

8TH ANNUAL

VAIL SCIENTIFIC SUMMIT

CLINICAL TRANSLATION:
**The Intersection of Science
and Medicine for
Better Clinical Outcomes
with Rapid Translation**

August 20-23, 2023

THE HYTHE | VAIL, COLORADO



THE STEADMAN CLINIC
AND
STEADMAN PHILIPPON
RESEARCH INSTITUTE

W E L C O M E

Thank you for joining us for the 8th Annual Vail Scientific Summit (VSS-2023) hosted by Steadman Philippon Research Institute (SPRI). On behalf of the organizing committee, it is our pleasure to extend you our warmest welcome to Vail. As we center our meeting on the latest regenerative and personalized medicine approaches; novel technologies and therapeutics; surgical and non-surgical interventions; and basic, clinical and translational science applications; we aim to inform our attendees about the state-of-the-art research that can keep people active and healthy. At SPRI, we are committed to making a significant impact on local, national and international scientific and clinical communities, while enhancing patient care and clinical outcomes.

In our 8th Vail Scientific Summit, we've brought together the most distinguished speakers in a variety of fields of research within the scope of regenerative, healthy aging and personalized medicine, military medicine, neuromuscular and cancer therapeutics, nanotechnology, imaging, biomechanics and more. The program is designed to facilitate interactions between basic, clinical and translational science researchers and physicians in order to generate new collaborations that will accelerate bench-to-bedside translations, with the ultimate focus of patient care. That's why this year's event focuses on **Clinical Translation: The Intersection of Science and Medicine for Better Clinical Outcomes with Rapid Translation**. Throughout this Summit, we aim to build on and inspire novel and cutting-edge research that will set the vision for the future of biologics, surgical & non-surgical interventions, diagnostics, therapeutics, technological innovations and translation to keep people active and healthy.

This event would not be possible without the support from our generous family donors and corporate and industry sponsorships. Many inspiring individuals had a vision for this event and its ability to have an impact on enhancing people's lives through research, innovation, education and rapid clinical translation. Each year, we are amazed at how the Summit has grown and we're looking forward to continue building upon this great momentum.

Welcome to the 8th Annual Vail Scientific Summit!



Marc J. Philippon, MD
Chairman



Johnny Huard, PhD
Chief Scientific Officer

ORGANIZING COMMITTEE



Johnny Huard, PhD

Steadman Philippon Research Institute
Chair - Organizing Committee



Marc J. Philippon, MD

The Steadman Clinic
Steadman Philippon Research Institute
Co-Chair - Organizing Committee



Sudheer Ravuri, PhD

Steadman Philippon Research Institute
Co-Chair - Organizing Committee



FAMILY SPONSORS

MARY SUE & MIKE SHANNON

*STEADMAN PHILIPPON RESEARCH INSTITUTE BOARD MEMBER,
CO-FOUNDER AND LONGTIME SUPPORTER OF
THE VAIL SCIENTIFIC SUMMIT*



Mr. Shannon co-founded KSL Capital Partners, LLC in 2005 and co-founded its predecessor KSL Recreation Corporation in 1992, serving as its President and Chief Executive Officer.

Since 2005, KSL Capital Partners has raised over \$7.4 billion in equity capital commitments and invests exclusively in travel and leisure businesses. Mr. Shannon co-founded and became Chief Executive Officer of KSL Resorts in 2004 following the sale of KSL Recreation. Prior to establishing KSL Recreation with Kohlberg Kravis Roberts, he served as President and CEO of Vail Associates, Inc. (owner of Vail and Beaver Creek Resorts) in Vail, Colorado, from 1986 to 1992.

Mr. Shannon currently serves on the Board of Trustees of Northwestern University, and as a Board Member of the University of Wisconsin Foundation, the Vail Valley Foundation, the United States Ski and Snowboard Team Foundation, the Eisenhower Medical Center, Steadman Philippon Research Institute and Vail Health Foundation. He also serves on the Mayo Clinic Global Advisory Council. Mr. Shannon is a member of the World Presidents' Organization.

FAMILY SPONSORS

THE BORGEN FAMILY

*KEYNOTE LECTURE:
LARS ENGBRETSSEN, MD, PhD*



Bjørn Erik and Kathy Borgen have made significant contributions to numerous educational, cultural, recreational and environmental programs here in the Vail Valley. Philanthropy and volunteerism are fundamental values that have been passed on to their children and grandchildren. Committed to family and touched by their own life experiences, they have quietly pursued their commitment to community.

