HAPS Western Regional Meeting
March 4, 2023

Salt Lake Community College
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Welcome to Salt Lake Community College. We are honored to host the Western Regional Human Anatomy and Physiology Conference on our beautiful Jordan Campus, one of 10 SLCC locations across the Salt Lake Valley.

Your meeting today is in the Jordan Health Sciences Building, home to our Nursing, Physical Therapy Assistant, Occupational Therapy Assistant, Dental Hygiene, Respiratory Therapy and Radiologic Technology Programs. All of these programs rely on students having a comprehensive anatomy and physiology education. We are proud of our outstanding lecture and lab instructors and their work with the 600 students who take these classes each year.

Given that one of your focuses today is on improving educational outcomes for Hispanic/Latinx students, SLCC is an ideal host given our emerging Hispanic Serving Institution (HSI) status. Leading the state of Utah with the highest enrollment of students from the Hispanic/Latinx community, SLCC’s pursuit of the federal HSI designation is a commitment and affirmation of our dedication to becoming a model for inclusive and transformative education, strengthening the communities we serve through the success of our students. Several of your presenters today are from schools who already have a HSI designation, and many higher education institutions in western states are pursuing these initiatives.

I commend you for taking the time to update your body of knowledge as well as reconnect with colleagues, and I hope you enjoy your time at Salt Lake Community College and in Salt Lake County. Please take advantage of your SLCC colleagues who can share tips for you on the best outdoor recreation, dining, and cultural opportunities in the area.

Sincerely,

Deneece G. Huftalin, PhD
President
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter/Staff</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM – 9:00 AM</td>
<td>Registration</td>
<td>--</td>
<td>Atrium</td>
</tr>
<tr>
<td>7:30 AM – 8:30 AM</td>
<td>Vendor Set-Up</td>
<td>--</td>
<td>Atrium</td>
</tr>
<tr>
<td>8:00 AM – 9:00 AM</td>
<td>Breakfast</td>
<td>--</td>
<td>Atrium</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Welcome</td>
<td>--</td>
<td>Room 117</td>
</tr>
<tr>
<td>9:10 AM – 10:10 AM</td>
<td>Update Speaker: “Going Beyond the Definitions: Inclusive Teaching of Human Physiology at an Hispanic-Serving Institution”</td>
<td>Juanita Jellyman</td>
<td>Room 117</td>
</tr>
<tr>
<td>10:10 AM – 10:35 AM</td>
<td>Break and Visit Vendors</td>
<td>--</td>
<td>Atrium</td>
</tr>
<tr>
<td>10:40 AM – 11:40 AM</td>
<td>Update Speaker: “How can I best prepare my students for health professional school?”</td>
<td>David Morton</td>
<td>Room 117</td>
</tr>
<tr>
<td>11:45 AM – 12:30 PM</td>
<td>Lunch</td>
<td>--</td>
<td>Atrium</td>
</tr>
<tr>
<td>12:30 PM – 1:20 PM</td>
<td>Workshop 1: “Teaching Anatomy with Imaging”</td>
<td>Jason Adams</td>
<td>Room 213</td>
</tr>
<tr>
<td>12:30 PM – 1:20 PM</td>
<td>Workshop 1: “Make Your Physiology Lab POPs on a Budget”</td>
<td>Jo Feldmen, Evelyn Mendoza, Kristen Taylor</td>
<td>Room 243</td>
</tr>
<tr>
<td>12:30 PM – 1:20 PM</td>
<td>Workshop 1: “On the connection between consciousness and stress (with links to educational issues)”</td>
<td>David Temme</td>
<td>Room 265</td>
</tr>
<tr>
<td>1:30 PM – 2:20 PM</td>
<td>Workshop 2: “Assessing Anatomical Mastery for Students Studying a 2D vs 3D Digital Atlas”</td>
<td>Steve Semadeni, Adam Strmec, Garrett Bresee, Kaden Shaw</td>
<td>Room 265</td>
</tr>
<tr>
<td>1:30 PM – 2:20 PM</td>
<td>Workshop 2: “Deep Cuts: A dive into undergraduate human dissections”</td>
<td>Jill Goodman, Melaney Farr</td>
<td>Room 259</td>
</tr>
<tr>
<td>2:30 PM – 3:30 PM</td>
<td>Update Speaker: “Structural Patterns of the Neuromuscular Anatomy of the Head”</td>
<td>Mark Nielsen</td>
<td>Room 117</td>
</tr>
</tbody>
</table>
Enter the campus on 9000 South at 3400 West (Wight Fort Road). Follow the road — staying to the left. When you reach the circle. You will be at the Jordan Health Science Building.

