

# **MIDWESTERN UNIVERSITY**

# Health Careers Institute for High School Students

June 20-29, 2024 - FINAL Schedule of Activities

## Thursday, June 20

9:00-9:45 AM Welcome to MWU: Introductions & Ice Breakers – Science Hall 130

Karen Mattox, Assistant Director, Communications, and MWU student mentors

Special welcome:

Lori Kemper, D.O., M.S., FACOFP, Dean, Arizona College of Osteopathic Medicine

9:45-10:30 AM Anatomy/Medical Terminology Games – Science Hall 130

MWU student mentors

10:30 AM-Noon Careers in Dental Medicine – Glendale Hall Simulation Lab 206

Learn about dental school and career options in dentistry, then try your hand at different

stations in the high-tech dental simulation lab.

Alexandra Pierre-Bez, D.M.D., M.Ed., Associate Professor; Daphne Velazquez, D.D.S., Assistant Professor, College of Dental Medicine-Arizona and MWU dental

students

**ER/Ultrasound Imaging – Agave Hall 101** 

Discover day-to-day functions of an emergency medicine physician, including case examples, and learn to use ultrasound to view internal anatomy in real time. *Charles Finch, D.O., Chair, Integrated Medicine; and MWU student mentors* 

**12:00-1:00 PM LUNCH** – Barrel II Cafeteria

1:00-2:30 PM **Dental Medicine and ER/Ultrasound** 

Same as above - switch groups

2:30-3:45 PM Group Introductions – Science Hall 130

**Bone Contest Introduction & Activity** 

MWU student mentors:

3:45-4:00 PM Advisory Groups – Science Hall 130

# Friday, June 21

MWU student mentors

9:30-10:30 AM Physical Therapy: Mobility is Medicine – Wellness and Recreation Center Gym

Learn about careers in Physical Therapy, try out PT equipment, and practice different assessment and therapy techniques. Come dressed in clothes you can move in! *Patrice Ayala, PT, D.P.T., Assistant Professor, Physical Therapy, and MWU physical* 

therapy students

Clinical Psychology: A Look Inside Your Mind – Glendale 132

Learn the role that psychology plays in a clinical setting and in everyday life; some of

it may surprise you. Make your own Rorschach inkblot!

Angela Breitmeyer, Psy.D., Associate Professor, Clinical Psychology; and MWU

clinical psychology student Elizabeth Hobbs

10:30-11:30 AM PT and Clinical Psychology Workshops

Same as above - switch groups

11:30-12:30 PM LUNCH – Barrel II Cafeteria

12:30-3:30 PM Clinical Skills Training – Agave Hall Second Floor

Introduction: The Clinical Skills and Simulation Center: Welcome

Jacqueline Spiegel, M.S., PA-C, Professor, Director of Clinical Skills & Simulation

Station #1 High Fidelity Simulation Scenarios - SIM Rooms 2, 3

Watch patient-provider encounters featuring life-like mannequins of human adult models. Learn the art of evaluating a patient in the ER and providing lifesaving

measures.

MWU student mentors

Station #2 Vital Signs and Other Clinical Skills – Exam Rooms 1, 3, 5, 7

Learn techniques for taking patient vital signs and performing physical exams using in-

room equipment.

MWU student mentors

Station #3 **History-Taking Interview – Exam Rooms 10, 12, 14, 16** 

Learn the key elements of performing a History Interview.

MWU standardized patients

Station #4 Gowning and Gloving – Scrub Room/ Mock OR A & B

Learn about the operating room environment by preparing for a patient surgery.

MWU student mentors

Station #5 **SOAP Notes/Prescription Writing – Classroom 220** 

Practice the tricks of the trade in listening, taking notes in an exam, and writing

prescriptions for a patient.

MWU student mentors

3:30-4:00 PM Advisory Groups – Science Hall 130

Monday, June 24

9:00-9:30 AM Ice Breakers – Science Hall 130

9:30-10:45 AM Osteopathic Medicine Overview & Lab – Agave Hall 101

Explore the history and principles of osteopathic medicine and tips for how to best take care of yourself. Learn to utilize touch as a diagnostic and treatment tool.

MWU student mentors

Cultural Humility in Medicine – Wellness and Recreation Center Gym

Explore ways in which personal and cultural values, biases, and views impact society

and healthcare.

MWU student mentors

10:45-Noon **OMM Lab and Cultural Humility** 

Same as above – switch groups

**12:00-1:30 PM LUNCH** – Barrel II Cafeteria

Interview Skills & Application Writing Workshop – Barrel I, Room 100 D/E

Bery Khorany, M.P.A., Admissions Counselor; Amanda Jones, Communications

Coordinator; and MWU student mentors

1:30-2:30 PM Nurse Anesthesia: Healthcare's Best Kept Secret – Ocotillo 103

An overview of the exciting careers in nurse anesthesia. Learn how an anesthesia

machine works and how to intubate a mannequin.