The Borgens have long supported Steadman Philippon Research Institute. As a former research assistant at Harvard University and the University of Colorado, Kathy believes there is no better place to locate cutting-edge orthopaedic research than in an active community like Vail. For Bjørn, giving to education-based initiatives is a value cultivated during his childhood. Born in Norway, Bjørn emigrated to the United States with his family after World War II and credits his schooling with providing endless support and a roadmap for success. His commitment to education was solidified, and he eventually went on to earn an MBA from Harvard Business School and had a very successful career.

FAMILY SPONSORS

LINDA AND MITCH HART

KEYNOTE LECTURE: ERIC VERDIN, MD, PHD



LINDA W. HART

Ms. Hart is Vice Chairman, President and CEO of Hart Group, Inc., a diversified group of companies. She is also Vice Chairman of CSIS, a Washington, D.C. nonpartisan public policy research institution. She has served in leadership positions on numerous corporate and charitable boards, including UTSW President's Advisory Board, Southwestern Medical Foundation's Board, the Board of Visitors for UTSW Hospitals & Clinics, Executive Boards of both SMU Schools of Law and Business, Hart Center for Engineering Leadership and SMU Hart Global Leaders Forum. She is the former Chairman of the NYSE Legal Advisory Board, has been a member of Duke University's Institute of Public Policy, is a member of the Dallas Symphony Association (former Chairman), and Dallas Opera Board. She is a graduate of the University of Pittsburgh and SMU School of Law and, for 25 years, was engaged in private practice as an attorney specializing in corporate finance matters. She served as outside consultant to the U.S. Securities and Exchange Commission and as a Visiting Professor at Stanford Law School.

FAMILY SPONSORS

LINDA AND MITCH HART

MILLEDGE A. “MITCH” HART, III

A graduate of the USNA, Mr. Hart—after service in the Marine Corps—began work at IBM. In 1962 he joined Ross Perot as one of the founders of EDS. He became President in 1970, a position he held until his retirement in 1977. Mr. Hart is one of the founders of The Home Depot, where he served on the board of directors and executive committee for more than 30 years. In 1983, Mr. Hart founded Hart Group, Inc., of which he remains Chairman. In 2017, Mr. Hart was awarded the USNA Distinguished Graduate Award, the highest honor the USNA awards to its graduates. Mr. Hart is Trustee Emeritus at both SMU and Duke University, where he started the Hart Leadership Program. He serves on various boards, including the SMU Hart Center for Engineering Leadership, SMU Hart Global Leaders Forum and Baylor Health Care System Foundation Board. Mr. Hart, together with Ms. Hart, founded the USNA Leadership Conference, an annual conference encompassing both military and civilian institutions.

FAMILY SPONSORS

SPRUANCE FOUNDATION II

SESSION 9: INTERVENTIONAL STRATEGIES IN CANCER



As a past resident of Vail, I love returning to this “gem” in the mountains. I first met Dr. Marc Philippon at the 3rd Annual Scientific Summit; he introduced me to Dr. Vinod Jaskula-Ranga, President of Hunterian Medicine, specializing in CRISPR gene editing technology. Having a daughter, Chelsea, with cystic fibrosis made this introduction very fortuitous. Thank you to Dr. Philippon and the team at SPRI!

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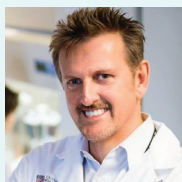
DIERDRE AND RONNIE BAKER

SESSION 3: AGE-RELATED TISSUE DEGENERATION AND REPAIR



After selling both of their companies in the Kansas City area and retiring to ski and play in the mountains, Dierdre and Ronnie Baker are now full-time residents in the Vail Valley. They have spent many years supporting several non-profit charities, both locally and nationally, and are committed to working with organizations that truly make a difference in the lives of people and animals. They feel honored and blessed to be able to help with Steadman Philippon Research Institute, having both benefited from the exceptional surgical skills, knowledge and cutting-edge research from the doctors within The Steadman Clinic. Special thanks go to Dr. Viola, Dr. Millett and Dr. Karli for their commitment to ensuring the Bakers 100% recoveries and helping them continue their very active lifestyles.

