



University of Colorado

SECTION OF WILDERNESS AND ENVIRONMENTAL MEDICINE
DEPARTMENT OF EMERGENCY MEDICINE



Rock N' Snow Medicine Symposium

Program 2021

Morning Session		
Time (MST)	Topic	Speaker
8:00 AM	Welcome to Rock N' Snow	Martin Musi, MD David Braun, PA-C
8:15 AM	Medical Direction for Ski Patrols	Ben Usatch, MD Univ. Colorado/ ELDORA
8:45 AM	Decision Making	Dale Atkins, W-EMT
9:15 AM	Psychological First Response in Snow Work	Laura McGladrey, NP Univ. of Colorado/Resp Alliance In collab: Drew Hardesty
9:45 AM	Avalanche Injuries and In-Bounds Avalanches	Spencer Logan, MS CAIC
10:15 AM	15 min break	
10:30 AM	Handoff: Interagency Communication	Angie Wright, MD Univ. of Colorado
11:00 AM	Trends in Air Medical Rescue	Charley Shimanski ICAR/MRA/FLL
11:30 AM	Colorado Hoist Rescue Program	-Dale Wang, MD RMRG/MRA/ICAR/BCH -Alison Sheets, MD RMRG/MRA/ICAR/BCH/Univ. of Colorado.
12:00 PM	Keynote Speaker Interview	Peter Hackett, MD Univ. of Colorado/ Inst. Altitude Medicine

1:00 PM	30 min break	
Afternoon Session		
1:30 PM	Virtual Workshops -Biomechanics of load carrying -Spinal Motion Restriction -Advance skills on MSK exams. Splints and Dislocations management	Jaqueline Kiernan, PT Support of Ilaria Ferrari Tom Califf, MD Spencer Tomberg Support of Kyle Norden MD
3:00 PM	Movement is Definitive Care Cutting edge avalanche medical resuscitation	Jason Williams, BS, EMT-P, DiMM Univ of New Mexico Daryl Macias, MD Univ. of New Mexico
3:30 PM	Frostbite injuries	Anne L. Wagner, MD Vanderbilt Univ.
4:00 PM	Field Medical Technology	Ryan Paterson, MD Univ. of Colorado/St Joseph Hosp.
4.30 PM	Closing Remarks	

Our Speakers

Ben Usatch, MD



Ben Usatch is a graduate of the Jefferson Medical College. He completed a residency in the Drexel/MCP Emergency Medicine Program. After 15 years serving as the deputy director for the Lankenau Hospital Emergency Department, he accepted a position to join the University of Colorado faculty to become the medical director for the UC Health ED in Highlands Ranch. He has been working in Emergency Medicine Services for 35 years and still maintains Paramedic certification. He serves as the medical adviser for the Eldora Ski Patrol and national medical adviser for the Professional Division of the National Ski Patrol. He is a regular speaker both regionally and nationally on current

issues relevant to EMS with a particular interest in austere medicine Dr. Usatch's articles can be found in nationally distributed EMS journals.

Dale Atkins, W-EMT



For more than 30 years Dale has been training and working with avalanche professionals and mountain rescuers around the world. He's an expert in rescue, avalanche accidents, human factors and prevention with numerous articles, books and films to his credit.

Laura McGladrey, NP



For the past 20 years, Laura McGladrey has instructed for NOLS Wilderness Medicine and is currently a Nurse Practitioner with dual certification, practicing both emergency medicine and psychiatry across the lifespan. She is currently a clinician with the Stress Trauma Adversity Research and Treatment (START) Center and provides trauma support for Emergency and Wilderness Responders. She has a background in international and relief work, teaches courses to wilderness medicine providers, and lectures nationally on Psychological First Aid and Stress Injuries. She is the Stress and Resilience advisor for Portland Mountain Rescue and Eldora Ski Patrol, and consults with and advises several other rescue and patrol teams throughout the United States and beyond. She is the

founder, and volunteer-in-chief- of Responder Alliance, and is profoundly grateful to work alongside the talented group of staff and volunteers at Responder Alliance.

Spencer Logan, MS



Spencer began skiing in northern Colorado and began learning about avalanches in northern Utah. He continued his avalanche education in southern Montana with an MS in Earth Sciences from Montana State University. He joined the CAIC in 2004. He has collaborated with colleagues from the CAIC, North America, and Europe to better understand trends and patterns in avalanche accidents and occurrences. His kids are the fourth generation of the family to ski and the fifth to fish in Colorado.

Charley Simanski



Charley Shimanski is President of the Air Rescue Commission for the *International Commission for Alpine Rescue* (ICAR). He is a 30-year member of Alpine Rescue Team (ART) and Mountain Rescue Program Coordinator for Flight For Life Colorado. He is also Past President and Education Director of the Mountain Rescue Association (MRA). Charley has trained at the Air Zermatt Training Center and co-authored "Helicopters in SAR - Advanced Level" with Air Zermatt.

