# 2022 STUDENT-ATHLETE HEALTH CONFERENCE



May 12-14, 2022 www.pac12sahc.org Aria Resort & Casino Las Vegas, NV

## Welcome to the

2022 Pac-12 Student-Athlete

Health Conference

PROUDLY SPONSORED BY:



STUDENT-ATHLETE HEALTH CONFERENCE

## COURSE DESCRIPTION

The Pac-12 Conference, with support from the Student-Athlete Health and Well-Being Board, will host the Student-Athlete Health Conference (SAHC). The conference is a comprehensive educational and business meeting aimed at collaboration amongst the sports medicine teams and promoting professional growth with the Pac-12 conference. The meeting functions as a forum for physicians, athletic trainers, dietitians, and mental health professionals to share best practices, evaluate Pac-12 and institutional policies, and discuss various aspects of student-athlete health and wellness. The conference provides a unique opportunity for a multi-disciplinary exchange with the leaders in both research and the clinical care of competitive athletes.

The course will feature sessions on current concepts in orthopedics, nutrition, and mental health and wellness, timely topics affecting student-athletes, medical teams and sports medicine departments, and research findings from Pac-12 grant funded projects.

The goals of the conference are to:

- Create an environment of collaboration and networking that preserves the standing of the Pac-12 Conference as the leader of student-athlete care
- Provide a space for representatives from each discipline to meet and discuss conference-wide trends and topics that impact each group
- Present an educational program that exhibits current trends and research in collegiate sports medicine
- Highlight Pac-12 funded research projects from across the conference
- Provide designated time for Pac-12 committees to conduct business meetings

The two-day program will bring together top sports medicine clinicians and researchers from across the nation to explore important issues surrounding the health and well-being of student-athletes, present new research findings, and discuss policies and procedures that can help better treat student-athletes.

Institutional sports medicine professionals as well as athletic directors, faculty athletic representatives, research teams and Pac-12 administrators are encouraged to attend.



## STUDENT-ATHLETE HEALTH CONFERENCE

## COURSE OBJECTIVES

At the completion of this program, participants should be better able to:

- Adopt NCAA and Pac-12 student-athlete health initiatives.
- · Identify optimal strategies for implementing the use of wearables for student-athletes and utilizing data in the most effective and efficient ways.
- Address concerns and barriers to implementing effective strategies for inclusion, diversity, multi-culturalism and social justice in intercollegiate athletic departments.
- Review and discuss the effects of burnout in higher education, healthcare, and in the athletic setting.
- Recommend effective treatment plans for orthopedic injuries including shoulder and hand injuries, bone stress injuries, and hip injuries.
- Review injury surveillance and health and wellness assessment policies to determine accurate student-athlete exposure and risk rates as well as utilization of care.
- Report a systematic approach to the multi-disciplinary care of orthopedic cases in the collegiate athlete population.
- Compare the current research findings for widespread concussion data collection consortiums and safe helmet design in football.
- Review current findings on the effects of marijuana use and the student-athlete and discuss effectiveness of drug testing.
- · Identify standards of practice in the use of biologics.
- Report approaches to addressing Name-Image-Likeness laws in discussions with student-athletes.
- Implement optimal prevention, treatment, and logistical strategies for the COVID-19 pandemic based on current research findings.

## TARGET AUDIENCE

This course is targeted toward healthcare personnel within intercollegiate athletic departments who work directly with collegiate and elite athletes. This may include, but is not limited to, team physicians, athletic trainers, clinical psychologists, dietitians, researchers, and athletic administrators.



### AGENDA

\*all times listed are Pacific Standard Time (PST)\*

#### Thursday May 12, 2022

Pre-Conference Meetings

Time	Event	Meeting Room
8:00am – 3:00pm	Student-Athlete Health & Well Being Board Meeting	Joshua 1
3:30pm – 5:30pm	Mental Health Task Force Meeting	Joshua 2
3:30pm – 5:00pm	Brain Trauma Task Force Meeting	Joshua 1

Time	Event	Meeting Room
6:45pm – 7:30pm	Athletic Trainer Vendor Presentations	Joshua 1

#### 7:30pm WELCOME RECEPTION, at Lift Bar at Aria Resort & Casino

#### Friday May 13, 2022

6:45am BREAKFAST in Sponsor Lounge – Orovada 3/5/8

#### Morning General Session - Orovada 1/2/4

7:45am Welcome: Tandi Hawkey, MA, ATC; Pac-12 SAHC Event Coordinator

7:50am Pac-12 State of the Union Address: Maggy Carlyle, Pac-12 General Counsel & Senior Vice President

