bordetella pertussis*
- *Chlamidophila pneumoniae*
- *Mycoplasma pneumonia*

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USAF Epidemiological Reference Laboratory

A

Autoantibody Profile:
 Mitochondrial Antibodies
 Smooth Muscle Antibodies
 Parietal Cell Antibodies

B

Blood Parasites Panel (Epi)
 Borrelia burgdorferi (b. Burgdorferi)
 Panel:
 B. burgdorferi EIA IgG & IgM
 B. burgdorferi IgG & IgM Western
 Blot

C

C Difficile PCR
 Campylobacter Antigen, EIA
 Chlamydia NAAT
 Coccidioides immitis (c. immitis) Antibody
 Profile
 Coronavirus MERS-CoV

Coxiella burnetii (C. burnetii) Panel:

C. burnetii IgG
 C. burnetii IgM

Cytomegalovirus (CMV) Panel:

CMV IgG
 CMV IgM

Cyclospora AF Stain

E

Epstein Barr Virus (EBV) Panel:
 EBV Viral Capsid Antigen IgG
 EBV Viral Capsid Antigen IgM
 EBV Nuclear Antigen-1 IgG

Entamoeba histolytica Antigen

F

Flavivirus PCR Panel

G

GC NAAT
 Giardia/Cryptosporidium Scn
 GI Panel (Epi)

H

L

Legionella Urinary Antigen
 Lyme Disease Antibody, Total
 Lyme Antibodies Western Blot Panel

M

Measles (Rubeola) virus IgG
 Mitochondrial Antibodies

Mumps virus IgG

N

Norovirus, PCR

O

Ova & Parasites Panel

P

Parietal Cell Antibodies

Pinworm

Q

Q Fever Panel (EPI) - see Coxiella burnetii
 (C. burnetii) IgG and IgM

R

Rapid Plasma Reagin (Serum)

Repository Sample

Respiratory Culture Panel

Rickettsia IgG/IgM Panel:

Rickettsia IgG

Rickettsia IgM

Rickettsial Disease Panel :

C. burnetii IgG

C. Burnetii IgM

Rickettsia IgG

Rickettsia IgM

Rubella virus IgG

Rubeola virus IgG

S

Shiga Toxin 1/2

Smooth Muscle Antibodies

Stool Culture

Syphilis Panel

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H pylori Antigen, EIA	T
Hepatitis A Antibody, Total	Toxoplasma gondii Panel:
Hepatitis A Virus IgM Antibody	Toxoplasma gondii IgG
Hepatitis B Core Antibody, IgM	Toxoplasma gondii IgM
Hepatitis B Core Antibody, Total	Treponema pallidum Antibody
Hepatitis Be Antibody	Trichrome Stain
Hepatitis Be Antigen	V
Hepatitis B Surface Antibody	Varicella virus (VZV) IgG
Hepatitis B Surface Antigen/Confirmation	Varicella zoster virus culture
Hepatitis C Antibody	Viral Culture Respiratory
Herpes 1 & 2 Antibody Profile, IgG	Vitamin D Total [25 (OH) Vitamin D]
Herpes simplex culture	W
Herpes simplex type identification	Worm Identification
HIV-1/O/2 (4th generation - includes P24 antigen)	Z
HIV Confirmatory Panel	Zika IgM ELISA

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Staining Solutions



MGS-80 Multi-slide **Best Gram Stainer for High-Volume Labs**

- Random access, continuous-loading design matches your workflow
- Auto-adjusted decolorizing time ensures consistent, high-quality staining
- Automated cleaning cycles mean minimal maintenance
- Ability to capture and segregate waste for cost-efficient disposal



AGS-1000 **Best Gram Stainer for Low-Volume Labs**

- No waiting to batch slides or waiting at the Gram stain sink
- No more worrying about slide quality on night and weekend shifts
- Self-contained, small footprint fits on the most crowded bench



QuickSlide Plus II **Hematology Stainer**

- Fast and consistent staining
- No pre-fixing of blood smears
- Adjustable stain and buffer times
- No daily maintenance; compact size
- One minute process time



QS-AFB Acid-Fast Bacillus **Rapid Fluorescent Stainer**

- Fast inexpensive first look for TB testing
- No daily maintenance; compact size
- 2 minutes and 15 seconds process time
- Modified Auramine O Stain and Decolorizer

www.quickslide.com
800-295-9588

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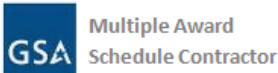


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