

ROAD TO UNDERSTANDING

CAMPAIGN SUBMISSIONS

I was working the ER stat lab one day, and the lab assistant asked me if I had heard about the finding of sperm in the urine of a 5-year old girl the previous weekend. When I asked more about it, I found out that it was not reported, because the policy was not to report sperm in the urine of females. I spoke to the tech and charge tech involved, the lab supervisor, the pathologist in charge of the lab. Everyone said that they had followed policy. I also found out, from a social worker friend, that we (lab professionals) are mandatory reporters of signs of abuse. I called the hospital's Compliance Hotline and reported what had happened. It took a few months, but the policy was changed, so that sperm in females under 16 years old became reportable. It is our job to report clinically significant findings and protect the safety of our patients.

A co-worker acquaintance came into work on afternoon and wasn't feeling well, so she went to the ER. Later that afternoon, I received her urine specimen. When I read it microscopically, I found trichomonas present. I reported the results and she was able to receive treatment and her symptoms resolved. I never spoke of it to her, nor she to me. It is my job to help find the reason why someone comes to the ER. That is why I always read the urinalysis microscopically if the urine is cloudy, even if the urine dipstick is negative. I figure if someone is feeling bad enough to come to the ER, they deserve a thorough workup. I was glad that I could find the cause of her abdominal pain, and she and I remained valued colleagues with fond regard for each other. I also explained to the lab supervisor the need to read cloudy urines microscopically, even when the dipstick is negative.

"We opened a new facility and there were some issues with our pneumatic tube system and its functionality with the users in the OR. The OR system required that each user have a unique access code and we soon found out that not all users had been identified. Thus, there were times of delay while an ID'ed user was found. This caused some samples to have a delay of several minutes between collection and receipt into the laboratory.

In a discussion about this problem it was identified by the OR staff that this was leading to an increase in clotted samples and the need to redraw. This in turn led to a great discussion with OR staff who did blood collection as to why this pneumatic tube delay was not the culprit increasing the issue of clotted specimens, but it was a function of the drawing and handling process of the samples themselves at the point of collection.

This discussion was then taken back to OR staff who were responsible for collections and the % clotted samples has basically decreased to 1%.

It is so easy for staff outside the laboratory to make an assumption when a process is going awry. And in turn so easy to derail that assumption with valid reasons - the ""why's"" - behind the true impact to the process. The lab is the conduit of those ""why's"" so let the education and info flow!"

On a Friday afternoon, five minutes away from clocking out a three-year-old little boy was sent to the clinic for a blood draw. I had just sent my phlebotomist home for the weekend. The little boy's mother informed me, this was his first blood draw and he has been extremely fussy lately. The provider listed a diagnosis of fatigue and slight bruising. Fortunately, I was successful in retrieving a blood sample for a CBC. The peripheral smear was 87% blast along with a white blood cell count of 100,000. The family was set to go to vacation in Florida that day. The little boy was admitted and began treatment that night.

Once, while reviewing orders for a NICU baby (at 2am no less), I discovered an order for a serum protein electrophoresis. I was puzzled as to why a provider would order such a test on a newborn. I looked for further details on the young patient and found that the neonatologists were considered that the baby may have a hemoglobinopathy. I then realized that the serum protein electrophoresis order was likely placed in error, and that a hemoglobin electrophoresis was indicated. I called the patient's nurse, explained the issue, and had her change the order before she drew any of the baby's lab work. With my knowledge of laboratory science, I was able to prevent that baby from needing to be redrawn for that hemoglobin electrophoresis and prevented one more headache for nursing and lab staff.

A Medical Laboratory Scientist (MLS) received a phone call in the Coagulation Lab from a physician. The physician was concerned about an International Normalized Ratio (INR) result of 18 on an outpatient. The INR testing was done in another lab. The physician mentioned that the patient was on coumadin. The physician had spoke with the patient's husband about the coumadin dosage. The husband indicated that the patient did not change the coumadin dosage, did not miss a dose and was not overdosed. The physician also mentioned that the patient's INR blood specimen was collected right after dialysis. The physician asked the MLS if the after-dialysis blood collection would cause the INR result of 18. Heparin was used in dialysis. The MLS explained that a blood specimen containing an excessive amount of heparin could falsely elevate the INR result, but likely not elevate to an INR of 18 that high. The physician took the MLS' suggestion to have the patient's INR re-checked with a new blood specimen the next day.