Angie Wright, MD



Angie started her adventure into medicine as an EMT with the Golden Fire Department. After realizing that she was very bad at driving an ambulance, she decided to go back to school to pursue her MD. She attended Loyola University Stritch School of Medicine in Chicago, IL, and then went on to complete her residency training in Emergency Medicine at Denver Health. She did an additional year of training in EMS and medical direction after graduating residency, and now sits as the EMS Medical Director of various prehospital agencies and at the University of Colorado Emergency Department, Anschutz Medical Campus. In her spare time, Angie enjoys trail running, skiing, hiking, and all things Colorado.

Dale Wang, MD



Dale Wang is a member of the Colorado Hoist Rescue Team. Currently, he is the Group Leader for the Rocky Mountain Rescue Group in Boulder, CO; one of the busiest volunteer mountain rescue teams in the country. Prior to RMRG he served for two seasons at the Himalayan Rescue Association clinic in the Everest region of Nepal, and was a National Park Service rescue volunteer on Denali. Professionally he is an Emergency Physician in Boulder,

CO and is the medical advisor for AIARE. Dale has been climbing and skiing since the 1980s in Europe, the Himalayas, and all over North America.

Alison Sheets, MD



Dr. Alison Sheets is a practicing emergency physician in Boulder, Colorado. She did her medical training in Denver at the University of Colorado and residency in emergency medicine at Denver Health Medical Center. Currently, she is the medical director and group leader for the Rocky Mountain Rescue Group (RMRG) in Boulder County, one of the nation's oldest all volunteer SAR organizations. She is an active field member with (RMRG) with 98 mission responses in 2018. Dr. Sheets contributes to the Mountain Rescue Association (MRA) locally as region chair and nationally as a member of the Officers Committee and is the MRA Medical Delegate to the International Commission on Alpine Rescue (ICAR). She also volunteered for a season at the Himalayan Rescue Association's Pheriche clinic at 14,000' in the Everest region. Prior to her medical career, she was a climbing guide and professional ski patroller in Colorado.

Peter Hackett, MD



Dr. Hackett has had a rather unusual career. After graduating from the University Of Illinois College Of Medicine in Chicago, and training at San Francisco General Hospital, his first job was as a helicopter rescue doctor in Yosemite National Park. He fought fires and rescued climbers and others, for \$4.47 per hour –he says it was the best job he ever had. That led him to Nepal, where a three-month stint for a trekking company turned into a love affair with Nepal and a 6-year adventure practicing wilderness medicine, researching high altitude illnesses, and climbing mountains, which culminated in an ascent of Mt Everest in 1981. Dr. Hackett, as a member of the American Medical Research Expedition to Everest, collected physiological data all the way to the summit, climbing alone the last three thousand feet, and nearly perished on the descent. Dr. Hackett was instrumental in starting the Himalayan Rescue Association, which now has two clinics in Nepal, and worked and lived at 14,000 ft near Everest for many seasons. He completed a fellowship in the Cardiovascular Pulmonary Research Lab at the University of Colorado in 1978-79.

Dr. Hackett founded the Denali Research Project in Alaska in 1982, and for nine summers operated a research and rescue facility at 14,000 ft on Mt McKinley, the highest mountain in North America. His research has been supported by the NIH, American Heart Association, American Lung Association, Department of Defense, the Wilderness Medical Society, and other agencies and foundations. Dr. Hackett has published over 100 papers related to altitude medicine, and has edited eight books.

He is boarded in Emergency Medicine and is currently a Clinical Professor in the Division of Pulmonary Sciences and Critical Care Medicine, Department of Medicine, University of Colorado Anschutz Medical Campus. He is Co-chair of the International Hypoxia Symposia, a biennial conference of the world's leading hypoxia researchers, and is past president of the International Society for Mountain Medicine.

Dr. Hackett is also the founder and director of The Institute for Altitude Medicine in Telluride, Colorado, which focuses on the health of altitude residents and visitors. He lives nearby in Ridgway, Colorado, where he breeds yak, and is doing work in the field of yak genomics. Dr. Hackett continues to publish, and still enjoys speaking to all sorts of groups, especially students and wilderness medicine practitioners.

Jason Williams, BS, Paramedic, DiMM



Jason is the Director of the International Mountain Medicine Center at the University of New Mexico where he and his faculty train healthcare professionals from across the globe in mountain emergency medicine and rescue. Jason is a paramedic and holds his Bachelors in Emergency Medicine; he obtained his International Diploma in Mountain Emergency Medicine in Switzerland under the shadow of the Matterhorn. He is the founder of UNM's Diploma in Mountain Medicine, a member of the International Commission for Alpine Rescue, chairs the international DiMM Regulation and Assessment Committee, and is on the board of directors of the Wilderness medical Society. Jason is a past member and president of volunteer-based Albuquerque Mountain Rescue Council and formed the University of New Mexico's first helicopter mountain rescue team in collaboration with the Bernalillo County Sheriff's Office Air Support Unit. He has been featured by the International Mountaineering and Climbing Federation, on National Geographic TV, and has rock climbed throughout the world. Despite his breadth of world travel, he'll let you know this any day: "Nothing beats climbing a granite cliff face in the Sandia mountains with my life-long climbing partner/wife and teaching our three year old daughter to share our love for New Mexican mountains".

