

NWMCA



5



Mt Hood, OREGON
JANUARY 6TH-8TH, 2023



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NWMC5 SCHEDULE

FRIDAY

4pm - 6pm	Check-In & Reception	Fanning Hall
6pm - 6:30pm	Welcome to NWMC5, <i>E. Kinney, E. Schnell, C. McAuslan</i>	Fanning Hall
6:30pm - 7:30pm	Medical Care for Avalanche Victims, <i>C. Heine</i>	Fanning Hall
7:30pm - 8:30pm	Wilderness Medicine as a Career, <i>JP. Beissinger</i>	Fanning Hall
8:30pm - 12am	Saturday Briefing & Social Hour	Fanning Hall



SATURDAY

7am - 7:50am	Continental Breakfast	Fanning Hall
8am - 8:50am	Survival and Stress Response, <i>E. Johnston</i>	Fanning Hall
9am - 9:50am	Swift Water and Drowning, <i>A. Franke</i>	Cy Lodge
	Search and Rescue, <i>D. Slack</i>	Laurel Lodge
	Creepy Crawly Critters, <i>T. DeLoughery</i>	Fanning Hall
10am - 10:50am	Hypothermia and Cold-Related Injuries, <i>O. Linney</i>	Fanning Hall
	Trials and tales from the First All-women's NPS Mountaineering Patrol on Denali, <i>A. Condino</i>	Laurel Lodge
	US Ski Patrol: comparing medical direction, training, and patient care <i>L. Fell</i>	Cy Lodge
11am - 11:50am	Austere Ultrasound, <i>J Grisham</i> , <i>sponsored by Rogue Ales & Spirits</i>	Laurel Lodge
	Wilderness ALS, <i>CJ Selva</i>	Fanning Hall
12pm - 12:50pm	Lunch	Fanning Hall
1pm - 1:50pm	Dive Medicine, <i>A. Luks</i>	Fanning Hall

SATURDAY WORKSHOPS

Rotation 1

2:15pm - 3:45pm	Splints from SAM, S. Scheinberg, C. Scheinberg	Laurel Lodge
2:15pm - 3:45pm	Point of Care Ultrasound, J. Grisham, S. Scott, N. Walther, <i>sponsored by Rogue Ales & Spirits</i>	Cy Lodge
2:15pm - 3:45pm	Wilderness ALS Workshop, CJ Selva	Fanning Hall
2:15pm - 3:45pm	Assessment & Transport, T. Eglin, <i>sponsored by American Alpine Institute</i>	Fanning Hall

Rotation 2

4:00pm - 5:30pm	Splints from SAM S. Scheinberg, C. Scheinberg	Laurel Lodge
4:00pm - 5:30pm	Point of Care Ultrasound, J. Grisham, S. Scott, N. Walther, <i>sponsored by Rogue Ales & Spirits</i>	Cy Lodge
4:00pm - 5:30pm	Wilderness ALS Workshop, CJ Selva	Fanning Hall
4:00pm - 5:30pm	Assessment & Transport T. Eglin, <i>sponsored by American Alpine Institute</i>	Fanning Hall

SATURDAY NIGHT

6pm - 7:30pm	Trivia, Silent Auction, & Dinner <i>sponsored by Fremont Brewing</i>	Fanning Hall
7:30pm - 8:30pm	Keynote: Bleeding ponies, bloated cattle, and breathless mountaineers: hearts and lungs under distress with exercise and altitude E. Swenson	Fanning Hall
9pm - 12am	Sunday Briefing & Social Hour	Fanning Hall



SUNDAY

7am - 8:30am	Continental Breakfast	Fanning Hall
8:30am - 9:30am	Lessons from Mountain Rescue, C. Van Tilburg	Fanning Hall

SUNDAY SCENARIOS

9:30am - 12:00pm	Scenarios	
12:30pm - 1:00pm	Group Picture & Closing Remarks	Fanning Hall
1:00pm-2:00pm	Future Leadership Meeting & Check-Out	

Don't leave just yet! Join us for an afternoon of skiing and boarding on the beautiful Mount Hood.

