

KTRM—Kirksville—Issues/Programs List

Filed January 10, 2015, for the Quarter October-December, 2014

Program: The P.I.T

Date/Time: October 14, 2014, 8:00 PM

Issue: Health/Medical School Admissions

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

Medical school admission requirements vary from school to school. In general, most medical schools will expect applicants to have taken the Medical College Admission Test® (MCAT®), and to have completed the following types of courses:

Undergrad degree

- One year of biology
- One year of physics
- One year of English
- Two years of chemistry (through organic chemistry)

MCAT® Exam.

- Applicants should consider volunteering at a local hospital or clinic to gain practical experience in the health professions.
- A well-rounded sampling of extra-curricular activities or work experiences, both related and unrelated to medicine, will help broaden an applicant's knowledge and development.

Medical school Application process

Primary application (online) – Goes out to all schools you select (\$\$\$ for each)

- Personal info, grades/MCAT, extracurricular activities, shadowing, everything...
- Personal statement essay
- Letters of recommendation

Secondary applications – vary from school to school

- Essay questions

Interview

- Whole day of interviews and tours – be careful they're watching

Acceptance – wait list – denial

Program: The P.I.T

Date/Time: October 21, 2014, 8:00 PM

Issue: Disease Prevention/Ebola

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

Because of general anxiety and fear of the Ebola virus, a discussion focused on the disease and how it is spread and controlled/treated.

What is Ebola?

- It is an RNA virus that affects the cells of your body specifically Macrophages.
- Causes hemorrhagic fever – blood vessels leak—bleeding both internally and externally
- Among the most virulent pathogens of humans – extremely severe or harmful.
- Vector (carrier) is thought to be bats – fruit bats
- Ebola then spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people, and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.
- Health-care workers have frequently been infected while treating patients with suspected or confirmed EVD. This has occurred through close contact with patients when infection control precautions are not strictly practiced.
- People remain infectious as long as their blood and body fluids, including semen and breast milk, contain the virus. Men who have recovered from the disease can still transmit the virus through their semen for up to 7 weeks after recovery from illness.
- There is data that shows air-borne transmission is possible but unlikely and has only been witnessed in healthcare workers.

Symptoms of Ebola –

- First symptoms: sudden onset of fever, fatigue, muscle pain, headache and sore throat.
- Followed by vomiting, diarrhea, rash (not itchy), symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding (e.g. oozing from the gums, blood in the stools).
- Incubation period, that is, the time interval from infection with the virus to onset of symptoms is 2 to 21 days.

Treatment and vaccines

- There is as yet no proven treatment available for EVD.
 - No licensed vaccines are available yet, but 2 potential vaccines are undergoing human safety testing.
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Program: The P.I.T

Date/Time: October 28, 2014, 8:00 PM

Issue: Childhood Immunizations

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

Today marks the 100th birthday of Jonas Salk. He developed the first successful inactivated polio vaccine. To mark that anniversary, a discussion of childhood vaccinations was broadcast to remind parents of the importance of such vaccinations.

Doctors recommend that babies and children get vaccines that can prevent the following infections:

- Hepatitis B – Hepatitis B can cause long-term liver problems or liver cancer.
- Diphtheria, tetanus, and pertussis – Vaccines to prevent these 3 different diseases are usually grouped together in 1 shot.
- Polio – Polio can cause muscle weakness and pain, and lead to long-term paralysis.
- Rotavirus – Rotavirus can cause severe diarrhea.
- Haemophilus influenza type B, called “Hib” – Hib can cause an infection of the skin, throat, joints, or tissues around the brain.
- Pneumococcus – Pneumococcus is a germ that can cause an infection of the lungs, ears, blood, or tissues around the brain.
- Measles, mumps, and rubella, called “MMR” – Vaccines to prevent these 3 different diseases are grouped together in 1 shot.
- Chickenpox – Chickenpox can cause a fever, sore throat, and rash.
- Hepatitis A – Hepatitis A does not usually cause problems in children, but can cause severe liver disease in adults.
- Flu – The flu can cause fever, chills, muscle aches, cough, or sore throat.
- Meningococcus – Meningococcus is a germ that can cause an infection of the blood or tissues around the brain.

Is there a benefit to delaying vaccines until my child gets a little older? — No! Some parents think it helps to let children get older than the recommended vaccination ages before giving them too many vaccines. The truth is, studies show that delaying vaccines could actually have downsides. For example, one study found that children who got their first MMR vaccine later than they were supposed to had a higher risk of fever-related seizures. The vaccine schedules doctors recommend have been carefully studied. Do not delay your child’s vaccines.

