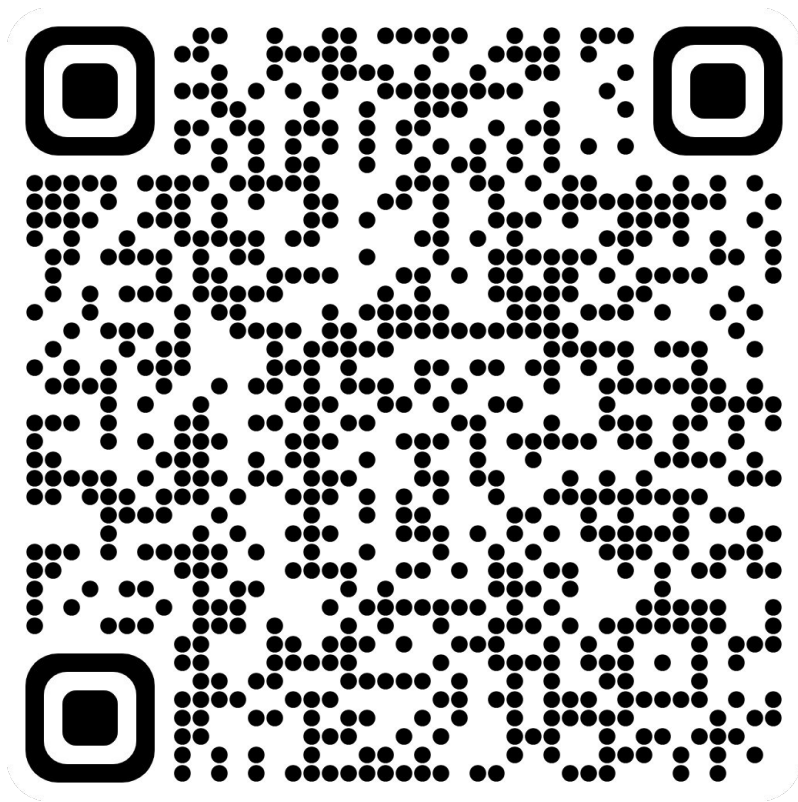


SIGN IN



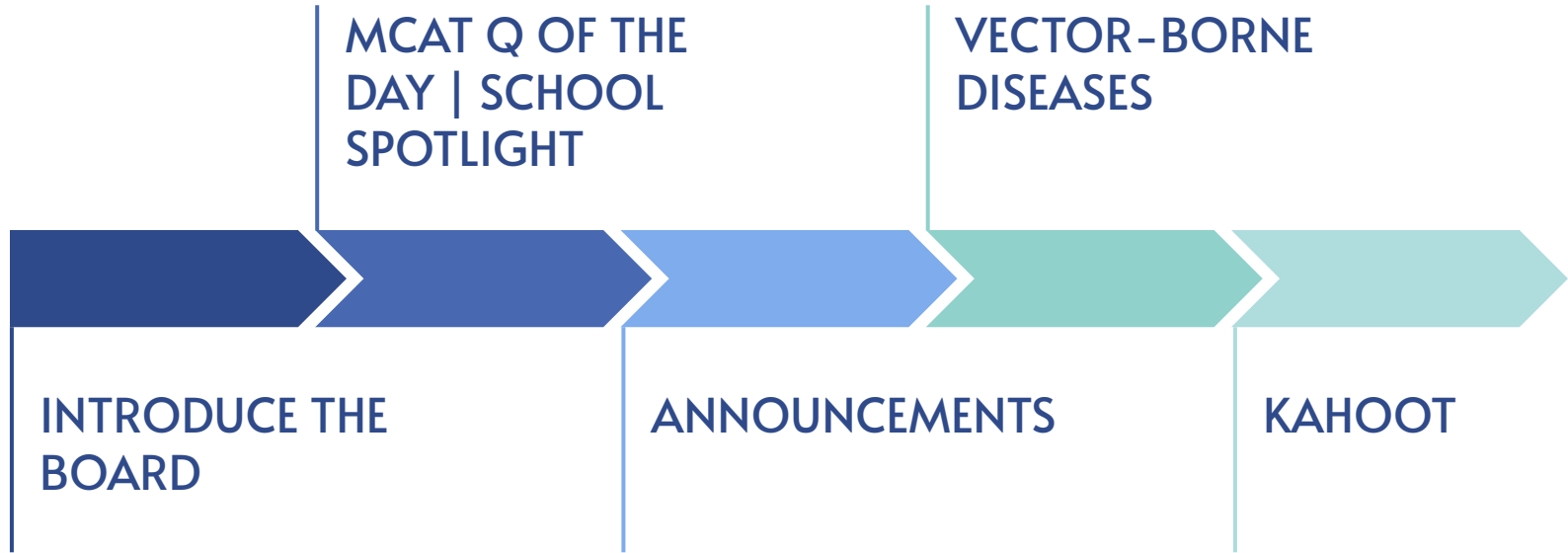
AMSA at UC Merced presents

VECTOR-BORNE DISEASES

Thursday, January 25, 2024 |
6:30pm COB 105



AGENDA



01. INTRODUCING THE BOARD





SHWETA SRINIVASAN PRESIDENT

Major: Public Health

Year: 3rd

Aspirations: Medical School

Fun Fact: I have 9 piercings!



ALANA SHAKRA VICE PRESIDENT OF MEMBERSHIP

Major: Human Biology

Year: 3rd

Aspirations: Orthopedic Surgeon

Fun Fact: Swim team for 10+ years

Also, that is Shweta's dog.



NATALIE MORA VICE PRESIDENT OF COMMUNICATION

Major: Human Bio

Year: 4th

Aspirations: dermatology

Fun Fact: crochet and do nails on the side



LIZ GARCIA-JACOBO

DIRECTOR OF OUTREACH

Major: Psychology

Year: 2nd

Aspirations: Psychiatry/Pediatrics

Fun Fact: I do digital art



RITIKA PALL DIRECTOR OF EDUCATION

Major: Human Biology

Year: 2nd Year

Aspirations: attend med school

Fun Fact: has a small business for
desserts



LESLIE MEZA

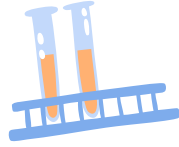
DIRECTOR OF EVENTS

Major: Public Health

Year: 3rd Year

Aspirations: Nurse

Fun Fact: I have 5 tattoos.



02. MCAT Q OF THE DAY | SCHOOL SPOTLIGHT



MCAT QUESTION:

A patient presents to the emergency room with an asthma attack. The patient has been hyperventilating for the past hour and has a blood pH of 7.52. The patient is given treatment and does not appear to respond, but a subsequent blood pH reading is 7.41. Why might this normal blood pH NOT be a reassuring sign?

- A. The patient's kidneys may have compensated for the alkalemia.
- B. The normal blood pH reading is likely inaccurate.
- C. The patient may be descending into respiratory failure.
- D. The patient's blood should ideally become acidic for some time to compensate for the alkalemia.

ANSWER:

The correct answer is: C