MEET THE SPEAKERS

ANDREW LUKS, MD



Dr. Luks is a faculty member in the department of pulmonary, critical care and sleep medicine at the University of Washington. Based largely at Harborview Medical Center, he spends most of his clinical time working on the medical and trauma surgical ICUs. Outside of his clinical duties, he maintains a scholarly program in high altitude medicine and physiology with a focus on travel to high altitude with underlying medical conditions, while at the same time engaging in a variety of educational endeavors in the UW School of Medicine. He has spent time working at the Himalayan Rescue Association Clinic in Nepal as well as the medical point person on two Denali volunteer ranger patrols. Outside of work he enjoys getting into the mountains as much as possible for backcountry skiing, hiking and mountaineering and believes non-motorized transport is the way to go for all outdoor activities.

J PEARCE BEISSINGER, MS PA-C DiMM FAWM



Pearce is a California native who grew up on the East Coast. With previous experience in orthopedics, he has spent the last decade serving as a physician assistant in cardiothoracic surgery and emergency medicine. "Going vertical" has been a life-long pursuit for Pearce. Pearce is a Fellow in the Academy of Wilderness Medicine (WMS) and an AMGA Certified Single Pitch Instructor (SPI). After having completed his Diploma in Mountain Medicine (DiMM), he has continued to provide locums instruction at the University of New Mexico International Mountain Medicine Center. He has served on the board of directors for the Appalachian Center for Wilderness Medicine (ACWM) and has dedicated many years of service to search and rescue teams across the country. He is currently the Assistant

Medical Director of Portland Mountain Rescue (PMR) and chair of the Rescue Leader Committee. In addition to his work with the outstanding members of PMR, Pearce serves in the Oregon Air National Guard, 142nd Fighter Wing- CERFP Unit. Pearce is the recipient of the 2017 Warren D. Bowman Award for contributions in service to wilderness medicine and to the Wilderness Medical Society. More recently, he received the 2018 PA-Citizen of the Year Award from the Oregon Medical Association.

OLIVIA LINNEY, MD DiMM



Dr. Linney is an emergency medicine physician who practices in Portland. She first came to OHSU as a medical student where she served as co-president of the wilderness medicine interest group. She completed her residency at Dartmouth, then returned to OHSU for her wilderness medicine fellowship. In the past, she has collaborated with Grand Canyon Emergency Services and served as a flight physician while at Dartmouth. Currently, she is on the medical committee for Portland Mountain Rescue and works at the Mt. Hood Meadows Mountain clinic. In her free time, Dr. Linney enjoys whitewater kayaking and has paddled over 150 different rivers in 6 countries, competed internationally, and completed a probable first descent in 2021. When trying to stay drier, she also enjoys skiing, climbing, backpacking, and just about any activity outside.

THOMAS DeLOUGHERY, MD MACP FASM



Dr. DeLoughery is a native Hoosier who developed a love for the outdoors hiking in the woods and an early interest in wilderness medicine from the resulting tick bites and poison ivy. He went to Indiana State University during the Larry Bird era and got his MD from Indiana University School of Medicine. After a brief stop at the University of California Irvine, he completed his Internal Medicine Residency at OHSU where he also did his Hematology/Oncology fellowship and currently is on faculty as a Professor of Medicine. He has been active in Wilderness Medicine for years including now Chairing the Wilderness Medicine Society's Research Committee and was on the WMS Board of Directors for 6 years. His passion is wilderness medicine education and his one oddity is he has attended 43 Bob Dylan concerts.

DON SLACK, MD



Dr. Slack is an emergency physician in Mount Vernon, Washington. He's been a Mountain Rescue volunteer since 1976; he is a member of both Skagit and Bellingham Mountain Rescue. He is also the medical advisor for North Cascades National Park and volunteers in the Mt Baker Ski area aid room. When not caring for patients or carrying a pack, he runs western rivers and someday hopes to run the Grand Canyon without swimming a major rapid.