WELCOME ADDRESS



Johnny Huard, PhD

Steadman Philippon Research Institute



Marc J. Philippon, MD

The Steadman Clinic
Steadman Philippon Research Institute



Dan Drawbaugh

The Steadman Clinic
Steadman Philippon Research Institute

KEYNOTE SPECIAL ADDRESS



Lars Engebretsen, MD, PhD

Oslo University Clinic and
International Olympic Committee (IOC)

Professor Engebretsen is currently the Professor of Orthopedic Surgery at Oslo University Clinic and Head of Medical Sciences in the International Olympic Committee. He is the current Chair on the WADA Health Medicine and Research committee. Professor Engebretsen has published over 500 articles and book chapters, with a citation index (H-index) of 114. He is among the world's most productive in clinical, epidemiological and basic science research in the areas of general sports medicine, knee ligaments, cartilage and prevention of sports injuries and illnesses. He has received research grants and awards from many agencies and associations, including the National Institutes of Health, the Norwegian Council for Research in Science and Humanities, the Norwegian Ministry of Health, the American Orthopaedic Society of Sports Medicine (AOSSM) and the International Olympic Committee. He and his group have won several research awards around the world, and he was inducted into the AOSSM Hall of Fame in July 2015 and became an ESSKA Honorary member in 2016 and ISAKOS Honorary member in 2017. He received the Nordic Prize in Medicine in 2016. He became an EFFORT Honorary member in 2022.

FEATURED SPEAKERS



Will Adams, PhD, ATC, FACSM

U.S. Olympic & Paralympic Committee

Prevention and Care of Exertional Heat Stroke



Zhiqiang An, PhD

University of Texas Health Science Center

Academic Drug Discovery: Challenges and Opportunities



Dustin Anderson, MD

The Steadman Clinic
Steadman Philippon
Research Institute

Update on Exosome Therapeutics in Orthopedics and Spine Care



Justin W. Arner, MD

University of Pittsburgh
Medical Center

Maximizing Meniscus Healing in 2023



Hani Awad, PhD

University of Rochester

Applications of 3D-Printed Polymer-Ceramic Scaffolds for Managing Bone Infections and Regenerating Massive Defects



Chelsea Bahney, PhD

Steadman Philippon
Research Institute

New Imaging and Machine Learning Technology to Evaluate Post-Fracture Animal Model Pain



David Bakta, COO

SPEAR Human Performance, Inc.

Panelist



Julie Barone, DO, FACS

Shaw Cancer Center,
Vail Health

Comprehensive Molecular Profiling of Breast Cancer: VailHealth/Shaw Cancer Center FLEX Experience

FEATURED SPEAKERS



Thomas Best, MD, PhD

University of Miami

Post-Traumatic Osteoarthritis: Does Early Intervention Make A Difference?



Silvia Blemker, PhD

University of Virginia

A New View of Skeletal Muscle Empowered by Ai-Driven Image Processing, Visualization, and Quantification



Gillian Bower, PT, DPT

U.S. Ski & Snowboard

Return to Performance in Elite Skiing & Snowboarding



Susan Bukata, MD

University of California San Diego

Bone and Cartilage Regeneration: Go Big or Go Local?



Laura Certain, MD, PhD

University of Utah School of Medicine

Open Questions in the Medical Management of Orthopedic Infections



April Craft, PhD

Harvard Stem Cell Institute

Knee in a Dish: Off-the-Shelf Tissues from iPSCs



George Dodge, PhD

University of Pennsylvania

Effective Drug Delivery Means Effective Therapeutics



Anthony Donato, PhD

University of Utah

Age-Related Endothelial Senescence: Mechanisms, Consequences and Potential Solutions

FEATURED SPEAKERS



Grant Dornan, MS

Steadman Philippon
Research Institute



Hicham Drissi, PhD

Emory University School of
Medicine

Moderator

Enhancing Bone Repair in Aged Mice



Nicole Ehrhart, VMD

Colorado State University



Jennifer Elisseeff, PhD

Johns Hopkins University

Moderator

**What is a Senescent Cell: Implications for
Tissue Repair and OA**



**Lars Engebretsen, MD,
PhD**

Oslo University Clinic and
International Olympic
Committee (IOC)



Thos Evans, MD

The Steadman Clinic
Steadman Philippon
Research Institute

**My Work in the International Olympic
Committee to Protect the Health of the
Athlete**

**How to Have a Healthy
Relationship with Golf**



Denis Evseenko, MD, PhD

University of Southern
California



Adam Faurot, CCO

SPEAR Human Performance,
Inc.