Doctors recommend that children age 7 to 18 get vaccines to prevent the following infections:

- Influenza (flu) – The flu can cause fever, chills, muscle aches, cough, or sore throat.
- Diphtheria, tetanus, and pertussis – Vaccines to prevent these 3 different diseases.
- Human papillomavirus (HPV) – HPV infection can lead to cancer of the cervix in women.
- Meningococcus – Meningococcus is a germ that can cause a serious body-wide infection.
- Pneumococcus – Pneumococcus is a germ that can cause infections of the lungs, ears, blood, or tissues around the brain.
- Hepatitis A – Hepatitis A does not usually cause problems in children, but it can cause severe liver disease in adults.

Program: The P.I.T

Date/Time: November 4, 2014, 8:00 PM

Length: 1 Hour

Issue: Mononucleosis

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

A discussion of the causes and treatments for a disease prevalent among college students: the Epstein Barr Virus known as “The Kissing Disease,” which is transmitted through saliva, so a student can get it through kissing, but can also be exposed through a cough or sneeze, or by sharing a glass or food utensils with someone who has mono.

Signs and symptoms of mononucleosis may include:

- Fatigue
- General feeling of unwellness (malaise)
- Sore throat, perhaps a strep throat that doesn't get better with antibiotic use
- Fever
- Swollen lymph nodes in your neck and armpits
- Swollen tonsils
- Headache
- Skin rash
- Soft, swollen spleen

The incubation period is approximately four to six weeks, although in young children this period may be shorter. The Epstein-Barr virus can cause much more serious illness in people who have impaired immune systems, such as people with HIV/AIDS or people taking drugs to suppress immunity after an organ transplant.

Treatments and drugs

There's no specific therapy available to treat infectious mononucleosis. Antibiotics don't work against viral infections such as mono. Treatment mainly involves bed rest and drinking plenty of fluids. Besides getting plenty of bed rest, these steps can help relieve symptoms of mononucleosis:

- **Drink plenty of water and fruit juices.** Fluids help relieve fever and sore throat and prevent dehydration.
- **Take an over-the-counter pain reliever.** Use pain relievers such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin IB, others) as needed. These medicines have no antiviral properties. Take them only to relieve pain or a fever. Use caution when giving aspirin to children or teenagers. Though aspirin is approved for use in children older than age 2, children and teenagers recovering from chickenpox or flu-like symptoms should never take aspirin. This is because aspirin has been linked to Reye's syndrome, a rare but potentially life-threatening condition, in such children.
- **Gargle with salt water.** Do this several times a day to relieve sore throat. Mix 1/2 teaspoon salt in 8 ounces (237 milliliters) of warm water.

Program: The P.I.T

Date/Time: November 11, 2014, 8:00 PM

Issue: Veterans/Sexual Assault/Trauma

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

In honor of Veterans Day, the discussion focused on Posttraumatic Stress Disorder (PTSD), its causes and treatments.

Posttraumatic Stress Disorder (PTSD) can occur after you have been through a traumatic event:

- Combat exposure
- Child sexual or physical abuse
- Terrorist attack
- Sexual or physical assault

How Common Is PTSD?

Many Americans have had a trauma. About 60% of men and 50% of women experience at least one traumatic event. Of those who do, about 8% of men and 20% of women will develop PTSD. For some events, like combat and sexual assault, more people develop PTSD.

Symptoms of PTSD

Reliving the event (also called re-experiencing). Memories of the trauma can come back at any time. You may feel the same fear and horror you did when the event took place. You may have nightmares or feel like you're going through it again. This is called a flashback. Sometimes there is a trigger—a sound or sight that causes you to relive the event.

Treatments for PTSD

There are good treatments available for PTSD. The two main types are psychotherapy, sometimes called “counseling,” and medication. Sometimes people combine psychotherapy and medication.

Psychotherapy

- Cognitive Behavioral Therapy (CBT)
- is the most effective treatment for PTSD. CBT usually involves meeting with your therapist once a week for 3-6 months. There are different types of CBT that are effective for PTSD.
- Cognitive Processing Therapy (CPT)
- is a CBT in which you learn skills to better understand how a trauma changed your thoughts and feelings. It will help you see how you have gotten “stuck” in your thinking about the trauma.
- Prolonged Exposure (PE) therapy is a CBT in which you talk about your trauma repeatedly until the memories are no longer upsetting. You also go into situations that are safe but which you may have been avoiding because they are related to the trauma.