When a patient with an asthma attack does not respond to treatment and has been hyperventilating for over an hour, he or she may become fatigued and may not be able to maintain hyperventilation. In this case, the patient begins to decrease his or her breathing rate and is not receiving adequate oxygen. By extension, carbon dioxide is trapped in the blood, and the pH begins to drop. Despite the fact that this pH is normal at the moment, this patient is crashing and may start demonstrating acidemia in the near future. While the kidneys should compensate for alkalemia, this is a slow process and would not normalize the blood pH within an hour.

MED SCHOOL SPOTLIGHT

UC Riverside School of Medicine Family Medicine

The Department of Family Medicine at the UC Riverside School of Medicine provides residents with outstanding training and skill development. We pride ourselves in delivering care that is evidence-based, culturally aware, and patient-centered. Residents can expect to build community, develop autonomy, and grow as leaders.

Three letters of recommendation (LORs)

- To strengthen your application, please consider submitting at least one letter from a Family Medicine physician or a Family Medicine Department Chair

International medical graduates are required to submit:

- ECFMG Standard Certification with valid date
- Score for examinations used to qualify for the ECFMG certificate
- US citizenship, permanent residency, or documentation of valid work permit
- For International Medical Graduates: ECFMG Certification with a valid date

A complete application includes the ERAS common application form, the Medical Student Performance Evaluation (MSPE) and transcripts, the USMLE or COMLEX transcripts, a Personal Statement, and three Letters of Recommendation.

All applicants invited for interview are considered good candidates for the program based on the review of the ERAS application. We evaluate candidates holistically based on experiences, attributes, metrics and competence.

NURSING SCHOOL SPOTLIGHT

San Jose State University

Master of Science, Family Nurse Practitioner Admissions

Eligibility:

- Applicant has current, unrestricted California Registered Nursing (RN) license
- Applicant has 1-2 years of prior nursing experience at the time of application
- Applicant has a Baccalaureate degree in Nursing (BSN)

A grade point average of 3.0 (B) is required in the last 60 units of the undergraduate program coursework.

