

## **MIDWESTERN UNIVERSITY**

# Health Careers Institute for High School Students

July 15-23, 2022 - FINAL Schedule of Activities

### Friday, July 15

8:00-9:00 AM Welcome to MWU & Ice Breakers – Science Hall 150

Karen Mattox, Assistant Director, Communications; Michelle D. Mifflin, D.O., Clinical Associate Professor, Osteopathic Family & Community Medicine, Arizona College of Osteopathic Medicine; and MWU student mentors: Halley,

BreAnna, Mackenzie, Ivy, Stephanie

9:00-10:00 AM Anatomy/Medical Terminology Games – Science Hall 150

MWU student mentors: Dawniel, Michelle

10:00 -11:30 AM Osteopathic Medicine Overview & Lab – Glendale Hall Lab 331

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: Peter, Ashley, Ivy, Dawniel

11:30-12:30 PM LUNCH – Recreation & Wellness Hall

12:30-2:00 PM Inside Human & Animal Bodies: Anatomy Lab – 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., Associate Professor, Anatomy, and MWU student mentors:

Dawniel, Peter, Ashley, Ivy, Evan, Ken, BreAnna, Halley

Occupational Therapy Lab: Skills for the Job of Living – Glendale Hall 317

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; Christine Merchant., Ph.D., M.A., OTR/L, Program Director; Froma Jacobson, M.Ed., OTR/L,* 

Assistant Professor, and MWU Occupational Therapy students

2:00-3:30 PM Switch Groups – SAME AS ABOVE

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

MWU student mentors

Monday, July 18

8:00-9:00 AM Group Names + Head/Neck/Oral Anatomy Overview - Science Hall 150

*MWU student mentors: Evan, Sharadyn + MWU student mentors* 

#### 9:00-10:30 AM ER/Ultrasound Imaging – Glendale Hall 122

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: Dawniel, Peter, Ashley, Ivy, BreAnna, Halley

#### 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.

Robert Kramer, D.M.D., Associate Professor; Thomas McDaniel, D.M.D, Professor; Jacquelyn Mathews, D.M.D., Assistant Professor; Christine Halket, D.D.S., M.S., Associate Professor; Lisa Jones, Practice Assistant; Kelley Anderson. Practice Assistant; Tom Smith, Dispensary Manager, Simulation Clinic, College of Dental Medicine-Arizona and MWU Dental student Preston Vance + MWU student mentors Evan, Ken, Stephanie, Michelle, Mackenzie, Sharadyn

10:30-12:00 PM Switch Groups - SAME AS ABOVE

**12:00-1:00 PM LUNCH** – Recreation & Wellness Hall

1:00-4:00 PM Clinical Skills Training– Mesquite Hall

**Introduction:** The Clinical Skills and Simulation Center – video shown in advance

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

Station #1 High Fidelity Simulation Scenarios - Simulation Room 1 and 2

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.

Presented by MWU student mentors – Halley, Peter, BreAnna, Ivy, Evan, Maria

Station #2 Vital Signs and Other Clinical Skills – Exam Room 4, 5, and 6

Presented by MWU student mentors – Dawniel Michelle, Mackenzie

Station #3 Interacting with Standardized Patients – Exam Rooms 10, 11, and 12

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

Presented by MWU Standardized Patients.

Station #4 Gowning and Gloving – Scrub Room and Mock OR

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

Presented by MWU student mentors - Sharadyn, Stephanie, Ken + AZCOM student

Trevor Read

Station #5 **SOAP Notes/Prescription Writing - Classroom** 

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

prescriptions for a patient.

Presented by MWU student mentors – Amy, Ashley

#### Tuesday, July 19

Advisory Groups/Ice Breakers/ Sat Presentations - Science Hall 150 -8:00 - 9:00 AM

MWU student mentors

9:00-10:15 AM Precision Medicine for the Future – Cholla Computer Lab 105 A

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

hands-on computer interactions.

Kolla Kristjansdottir, Ph.D., Associate Professor, and Kimberly Bussey, Ph.D., Assistant Professor, Precision Medicine

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

10:15-11:30 AM Switch Groups - SAME AS ABOVE

11:30-1:00 PM **LUNCH - Recreation & Wellness Hall** 

Cardiovascular Perfusion Overview & Lab – Ocotillo 108 1:00-2:00 PM

> 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.