**Plurocart - A New Generation Bioimplant
for Articular Cartilage Repair**

Panelist

FEATURED SPEAKERS



Jonathan Finnoff, MD, FACS

U.S. Olympic & Paralympic Committee

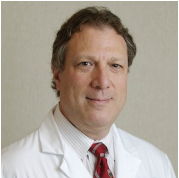
Brain Health, Mental Health and Sliding Sports: Pilot Data from Team USA



Don Gibbons, MD, PhD

MD Anderson Cancer Center

Targeting Tumor-Mediated Microenvironment Reprogramming to Address Immune Checkpoint Therapy Resistance in Nscl



Stuart Goodman, MD, PhD

Stanford University

Inflammation, Aging and Bone Healing



Anthony Griswold, PhD

University of Miami, Miller School of Medicine

Utilization of Genomic Applications to Identify Osteoarthritis Phenotypes



Michael Gallizzi, MD, MS

The Steadman Clinic
Steadman Philippon
Research Institute

What Are Current Challenges with Robotic Spine Surgery?



Sonny Gill, MD

The Steadman Clinic
Steadman Philippon
Research Institute

Investigating Regenerative Approaches to Intervertebral Disc Repair



Laurie Goodrich DVM, PhD, DACVS

Colorado State University

Preserving joint integrity with MSC Therapy Following Multidrug Resistant Staphylococcal Septic Arthritis



Farshid Guilak, PhD

Washington University
in St. Louis

Young Patients, Old Joints: Obesity as a Driver of Premature Aging

FEATURED SPEAKERS



Patricia Hardenbergh, MD

Shaw Cancer Center,
Vail Health

Can We Prevent Fibrosis from Cancer Treatment; Building on Sports Medicine Experience



Josh Hare, MD

University of Miami

Regenerative Medicine Approaches for Sarcopenia and Frailty



Chris Hernandez, PhD

University of California
San Francisco

Gut Microbiome-Induced Impairment of Bone Tissue Strength is Reversible in Adults



Francis Hornicek, MD, PhD

University of Miami,
Miller School of Medicine

Radiation-Induced Sarcoma



David Howell, PhD

University of Colorado

Sport-Related Concussion and Subsequent Musculoskeletal Injury: What Can Be Done?



Johnny Huard, PhD

Steadman Philippon
Research Institute

Effects of Fisetin Treatment on Cellular Senescence in Various Tissues and Organs of Old Sheep



Matt Jordan, PhD

University of Calgary

The Biomechanics of Muscle Strength and Power after ACL Injury: New Perspectives on Return-to-Sport Testing



Herb Kasler, PhD

Buck Institute for
Research on Aging

Deep Immunophenotyping by Spectral Flow Cytometry in Mouse and Human Models of Aging and Age-Related Musculoskeletal Pathologies

FEATURED SPEAKERS



James Kirkland, MD, PhD

Mayo Clinic

Development and Clinical Application of Agents Targeting Fundamental Aging Processes: The Translational Geroscience Network



Dimitrios Kouroupis, PhD

University of Miami

Human Mesenchymal Stem/Stromal Cell-Derived Small Extracellular Vesicles Possess Immunomodulatory Cargo and Maintain Cartilage Homeostasis under Inflammatory Conditions



Wan-Ju Li, PhD

University Of Wisconsin

Generation of Neural Crest Lineage-derived Chondrocytes from iPSCs for Articular Cartilage Repair



Josh Li, MD, PhD

University of Virginia

Intervertebral Disc Herniation and Immune Response



Mark Markel, DVM, PhD

University of Wisconsin

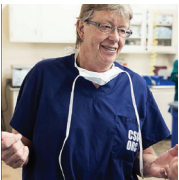
Moderator



Kirk McGilvray, PhD

Colorado State University

Innovations in Bone Healing Assessment: Moving Beyond Traditional Techniques for Improved Fracture Management