"An activated partial thromboplastin time (aPTT) test was completed on an inpatient blood specimen. The result was very high, over the test's upper testing range. The blood specimen was not clotted. In investigating the reason behind the very high aPTT result, the Medical Laboratory Scientist (MLS) did an Anti-Xa assay (Anti-10a, Anti Ten a, Anti coagulation factor 10 a). The Anti-Xa assay result indicated the specimen contained an excessive amount of heparin, the likely cause of the very high aPTT result. The blood specimen was a nurse-collect. The patient's nurse was consulted as to whether the patient was on any anti-coagulant. The nurse indicated that the patient was not on any anti-coagulant. The MLS then specifically asked if the patient had been on heparin. The nurse mentioned that the patient's IV line was dealt with with heparin. The aPTT blood specimen was collected from the line. Based on these findings, the MLS concluded and explained to the nurse that the aPTT blood specimen was likely contaminated with heparin, causing the very high aPTT result. A subsequent re-collect blood specimen for aPTT was obtained from the patient. The aPTT result was in the normal reference range.

A Medical Laboratory Scientist (MLS) answered a phone call from a physician to add on a test to a cerebrospinal fluid (CSF) specimen. Upon ending the phone conversation, the MLS went to the computer to add on the test. The MLS noticed that the add-on lab test was put in incorrectly in the computer; the specimen type was ordered as "blood". The MLS corrected the physician's mistake and edited the test to the correct CSF specimen type.

When working a weekend shift by myself at one of our Urgent Care Medical offices, I was asked to draw a 7 y.o. male for a CBC. Between his DAD and I we managed to get the blood drawn while the Dad was recounting the story of his week with his son screaming anytime he was touched., running a slight fever and very cranky. He this was their 3rd time into the UC and he kept being told it was the flu, but

knew it was something more. I asked if blood had been taken on previous visits and he said "no". I ran the CBC, nothing too remarkable but when I looked at the differential I almost screamed. Marked anisocytosis and poikilocytosis! Did I mention the race of the child? You guessed it.... Sickle Cell Crisis! A quick call to the doctor in the ER stating you need to get him on O2, he's in Sickle Cell crisis and then the Doctor yelled, "Get the O2 and call Children's Hospital STAT!" I knew at that moment that I had truly made a difference! This incident happened over 15 years ago, but I use it every time I need to impress upon a group of middle school or high school students the importance of our profession!

At the time our lab was using the Toxi-Lab chromatography method for doing drug screens. It was a Saturday and that morning a patient comes into the emergency room in respiratory distress and the nursing staff had to resuscitate this patient multiple times. The physician was not sure what he was dealing with, so he ordered a drug screen to see if that would give him any answers. The drug screen report indicated the presence of strychnine. When the physician reviewed the treatment for this it was different from other drug overdosing and based on this report he treated and saved this patient. It was later determined that it was an attempted homicide, in which, the husband had placed the poison in the patient's Tylenol capsules. Without this report this patient would most likely have died, and the physician would not have been able to treat the patient properly. It was a very memorable and rewarding moment in my lab career.

As a younger manager, I was working with a small team to help improve patient throughput in the Emergency Department. After meeting for several weeks, the group had developed a good relationship with each other, so I was pleased when the ED Provider on the team reached out to me with her concerns that the tech who runs the Troponin tests was not doing as well as the techs who run the Hemograms and Chemistry profiles. She was getting those results in 30-minutes or less and it was taking 45-60 minutes for the Troponin. This was a great opportunity to educate others about the magic black box technology that seems to be an all too pervasive view of the laboratory department. Our next meeting was a tour of the laboratory where we followed the specimens from an ED patient through the lab. It was a huge eye-opener for the whole group and resulted in a renewed focus on workflow from the time the patient arrives and how to make sure all hand-offs flowed smoothly.

60 yo. Male no personal physician came to ER three nights in a row with elevated WBC and lymphocytosis. Few smudge cells and occasional ATL. Different physician saw him each night. Each ordered a monostest and sent the patient home. Third time I did the differential, I called ER. I explained that I was not a physician so could not officially report the sample as CLL but my twenty plus years of experience told me that's what it was. Within the hour the hematologist came to the lab, looked at the slide for about thirty seconds and admitted the patient as CLL. Patient started on treatment that night.