Tuition: \$50,000

Potential applicants need to demonstrate knowledge and skills in the following areas:

- Competency in the [American Association of Colleges of Nursing \(AACN\) Nursing Essentials for baccalaureate nursing](#)
- Introductory research course, or the equivalent, that has prepared the applicant to critique the usefulness of specific research with regard to nursing practice
- Advanced writing skills

03.

ANNOUNCEMENTS



SEMESTER PLANS

This semester, we can look forward to...

- More guest speakers
- Hands-on workshops (suturing, CPR certification, etc.)
- MMIs (Multiple Mini Interviews)
- Volunteer opportunities

... and more!



Suturing Availability Form

MEMBERSHIP & TIER CRITERIA

AMSA National Membership is offered all year long:

- \$35 for one year membership
- \$75 for four year membership

*Local Membership Dues:

- \$22 per year

*Must be a member of AMSA National in order to be a member of our chapter

Membership Tier Criteria	
<u>Gold</u> <ul style="list-style-type: none">• 4 general meetings• 20 Community Service Hours	<u>Silver</u> <ul style="list-style-type: none">• 3 general meetings• 15 Community Service Hours
<u>Bronze</u> <ul style="list-style-type: none">• 2 general meetings• 10 Community Service Hours	<u>Basic</u> <ul style="list-style-type: none">• 2 general meetings• 5 Community Service Hours

COMMUNITY SERVICE

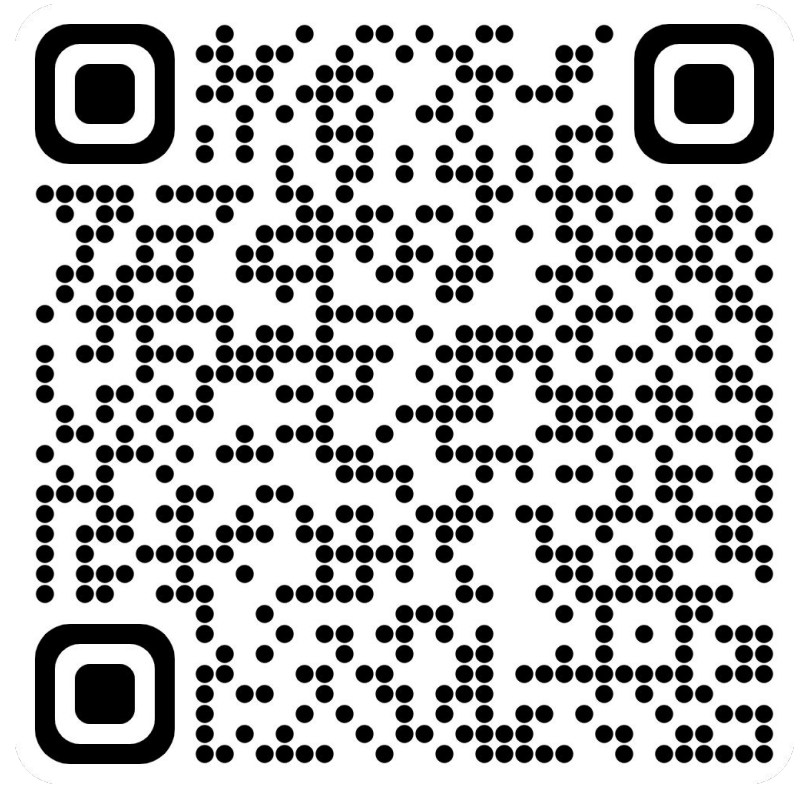
Community service is an important part of giving back and showing dedication and involvement.

Log your community service hours for this semester using this form, which will also be available on our website!



OUTREACH OPPORTUNITIES

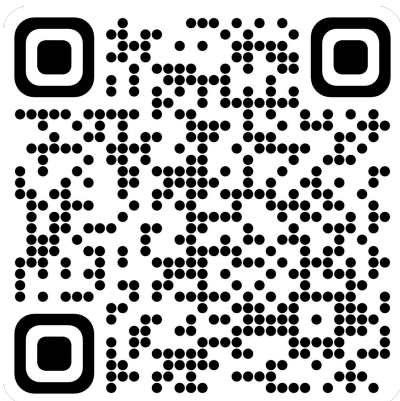
Use this spreadsheet as a way to keep track of different opportunities to gain knowledge and experience as pre-health students!