Wayne McIlwraith, BVSc, MS, PhD, DSc, FRCVS

Colorado State University

Top Eight Treatments That Have Translated or Are Likely to Translate Into Human Treatments

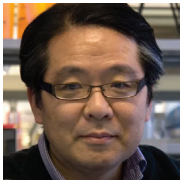


LT Garrett Morgan, PhD

Office of Naval Research

Panelist

FEATURED SPEAKERS



Naoki Nakayama, PhD

Steadman Philippon
Research Institute

Education of Chondrogenic Mesenchymal Cells for Improved Articular Cartilage Tissue Engineering



Corey Neu, PhD

University of Colorado

Strain Mapping and Functional Assessment of Cartilage Repair



Maurizio Pacifici, PhD

Children's Hospital of
Philadelphia

Heterotopic Ossification and Fracture Repair: Shared Mechanisms and Therapeutic Targets



Marc Philippon, MD

The Steadman Clinic
Steadman Philippon
Research Institute

Evidence-Based Medicine: How Research Contributes to Better Outcomes for the Patient



**Matthew T. Provencher
MD, MBA, CAPT, MC,
USNR (Ret.)**

The Steadman Clinic
Steadman Philippon
Research Institute

Moderator



Charles Raison, MD

University of Wisconsin

Psychedelics and Consciousness Studies in the UW-Madison/Vail Health Consortium for Behavioral Health Innovation



Martin Roche, MD

Hospital for Special Surgery

Role of Robotic-Assisted Arthroplasty in the Young Athlete



**Kelly Santangelo,
DVM, PhD, DACVP**

Colorado State University

Intravenous Injection of Adipose-Derived Mesenchymal Stromal Cells Benefits Gait and Inflammation in a Spontaneous Osteoarthritis Model

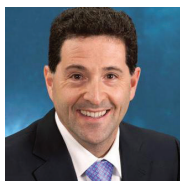
FEATURED SPEAKERS



Richard Santore, MD

University of California
San Diego

The Recognition of Hypermobility in Multiple Clinical Disciplines Beyond Orthopaedics is Increasing Significantly



Eddie Schwarz, PhD

University of Rochester

Novel Therapies for Musculoskeletal Diseases



Colin Smith, PhD

Steadman Philippon
Research Institute

The Relationship Between Mechanical Loading and Degeneration in Knee Osteoarthritis



Samuel Stupp, PhD

Northwestern University

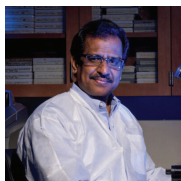
Molecular Engineering of Regenerative Therapies



Slim Sassi, PhD

Harvard Medical School
Massachusetts General
Hospital

Tgfb β is a Vulnerability in Chordoma and Regulatorily Linked to Brachyury, a Central Transcription Factor of This Tumor



Ashok Shetty, PhD

Texas A&M University

Prospects of Human Neural Stem Cell-Derived EVs for Slowing the Progression of Alzheimer's Disease



CDR Chris Steele, PhD

U.S. Navy Bureau of Medicine
and Surgery

Panelist

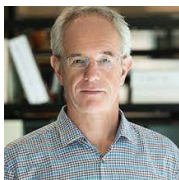


Giulio Tononi, MD, PhD

University of Wisconsin

Measuring Consciousness

FEATURED SPEAKERS



Eric Verdin, MD

Buck Institute for
Research on Aging

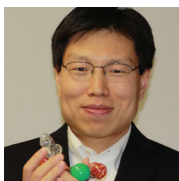
Human Immune Aging



Leslie B. Vidal, MD

The Steadman Clinic
Steadman Philippon
Research Institute

**Hip Abductor Tendon Repair
with Biologic Augmentation**



Yadong Wang, PhD

Cornell University

In Situ Tissue Engineering of Arteries



Chenbaio Wu, PhD

University of California
San Diego

**Preclinical Study of NGF R100W Mutant for the
Treatment of Peripheral Sensory Neuropathy**



Mike Zuscik, PhD

University of Colorado Denver

**Targeting Intestinal Inflammation to Decelerate
the Progression of Osteoarthritis**

8TH ANNUAL
**VAIL SCIENTIFIC
SUMMIT**

S C H E D U L E
O F
E V E N T S

August 20-23, 2023

THE HYTHE | VAIL, COLORADO

SUNDAY, AUGUST 20, 2023:

WELCOME TO THE 8TH VAIL SCIENTIFIC SUMMIT & KEYNOTE LECTURE

Sponsored by the Borgen Family

4:00-7:00 PM Registration

6:00-7:00 PM Welcome Reception: Cocktail Gathering

7:00-8:00 PM Welcome Dinner

Welcome Address:

- Marc J. Philippon, MD
- Dan Drawbaugh
- Johnny Huard, PhD

8:00-8:35 PM Keynote Lecture: Lars Engebretsen, MD, PhD, Oslo University Clinic and International Olympic Committee (IOC).

Keynote Introduction:

- Marc J. Philippon, MD
- Johnny Huard, PhD

SCHEDULE

MONDAY, AUGUST 21, 2023

SCIENTIFIC SESSIONS

7:00-8:00 AM Breakfast

8:00-8:35 AM Keynote Lecture: Eric Verdin, MD,
Buck Institute for Research on Aging
Keynote introduction by Johnny Huard, PhD
Keynote Lecture sponsored by Linda and Mitch Hart

SESSION 1: JOINT AND MUSCULOSKELETAL REPAIR

Session Chairs: Marc Philippon, MD and Richard Santore, MD

8:40-8:55 AM Marc Philippon, MD, The Steadman Clinic &
Steadman Philippon Research Institute

8:55-9:05 AM Richard Santore, MD, University of California San Diego

9:05-9:15 AM Thomas Best, MD, PhD, University of Miami

9:15-9:25 AM Leslie Vidal, MD, The Steadman Clinic &
Steadman Philippon Research Institute

9:25-9:35 AM Thos Evans, MD, The Steadman Clinic &
Steadman Philippon Research Institute

9:35-9:45 AM Q&A

9:45-10:00 AM Break & Networking

SESSION 2: INJURY PREVENTION AND SPORTS REHABILITATION

Session Chairs: Grant Dornan, MS and Jonathan Finnoff, MD, FACSM

10:00-10:15 AM Jonathan Finnoff, MD, FACSM, U.S. Olympic & Paralympic Committee

10:15-10:25 AM Will Adams, PhD, ATC, FACSM, U.S. Olympic & Paralympic Committee

10:25-10:35 AM David Howell, PhD, University of Colorado

10:35-10:45 AM Gillian Bower, PT, DPT, High Performance at U.S. Ski & Snowboard

10:45-10:55 AM Matt Jordan, PhD, University of Calgary

10:55-11:05 AM Q&A

11:05-11:20 AM Break & Networking

SCHEDULE

SESSION 3: AGE-RELATED TISSUE DEGENERATION AND REPAIR

Session Chairs: Chelsea Bahney, PhD and Susan Bukata, MD

- 11:20-11:35 AM Susan Bukata, MD, University of California San Diego
- 11:35-11:45 AM Zhiqiang An, PhD, University of Texas Health Science Center
- 11:45-11:55 AM Stuart Goodman, MD, PhD, Stanford University
- 11:55-12:05 PM Maurizio Pacifici, PhD, Children's Hospital of Philadelphia
- 12:05-12:15 PM Hicham Drissi, PhD, Emory University
- 12:15-12:25 PM Jennifer Elisseeff, PhD, Johns Hopkins University

- 12:25-1:40 PM Lunch & Networking

SESSION 4: REGENERATIVE MEDICINE & SPORTS MEDICINE

Session Chairs: George Dodge, PhD and Hani Awad, PhD

- 1:45-2:00 PM Martin Roche, MD, Hospital for Special Surgery
- 2:00-2:10 PM Kelly Santangelo, DVM, PhD, DACVP, Colorado State University
- 2:10-2:20 PM Justin Arner, MD, University of Pittsburgh Medical Center
- 2:20-2:30 PM Hani Awad, PhD, University of Rochester
- 2:30-2:40 PM George Dodge, PhD, University of Pennsylvania
- 2:40-2:50 PM Q&A