In September 2015, the National Academy of Medicine, formerly the Institute of Medicine, issued a report on diagnostic error in America. The principal conclusion is that every adult American experiences at least one diagnostic error in a lifetime. One of the major contributing factors to diagnostic error is the failure to order the correct diagnostic tests. There is often significant controversy, even among experts about which tests should be included and which ones excluded from a laboratory evaluation. Generalizations are often made about test use by individuals, not a group of experts. We completed a study with the rare opportunity to have multiple experts in diagnostic coagulation and hear the clinical presentation of patients who are being evaluated in real time for bleeding or thrombotic disorders. These experts were able to provide an opinion about overutilization or underutilization of coagulation laboratory tests on a case-by-case basis in real time. The results of this study indicate that experts hearing cases in clinical context, found that overutilization and underutilization of laboratory tests pertaining to coagulation testing were present in about 78% of the cases, with 44% due to

underutilization, 16% due to overutilization, and about 18% due to both. This causes an immense financial burden to a healthcare facility and can cause serious clinical consequences. The use of patient specific, expert driven interpretive comments by a diagnostic management team accompanying laboratory results helps physicians to more accurately request the correct, and only the correct laboratory tests reducing delayed or missed diagnosis.

I am a student in the chemistry department as part of my senior year rotations. This week the ER was running low on green top tubes so received a few calls from the nurses asking if tests such as metabolic panels could be run on yellow top tubes just the same as green tops. A nurse asked if a lactic acid or ammonia could be run on a yellow top, and by our protocol we answered, "No." She asked the same question to the phlebotomy department which promptly transferred the call back to us. I answered felt like she was more so wondering WHY they had to use green top for these tests. I explained that if the tube hasn't fully clotted and there is any fibrin left in the serum when the tube is tested that it will interfere with the testing to give bad results. This was my first time answering a nurse's question and feeling like I had shed some light on a point of confusion! Looking forward to more opportunities for sharing information with nurses and doctors in the future!

I was working in the Transfusion Service of a large hospital. We had been transfusing a patient with cryosupernate (cryo-poor plasma) for several weeks. Then we received an order to transfuse with two units of cryoprecipitate. I called the nursing unit to verify the order. The nurse confirmed the order and I asked her to verify with the ordering physician. A few moments later an irate resident called and wanted to know why his orders were being questioned. I explained that we had been transfusing with cryo-poor plasma for several weeks. I asked him to clarify the order with the patient's attending physician. About 5 minutes later I again spoke with the resident who was very apologetic. He cancelled the previous order and stated that it should have been for cryosupernate. He then stated, "cryoprecipitate, cryosupernate, what's the difference?" I proceeded to explain the difference: cryosupernate was plasma with the cryoprecipitate (clotting factors) removed. The resident thanked me for the information and for questioning the order which prevented possible harm to the patient.

Several years ago, our Hematology Department was working up a peripheral blood specimen for CBCD and Reticulocyte count prior to a bone marrow aspiration. The reason for the bone marrow was extreme thrombocytopenia. The specimen collected in our lab yielded a normal platelet count, we contacted the physician and a recollect was submitted verifying our normal count was correct. The oncologist contacted the phlebotomy collection lab at an outside vendor to track the initial error. We had already discussed with the oncologists the possibility of improper collection with a clotted specimen. The initial sample that was used to refer the patient to the oncologist was indeed clotted. We saved a person from having to undergo an unnecessary invasive technique and additional expense not to mention undue stress.

In participating in a local church's health fair in May 2017, I did a glucose on a gentleman and it came back as greater than 500 mg/dL! I did not let him leave until we contacted the church's nurse who will do the follow-up. Interestingly, the gentleman had an insulin pen which he promptly injected into himself right then and there!!

When it comes to ordering lab tests for patients, there are many hands in the pot, so to speak. The doctor orders a test and, at our facility, the MA interprets that dr order and places the test order in the

lab system for the phlebotomist to receive. Things can go wrong with this process, as you can imagine. Every day, my lab coworkers and I have to edit orders or clarify orders to make sure the doctor is getting the test they need. It saves the patient time and money and ensures that the doctor has the information they need to help the patient.

Small Town USA - I once had to drive 45 miles to send a patient sample to the American Red Cross for workup of a wam autoantibody. The highway patrol officer met me halfway and took the sample the rest of the way. The patient had a HCT of 15% and we were able to give him blood an hour and a half later. He is alive and well!

