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We want to hear from you! If you would like to submit something for publication in the newsletter, contact Rebecca Taylor at rbcatylr@gmail.com
Summer means different things to different people -
Graduation, vacation,
New job or old routine,
Kids sports & summer camp,
Long days and lots of sun,
Warm nights and fireflies.
Whatever your summer passions and pursuits, we wish you health, happiness, and good times with good people.

Happy Fourth of July!
Case Study – Part One

This case study is presented in sections, with the conclusion at the end of the newsletter. Keep reading!

A 22 year old woman presents to her primary care physician with a swelling on her arm which appears to be a boil. The swelling is itchy and occasionally, though not always, painful. A tiny hole at the center of the swollen area secretes a small amount of watery, bloody fluid. The woman finds her condition particularly disturbing because she says she can sometimes feel something moving inside the swelling.

The doctor orders routine lab testing which indicates that the woman has an elevated white blood cell count, with elevated eosinophils on the differential. All the other lab results are normal. The doctor prescribes antibiotics for a bacterial soft tissue infection and sends the woman home with instructions to return in two weeks if her condition does not improve.

Question 1: Do you agree with the diagnosis of bacterial soft tissue infection?

Question 2: What question would you like to ask this patient?
Please join us for the 2018 ASCLS annual meeting and exposition in Chicago, Illinois on July 29 – Aug 2.

Visit the ASCLS website for hotel, travel and meeting information

http://ascls.org/education-meetings/annual-meeting

Give yourself the gift of professional growth!

Renew Your Membership!

The American Society for Clinical Laboratory Science is the preeminent organization for clinical laboratory science practitioners. ASCLS provides dynamic leadership and vigorously promotes all aspects of clinical laboratory science practice, education and management to ensure excellent, accessible cost-effective laboratory services for the consumers of health care.

Membership is valid August 1 – July 31. Your KSCLS membership renewal is part of your ASCLS renewal.

Find information and renew online at

http://www.ascls.org/membership/join
Two weeks after her initial visit, the woman returns with her condition unchanged, despite taking the complete course of antibiotics, and her doctor refers her to a dermatologist. Upon questioning by the dermatologist, the woman reveals that she recently traveled to Mexico. The trip was a graduation present from her parents, and she had a fabulous time, although she found the mosquitoes troublesome, and received many mosquito bites. She repeats her concern to the dermatologist that she can feel something moving inside the swelling on her arm. “Actually,” the dermatologist says, “That’s not surprising. If you look closely at the opening on the swollen area, you might see something moving, as well.”

Question 3: What does the dermatologist see through the opening in the woman’s arm?

Question 4: What do you think the woman has?

![Eosinophil](image)
Thank you to everyone who attended the Patchwork of Knowledge meeting in April!

We had a great time, and came away educated and energized!

Thanks to everyone who helped to make the meeting a success—

- Leaders and planners
- Volunteers
- Vendors
- Speakers
- Students and teachers
- Members
- Photographs by Anita Staats
Thanks to the leaders and planners who made the meeting a success!
Each day started with a keynote address.
Everyone enjoyed the vendor exhibits!

The food was delicious!
Awards and student recognitions
Congratulations to all the students who received awards at this meeting.

**KSCLS Mary Conrad Scholarship recipients for 2018:**
Max Kaplan
Chelsea Lyon

**KSCLS Kathern Forest Scholarship recipients for 2018:**
Esmeralda Orosco
Ruth Romero

**KSCLS Outstanding Student Award recipients for 2018:**
Barton County Community College – Chelsey Lyon
Manhattan Area Technical College – Megan Sawyer
Seward County Community College – Kami Herons
University of Kansas Medical Center – Sydney Webb
Wichita State University – Dillon Jackson

Mark your calendar now and plan to join us in Wichita for the 2019 KSCLS meeting at the Wichita Marriot Hotel, April 16—17, with the Wheatlands CLMA. We hope to see you there!
Regulatory News –

Anyone involved in CLIA inspections will be interested in the CLIA Survey Hot Points for 2018. This will help smooth your way through your next inspection!

1. Proficiency Testing – You must perform the following for any proficiency test that is not graded.
   - Document that you have evaluated the results and compared the results to the summary result.
   - State whether the result would have passed or failed.
   - State that the result was self-evaluated, and date and initial your comments.
   - Failure to follow these steps may result in a deficiency.

2. Coagulation Testing – New Instructions for Use (IFU) from Siemens for Citrol controls 1, 2, and 3
   - Instructions have changed from using either distilled water or deionized water to using distilled water only.
   - The new instructions state: “Add exactly 1 mL of distilled water, gently tilt the vial and allow 15 minutes for reconstitution.”
   - Failure to use distilled water may result in a deficiency.
3. Humidity Check – All labs must monitor the laboratory environmental humidity each day.