ANNA CONDINO, MD MPH DIMM



Dr. Condino is a board certified Emergency Physician and EMS Physician practicing outside of Seattle, Washington. She attended Dartmouth Medical School and then came to the University of Washington to complete her EM residency and EMS fellowship. Prior to med school, she worked as a wilderness therapy instructor, rock climbing guide, and climbing program director. She nourishes a lifelong love of the outdoors based in the foothills of the central Cascades, where she is the medical director of Seattle Mountain Rescue and an active field member. When she's not working in the emergency department, rescuing people out of the mountains, or chasing her toddler around, she gets out

to climb, ski, hike, bike, and trail run as much as she can. She recently completed a medical patrol with the National Park Service on Denali, and will be talking about that experience at NWMC 23'.

CARL HEINE, MD PhD FACEP FAWM



Dr. Heine is a practicing emergency medicine physician with a special interest in wilderness medicine. He moved from Alaska to Spokane to be the Clinical Education Director for Emergency Medicine and the Foundational Sciences Education Director for Physiology at the new Elson S Floyd College of Medicine at Washington State University, where he is currently the Associate Dean for Clinical Education. He founded the ACEP Section of Wilderness Medicine and has been a long time member of the Wilderness Medical Society. He has been active with the National Ski Patrol for over twenty years and is passionate about backcountry skiing and other outdoor activities in wild places.

ALEX FRANKE, MD



Alex Franke is a second year emergency medicine resident at University of Utah and a recent graduate from the Elson S Floyd College of Medicine at Washington State University. He spent three seasons doing search and rescue for the National Park Service in Yosemite, Sequoia, and Kings Canyon National Parks, which involved a little bit of technical rescue and a lot of carrying people down trails. He has always been a fan of type II fun and when he realized that medicine was the ultimate type II fun, he decided to enroll. When he's not busy with school he enjoys climbing, biking, skiing, running long distances, and eating doughnuts.

EMILY JOHNSTON, MD FACEP DiMM FAWM



Dr. Johnston works as a mountain guide, whitewater guide, ski patroller and emergency medicine physician. She guides climbers on the highest peaks around the globe. She is medical director for several guide services, teaches DiMM courses for the Army, trains whitewater guides, has a level 3 avalanche certification, writes and delivers avalanche curriculum for Cascadia Mountain Institute, and practices and teaches emergency medicine. She attended the University of Washington School of Medicine, and completed her training at the OHSU Emergency Medicine Residency Program in Portland, OR. She enjoys remote places, good IPAs and dogs (not necessarily in that order). Dr. Johnston is currently based in a little cabin in the Tetons, and her Astro van in the Cascades.

KEYNOTE SPEAKER: ERIK SWENSON, MD



In my 45-year research and clinical career as a pulmonary and critical care doctor and investigator I have explored how humans and animals adapt or fail to adapt to high altitude. I have performed definitive studies in the mechanism(s) by which humans develop high altitude pulmonary edema (HAPE). I have shown the critical role of the peripheral chemoreceptors in mediating many important responses to hypoxia in the pulmonary circulation, central nervous system control of ventilation and the renal diuretic response. Another area of focus has been the roles of carbonic anhydrase (CA) across vertebrate species including humans and in many organ systems. This work has utilized different types of CA inhibitors in ventilatory disorders, high altitude medicine, pulmonary hypertension, and heart disease. I found acetazolamide, the prototypical drug to probe

CA function, may have non-CA inhibition mediated actions. CA inhibition in peripheral chemoreceptors leads to loss of normal rapid ventilatory responses that help to suppress breathing instability during sleep at high altitude. In the heart, brain and lungs CA inhibition reduces ischemia-reperfusion injuries by several anti-inflammatory and ROS suppression mechanisms. I have discovered significant actions of carbon dioxide in the regulation of regional pulmonary ventilation and perfusion, that may be as quantitatively important as the more well recognized actions of oxygen. In addition to V/Q regulation, carbon dioxide and acidosis have anti-inflammatory effects that may help to reduce lung injury such as in the acute respiratory distress syndrome (ARDS).