8:00am NCAA Update: Brian Hainline, MD - NCAA Chief Medical Officer

#### 8:30am Wearables in Sport

- *"The Utilization of Wearables in Football"* Travis Halseth, MS, ATC; University of Oregon Associate Athletic Trainer & Ben McKay, University of Oregon Sport Science Coordinator
- *"The Utilization of Wearables in Basketball"* Steve Englehart, University of Colorado Director of Strength and Conditioning Olympic Sports & Men's Basketball
- *"Data Strategies: Putting It Into Play"* Bryan Burnstein, Director of Performance Strategy/Performance Scientist Kitman Labs

#### 9:45am BREAK in Sponsor Lounge; Pac-12 Awarded Grant Research Poster Presentations - Orovada 3/5/8

10:15 am **Student-Athlete Health and Well-Being Board Updates** – Miguel Rueda, MS, ATC; University of Colorado Senior Associate Athletic Director – Health & Performance; Chair, Pac-12 SAHWBI

10:25am SAHWBI Research Development Director Updates – Kim Harmon, MD; University of Washington

#### 10:35am Diversity, Equity, and Inclusion in Healthcare

- Mitchell Lunn, MD, Assistant Professor of Medicine; Stanford University School of Medicine
- Oluwaferanmi Okanlami, MD, Director Student Accessibility & Accommodation Services; University of Michigan
- Lisa Barkley, MD, Chair, Department of Family Medicine, Charles R. Drew University of Medicine & Science
- Edmond Baker, MD; Medical Director for Equality Care Centers; Arizona State University

#### Awarded Grant Research Presentation

11:15am "Pac-12 Student-Athlete Utilization of Care" Marc Norcross, PhD, ATC; Oregon State University, Cathleen Crowell, PhD, ATC, Oregon State University

#### 11:35am Name-Image-Likeness & Sports Medicine: A Panel Conversation

Moderated by Michael Dillon, ATC - Associate Athletic Director – Health & Wellness, University of Washington

- Chris Merino Assistant Commissioner, Pac-12
- Doug Aukerman, MD Senior Assoc Athletic Director, Sports Medicine; Oregon State University
- Max Sutro Agent, Athletes First
- Lauren Link, RD Director of Nutrition, Purdue University
- Shamaree Brown Director, Student Programs & Compliance; Atlantic Coast Conference

#### 12:15pm LUNCH in Sponsor Lounge - Orovada 3/5/8

#### 1:00pm Discipline Business Meetings – All Institutional Personnel

- (a) Orthopedic Physicians Joshua 1
- (b) Primary Care/Sports Medicine Physicians Joshua 2
- (c) Athletic Trainers Orovada 1/2/4
- (d) Mental Health Professionals Joshua 3
- (e) Dietitians Joshua 4

#### Afternoon General Session - Orovada 1/2/4

#### 1:55pm Vendor Presentation: Riddell Sports

2:00pm **Pac-12 Grants Committee Update** – Dan Nordquist, Associate Vice President – Office of Research, Washington State University, Lynn Fister, CPA; Pac-12 Student-Athlete Health and Wellness Grants Program Executive Director

#### Pac-12 Awarded Grant Research Presentation

2:10pm "Injury and Prevention: Developing a Comprehensive, Quantitative Understanding of Hip Morphometrics and Biomechanics in Collegiate Athletes at Risk for Developing Femoroacetabular Impingement Syndrome" Andrew Anderson, PhD; University of Utah

#### 2:25pm BREAK in Sponsor Lounge; Pac-12 Awarded Grant Research Poster Presentations - Orovada 3/5/8

#### Multi-Disciplinary Approach to the Treatment of Jones Fractures

2:55pm **"Incidence of Foot Injuries Related to Shoe Wear**" Dr. Robin Queen, Professor, Biomedical Engineering and Mechanics, Virginia Tech University

3:20pm "**Non-Operative Care of Jones Fractures**" - Marci Goolsby, MD, Medical Director of the Women's Sports Medicine Clinic, Hospital of Special Surgery

3:45pm "Surgical Considerations for Jones Fractures" - Dr. Glenn Pfeffer, MD, Director, Foot & Ankle Program: Cedars-Sinai Orthopedic Program

4:10pm "Rehabilitation Considerations for Jones Fractures" - Floyd Vitocruz MSPT, SCS, CSCS, Physical Therapist, Stanford University