Conference Attendees with their own car. Will go to the parking Kiosk. Enter the code 03042023. Take the ticket and park in the blue area or the Handicapped Parking.
HAPS Western Regional Meeting
Exhibitors

HAPS would like to recognize and thank our conference exhibitors. Their generous support makes this conference possible.

Exhibitors

Caduceus
Touch of Life Technologies
Visible Body

The HAPS 37th Annual Conference will be held in Albuquerque, New Mexico on May 24 through May 28, 2023. The Update Seminar portion of the meeting (May 24-26) will be held at The Albuquerque Convention Center and the Workshop portion of the meeting (May 27-28) will be held at Central New Mexico Community College.

Register now!
Abstract: A Hispanic-serving institution (HSI) is defined in the Higher Education Act as an accredited, degree-granting, public or private nonprofit institution of higher education that enrolls 25% or more full-time equivalent (FTE) undergraduate Hispanic or Latinx students. As such the HSI designation is based on an institution reaching an enrollment threshold of Latinx students and provides little guidance for how to serve the needs of these students. This presentation will consider the opportunities and challenges associated with becoming an HSI and what it means to serve Latinx students in an Anatomy and Physiology classroom. Ideas for inclusive, and culturally responsive teaching practices will be shared to help instructors provide equitable experiences and outcomes for all students.

Bio: Dr. Juanita Jellyman is an Associate Professor in the Biological Sciences Department at California State Polytechnic University at Pomona (Cal Poly Pomona), an Hispanic Serving Institution in Southern California. Dr. Jellyman received her BSc (Honors) in Physiology from the University of Otago, New Zealand, and her PhD in Fetal Physiology from the University of Cambridge in England. She currently teaches undergraduate classes in human physiology, systems physiology, the physiology of human reproduction, fetal physiology, and endocrinology.

Dr. Jellyman uses engaging learning activities to help students understand and retain challenging Physiology concepts. In addition to using Think-Pair-Share questions, Dr. Jellyman incorporates a variety of kinesthetic activities and simple demonstrations into her lectures. She also enjoys using the Flipped Classroom technique to create valuable face-to-face interactions.
to help students work through problem solving activities. Dr. Jellyman received the 2018-2019 Cal Poly Pomona Biological Sciences Department Award for Teaching Excellence and the HAPS 2020 Gail Jenkins Teaching and Mentoring Award.

Dr. Jellyman is also passionate about research mentoring. She currently mentors four master’s students and eleven undergraduate students. Her research interests are in maternal and fetal physiology with an emphasis on the endocrine and mechanisms that regulate fetal development in utero. The long-term goal of her research is to identify how the intrauterine environment programs fetal physiology and increases the risk of chronic diseases, such as obesity and type 2 diabetes, in the offspring.

Dr. Jellyman lives in Pasadena, where she enjoys spending time with her husband and three children.
Update Speaker II

David Morton

“How can I best prepare my students for health professional school?”

