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# Midwestern University

# *Health Careers Institute for High School Students*

July 13-22, 2023 - FINAL

Schedule of Activities

Thursday, July 13

9:00-9:45 AM **Welcome to MWU: Introductions & Ice Breakers – Science Hall 150**

*Karen Mattox, Assistant Director, Communications,*

*and MWU student mentors: Rand, Nichole, Halley*

*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 150

*MWU student mentors: Loveleen, Mandy, Akhila*

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.

*Teresa Pulido, D.D.S., M.S. Associate Dean; Alexandra Pierre-Bez, D.M.D., M.Ed., Assistant Professor; Tom Smith, Dispensary Manager, Simulation Clinic, College of Dental Medicine-Arizona and MWU dental student mentors: Mandy, Rand, Loveleen*

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; Justin Georgi, Ph.D., Professor, Anatomy; and MWU student mentors: Spencer, Curtis, Leah, Sydney, Abbie, Jacob, Akhila, Alexandra, Ariel, Halley*

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

1:00-2:30 PM Dental Medicine and Anatomy Lab

Same as morning workshops - switch groups

2:30-3:30 PM Group Introductions Part Two – Science Hall 150

Bone Contest Introduction & Review

*MWU student mentors: Ariel, Abby, Mandy, Jacob*

3:30-4:00 PM **Advisory Groups – Science Hall 150**

Friday, July 14

9:00-9:30 AM **Anatomy Games: The Senses, Part One – Science Hall 150**

*MWU student mentors: Nichole, Melissa*

9:30-10:30 AM **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*

**Envision Optometry – Glendale Hall Optometry Lab 110, 126**

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

*Pierce Kenworthy, O.D., FAAO, Associate Professor, Arizona College of Optometry; and MWU optometry student mentors: Nichole, Melissa, Choon, Michelle*

10:30-11:30 AM Perfusion and Optometry Labs

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**

*MWU student mentors: Choon, Sydney*

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

Attempt to diagnose the patient by performing a History Interview and Physical Exam.

*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: Spencer, Jacob*

Station #5  **SOAP Notes/Prescription Writing – Classroom 212**

Practice the tricks of the trade in listening, taking notes in an exam, and writing prescriptions for a patient.

*MWU student mentors: Alexandra, Ariel*

3:30-4:00 PM **Advisory Groups – Science Hall 150**

Monday, July 17

9:00-9:30 AM **Anatomy Games: The Senses, Part Two – Science Hall 150**

*MWU mentors: Nichole, Melissa*

9:30-10:45 AM **ER/Ultrasound Imaging – Agave Hall 103-115**

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: Abbie, Alexandra, Jacob, Spencer, Ariel, Curtis, Leah, Akhila*

**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: Halley, Sydney*

*Special welcome:*

Carla Gartrell, D.V.M., J.D., DACVIM, College of Veterinary Medicine

10:45-Noon **ER/Ultrasound and Cultural Humility Workshops**

Same as above – switch groups

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

1:00-2:00 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 - Cactus Wren 240**

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: Akhila, Ariel*

2:00-3:00 PM **Nurse Anesthesia and Ethics Labs**

Switch groups – same as above

3:00-3:30 PM **Group Names & Saturday Presentations – Science Hall 150**

3:30-4:00 PM **Advisory Groups – Science Hall 150**

Tuesday, July 18

9:00–9:30 AM **Advisory Groups - Science Hall 150 & Wellness and Recreation Center Gym**

Ice Breaker Game

9:30-10:30 AM **Graduate Nursing: Leadership, Clinical Skills & More** **– Science Hall 130**

Learn about MWU’s graduate nursing programs and the many options available in nursing careers. Practice palpation of arterial pulses as well as auscultation of heart and lung sounds, and view a simulated case via i-Human of a patient with chronic atrial fibrillation and heart failure.

*Misty Pagan, D.N.P., APRN, AGNP-C, Program Director*

**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: Leah and Akhila*

10:30-11:30 AM **Nursing and Blood Typing Labs**

Switch groups – same as above

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

Bone Contest Semi-finals Quiz

12:30-2:00 PM **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; Katherine Melia, third-year podiatry student, and MWU podiatry students*

Osteopathic Medicine Overview & Lab – Agave OMM Lab 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: Curtis, Alexandra, Ariel*

2:00-3:30 PM **Podiatry and OMM Labs**

Switch groups – same as above

3:30-4:00 PM **Advisory Groups – Science Hall 150**

Presentation Planning

###### Wednesday, July 19

9:00-9:30 AM **Advisory Groups – Science Hall 150**

Ice Breaker Game

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.