4:35pm "Nutritional Considerations for Jones Fractures" – Meredith Price, MS, RD, Executive Director of Sports Nutrition, University of Utah

4:55pm "Mental Health Considerations for Jones Fractures" - John Heil, PhD, Clinical Psychologist, Carilion Clinic

5:20pm Vendor Open House/Happy Hour, Pac-12 Awarded Grant Research Poster Presentations - Orovada 3/5/8

#### 7:00pm & 7:30pm GROUP DINNERS

#### Saturday May 14th, 2022

7:00am BREAKFAST in Sponsor Lounge - Orovada 3/5/8

Morning General Session - Orovada 1/2/4

Pac 12 Committee and Project Updates

7:45am Pac-12 Concussion Coordinating Unit: Bridget Whelan, MPH; University of Washington

8:00am Pac-12 Brain Trauma Task Force: Sourav Poddar, MD; University of Colorado

8:10am Pac-12 Mental Health Task Force: Robin Scholefield, PhD; University of Southern California

8:20am Pac-12 Mental Health Coordinating Unit Update: Daniel Taylor, PhD; University of Arizona

Pac-12 Awarded Grant Presentations

8:35am "Overall Health: The STEALTH Project Pilot Study: Student Athlete Health Assessment Using PROMIS Tools" Kenneth Hunt, MD – University of Colorado Associate Professor of Orthopedics

8:50am "Overuse Injuries/Injury Prevention: Integration of Biomechanics-based Informatics for Prevention of Stress Fractures" Michael Hahn, PhD; University of Oregon

9:05am "**Designing Safer Helmets Using Advanced Materials and Modeling**" Christopher Yakacki, PhD; University of Colorado

Special Topics: Student-Athlete Health & Wellness

9:20am "Marijuana in College Athletics: The Health Effects, Current Use & Current Industry" Ben Cort, CEO The Foundry -Steamboat Springs & Author: Weed Inc. & LaTisha Bader, PhD, Chief Clinical Officer for Women's Recovery

9:50am BREAK (Refreshments in Break-Out Rooms)

Educational Presentations (25 minutes presentations)

	<b>Room One - Orovada 3/5/8</b> Moderator: Tad Kremen, MD; UCLA	<b>Room Two – Joshua 1</b> Moderator: Meredith Price, RD; University of Utah	<b>Room Three – Joshua 2</b> Moderator: Kelly Schloredt, PhD; University of Washington	
10:10am	Hand Injuries in Sport Steve Shin, MD, Cedars Sinai Executive Vice Chair, Department of Orthopedics	<b>Overtraining Syndrome</b> Alex Bechard, RD, Director of Performance Nutrition, University of California - Berkeley	Panel: The Future of Drug Testing -Stephanie Chu, OD, University of Colorado; Chair of the NCAA Committee on Competitive Safeguards and Medical Aspect of Sport -Kim Terrell, ATC, University of Oregon; Safeguards Committee -Letitia Bader, PhD, Chief Clinical Officer for Women's Recovery -Ben Cort, CEO The Foundry - Steamboat Springs & Author: Weed Inc.	
10:35am	Shoulder Dislocation in Athletes Eric McCarty, MD, Head Team Physician, University of Colorado	<b>Gut Health Nutrition</b> Ally Gallop, RD, Associate Director of Sports Nutrition, University of Washington	Who is in the Loop: Interdisciplinary Considerations for Best Practice in the Treatment of Sexual Assault -Michael Clark, PhD, CMPC; Sport Psychologist & Certified Mental Performance Consultant, University of Arizona -Rachel Webb, EdD, Assistant Athletic Director, Sport Psychology and Wellness, University of Arizona	
11:00am	<b>Biologics Update</b> Rachel Frank, MD, Orthopedic Surgeon, University of Colorado	<b>Dietary Supplements and the High -</b> <b>Performance Athlete</b> Patrick Dixon, MA, MBA, Director of Applied Science, Momentous		

11:25am Return to Orovada 3/5/8

11:35am **"Building Strength for the Road Ahead: Well-Being and Resilience in Athletics**" Anne Browning, PhD; Founding Director, University of Washington Resilience Lab

12:15pm COVID-19 Current Updates: Panel - Pandemic and Infectious Disease Experts

- Moderated by Calvin Hwang, MD, Primary Care Team Physician, Stanford University
  - Adam Brady, MD Infectious Disease Physician, Oregon State University
  - Sankar Swaminathan, MD Chief of Infectious Diseases, University of Utah