Joseph Bailon, D.N.P., CRNA, Assistant Professor, Nurse Anesthesia

Medical Ethics: An Interactive Case Study – Science Hall 150

Apply principles of biomedical ethics and learn about its importance in decision

making.

Nathan Johnson, Ph.D., Associate Professor, Biomedical Sciences, and MWU student

mentors

2:30-3:30 PM Nurse Anesthesia and Ethics Labs

Switch groups – same as above

3:30-4:00 PM Advisory Groups – Science Hall 130

**Group Names & Saturday Presentations** 

Tuesday, June 25

9:00-10:00 AM Group Photo/Advisory Groups - Sahuaro Reflecting Pond

Wear Your MWU Shirt

10:00-11:00 AM Precision Medicine for the Future – Cactus Wren Computer Lab 131

A look at the rapidly evolving use of genomic data in healthcare fields, including

hands-on computer interactions.

Garilyn Jentarra, Ph.D., Program Director, and Kimberly Bussey, Ph.D., Assistant Professor, Precision Medicine

# Biomedical Sciences/Blood Typing Lab – Sahuaro MDL 208, 222

Accurate diagnostic testing is a vital part of any healthcare team! Learn to perform blood typing to determine which donor's blood is safe to transfuse into a patient. Adebayo Molehin, Ph.D., M.S., Assistant Professor, Microbiology and Immunology, and MWU student mentors

## 11:00-12:00 PM Precision Medicine and Blood Typing Workshops

Switch groups – same as above

#### **12:00-1:00 PM LUNCH** – Barrel II Cafeteria

# 1:00-2:00 PM Speech-Language Pathology: Tools for Improving Communication – Cactus Wren 240

Learn about careers in the exciting field of Speech-Language Pathology. Participate in workshops about the larynx, vocal cord function, and therapy techniques for those who have lost their ability to phonate.

Sharon Edwards, M.S., CCC-SLP, Clinical Assistant Professor, Speech-Language Pathology

#### Cardiovascular Perfusion Overview & Lab – Ocotillo 108

Learn the perfusionist's role in open-heart surgery, view a working heart and lung machine, and try your hand at a life-saving procedure.

Kyle Dana, D.C., Program Director, Cardiovascular Science

## 2:00-3:00 PM SLP and Perfusion Labs

Switch groups – same as above

## 3:00-4:00 PM Advisory Groups – Science Hall 130

**Presentation Planning** 

## Wednesday, June 26

7:30-8:30 AM Optional Food is Medicine: The Basics Workshop & Breakfast – Cafeteria

MWU Chef David and MWU student mentors

9:00-9:30 AM Ice Breakers – Science Hall 130

# 9:30-10:45 AM **Venipuncture Skills Lab – Agave 208, 212**

Practice the art of phlebotomy (drawing blood). Note: blood activities are simulation only; no actual blood is involved.

MWU student mentors, with Lisa L. DeWinter M.D., Clinical Assistant Professor, AZCOM

## Introduction to Public Health - Science Hall 150

Learn about the major areas of public health and their roles in healthcare. David Line, Ph.D., M.P.H., M.S.W., Program Director, and Tiffany F. Hughes, Ph.D., M.P.H., M.B.A., FGSA, Assistant Professor, Master of Public Health Program

10:45-Noon Venipuncture and Public Health Workshops

Switch groups – same as above

12:00-1:00 PM LUNCH – Barrel II Cafeteria

**Optional Small Group Table Topics** 

Research

Clinical Experiences
First-Generation College
Emergency Medicine

1:00-2:15 PM Physician Assistant Studies: Clinical Skills Lab - Science Hall 150

Learn about career options as a Physician Assistant and take part in a hands-on "skin" biopsy and suturing workshop.

Deborah Black, M.S., PA-C, Associate Professor & Clinical Coordinator; Marcia Bouton, D.M.Sc., M.H.P.E., PA-C, DFAAFA, Assistant Professor; Nicole Hamilton, M.P.A.S., PA-C, Assistant Professor; Gretchen Post, M.S.P.A.S., PA-C, Associate Professor & Clinical Coordinator; Jenn Wild, D.O., Assistant Professor

A Look Inside Human & Animal Bodies - Sahuaro Anatomy Lab 101

View human and animal anatomical specimens such as a heart, arm, brain, and others in a medical school anatomy lab. No actual dissection involved.