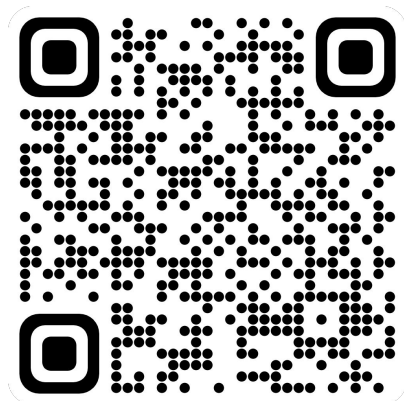
ASPIRING PHYSICIANS PROGRAM

UCSF Latinx Center of Excellence presents APP:

- Premedical program supporting those underrepresented in medicine
- 6-weeks (summer) with \$3,000 stipend, mentor, and workshops
- Preparation for MCAT, applications, organizations, etc.



INFO SESSION



APPLY HERE

UCSF Latinx Center of Excellence Aspiring Physicians Program (APP)

Join us for our 2nd Info Session
to learn about our Aspiring
Physicians Program (APP)
at SFSU, Fresno State,
& UC Merced!



2024 Summer Program Overview

LCOE APP is a pre-medical program that supports and prepares underrepresented in medicine (UIM) with an emphasis on Latinx students at UC Merced, who wish to pursue a medical career.

Our intensive 6-week summer program includes a \$3,000 stipend, mentorship, and a variety of workshops. Students will gain exposure to:

- Preparation for Medical School Application
- Introductory MCAT preparation
- Health policy & Research-based fact sheets
- Local Community-Based Organizations (CBOs)
- Guest speakers, medical school panelists & much more!

UC Merced:
APPLY HERE



Info Session:
Monday, Jan. 29
5:00-6:00 PM
[Register HERE](#)



Summer 2024
Program Dates:

June 3- July 12
Mon-Fri (9:00-4:00 PM)

Questions?

Contact Program Coordinator:
Yoselin.Castillo@ucsf.edu

<https://latinx.ucsf.edu/programs>

04.

VECTOR-BORNE DISEASES



WHAT ARE VECTOR-BORNE DISEASES?

Defined by the World Health Organization (WHO) as “Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors.”

- Vectors: Living organisms that can transmit infectious pathogens between humans or between animals and humans

Examples of vectors include:

- Mosquitoes
- Ticks
- Fleas
- Bats
- Rodents



LYME DISEASE

WHAT IS IT?

- Caused by the transmission of *Borrelia burgdorferi* bacteria from deer ticks to humans
- An estimated approximately 476,000 Americans are diagnosed and treated for Lyme disease each year

SYMPTOMS

- Fever, chills, headache, fatigue, muscle/joint aches
- Erythema migrans (EM) rash (pictured) occurs in 70-80% of afflicted individuals



TREATMENT

- Early diagnosis and 4-week oral antibiotic treatment may prevent late Lyme disease
- Some patients may still feel long-term effects after treatment such as pain or fatigue

MALARIA

WHAT IS IT?

- Caused by transmission of a parasite by infected *Anopheles* mosquitoes
- The U.S. reports about 2,000 cases of malaria each year

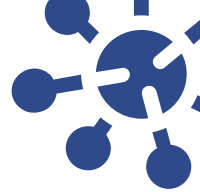


SYMPTOMS

- Fever, chills, headaches, flu-like illness
- Nausea, vomiting, diarrhea
- May also cause anemia and jaundice due to loss of red blood cells

TREATMENT

- Curable if diagnosed and treated quickly
- Prescribed drugs like Coartem® can help treat infected individuals (dosage based on age, weight, location, etc.)



WEST NILE VIRUS

WHAT IS IT?

- Caused by transmission of virus from mosquitoes that fed previously on infected birds
- Approximately 2,500 cases of humans afflicted with West Nile Virus in 2023

SYMPTOMS

- While 8 out of 10 individuals do not develop symptoms, most symptomatic persons express fever, headache, body aches, vomiting, etc.
- Most individuals with symptoms recover but may have long-term symptoms

TREATMENT

- No vaccine or specific medicines are available for West Nile virus infection, but prevention measures can be taken such as wearing bug spray, maintaining hygienic practices, etc.
- Pain medication and rest may relieve symptoms



DENGUE FEVER

WHAT IS IT?