10:40 AM – 11:40 AM
Room 117

Abstract: Thousands of undergraduate students take A&P classes each year in the hopes of entering one of the admissions slots for a health professional program. As an A&P professor how can you best prepare your students for what to expect in their future medical or nursing program? Are you teaching the proper level of content? What about the different pedagogues they will experience in graduate school? What about the curriculum changes that are occurring in health professional schools? The purpose of this talk is to discuss curriculum and teaching trends moving across health professional programs and principles you can follow to best help prepare your students.

Bio: At the University of Utah School of Medicine (UUSOM) Dr. Morton is a Professor of Neurobiology and serves as the Vice-Chair of Medical and Dental Education. He is a curriculum leader, directs multiple courses, and teaches anatomy, physiology, histology, and neuroanatomy to medical, dental, PA, PT and OT students. Dr. Morton has received numerous teaching awards, including the American Association for Anatomy Henry Gray Distinguished Educator Award, the University of Utah Distinguished Teaching Award and the UUSOM Leonard W. Jarcho, MD Distinguished Teaching Award. His research interests and publications focus on the creation and incorporation of active learning activities and the use of cadavers in medicine. Dr. Morton authored multiple textbooks including The Big Picture: Gross Anatomy (Lange, McGraw Hill), The Big Picture: Histology (Lange, McGraw Hill) and Gray’s Dissection Guide for Human Anatomy (Churchill Livingston, Elsevier). His video tutorials on YouTube (The Noted Anatomist) have received over 19 million views with over 365K subscribers. Dr. Morton is an internationally recognized educator and speaker, a Fellow in the American Association for Anatomy and is a visiting professor to three medical schools in Ghana.
Abstract: With an understanding of comparative and developmental anatomy, the complex neuromuscular anatomy of the head can be organized into clear structural patterns that simplify and clarify the detail of the nerves and muscles of the head along with their topography and relationships.

Bio: Mark Nielsen is a professor emeritus at the University of Utah. He has taught 32,000 students and trained 1,600 teaching assistants over the past thirty-two years. Mark has authored numerous books and software programs including Principles of Human Anatomy 15th ed. by Tortora and Nielsen; Atlas of Human Anatomy by Nielsen and Miller; Real Anatomy by Nielsen and Miller; Human Anatomy Lecture Manual and Workbook, 6th ed. by Nielsen; Anatomica by Nielsen, et. al., and was an author and the anatomy executive editor of Anatomy One. Mark is also a member of the American Association for Anatomy (AAA) and the American Association of Clinical Anatomists (AACA).
Workshop Presentations

Session 1: 12:30 PM - 1:20 PM

Room: 213
Teaching Anatomy with Imaging
Jason Adams, jason_adams@byu.edu, Brigham Young University
Anatomy is frequently taught isolated from medical imaging in a lower-level undergraduate course. This format can give students a foundation as they prepare for health-related courses though it does not expose them to applying normal anatomy to imaging. Applying anatomy to medical imaging is an essential skill for contemporary health professionals. Exposure to learning this skill in a medical imaging course during a student's undergraduate schooling can enhance their understanding of anatomy and ability to read an image when in graduate school.

Room: 243
Make Your Physiology Lab POPs On a Budget
Jo Feldmen, jo.stosich@slcc.edu, Salt Lake Community College
Co-Authors: Evelyn Mendoza, Salt Lake Community College, evelyn.galvez@slcc.edu; Kristen Taylor, Salt Lake Community College, kristen.taylor@slcc.edu
Dr. Sheema Nasir will share her experience with turning Anatomy and Physiology coursework topics into department-wide signature assignments. We will discuss how to align Signature Assignments with general education outcomes. Participants will design an assignment to test mastery of general education outcomes. By aligning description of the assignment with both general education and student learning outcome, students can engage with the material in an interactive way to achieve mastery. Participants are encouraged to bring A&P assignment and their laptops to transform into Signature Assignment, ready to pilot at their institutions.