#### 12:45pm Closing Remarks & Adjourn

#### PAC-12 AWARDED GRANT POSTER PRESENTATIONS

PI: Dr. David Camarillo Co-PIs: Dr. Gerald Grant (Stanford), Dr. Michael Zeineh (Stanford), Dr. Charles Liu (USC) Stanford University collaborating with University of Southern California **Title:** Head Trauma and Mental Health: From Head Impacts to Brain Injury, Determining the Mechanism Underlying Concussions in Pac-12 Football

**Project Summary:** In an effort to determine the causes of concussive injury, this study plans to implement the use of the Stanford Instrumented Mouthguard 2.0 (MiG2) in combination with MR imaging with the football teams at two Pac-12 institutions to collect data on concussions. This will expand upon recent research and data collected with an instrumented mouthguard in combination with MRI with the Stanford football program. In that study, researchers discovered that concussions could be predicted by peak head

angular acceleration, correlating with signal changes on MRI. At its completion, this will be the first study to identify mechanisms of concussion by tracing the head angular acceleration input, to brain tissue damage, to advanced imaging detection of injury.

PI: Dr. Theresa Hernandez Co-PI: Dr. Adam Bohr University of Colorado, Boulder

Title: Student Athlete Health and Well-Being: Looking at the Past to Inform the Future

**Project Summary:** In collecting and utilizing data from former student-athletes to inform current best practices, this study will assess longitudinal patterns of physical and psychological health while paying attention to the presence of chronic conditions (e.g., diabetes, heart disease, obesity, neurodegenerative diseases, etc.) and mental health diagnoses in student-athlete alumni compared to cohort matched student non-athlete alumni. The research will also aim to build upon previous related research by assessing socioeconomic and first-generation status as group profiles, as well as modifying factors of student-athlete health following their collegiate careers. The goal of this research is not only to characterize life-course trajectories, but also to utilize this information to identify best practices, thereby creating opportunities to improve and optimize the overall health and well-being of current and future student-athletes.

#### PIs: Dr. Angela Lumba-Brown

Co-PIs: Dr. Jamshid Ghajar (Stanford), Dr. Masa Teramoto (Utah), Dr. Matthew McQueen (Colorado), Dr. Douglas Aukerman (OSU), Dr. Kimberly Harmon (UW), Dr. David Petron (Utah), Dr. Sourav Poddar (Colorado) and Russ Romano (USC) Stanford University collaborating with the University of Colorado, Oregon State University, University of Southern California, University of Utah and University of Washington

**Title:** Head Trauma: The Subtypes of Concussion – Classification and Recovery Trajectories in Pac-12 Student Athletes **Project Summary:** The goal for this study is to advance the science of concussion care and change how concussions are diagnosed and managed, allowing for earlier and more focused rehabilitation and treatments. By performing clinical research, this study will look to characterize and compare concussion subtypes over time and by gender, sport, school and medical history, including cardiovascular health, while also assessing recovery trajectories by concussion subtypes over a six-month span to allow for anticipated outcomes and targeted-treatment options.

#### PI: Dr. Lori Michener

Co-PIs: Dr. Andrew Karduna (UO) and Dr. Roksana Karim (USC)

University of Southern California collaborating with the University of Oregon and University of California, Los Angeles

**Title:** Overuse Injuries/Injury Protection: Biomechanical metrics to improve performance and reduce elbow injuries in baseball **Project Summary:** A common problem among baseball players is an injury to the ulnar collateral ligament (UCL) at the elbow. The UCL provides ~50% counter to elbow force (varus torque) during pitching, putting the UCL at risk for injury. Elbow varus torque increases as ball velocity increases, but not for all pitchers. Elbow varus torque may be mediated by player physical factors, such as muscle performance, joint motion, and stability. The knowledge gap is understanding the ball velocity - elbow varus torque relationship, and how physical factors can mediate the relationship to reduce elbow varus torque. This study will aim to characterize player risk of UCL injuries by developing player profiles that can be used to: 1) target the identified physical factors to reduce injuries and inform rehabilitation after injury, 2) specify return to sport criteria and 3) guide performance enhancement.