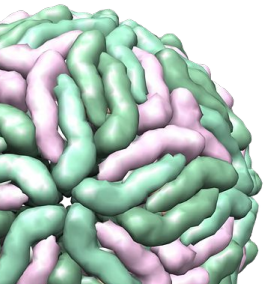
- Caused by transmission of virus by *Aedes aegypti* mosquitoes
- Up to 400 million people are infected by a dengue virus each year
 - Almost half the world's population live in areas with risk of dengue

SYMPTOMS

- Fever accompanied with rash, nausea, vomiting, aches and pains
- Typically last 2-7 days
 - most afflicted individuals recover within a week

TREATMENT

- No specific antiviral agents exist for dengue
- Patients are recommended to stay hydrated and aspirin-type drugs due to the anticoagulant effects and the increased risk of bleeding complications



HANTAVIRUS

WHAT IS IT?

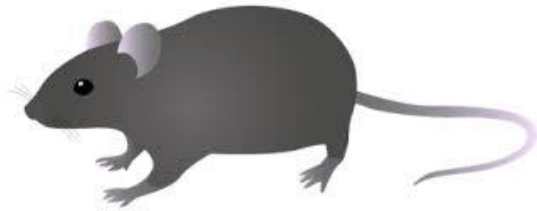
- Caused by transmission of aerosolized virus by rodents
- Approximately 100,000 cases worldwide each year
 - Can cause Hantavirus Pulmonary Syndrome (HPS)

SYMPTOMS

- Fever accompanied with nausea, aches and pains in large muscle groups such as back and thighs
- Typically last 4-10 days – most individuals recover within 2-3 weeks

TREATMENT

- No specific treatment or cure for infection
- Patients undergo oxygen therapy to help with a period of respiratory distress.
- Patients are recommended to receive appropriate, broad-spectrum antibiotic therapy.



TYPHUS

WHAT IS IT?

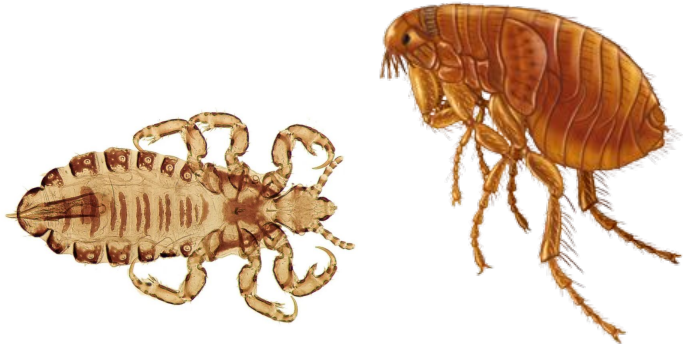
- Group of diseases caused by transmission of bacteria by lice, fleas, chiggers, etc.
 - Scrub typhus, epidemic typhus, Murine typhus, etc.

SYMPTOMS

- Fever, headaches, body aches
- Nausea, vomiting, rapid breathing
 - Epidemic typhus – considered rare
 - Scrub typhus– prominent in Southeast Asia
 - Murine typhus– tropical climates around the world

TREATMENT

- Most typhus cases may be treated with the antibiotic doxycycline– any individual can take it regardless of age
- Doxycycline is most effective when taken soon after symptoms emerge





05.

LET'S PLAY!

Get into groups and get ready to test your knowledge!

Kahoot!

Any questions?

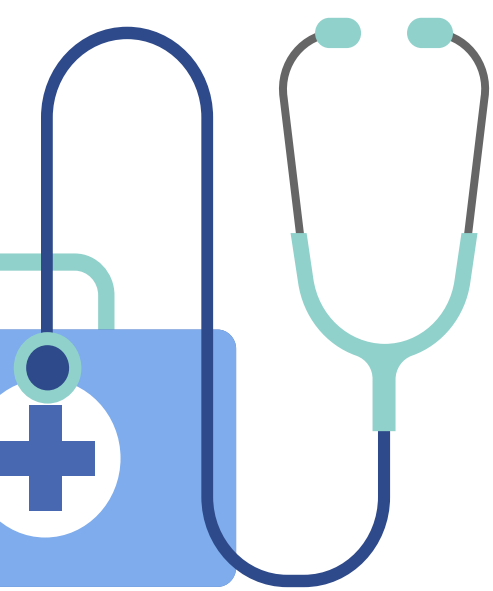
THANK YOU

amsaucmerced.com

[@amsa.ucmerced](https://twitter.com/amsa.ucmerced)

Next meeting: Thursday, February
8th, 2024 @ 6:30pm in **COB 105**





SIGN IN