CHRISTOPHER VAN TILBURG, MD



Dr. Van Tilburg is a wilderness, emergency and occupational medicine physician. He is staff physician at Providence Hood River Memorial Hospital at Occupational and Travel Medicine, Emergency Department, and Mountain Clinic at Mount Hood Meadows Ski Resort. He serves as an active member of Crag Rats Mountain Rescue, Chair of Mountain Rescue Association Medical Committee, and Hood River County Public Health Officer and Medical Examiner. He is author of 11 books including Mountain Rescue Doctor: Wilderness Medicine in the Extremes of Nature, which was shortlisted for the Banff Festival of Mountain Books and the Oregon Book Awards, and Search and Rescue Stories: A Wilderness Doctor's Life and Death Tales of Risk and Reward. He is first author of Wilderness Medical Society Practice Guidelines for Prevention and Management of Avalanche and Non-Avalanche Snow Burial Accidents.

LINDSEY FELL, MD



Dr. Fell is a first year resident in emergency medicine at the University of Utah. She completed her undergraduate studies in German literature in Tacoma, WA. Thereafter, she made her home in the Tetons, where she grew vegetables for local farms and made heaps of sourdough bread. She worked as a field instructor for the National Outdoor Leadership School (NOLS), and as a ski patroller in New Zealand and at Grand Targhee, the last 3 years of which she spent serving as Targhee's Assistant Snow Safety Director. She attended medical school at OHSU. While at OHSU, she volunteered with Portland Mountain Rescue, and she wants to give a big shout-out to those folks because they are awesome. She could not be more excited to be back in her old "Hood" with all of you.

MEET THE WORKSHOP LEADERS

TOM EGLIN, MD



Dr. Eglin finished undergraduate at Whitman College in 1978 and then attended Medical School at Emory University, graduating in 1982. He started an Internal Medicine Residency at UW Hospitals in 1982 but transferred back to Atlanta to work in the Grady ER for 3 years then attend ER residency until 1987. He then moved back to the Northwest in 1992 and worked in the ER in Yakima full time until 2022 when he increased his teaching commitments at PNWU. Upon moving back to Yakima, his interest in the forest and mountains grew and he joined the Wilderness Medical Society. He joined Central Washington Mountain Rescue and Yakima Search and Rescue and has been volunteer of the year for both organizations as well as past president for CWMR. Tom enjoys skiing, hiking, and biking as well as teaching with an emphasis on Clinical Skills

and Emergency Medicine related topics. He likes to spend time in the Hwy 12 area hiking, biking, and working on local mountain bike trails during the summer and skiing with friends and family in the winter. He just joined the local ski patrol at White Pass.

CJ SELVA, BSN, RN, NR-P, WMI-P, FP-C/CFRN, APP/NSP CERTIFIED SKI PATROLLER



CJ is a Registered Nurse at Legacy Emanuel Hospital's Neuro-Trauma ICU in Portland, Oregon. A PNW native, he lives for the outdoors and has worn many hats within the outdoor and medical industries. He began his professional mountain career on Mt Ashland in Southern Oregon as a river guide and a professional ski patroller for 22 years. He has worked as a wilderness rescue paramedic with AMR's Reach and Treat (RAT) Team and a flight paramedic with Life Flight Network and REACH Air Medical. He has been deployed as a technical rescue medic to wildland fires and other natural disasters such as hurricanes Katrina and Gustav. He has an extensive background in guiding, recreation, professional, and industrial snow and avalanche work, ranging from pro-observer

with Northwest Avalanche Center (NWAC), helicopter guide operations in Alaska, and forecasting in British Columbia, Washington, and Oregon. He is an AIARE and the American Avalanche Institute (AAI) instructor, teaching recreational and professional groups. He has served on the Association of Professional Patrollers (APP) board of directors, American Avalanche Association (A3) Professional Member, and AMGA Ski Guide. He is currently in the Doctor of Nursing Practice (DNP) Acute & Critical Care Program at Seattle University.