It's been a long time since I worked in a laboratory--I am a field technical rep for a major diagnostic manufacturer. I hope that by teaching and supporting my customers that I have impacted patient care. I do remember way back a GI physician came to my micro lab and hugged me (1981) because I found a guardia in his patient and he had struggled to find a cause for the patient's illness.

A young boy came into the ER at a large urban hospital that I was working at. The boy was an immigrant from India, and his name was unfamiliar to the clerical staff in the ER so that his initial lab work was submitted under a name that was spelled slightly differently than the name under which he was eventually admitted. Unfortunately, it was only the blood cultures collected under the first name that grew. A "glitch" in the system prevented the two admissions from merging which meant that the physicians could not see those microbiology results from the computer when they looked up the labs for the now admitted boy. Because the initial positive results were called to the ER, none of the nurses on the floor new that the boy was septic. It was not until I called the physician to notify him of unusual sensitivity results, 3 days later, that the medical staff in charge of this boy became aware of the positive results. At this point I initiated an investigation with IT to determine where that glitch was so that future visits would merge properly upon admission.

There have been times that we get transfers from outside locations, generally on third shift or late in the day Friday. These patients end up being new acute leukemias. I have stayed late and come in early to assist in bone marrow biopsies and perform flow cytometry testing to obtain a diagnosis within 4 hours of the patient arriving at my facility. That expedites patient treatment and truly impacts the care they receive.

It was a weekday 3-11:30 p.m. shift in the laboratory and we had a CBC on a patient in ER who had a fever. I was a brand-new technologist with a few months on the job. While scanning the differential I saw what I thought was a malarial ring form. All of the experienced technologists working that evening told me I was crazy, that was a platelet stuck on an RBC.

So, I made a bunch of slides and found two more examples and talked the ER doc into coming to the lab to look. Indeed, the patient had been on a vacation trip to Africa and had Plasmodium falciparum. That was the only previously undiagnosed case of malaria I found in a 25-year career in the lab.

My mother who at the time was having difficulties with memory, awareness, weakness and fatigue. I suggested to her doctor that she be tested for vitamin B 12, as he was considering dementia. As it happened, her B12 was low and upon subsequent addition of this to her meds, she was able to recover

many functions.

It was on a Monday morning while I was at a private laboratory a 43 yr old man was brought in for tests. I collected blood, urine and analyzed for FBS, MP, U/A and WIDAL., but at end results showed the followings; FBS 240mg/dl (60-120), MP +,U/A; glu (++), ph 5.0,others; nil, widal test; 1/20 in all .. I prescribed Glucophage for him and then referred him to see a doctor for follow up.

I have the pleasure of teaching RN's phlebotomy skills or refreshing their skills. I have received feedback from these professionals that it is very helpful to learn how much impact their technique can have on patient results. Developing a technique that meets CLSI guidelines and protects specimen integrity has been my goal. Helping them learn it is not "just getting blood" has been so rewarding.

I have developed several assays that are now being used worldwide for treating patients with blood coagulation problems. I developed a method of universal calibrators to monitor people on different heparinoids. Where before we had to use separate calibrators we now need to use only a single hybrid curve. I was the first MLS to automate the STACLOT-LA procedure for identifying lupus anticoagulants. I helped put a serial killer nurse, Genene Jones behind bars who was killing pediatric patients by injecting them with heparin. I was the one that discovered the existence of the drug where it wasn't supposed to be. The child was saved by this discovery and the nurse was sentenced to prison. Many other of my publications led to direct changes in patient care in blood coagulation testing.

Don't know where to start, I have been working at Children's Hospital of Philadelphia for over 35 years and have saved many lives thru my career. Running lab tests on small volumes of blood with precision and a passion for the field of Medical Technology. I have always been proactive about supporting this field, started a lab tour program which anyone can tour the labs, we have 17 labs that are tour able. Once you get a RN or doctor in the lab, they are amazed on what happens to that tube of blood they send to the lab. I go out to the floors and do RN education talks on various lab related issues. The sad part is that 70% of all diagnosis and monitoring of a patient is based on lab tests and yet the public doesn't really know us. During lab week I try and pro mote /educate with a lab fair where we set up outreach tables here in the lobby and inform staff and families about our labs. Bottom line is all the time we impact patient care and we need to be more public about what we do.

The Medical (Clinical) Laboratory is not a field we would have ever categorized as high profile until out of necessity we met Dr. Rodney E. Rohde. His unwavering desire to save lives through the application of this expertise is not merely a subject he has written articles on or spoken about, it is in fact, how he leads his interactions as evidenced by our story.