Tom Rath, M.P.S., CCP, Assistant Professor, Cardiovascular Science

Biomedical Sciences Lab – Sahuaro MDL 221

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. Kathryn Leyva, Ph.D., Chair, Microbiology and Immunology, College of Graduate Studies; Brian Wellensiek, Associate Professor, Biomedical Sciences Program, College of Graduate Studies; and MWU Biomedical Science students

Switch Groups. SAME AS ABOVE 2:00-3:00 PM

3:00-4:00 PM Advisory Groups/Ice Breakers/ Sat Presentations – Science Hall 150

MWU student mentors

Wednesday, July 20

8:00-9:00 AM Advisory Groups/Photos/Sat Presentations - Wear Your MWU Shirt - Science

Hall and Sahuaro Reflecting Pond

9:00-10:15 AM 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

### **Companion Animal Clinic Activities:**

**Veterinary Radiology Game – CAC 311** 

MWU Veterinary Medicine student: Stephanie Tan

**CPR for Dogs: Learn & Practice! – CAC 311** 

MWU student mentor: Maria

10:15-11:30 AM Switch Groups – SAME AS ABOVE

11:30-12:30 PM LUNCH - Recreation & Wellness Hall

12:30-1:30 Nurse Anesthesia: Healthcare's Best Kept Secret – Ocotillo 103 CRNA Lab

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 + Nurse Anesthesia faculty

Graduate Nursing: Leadership, Nursing Skills & More – Science Hall 130

Learn about MWU's new graduate nursing programs and the many options available in nursing careers. Practice simple patient assessments.

Stephanie Ann Herrick Kays, Ed.D., APRN, FNP-C, Assistant Professor, Graduate Nursing; Misty Pagan, D.N.P., APRN, AGNP-C, Program Director

1:30-2:30 PM Switch Groups – SAME AS ABOVE

2:30-4:00 PM Careers in Neuroscience/ Science of Drug Addiction – Ocotillo Lecture Hall G

Learn about the biomedical effects of drugs, career opportunities in neuroscience, and fascinating brain facts.

Jim Stoehr, Ph.D., Professor, College of Health Sciences

Thursday, July 21

8:00-9:00 AM Bone Contest & Donuts – Science Hall 150

MWU student mentors: Ivy, Sharadyn

9:00-10:15 AM Physical Therapy in Motion – Therapy Institute PT Lab

Learn about careers in Physical Therapy, try out PT clinic equipment, and practice different assessment and therapy techniques. We will also tour the CAREN (Computer Assisted Rehabilitation Environment) virtual reality room, 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 – Therapy Institute SLP Lab

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

Presented by Schea Fissel, Ph.D., CCC-SLP, Associate Professor, Speech-Language Pathology

10:30-11:45 PM Switch Groups – SAME AS ABOVE

12:00-1:00 PM LUNCH + Sat Presentations - Recreation & Wellness Hall

1:00- 2:30 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, and MWU Podiatry student Hannah Windauer + MWU student mentors: Maria, Stephanie, Mackenzie, Sharadyn

### Venipuncture Skills Lab – Sahuaro Lab MDL 221

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: Amy, Ashley, Evan, Ken + AZCOM students Trevor Read, Adam Hepworth, Michael Christensen

2:30 PM – 4:00 PM Switch groups – SAME AS ABOVE

Friday, July 22

8:00-8:30 AM Advisory Groups/Sat Presentations – Science Hall 150

8:30-10:00 AM Pharmacy Lab: 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

#### Envision Optometry -- Glendale Hall Optometry Lab 110, 121

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, Assistant Professor; Christina Esposito, O.D., FAAO, FCOVD, Associate Professor; Kelly Varney, O.D., FAAO, Assistant Professor; Kevin Helmuth, O.D., FAAO, Associate Professor/Clinical Director, Arizona College of Optometry; and MWU Optometry students

10:00 - 11:30 AM Switch Groups – SAME AS ABOVE

#### 11:30 AM-12:30 PM 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

12:30-1:30 PM LUNCH - Recreation & Wellness Hall

#### 1:30-3:00 PM Clinical Skills & Simulation Contest – Mesquite 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:

### Insider's Guide to Being a Health Professions Student – Science Hall 150

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

MWU student mentors: Amy, Maria, Sharadyn, Peter, BreAnna

3:00 – 4:30 PM Switch groups. SAME AS ABOVE.

# Saturday, July 23

8:00-9:00 AM Advisory Groups/ Sat Presentations – Science Hall 150

MWU student mentors: Ashley, Stephanie, Ken

10:30 AM-12:00 PM Glendale Fire Department - Ocotillo Lecture Hall E

An overview of careers in fire science. Practice real-life emergency response scenarios!

12:00-1:00 PM LUNCH/ Evaluations/ Advisory Groups – Ocotillo 106

1:00-2:30 PM OPEN HOUSE RECEPTION for Friends & Family – Ocotillo Lecture Hall G

- Welcome/MWU Overview
- Video
- Student Group Presentations
- Open House: Exam Rooms/Vital Signs

2:30 PM END PROGRAM