PI: Dr. Peter Fino and Dr. Lee Dibble Co-PIs: Dr. Daniel Cushman, Dr. Nicholas Monson, Dr. Angela Presson University of Utah

Title: Head Trauma: Reactive Postural Responses after Concussion: Objective Measurement of Balance Recovery and Prospective Injury Risk

**Project Summary:** Reactive postural responses are used to recover balance, but they have received relatively little attention after concussion despite being common in athletics and critical to athlete safety and performance. Prior research has shown previously concussed athletes experience a greater risk of musculoskeletal injuries, but the cause of this increased risk is not known. This study will focus on a critical barrier of current balance assessments for concussion by objectively quantifying reactive postural responses to determine the connection between post-concussion postural control and musculoskeletal injuries. This project seeks to have immediate impact on concussion management by establishing a protocol to assess postural responses that is tailored for concussions and clinical use and can be rapidly implemented through the Pac-12. Long-term, this study seeks to provide the framework for future studies to examine rehabilitative approaches that train balance recovery to accelerate the recovery and/or decrease the risk of musculoskeletal injury following concussions.

PIs: Dr. James Martin

University of Utah

Title: Injury Prevention: Improving Rehabilitation Following Anterior Cruciate Ligament Repair with Real-Time Feedback during Low Intensity Cycling **Project Summary:** With an astounding 25% of athletes with previous anterior cruciate ligament (ACL) reconstruction surgery developing additional ACL injury following surgery, this study aims to reduce compensatory patterns during movement exercises while evaluating the relationship between cycling symmetry and return-to-play outcomes. Of concern, current data indicates that these patterns progress, rather than diminish, during the course of rehabilitation and can go undetected due to maximal tests typically taking place several months following surgery. Low-intensity cycling is commonly prescribed and known to be safe soon after surgery. This project seeks to improve symmetry by providing biomechanical feedback during low-intensity cycling. It also aims to determine if cycling symmetry leads to improve symmetry during weight bearing tasks and reduces subsequent injuries. If successful, we believe this technique may improve rehabilitation of a variety of other leg injuries as well.

#### Co PIs: Dr. Mark D'Esposito (CAL) and Dr. Cathra Halabi (UCSF)

Co-PIs: Dr. Ben Inglis (UCSF) and Dr. Wade Smith (UCSF)

University of California, Berkeley collaborating with University of California, San Francisco

Title: Head Trauma: Advancing New Biomarker Tests for Concussion Diagnosis and Recovery

**Project Summary:** The human brain is impacted by blood flow with each heartbeat with 25 percent of cardiac output directed toward the head. This flow generates a measurable pulse through the brain described by this study as the "headpulse." This pulse can be measured noninvasively via a portable device. Developing the practice for measuring this biomarker will alleviate current challenges in predicting concussion resolution due to the lack of objective indicators. This study will also aim to characterize the brain's recovery from sports-related concussions using an approach comprised of intermittent headpulse measurements in addition to current common practices. This study hypothesizes that the restoration of headpulse patterns to normal values will parallel improvements in key metrics. Ultimately, it is of this research team's belief that tracking the headpulse may support safer release of student-athletes to normal activities following concussions in addition to other added benefits in healthcare.

PI: Dr. Cathleen Crowell Co-PI: Dr. Viktor Bovbjerg Oregon State University

#### Title: Injury Prevention: Documenting Overuse and Non-Time-Loss Injuries

**Project Summary:** Sports injury epidemiology has historically excluded overuse and non-time-loss injuries. Instead, research has focused on acute and time-loss injuries, despite the potential for overuse and non-time-loss injuries to hinder performance and influence long-term health. This study seeks to report the epidemiology of overuse and non-time-loss injuries across multiple Pac-12 sports while also identifying potential factors that may influence the occurrence of such injuries. The study will also look to report on the workload burden for healthcare utilization associated with treatment of such injuries. Conducting the research will help identify risk factors for overuse and non-time-loss injuries as well as provide details on the number and types of treatments and encounters. Results of this study will help inform decisions regarding injury prevention, holistic health and appropriate medical coverage, as the study's findings will be of use for all sports medicine clinicians across the Pac-12.