Medication

Selective Serotonin Reuptake Inhibitors (SSRIs)

They can raise the level of serotonin in your brain, which can make you feel better.

Program: The P.I.T

Date/Time: November 18, 2014, 8:00 PM

Issue: Student Stress

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

A discussion of headaches, especially among college students, who may suffer from tension-related headaches.

A Tension-type headache (TTH) is the most prevalent headache in the general population, and the second-most prevalent disorder in the world. The typical presentation of a TTH attack is that of a mild to moderate intensity, bilateral, nonthrobbing headache without other associated features.

CLASSIFICATION — There are three main subtypes of TTH:

- Infrequent episodic TTH, with headache episodes less than one day a month
- Frequent episodic TTH, with headache episodes 1 to 14 days a month
- Chronic TTH, with headaches 15 or more days a month

The term tension-type headache replaces previous terms such as stress or tension headache, muscle-contraction headache, psychomyogenic headache, and psychogenic headache. Tension headache was originally named for its suspected etiology (i.e., excessive stress or tension leading to muscle contraction).

Treatment- Studies have shown that tricyclic drugs such as amitriptyline and nitric oxide synthase inhibitors can reverse central sensitization and the chronicity of headache. Finally, low frequency electrical stimulation has been shown to rapidly reverse central sensitization and may be a new modality in treatment of chronic TTH and other chronic pain disorders.

For patients with pure episodic tension-type headache (TTH), we recommend treatment with simple analgesics such as nonsteroidal anti-inflammatory drugs (NSAIDs) or aspirin.

Acetaminophen (1000 mg) is probably less effective than NSAIDs or aspirin, but is preferred in pregnancy.

● The combination of caffeine with the simple analgesics acetaminophen, aspirin, or ibuprofen is more effective for the treatment of TTH than simple analgesic monotherapy, although side effects are likely to be more frequent with combination therapy.

For patients with TTH that is unresponsive or poorly responsive to monotherapy with simple analgesics, we suggest the use of caffeine combined with simple analgesics

Program: The P.I.T

Date/Time: November 25, 2014, 8:00 PM

Issue: Alternative Medicines/Treatment

Length: 1 Hour

Hosts: Todd Troxell and Kyle Baird, A.T. Still Medical School, Kirksville

A wide-ranging discussion of alternative medicine as opposed to standard pharmaceutical treatments that are prevalent amongst doctors and patients.

Pranic Healing

energy medicine developed by GrandMaster Choa Kok Sui that uses prana to balance, harmonize and transform the body's energy processes.

Prana is a sanskrit word that means life-force. The Chinese refer to it as Chi. The Japanese call it Ki. It's also called Ruach or the Breath of Life in Hebrew.

Prana is invisible bio-energy that keeps the body alive and maintains a state of good health. Pranic healing is a pretty simple yet effective system of "no touch" energy healing. It is based on the fundamental notion that the body is a self-repairing living entity that possesses the ability to heal and is helped by increasing and cleansing this life force.

There have been accounts of quick healing and recovery using pranic healing. One skeptical engineer says he used pranic healing to help his wife's fractured hip that healed in 2 weeks as opposed to the doctor's opinion of 3-4 months.

Chia Seeds

Remember the Chia Pet? These gift items, clay figurines that sprouted grass-like "fur," were once all the rage. Fast-forward a few decades, and the seeds from the same chia plant are being sold online and in health food stores as a [weight loss](#) aid.

They're supposed to help control [hunger](#) while they enhance your [diet](#) with super-nutrients. But what's the real story on these nutritious seeds and their ability to help you lose [weight](#)?

In theory, chia seeds are supposed to expand in your belly, helping you to feel full, eat less, and ultimately shed pounds. But one study indicates otherwise.

"Over a 12-week period, we did not see a change in appetite or weight loss" in study participants who consumed chia seeds, says researcher David Nieman, a professor at Appalachian State University in North Carolina. "Our study showed no reduction in body weight, body fat and no improvement in traditional cardiovascular markers from 50 grams of chia per day."

A study reviewing the body of scientific evidence on chia found similar results.

"The evidence is limited on chia, and only two clinical trials examined [heart health](#) and body weight," explains researcher Catherine Ulbricht. "One showed some beneficial [heart](#) effect, but neither showed any effect on weight loss."

More study is needed before chia can be recommended either for weight loss and heart health, says Ulbricht, chief editor of *Natural Standard Research Collaboration*.