Darryl Macias, MD



Dario is the fellowship director for the Wilderness, Austere and International Medicine Fellowship and Professor of Emergency Medicine at the University of New Mexico. He currently serves as the media and podcast editor, and the mountain medicine section editor for Wilderness and Environmental Medicine, and speaks at national and international emergency and wilderness medicine conferences. He is the medical director for the Khumbu Climbing Center in Phortse, Nepal and has served as an expedition physician for expeditions to K2, Masherbrum III, and Mt. Shishapangma. He has played a key role in the specialty of emergency medicine (and mountain medicine) in Argentina, Chile, Mexico, and France. He is currently involved in standardizing avalanche resuscitation and developing virtual reality platforms for mountain medicine education.

Anne L. Wagner, MD



Dr. Wagner is the Burn Center Medical Director Associate Professor at a Level 1 Trauma Center, she has vast experience in both trauma and general surgery settings, with a specialty focus on frostbite and burn injuries. In her practice she has learned that there are not many things like the best patient care that she can provide. She is committed to her patients suffering from burns and environmental conditions.

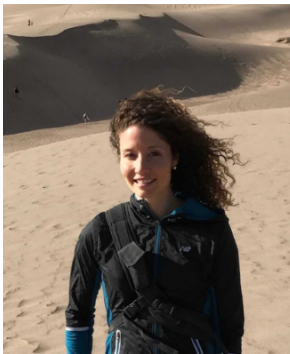
Ryan Paterson, MD



Dr. Ryan Paterson attended the University of Vermont School of Medicine and completed his Emergency Medicine residency and fellowship in Wilderness Medicine at Denver Health Medical Center/the University of Colorado. He is a co-founder of the WMS DIMM course. Dr. Paterson is an altitude researcher, expedition physician, medical director and guide.

Our Virtual Workshops Leads

Jacqueline Kiernan, PT



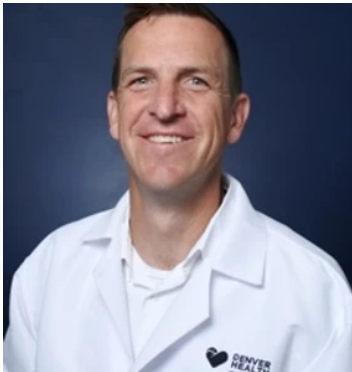
Jac is a senior physical therapist at the University of Colorado Hospital working in inpatient acute care and the emergency department, combining a love of research, wilderness medicine and physical therapy. Her current research involves investigating biomechanical implications for fitting backpacks and how this contributes to musculoskeletal injuries. Areas of interest include: treating patients with vestibular pathology, wound care, biomechanics and wildlife/adventure photography.

Tom Califf, MD



Dr. Califf was born in the woods of North Carolina, he found his outdoors and medical passions in the mountains of Colorado. He is primarily interested in wilderness medicine education and medical care in mountainous environments, particularly in snow/ice/avalanche terrain. He has led the residency's Wilderness Medicine Career Track and is active in educational initiatives for local ski patrol outfits.

Spencer Tomberg, MD



Dr. Tomberg assisted medical school at the University of Colorado And finished his Emergency Medicine residency at Denver Health. He completed a fellowship in Sports Medicine, at the University of Utah and has been a DHEM Faculty member since 2020. His academic Interests are Orthopedic trauma care, Sports medicine, Resident education and Performance optimization.

Acknowledgments: Kyle Norden MD, Illaria Ferrari, Pfahl, Jamie, OIT, Drew Hardesty, and many more instructors who helped with planning.

Organizers

Dave Braun



David Braun completed his Masters of Physician Assistant Studies at the University of Washington Physician Assistant Program in Seattle, Washington. He spent the first part of his career teaching wilderness skills and wilderness medicine throughout the Rocky Mountains with the National Outdoor Leadership School. This followed undergraduate training at Prescott College with degrees in Outdoor/Experiential Education and Environmental Education. David's focus is on wilderness medicine education and supporting the range of the Division's programs.

Martin Musi, MD



Dr. Musi is currently an Assistant Professor of Emergency Medicine and Wilderness & Environmental Fellowship Director at the University of Colorado School of Medicine; He is a rescue doctor, member of Rocky Mountain Rescue Group based in Boulder, Colorado; Originally from Argentina Dr. Musi developed courses -expeditions in Latin America (Patagonia!) and is the founder of the recently approved Diploma in Mountain Medicine of the Andes (DIMM Andes). His special interest includes frostbite, hypothermia, global health, SAR, and expedition medicine.

Meagan Rivers



She is an administrator for the Wilderness and Environmental Medicine section at the University of Colorado School of Medicine. She graduated from Canisius College in 2010 with a BA in Sociology. Before the University of Colorado, she worked at a local Catholic Church, as well as a website design and digital marketing boutique agency.



[University of Colorado Section of Wilderness & Environmental Medicine](http://www.wildernessandenvironmentalmedicine.org)