You see, there are approximately 30,000 people in the United States living with a chronic illness for which there is currently no cure called Cystic Fibrosis (CF)...and our daughter Regan is one of them.

My husband Todd and I have always believed that education is paramount to navigate any challenge, but nothing prepares you for holding your 5 month old first born and hearing such terms as life expectancy. That was 18 years ago.

Among many things, through this on-going journey, we have gained invaluable first-hand experience, the kind that is not detailed in any parent manual nor familiar enough to rely on cultivated education. As issues come up, we seek out information specific to the topic. Ultimately, we are responsible for our

daughter's well-being. The challenge of course is how to figure out what to ask and to who because comprehending the many facets of a complex multi-organ disease like CF is an impossible task outside of a medical specialty.

The convenience of living near the Houston Medical Center meant we had access to one of the finest children's hospitals and even more specific, a large CF center.

Even considering our geographical advantage, we quickly discovered that our healthcare system while truly fantastic, it is far from perfect.

When Regan was 12, we accidentally found out she had cultured methicillin resistant *Staphylococcus aureus* (MRSA) while discussing a possible antibiotic prescription. MRSA is an antibiotic resistant microbe (bacteria) linked either to healthcare associated infections (HAIs) or to community infections. We also discovered that there was no effective protocol for either treatment or eradication of MRSA in Cystic Fibrosis patients. Shocked, we asked follow-up questions. Unsatisfied with the responses, we reached out to several clinical laboratory experts for better understanding. Of particular interest was the microbiology of the bacteria and the diagnostic methodology. We were not seeking medical advice. We needed information in order to confidently contribute to the decision-making process on how to best treat our daughter. Taking the lead to advocate for positive change as our perspective and more importantly, our timeline, are much different than the caring medical staff was not possible via the established communication.

Dr. Rohde not only returned our call, he was instrumental in assisting us to better understand what we were facing. He did not have to speak with us. He did not have to take the time to help, as it is not part of his job description. However, he has and much to our surprise continues to this day to offer future assistance. His patience in explaining an extremely complicated subject to non-scientific professionals should not go unnoticed. There are simply not enough words to express our sincere gratitude! For our family, his expertise in clinical laboratory and willingness to share his knowledge with us provided the foundation for contributing to our daughter's medical treatment. We had no other way to learn of the different diagnostic mechanisms, which prove to be much for efficacious in identifying potentially life-threatening bacteria for CF patients.

It was immediately clear to our medical team that our questions were too precise. They were astounded to find out these medical laboratory professionals, like Dr. Rohde, would take the time to speak with us. Although we had originally asked, we were unable to obtain answers to our time sensitive questions even from our outstanding team. Without Dr. Rohde's help, we would not have been in a position to ask the right questions, to advocate for the best diagnostic methods available, to know what the options are for our daughter...to even know where to begin!

We share this with you, as we are certain that we are but one example of one case where the field of clinical laboratory played an indispensable role. This is our unique situation. However, we know there are countless other applications for the science of clinical laboratory that we could not even contemplate with direct implications to positive medical outcomes. These are not numbers being measured, rather they are people's lives. Regan's quality of life. We felt strongly that at least our story should be shared. We hope that you will share your story! [View online.](#)

Working in rural Montana as a young MLS professional has been very challenging and rewarding. As a night Tech, I work very closely with ER and ICU patients. One direct impact of our work that can be easily noticed is when DKA patients are seen in the ER. Without a phlebotomist at night, I make several trips during the night to collect samples from these patients. From the first glucose results to the last of the serial Basic/CMP lab results after they are admitted, it is evident that the results we reported out dictate and guide the nurses caring for that patient. This is very rewarding and satisfying to me as a MLS to see the transformation in patients care almost in real time.

Working with our reference lab clients has afforded our team to be able to help many patients get quality care. One incident we had was with a mother to be who was having issues and the provider needed tests that would require it to be sent to Mayo. Our team was contacted by the provider when the specimen was sent, courier brought it to us, and we notified the provider we received it, sent to Mayo and Mayo contacted us when they received it. We got the result from Mayo (who called the provider directly), we faxed the result to the provider and the patient received care she needed for the health of her and her unborn child. They say it takes a village and it was the village that helped the provider to be able to provide quality service.