Andrew Lee, Ph.D., Professor, Anatomy, and MWU student mentors

2:15-3:30 PM PA and Anatomy Labs

Switch groups – same as above

3:30-4:00 PM Advisory Groups – Science Hall 130

**Presentation Planning** 

Thursday, June 27

9:00–9:30 AM Ice Breakers - Science Hall 130

9:30-10:45 AM An In-Depth Large Animal Experience – Large Animal Center

Join us for a fun, slightly dirty, hands-on encounter that will leave you with a better understanding of a day in the life of a large animal veterinarian! Interact with horses and cows to learn about the basics of handling as well as the equipment veterinarians employ to perform a physical exam and make a diagnosis, including how to assess temperature, pulse, and respiration.

Sarah Matyjaszek, D.V.M., DACVS, Clinical Associate Professor, College of Veterinary Medicine; and MWU veterinary students

Discovering Animal Diagnostic Pathology Skills - Diagnostic Pathology Center

Get an up-close view of how veterinary pathologists study animal specimens to understand how they died, including working with police to help stop animal abusers. *Veterinary Pathology Team, College of Veterinary Medicine* 

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10:45-12:00 PM Large Animal and Pathology Workshops

Switch groups – same as above

#### **12:00-1:00 PM LUNCH** – Barrel II Cafeteria

## 1:00-2:00 PM Envision Optometry – Glendale Hall 131-132, 110, and 126

Learn about the specialties within the field of optometry and practice eye exams and other activities in the optometry labs.

Rachel Stephan, O.D., FAAO, Assistant Professor; Pierce Kenworthy, O.D., FAAO, Associate Professor; Kevin Helmuth, O.D., FAAO, Professor, Arizona College of Optometry; and MWU optometry students

#### Podiatric Medicine Overview & Lab – Glendale Hall 324

Understand career options in podiatric medicine and practice examining the lower extremity, studying gait, suturing, using the doppler, and conducting noninvasive vascular labs.

David Jenkins, D.P.M., FACFAS, Professor, Arizona College of Podiatric Medicine, and MWU podiatry students

# 2:00-3:00 PM **Optometry and Podiatry Labs**

Switch groups – same as above

## 3:00-4:00 PM **Bone Contest – Science Hall 130**

MWU student mentors

# Friday, June 28

# 9:00-9:30 AM Advisory Groups – Science Hall 130

**Presentation Planning** 

## 9:30-10:30 AM The Many Roles of a Pharmacist – Cholla Pharmacy Lab 101

Discover the many career paths available to pharmacists, including the role of the pharmacist in proper medication management and opportunities in pharmaceutical research. Practice activities in the pharmacy lab.

Melanie Jordan, Ph.D., Associate Professor, Pharmaceutical Sciences, and MWU pharmacy students

## **Health Professions Mentor Panel – Science Hall 130**

Listen to first-hand experiences from current healthcare professions students on how they got there and where they are headed. There will be plenty of time for Q&A, so come prepared with questions!

MWU student mentors

# 10:30-11:30 AM **Pharmacy and Mentor Panel Workshops**

Switch groups – same as above

# 11:30-12:30 PM LUNCH – Barrel II Cafeteria

## 12:30-2:00 PM Clinical Skills & Simulation Contest – Agave Hall

Put your clinical and patient skills into action in a real-life patient scenario!

Brian Monaghan, M.P.A., Assistant Director, Clinical Skills & Simulation Center; and MWU student mentors

## Occupational Therapy: Skills for the Job of Living – Glendale Hall

What does an occupational therapist do? Understand career options and practice utilizing adaptive equipment and dexterity games to improve patient function. *Katherine Schofield, D.H.S., OTR/L, CHT, Assistant Program Director; Holly Rae Jones, M. OTR/L, Instructor; Cynthia Selim, D.Sc., OTR/L. Assistant Professor, and MWU occupational therapy students* 

2:00–3:30 PM Clinical Skills Contest and OT Workshops

Switch groups – same as above

3:30-4:00 PM Advisory Groups – Science Hall 130

# Saturday, June 29

9:00-10:00 AM Advisory Groups/ Presentation Planning – Ocotillo E, F, G

10:00-11:15 AM Careers in Firefighting Workshop – Ocotillo E

Retired Firefighter Tim Leija, Hall of Flame Museum of Firefighting, and MWU student mentors

11:15-12:30 PM First Aid/Sports Medicine: Common Injuries and How to Treat Them – Agave

Learn how to avoid, diagnose, and treat some of the most common injuries in athletics. Try your hand at immobilizing joints with athletic tape and more.

MWU student mentors

12:30 1:30 PM LUNCH/ Evaluations/ Advisory Groups – Ocotillo E

1:30-3:00 PM OPEN HOUSE RECEPTION for Friends & Family – Ocotillo G

- Welcome/MWU Overview
- Videos
- Student Group Presentations
- Awards

3:00 PM END PROGRAM