JUSTIN GRISHAM, DO FAWM DiMM



Dr. Grisham is a board certified Emergency Medicine physician with a US Army Forward Resuscitative Surgical Team. His interests include austere and wilderness medicine, EMS, ultrasound, and military operational medicine. Following medical school at AT Still University Kirksville College of Osteopathic Medicine, he completed his Emergency Medicine residency and Ultrasound Fellowship at Madigan Army Medical Center in Tacoma, WA. He has completed a Fellowship in Wilderness Medicine and the UIAA Diploma in Mountain Medicine and actively teaches both civilian and military wilderness medicine courses. Justin previously worked as a climbing ranger at Mt. Rainier National Park and served as a squad leader and chief medical officer with the Salt Lake County Sheriff's Department's Mountain Rescue Team where he was a high angle rescue technician, swift water rescue tech, helicopter rescue tech, and training officer. You can find him in Colorado working in rural emergency departments when he's not paragliding, climbing, mountain biking, skiing, or lounging with his elderly golden retriever.

SAM SCHEINBERG, MD AND CHERRIE SCHEINBERG, CEO Co-FOUNDERS OF SAM® MEDICAL



After serving as a trauma surgeon in Vietnam, Dr. Sam Scheinberg recognized the need for better emergency splints. His "AHA" experience occurred while he wrapped an aluminum foil gum wrapper around his finger. At that moment he realized an appropriately sized thin, soft strip of metal could serve as a perfect splint. Fifteen years, and many false starts later, Sam and his wife Cherrie opened a company in the kitchen of their home to manufacture the world's first universal splint. Since their humble beginning the SAM® Splint has become the most common emergency splint in use on the planet. The SAM® Medical Company has continued to innovate medical devices designed to address the most challenging problems in the emergency prehospital setting. After nearly 40 years in the industry Sam and Cherrie continue to travel the world teaching, training, and most important listening to the needs of their personal heroes...those feet on the street who answer the call day or night when others are in need.

Sam Scheinberg, M.D., C.E.O of SAM® Medical, is a board-certified orthopedic surgeon. He still lives on the Oregon Coast where he practiced orthopedic surgery and co-founded the SAM® Medical Company. Cherrie Scheinberg, attended Northwestern and is the Co-founder / heart and soul of SAM® Medical. She is a peerless teacher and trainer. Sam and Cherrie have been Married 55 years.