*Lisa L. DeWinter M.D., Clinical Assistant Professor​, AZCOM, and MWU student mentors: Jacob, Leah, Alexandra, Sydney*

**Introduction to Public Health – Cactus Wren 240**

Learn about the major areas of public health and their roles in healthcare.

*David Line, Ph.D., M.P.H., M.S.W., Public Health Program Director, and MWU student mentors: Melissa, Michelle*

10:45-Noon **Venipuncture and Public Health Workshops**

Switch groups – same as above

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

*TABLE TOPICS:*

Healthcare Military Options - Alex

MWU BRIDGES Program/Biomedical Sciences – Halley, Leah, Sydney, Akhila

MWU Double-Degree Programs - Melissa

Residency Specialties – Spencer, Curtis

Women’s Health/OBGYN - Abbie

College/ Health Professions Application Tips - Mandy

Travel Nursing - Jacob

1:00-2:00 PM **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*

**Precision Medicine for the Future – Cholla Computer Lab A**

A look at the rapidly evolving use of genomic data in healthcare fields, including hands-on computer interactions.

*Kimberly Bussey, Ph.D., Assistant Professor, Precision Medicine*

2:00-3:00 PM **Pharmacy and Precision Medicine Workshops**

Switch groups – same as above

3:00-4:00 PM **Advisory Groups – Science Hall 150**

Presentation Planning

Thursday, July 20

9:00-10:00 AM **Group Photos/Advisory Groups - Science Hall and Sahuaro Reflecting Pond**

***Wear Your MWU Shirt***

10:00-11:00 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.

*Margaret Brosnahan, D.V.M., Ph.D., DACVIM, 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*

11:00-12:00 PM **Lage Animal and Pathology Workshops**

Switch groups – same as above

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

1:00-2:00 PM **Physical Therapy in Motion – Glendale Hall 331**

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*

Speech-Language Pathology: Tools for Improving Communication – Glendale Hall 131, 132, 133

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.

*Danielle Reed, Ed.D., CCC-SLP, Assistant Program Director; Sharon Edwards, M.S., CCC-SLP, Clinical Assistant Professor, Speech-Language Pathology*

2:00-3:00 PM **PT and SLP Workshops**

Switch Groups – same as above

3:00-4:00 PM **Bone Contest – Science Hall 150**

*MWU student mentors: Ariel, Abbie, Mandy, Jacob*

Friday, July 21

9:00-9:30 AM **Advisory Groups – Science Hall 150**

Presentation Planning

9:30-10:30 AM**Clinical Psychology: A Look Inside Your Mind – Science Hall 130**

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*

**Physician Assistant Studies: In-depth Physical Exam Review - Science Hall 150**

Learn about career options as a Physician Assistant! Practice suturing and doing hands-on “skin” biopsies.

*Gretchen Post, M.S.P.A.S., PA-C, Associate Professor & Clinical Coordinator, Physician Assistant Studies; Deborah Black, PA-C, Associate Professor & Clinical Coordinator; Nicole Hamilton, M.P.A.S., PA-C, Postgraduate Academic Fellow/Visiting Instructor*

10:30-11:30 AM **Clinical Psychology and PA Workshops**

Switch Groups – same a 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 OT Lab 317**

What does an occupational therapist do? Understand career options and practice utilizing adaptive equipment and dexterity games to improve patient function.

*Christopher Trujillo, O.T.D., OTR/L, Program Director, Katherine Schofield, D.H.S., OTR/L, CHT, Assistant Program Director, 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 150**

**Saturday, July 22**

9:00-10:00 AM **Advisory Groups/ Sat Presentations – Ocotillo E, F, G**

10:00-11:00 AM **Health Professions Mentor Panel – Ocotillo E**

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!

Rand, Mandy, Nichole, Ariel, Sydney, Stephanie

11:00-12:30 PM **Sports Medicine: Common Injuries and How to Treat Them** – **Agave Hall 101**

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*: Curtis, Spencer, Sydney

**12:30 1:30 PM** **LUNCH/ Evaluations/ Advisory Groups – Science Hall 150**

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

* + - * *Welcome/ MWU Overview*
      * Video
      * *Student Group Presentations*

3:00 PM **END PROGRAM**