Room: 265
On the connection between consciousness and stress (with links to educational issues)
David Temme, temme@biology.utah.edu, University of Utah
From a mechanistic perspective, the emergence of consciousness (awareness of self in relation to one’s surrounding circumstance) from firing patterns of neural networks is one of the great neurobiological mysteries. Here, I propose no additional insights. Instead, my focus is to first outline a simple, functional, hence relatable view of the nature of consciousness. Next, to consider the nature of stress and stress-based responses from a biological perspective. Then, to link the two as a means to frame a discussion of mental states/mental health. And finally, to use this vantage point to view the educational journeys of our students and ourselves.
Session 2: 1:30 PM – 2:20 PM

Room: 265
Assessing Anatomical Mastery for Students Studying a 2D vs 3D Digital Atlas
Steve Semadeni, semadenis@byui.edu, Brigham Young University – Idaho
Co-authors: Adam Strmec, Brigham Young University – Idaho, str17033@byui.edu; Garrett Bresee, Brigham Young University – Idaho, bre19016@byui.edu; Kaden Shaw, Brigham Young University – Idaho, sha17016@byui.edu
We provided on-campus students either an interactive online 3D skull atlas or a static 2D skull atlas. We hypothesized that students studying a 3D atlas would score better on an exam using models and images from multiple 360-degree perspectives. We discovered that there was no difference in exam performance between students who studied with the 2D vs the 3D atlas. It appears that students who study a 2D atlas can rotate the images in their mind to do fine on a test that shows them images with anatomy presented in dimensions that they have not previously seen.

Room: 259
Deep Cuts: A dive into undergraduate human dissections
Jill Goodman, Salt Lake Community College, jill.goodman@slcc.edu
Co-authors: Melaney Farr, Salt Lake Community College, melaney.farr@slcc.edu
Salt Lake Community College’s (SLCC) cadaver labs serve 1500 students/year on two campuses. To offer a valuable learning experience, SLCC developed an undergraduate dissection course. This course provides faculty-led cadaver dissection experiences and meets the needs for quality dissections rotating through our high-enrollment anatomy labs. A rare opportunity at a 2-year college, students practice dissection techniques that will serve future SLCC students while deepening their knowledge of human anatomy before applying to clinical programs. This workshop will explore the course, the benefits of the course from current and former dissection students and allow attendees to view student-dissected cadaver specimens.
Welcome to the Western Regional HAPS Conference!

It has been my pleasure to put this day of speakers and workshops together for you. I hope you enjoy our update speakers and come away with fresh perspectives and information. As teachers, I hope gathering with colleagues renews your spirit and the workshops inspire your teaching.

Of course, I did not do this alone. The Biology Department and the School of Science, Math and Engineering here at Salt Lake Community College both supported this effort. They have provided a budget, administrative support, and released teaching time to make this happen. A big thank you to Dean, Craig Caldwell; Assistant Dean, MaryJane Keleher; and Admin Assistants Jan Rogers and Rin Dupont.

My Anatomy and Physiology Peers, many of whom are here today, have been a huge help. Craig Karren has helped for months curating and sending mass emails for me. One of our goals was to find teachers not in HAPS who lived in nearby states. Our Physiology Lab team is especially proud of their student-centered research project – POPS. Thank you to Evelyn, Jo and Kristen for putting together a workshop for you. Not to be outdone, our Anatomy Crew, will tell you about our Student Dissection program. Thank you to Jill, Mel, and Jeff.

The HAPS Team of Caitlin, Cathe and William have endured hundreds of emails, questions, and mini dramas. Their guidance has kept me on track with all the details needed to make this conference happen. Thank you for your excellent professional help.

Today, we have many volunteers to help you register, find your way around the building, and get you on the Wi-Fi. Thank you to everyone who gave me their Saturday time to make this happen.

This conference has waited several years to happen because I felt meeting face to face was important. Make the most of this opportunity and talk to someone you don’t know.

Wishing you a great day,

Vicky F. Rands

Vicky F. Rands, 2023 Western Region Conference Chairman