I work for a tissue bank laboratory. Every day we perform infectious disease testing and pathogenic microbiology on cadaveric donors in preparation for transplantation. Everyday our contributions in donor testing are saving people's lives and protecting the recipients from acquiring infections from transplants. Each donor we take in and process can help 150-300 patients with lifesaving transplants.

I know that we don't always get the attention and glory that we deserve, however on certain occasions, an event happens where we directly and most profoundly impact a patient. I'm a graveyard tech working in a 350-bed hospital. One night we had a patient arrive in the ER for a bad trip and possible broken bones. After his green top for chemistries was done centrifuging, we noticed the plasma was extremely thick. We thought maybe the centrifuge didn't quite work like it should, respun the specimen in a different centrifuge. Again, the plasma was so viscous and as I was showing a fellow tech, she said it's almost like he's got a lot of protein in his blood. I was a fresh tech, only took the MLS certification exam 1 year prior, had recalled the word "viscous" in a series of disorders where our bodies make too much protein. She and I quickly searched our reference material and we came across Waldenstrom's hypermacroglobulinemia. It seemed to fit this patient's history and current symptoms. We needed to test this plasma for IgM to help us distinguish this. After running his IgM, we see the result is >300. We notify the pathologist of our findings and suggest a bone marrow biopsy to confirm. We were fortunate enough to have an amazing pathologist and he did agree to this. It was confirmed almost 2 weeks later that this patient did have Waldenstrom's hypermacroglobulinemia, a Non-Hodgkin's lymphoma. This patient was immediately placed on chemotherapy. I don't know how the patient is doing now, but I do know he had gone undiagnosed for several years and when we discovered that, he was in a "crisis" state. I'm thankful that he was able to get the correct care that he deserved. This is why we train, study, and work so hard to be the best for our patients.

I explained to an ER doctor why giving a patient with a known history of anti-c O negative emergency-release red blood cells was a bad idea and convinced them to accept O positive instead.

I was working night shift at a small community hospital and we had a young woman come in with terrible abdominal pain. It was determined that she had an abscess on one of her ovaries and she was started on iv antibiotics. Her white count was elevated, 16,000, I believe. She spiked a fever during the night and blood cultures and a CBC were ordered. Her white count had dropped to 5.2k. I called the nurse who questioned my calling a 'normal' white blood cell count, I told her she might want to contact the MD as "all of those whites cells had to have gone somewhere, they may have mediated and she is about to rupture". I was called back up to the floor shortly for blood bank orders for type and screen as the patient was being prepped for surgery. The doctor stopped me in the hall and first ribbed me about being responsible for him being dragged out at 3am. He then thanked me for having them call him as

this young woman's reproductive abilities had been saved due to my investigative skills. I love my job. This was just one of the many, many times that I know of over the past 30+ years as a Medical Laboratory Scientist!

Working in the Mycology section of microbiology, I noticed an unusual number of *Fusarium* species in bronchial washings. I called my supervisor to ask if she thought we should let Infection Prevention department know since it seemed so unusual. We decided to let them know and they did investigate, finding that the common denominator was a single bronchoscope used on the patients. I do not remember the details of exactly what the issue was, but I do remember that changes were made to the post decontamination protocols for the scopes in terms of how they were stored. An entire policy was improved that resulted in a direct impact to patient safety because of my observations.

In an inspection I was doing of a lab in a doctor's office, I found that hematology controls were only being run one day a month and on that day the controls were run numerous times. I asked the technician about this. Why were controls not run on the other days but many times on one day. She explained that she only received the control material once a month and she used it all when she received it. There was not enough to use it every day. I explained to her the purpose of controls and about how to use the control material - that she should run the controls at least once a day. If she used it this way, she should have enough to last until the next shipment of control was received.

As a fresh face to this career, I must search through my young mental information banks and remembered professional improvements to conclude that my viewing of each shift as non-routine and as an individual and unique service has impacted patient care each and every day since I've started. The encouragement from other departments to me and my fellow working colleagues have reflected how this approach can make the difference in impacting patient care.

Our story centers on an education experience. At Michigan State University, where we have the Biomedical Laboratory Diagnostics Department and our accredited Medical Laboratory Science Program, we participated in the MSU Science Festival this spring. This was an event that attracted hundreds of attendees, young and old. Many were children and their families. During this event, our department presented an expo with 5 hands-on activities that educated the public on what it is like to be a medical laboratory scientist. These stations included microscope, microbiology, pipetting, urinalysis, and handwashing activities. We also had a table with information about the MLS profession, education routes, and fun giveaways (pin-on buttons and temporary tattoos). We recruited students, faculty/staff, and ASCLS members to participate as volunteers. This event attracted many attendees due to the marketing efforts of the MSU Science Festival team. In addition, we publicized the event to our students, alumni, and members of ASCLS-Michigan. It was an awesome opportunity to educate the public in what we do as medical laboratory science professionals!