THE CAMP

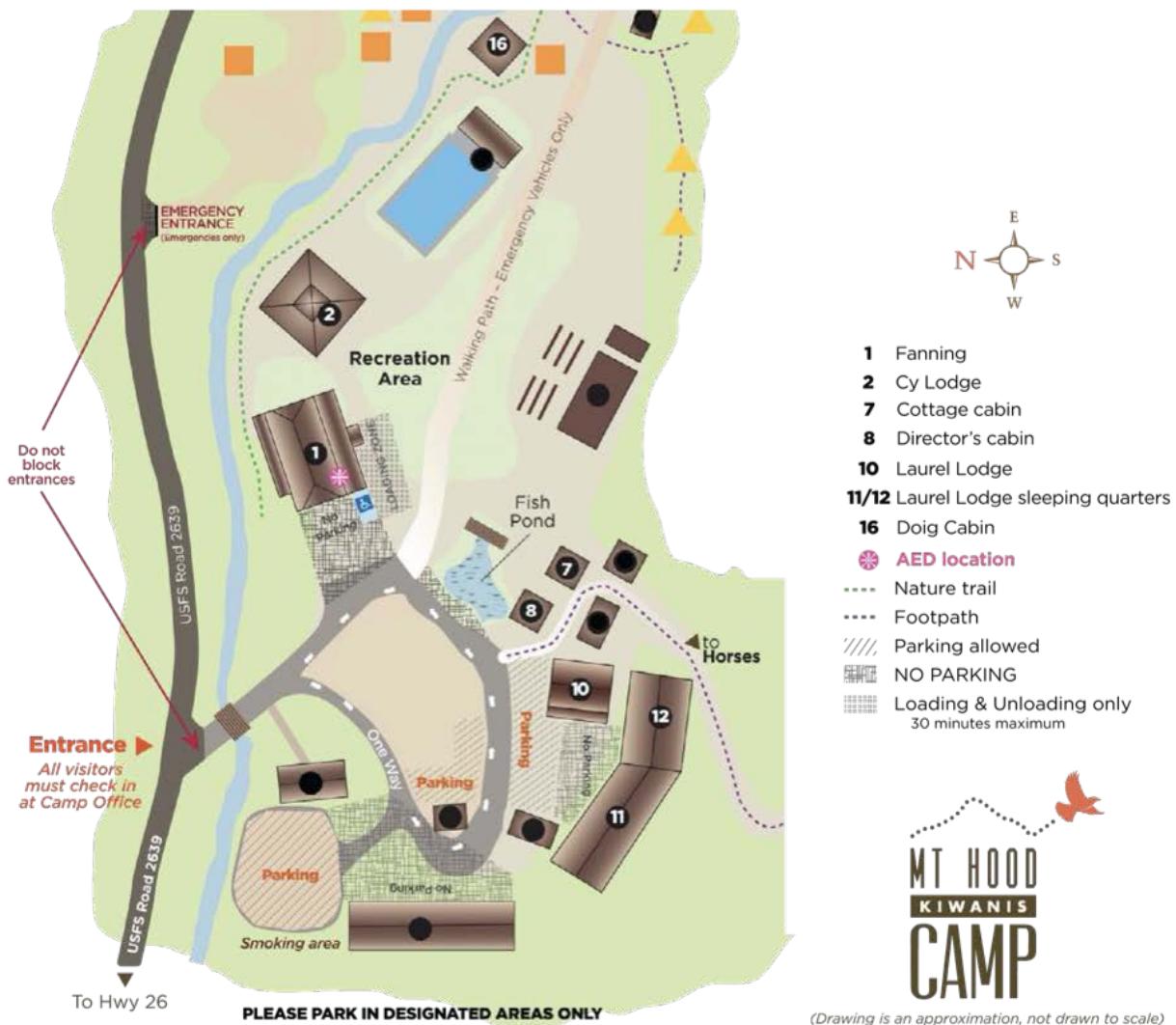
US Forest Service Road #2639

83500 E. Kiwanis Camp Road, Government Camp, OR 97028

A brown "Mt. Hood Kiwanis Camp" sign on the south side of Highway 26 points to Road 39. The sign is 4 miles east of Rhododendron and after Mile Post 48. (It is about 4 miles west of Government Camp.) Turn east on Road 39 and go 2 miles; the camp is on the right.

From Portland: Take I-84 east (towards Troutdale and The Dalles). Take the Wood Village exit (about 13 miles from Portland). Turn south on 238th Drive and follow for about 3 miles (238th turns into 242nd then NE Hogan). Turn east on Powell, go 1/2 mile, turn south onto the Mt. Hood Highway 26.

From Salem: Travel north on I-5 about 35 miles; exit to I-205 (to Oregon City). Stay on I-205 for 13 miles then exit east on Highway 212. Stay on Highway 212 for 14 miles and exit southeast to Highway 26.



THANK YOU NWMC5 SPONSORS

Thank you sponsors for your generous contributions! Thank you AIARE, RMI, Portland Mountain Rescue, and PNW Search and Rescue for your expertise and support with Sunday scenarios. Thank you Fremont Brewing for sponsoring our Saturday dinner and American Alpine Institute for sponsoring the Assessment & Transport workshop. Thank you Butterfly for donating ultrasound probes and Rogue Ales and Spirits for sponsoring the austere ultrasound workshop. Thank you Madigan Army Medical Center Ultrasound Fellows for leading the ultrasound workshop.



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