- 2:50-3:00 PM Break & Networking

SESSION 5: STEM CELLS, EXOSOMES AND BIOENGINEERING

Session Chairs: Josh Hare, MD, and Johnny Huard, PhD

- 3:00-3:15 PM Josh Hare, MD, University of Miami
- 3:15-3:25 PM Wan-Ju Li, PhD, University of Wisconsin
- 3:25-3:35 PM April Craft, PhD, Harvard Stem Cell Institute
- 3:35-3:45 PM Corey Neu, PhD, University of Colorado Boulder
- 3:45-3:55 PM Denis Evseenko, MD, PhD, University of Southern California
- 3:55-4:05 PM Q&A

- 4:05-4:15 PM Break & Networking

SCHEDULE

SESSION 6: MILITARY MEDICINE, ORTHOPAEDIC SURGERY & MSK RESEARCH

**Session Chairs: Matthew Provencher, MD, MBA, CAPT MC USNR (Ret.)
and LT Garrett Morgan, PhD**

4:15-4:20 PM Panel Introductions

4:20-4:35 PM CDR Chris Steele, PhD, U.S. Navy Bureau of Medicine and Surgery

4:35-5:05 PM Panel Discussion

Moderator Matthew Provencher, MD, MBA, CAPT MC USNR (Ret.),
The Steadman Clinic & Steadman Philippon Research Institute

- Panelists
- CDR Chris Steele, PhD, U.S. Navy Bureau of Medicine and Surgery
 - LT Garrett Morgan, PhD, Office of Naval Research
 - Adam Faurot, CCO, SPEAR Human Performance
 - David Bakta, COO, SPEAR Human Performance

5:05-5:15 PM Q&A

5:15-5:30 PM Break & Networking

5:30-6:30 PM Poster Session & Reception

SCHEDULE

Tuesday, 22 August 2023

SCIENTIFIC SESSIONS

7:00-8:00 AM Breakfast

8:00-8:35 AM Keynote Lecture: Farshid Guilak, PhD, Washington University
Keynote introduction by Dr. Johnny Huard

SESSION 7: REGENERATIVE MEDICINE FOR BONE AND CARTILAGE REPAIR

Session Chairs: Kelly Santangelo, DVM, PhD, DACVP and Dimitrios Kouroupis, PhD

8:40-8:55 AM Mike Zuscik, PhD, University of Colorado Denver

8:55-9:05 AM Wayne McIlwraith, BVSc, MS, PhD, DSc, FRCVS,
Colorado State University

9:05-9:15 AM Dimitrios Kouroupis, PhD, University of Miami

9:15-9:25 AM Laurie Goodrich, DVM, PhD, DACVS, Colorado State University

9:25-9:35 AM Chelsea Bahney, PhD, Steadman Philippon Research Institute

9:35-9:45 AM Q&A

9:45-9:55 AM Break & Networking

SESSION 8: BIOMEDICAL ENGINEERING AND IMAGING

Session Chairs: Scott Tashman, PhD and Kirk McGilvray, PhD

9:55-10:10 AM Yadong Wang, MD, PhD, Cornell University

10:10-10:20 AM Silvia Blemker, PhD, University of Virginia

10:20-10:30 AM Colin Smith, PhD, Steadman Philippon Research Institute

10:30-10:40 AM Kirk McGilvray, PhD, Colorado State University

10:40-10:50 AM Q&A

10:50-11:00 AM Break & Networking

SCHEDULE

SESSION 9: INTERVENTIONAL STRATEGIES IN CANCER

Session Chairs: Patricia Hardenbergh, MD and Francis Hornicek, MD, PhD

- 11:00-11:15 AM Francis Hornicek, MD, PhD, University of Miami
- 11:15-11:25 AM Slim Sassi, PhD, Harvard Medical School and Massachusetts General Hospital
- 11:25-11:35 AM Patricia Hardenbergh, MD, Shaw Cancer Center, Vail Health
- 11:35-11:45 AM Julie Barone, DO, Shaw Cancer Center, Vail Health
- 11:45-11:55 AM Don Gibbons, MD, PhD, MD Anderson Cancer Center
- 11:55-12:05 PM Q&A

- 12:05-1:00 PM Lunch Break & Networking

SESSION 10: INTERVENTIONAL STRATEGIES IN NEURODEGENERATION

Session Chairs: Charles Raison, MD and Ashok Shetty, PhD

- 1:05-1:20 PM Charles Raison, MD, University of Wisconsin
- 1:20-1:30 PM Giulio Tononi, MD, PhD, University of Wisconsin
- 1:30-1:40 PM Johnny Huard, PhD, Steadman Philippon Research Institute
- 1:40-1:50 PM Ashok Shetty, PhD, Texas A&M University
- 1:50-2:00 PM Q&A