#### PI: Dr. Daniel Cushman

Co-PIs: Dr. Masa Teramoto (Utah), Dr. David Petron (Utah), Dr. Amy Powell (Utah), Dr. Sarah Eby (Utah), Dr. Justin Rigby (Utah), Dr. Michael Fredericson (Stanford), Dr. Blake Corcoran (WSU) and Dr. Leyen Vu (WSU)

University of Utah collaborating with Stanford University and Washington State University

Title: Injury Prevention: Utilizing Ultrasound Imaging to Detect Precursors of Achilles Tendon, Patellar Tendon and Plantar Fascia Injuries

**Project Summary:** The patellar tendon, and Achilles tendon, and plantar fascia are common athletic injuries. These often result in prolonged recovery times, decreased performance and can also derail promising athletic careers. This study seeks to develop a method of using brief preseason ultrasound examinations of the bilateral patellar tendon, Achilles tendon and plantar fascia to identify precursors to injury of each. With the collaboration of select Pac-12 universities, the examinations will be performed prior to each academic season for a total of three years, first identifying subgroups of student-athletes with tendon and/or fascia abnormalities and those without before looking closer at those who develop such injuries as seasons progress. This research will provide impacts in the short-term by creating an easily-implemented procedure to help identify such injury risks as well as long-term by helping develop strategies to prevent future tendon and/or fascia injuries.

PI: Dr. Michael Fredericson (Stanford) and Dr. Aurelia Nattiv (University of California, Los Angeles) Stanford University & University of California, Los Angeles

**Title:** Improving Bone Health and Reducing the Incidence of Bone Stress Injuries in Pac-12 Distance Runners: An Implementation Plan Focusing on Health Promotion, Optimal Fueling and Changing Culture.

**Project Summary:** The primary objective this project is to improve bone health and reduce the incidence of bone stress injuries in female and male distance runners (the highest risk groups) across all Pac-12 schools.

- This will be based on the successful results of their recently completed 3-year prospective study funded by the Pac-12.
- Pac-12 institutions will apply a universal risk stratification system based on evidence-based risk factor assessment to measure energy availability, disordered eating, menstrual irregularities, low bone mass, and prior bone stress injuries.

- They will also utilize an active nutrition education program emphasizing achievement of a positive energy balance. This intervention will optimize the health status of athletes by addressing low energy availability and disordered eating, restoring normal menstrual function, and increasing bone mineral density.
- Anticipated outcomes include changing team "culture" from a focus on injury treatment to injury prevention and health promotion.

PI: Dr. Andrew Lovering – University of Oregon

Co-PI: Dr. Hans Haverkamp – Washington State University

University of Oregon

Title: Impact of COVID-19 on student athlete lung function and diffusing capacity

**Project Summary:** The healthy lung can limit exercise performance in the well-trained athletic population so lung health is critical for optimal well-being and athletic performance.

- This study aims to measure lung function and diffusing capacity in a large cohort of young health Pac-12 athletes pre-COVID19 infections and then will repeat these measures in the same cohort near the end of the grant period.
- These non-invasive, objective lung tests have very clear performance criteria, are standard clinical measures that are internationally validated and are considered gold standards for measuring lung health and function.
- They will determine the association of disease severity with the measures of lung function.

#### PAC-12 STUDENT-ATHLETE RESEARCH & TRAVEL AWARD, POSTER PRESENTATIONS

PI: Melany Smart

University of Washington, Women's Cross Country

**Title:** What are the types and incidence rates of stress fractures by sport, sex, race/ethnicty and what is the variability between Pac-12 institutions?

PI: Chloe Castaneda

University of California, Los Angeles, Women's Soccer **Title**: The Effect of COVID-19 Pandemic Restrictions on the Incidence of Stress Reactions and Fractures Among Pac-12 Intercollegiate Athletes

PI: Samantha Boyle

Washington State University, Women's Cross Country

**Title**: How does time loss due to bone overuse injuries compare to time loss due to tendon overuse injuries in both male and female distance runners?

PI: Libby Geraghty University of Colorado, Women's Soccer Title: Comparison of concussion severity between sport and non-sport related concussions

#### REGISTRATION INFO

Registration is available on the conference website: www.pac12sahc.org.

#### ACCREDITATION

UCLA is approved by the Board of Certification, Inc. to provide continuing education to Athletic Trainers. This program is eligible for a maximum of 12 Category A hours/CEUs. ATs should claim only those hours actually spent in the educational program.

A special thanks to the 2022 Student-Athlete Health Conference Planning Committee:

Tandi Hawkey, Chair Michael Dillon, University of Washington Joshua Goldman, UCLA Calvin Hwang, Stanford University Tad Kremen, UCLA Kelly Schloredt, University of Washington Sanam Rezazadeh, Stanford University

Additional thanks to Maggy Carlyle, Keisha May, and Lynn Fister from the Pac-12 Conference and Miguel Rueda from University of Colorado for their help in planning this event.