- Manufacturers specify permissible humidity limits for each instrument or kit.
- These specifications are in the Operator’s Manual for each instrument or kit under “Temperature and/or humidity requirements”.
- The daily values should be plotted on a chart which displays acceptable high and low limits for each instrument or kit.
- It is acceptable to use one monitoring chart for the lab as long as the highest and lowest values are within specifications for all of your testing.
- Temperature and humidity monitors are easily available from local suppliers such as Target.
- Failure to monitor humidity as well as temperature may result in a deficiency.

4. The CLIA Corner – This is a very helpful publication from the State Hygenic Laboratory at the University of Iowa.

- This 4 – 6 page publication is produced on a quarterly basis.
- Each issue focuses on a specific topic.
- Archived issues are available at the University of Iowa website at [http://www.shl.uiowa.edu/labcert/clia/cliacorner.xml](http://www.shl.uiowa.edu/labcert/clia/cliacorner.xml)
5. Update laboratory contact information with the Kansas Department of Health and Environment (KDHE).

- All laboratory managers should email KDHE with your name and current email address.
- Updated contact information will facilitate communication with KDHE.
- Late surveys and missed state inspections may result in a deficiency in a federal inspection.
- KDHE relies on lab managers to keep their inspections current as part of their management responsibility.

These suggestions were shared by Carol Shearer, KSCLS president.

We wish you the best on your next inspection!
The dermatologist explains that the botfly, *Dermatobia hominis*, is endemic to Central and South America, including Mexico, and that the botfly maggot burrows into the skin of animals and matures there, feeding on the host’s tissue fluids. Once the maggot matures, it will exit the host so that it can pupate in the soil and metamorphose into the adult. The adults mate, and then the female botfly attaches her eggs to a blood sucking vector such as a mosquito. When the mosquito pierces a host’s skin to obtain a blood meal, the botfly eggs sense the body heat of the host and hatch, and the larvae enter the host’s skin through the hole made by the mosquito or through a hair follicle. Most likely this patient was infected through one of the many mosquito bites she received in Mexico, and the botfly larva has been maturing in the skin of her arm. The movement of the larva causes the sensation of pain and movement she sometimes feels.
Case Study – Part Three

The dermatologist makes a small incision and removes the botfly larva. The wound heals without secondary bacterial infection. The larva is sent to an entomology reference laboratory and identified as the third instar larval stage of *Dermatobia hominis*.

References:

1. Furuncle photo
Furuncular myiasis by Mike Cadogan, Last updated February 10, 2018
https://lifeinthefastlane.com/botfly-extraction/

2. Eosinophil photo
http://www.daviddarling.info/encyclopedia/E/eosinophil.html

3. Botfly photo
https://en.wikipedia.org/wiki/Botfly

4. Eosinophil drawing
http://laboratorytests.net/laboratory-tests/high-eosinophils-count.html

5. Botfly larva picture

6. Botfly larvae and adult picture
https://www.cdc.gov/parasites/myiasis/index.html

Published online 2014 Dec 19. doi: [10.1136/bcr-2014-205890](http://10.1136/bcr-2014-205890)

8. Parasites—Myiasis; CDC, Jan 10, 2013
https://www.cdc.gov/parasites/myiasis/index.html

9. Fly clipart
https://clipartxtras.com/categories/view/549256f25079ce1e415e8177c126ee6a56cdabc1/flies-clipart-black-and-white.html
Save the date!

You are cordially invited to attend the KSCLS annual summer planning meeting, held this year on August 18\textsuperscript{th} from 10:00 am – 3:00 pm. The Blueville Nursery in Manhattan, Kansas, is generously allowing us to use their meeting room, and lunch will be provided courtesy of Carol Shearer, our outgoing KSCLS president.

It’s a great way to get involved in your professional society, and meet (or join) the leadership team.

If you would like to join us for a day of strategizing and planning for the coming year, please send your contact information to Cheryl Lippert at \texttt{LippertC@bartonccc.edu}.

RSVP for lunch no later than August 4\textsuperscript{th} to Carol Shearer at \texttt{carol.shearer56@gmail.com}.

The Blueville Nursery is located at 4539 Anderson Avenue, Manhattan, Kansas – about one block northwest of the intersection of Anderson Avenue and Scenic Drive.

We hope to see you there!
Lab Laughs

What do bacteria call their summer vacation home movies?

Biofilms, of course!

Stay cool and have a safe lab summer!

Photo from Atlanta Animal Rescue at http://www.atlantalabrescue.com/4th-of-july-fireworks-and-your-dog/

Best wishes
from the KSCLS Leadership Team!