- 2:00-2:10 PM Break & Networking

SESSION 11: MUSCULOSKELETAL INFECTION, ORTHOBIOLOGICS AND PAIN MANAGEMENT

Session Chairs: Dustin Anderson, MD and Eddie Schwarz, PhD

- 2:10-2:25 PM Eddie Schwarz, PhD, University of Rochester
- 2:25-2:35 PM Chris Hernandez, PhD, Cornell University
- 2:35-2:45 PM Laura Certain, MD, PhD, University of Utah
- 2:45-2:55 PM Chenbaio Wu, PhD, University of California San Diego
- 2:55-3:05 PM Dustin Anderson, MD, The Steadman Clinic & Steadman Philippon Research Institute
- 3:05-3:15 PM Q&A

- 3:15-3:25 PM Break & Networking

SCHEDULE

SESSION 12: BIOMATERIALS, ORTHOBIOLOGICS, ROBOTIC SURGERY & SPINE RESEARCH

Session Chairs: Mark Markel, DVM, PhD and Sonny Gill, MD

- 3:25-3:40 PM Samuel Stupp, PhD, Northwestern University
- 3:40-3:50 PM Anthony Griswold, PhD, University of Miami
- 3:50-4:00 PM Josh Li, MD, PhD, University of Virginia
- 4:00-4:10 PM Sonny Gill, MD, The Steadman Clinic & Steadman Philippon Research Institute
- 4:10-4:20 PM Michael Gallizzi, MD, MS, The Steadman Clinic & Steadman Philippon Research Institute
- 4:20-4:30 PM Q&A

- 4:30-4:40 PM Break & Networking

SESSION 13: INTERVENTIONAL STRATEGIES AND NOVEL THERAPEUTICS FOR HEALTHY AGING

Session Chairs: James Kirkland, MD, PhD and Nicole Ehrhart, DVM, VMD, MS

- 4:40-4:55 PM James Kirkland, MD, PhD, Mayo Clinic
- 4:55-5:05 PM Herb Kasler, PhD, Buck Institute for Research on Aging
- 5:05-5:15 PM Anthony Donato, PhD, University of Utah
- 5:15-5:25 PM Naoki Nakayama, PhD, Steadman Philippon Research Institute
- 5:25-5:35 PM Q&A

- 5:35-5:45 PM Poster Awards & Closing Remarks

- 5:45-7:00 PM Closing Reception

ABOUT US

STEADMAN PHILIPPON RESEARCH INSTITUTE www.sprivail.org

Steadman Philippon Research Institute (SPRI) is dedicated to keeping people of all ages physically active through orthopaedic research and education. With an enduring focus on applied clinical translation, SPRI is dedicated to discovering new therapies, treatments and cures that can be brought to patients in a clinical setting. We utilize the latest regenerative medicine techniques—basic science studies at the cellular level—to investigate the causes and effects of degenerative arthritis, techniques of musculoskeletal regeneration and healing processes. SPRI also utilizes state-of-the-art Biomotion and Robotics technologies, magnetic resonance imaging and over thirty years of patient outcomes data in its bench-to-bedside approach to research. The 501(c)(3) charitable organization is one of the most published organizations in sports medicine research and education.

THE STEADMAN CLINIC www.thesteadmanclinic.com

The Steadman Clinic is a world-renowned orthopaedic clinic with facilities located in Aspen, Basalt, Frisco, Edwards and Vail, Colorado. The clinic specializes in sports medicine including knee, hip, shoulder, elbow, hand, spine, foot and ankle injuries and joint replacement. Our experience and research have led to significant advances in the fields of orthopaedics and regenerative sports medicine. The Steadman Clinic treats patients from all walks of life, including recreational and professional athletes from all over the world.

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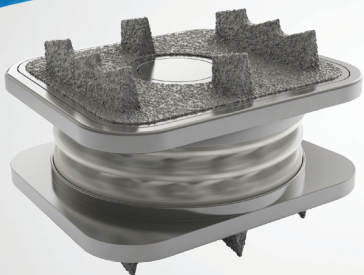


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