Years ago in 1969 when I spent a summer working as a Med Tech at Grittman Memorial Hospital in Moscow, Idaho, I discovered Malaria when I examined a patient's blood under the microscope. He had been in Vietnam and it helped to explain his recurring fevers among other things!

There are so many but this one stands out. One morning our phlebotomy staff was having difficulty with a patient who was obviously angry and was being oppositional. They called me as I was working in

Hematology and we were the back up for phlebotomy. I escorted this female patient into the donor room where it was quiet and more dimly lit as it was not open to the public yet. I sat her calmly down in a chair and started to talk to her. I found out that the anger the patient was expressing was really fear. She was on the surgery schedule and getting some pre-surgical labs drawn. She told me that she had known about her breast cancer for a couple of months but kept it secret from her family because they had a once in a lifetime month long vacation scheduled and she did not want to put a damper on the activities. I was able to express how brave I thought she was and how strong of a woman I felt she was. She was a mother after all and that is about the bravest thing a woman can do. We cried together, and I hoped that I helped her gather her courage and strength to face her surgery. Oh and of course I got the blood I needed for her lab work. I often think about her and wonder how everything came out for her. I hope she thinks of that moment also. There are so many times that I have helped patients face difficult situations like pain, etc. by being calm and compassionate. Sometimes we need to fill in the gap between the patient and the time it takes for the nurse to deliver similar services including pain meds.

As a Certified Laboratory Consultant, I have the opportunity to see laboratories at their worst. I often get called in AFTER an inspection has gone badly. Last year, I worked with a reference laboratory who was fearful of an upcoming CLIA survey. In the 4 months I worked with them, I identified training deficiencies, QC deficiencies, outdated reagents in use, and 3rd party reagent purchase. By sharing the knowledge and regulations with the laboratory, all of the pieces were updated and with only a few, easy to resolve deficiencies, I was instrumental in the improvement of this laboratory that served clients in 11 states.

I took a job in a clinic that had previously only had Xray techs do their lab work. The Docs weren't happy to have to pay more for a MLS. One day, I drew a gentleman patient and then, upon review of the blood smear, I realized he was in blast crisis. I prepared slides, contacted the courier and the pathologist and sent off everything to the core lab in another city. Next, I waited outside the exam rooms to catch the provider to let him know what was happening. At the end of the day, the provider came into the clinic lab, pointed at me and said, "You earned your money today." I didn't get any more remarks about not being worth the extra money.

I would like to share a story on how the laboratory profession affected my personal development. I grew up with a working mom and dad. Since my parents worked, I had a housekeeper / babysitter. Her name was Alberta Dew. There were many times that I am sure I tried Alberta's patience. I was not the most disciplined kid in the neighborhood. Alberta and I had a few epic battles of will during our time together. After college I returned home to work for my hometown hospital laboratory. I started on the third shift which left me covering the ER almost every night. One of my first patients just happened to be Alberta Dew. At this time in Alberta's life, she was suffering dementia. I was just another caregiver at the hospital. I still remember the feelings that I felt that night. The pleasure I received from taking care of someone who had spent many an hour loving and caring for me. That feeling is what drives me today to continue delivering the best healthcare possible.

For a couple years now, members of ASCLS-DE have attended a community health fair at Bethel AME, a church located in downtown Wilmington, DE. Every spring they have a wellness fair aimed at trying to get their parishioners to focus on their health and make changes to their daily lives to become healthier. This was the third year that I have participated, and it always feels amazing to help these people. We perform glucose and cholesterol screenings by finger stick on anyone who would like to have the screening performed. Some people in this community don't have access to regular medical care, so this

health fair might be the only time anyone is paying attention to their health. This year we tested 85 people and of those found 2 people with glucose levels well above 300 and brought this to their attention to help them get the necessary care. We get to see both sides of patient care, as we're collecting the sample from the patient and we're also giving them their results and explaining to them what they mean. We will be completing a follow up screening 60 days after the initial screening to see if the parishioners have been able to make changes in their lives to improve their health.